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TOUR
THROUGH SOME OF THE
ISLANDS
OF
ORKNEY AND SHETLAND,

WITH A VIEW CHIEFLY TO
OBJECTS OF NATURAL HISTORY,
BUT INCLUDING ALSO
OCCASIONAL REMARKS ON THE STATE OF THE
INHABITANTS, THEIR HUSBANDRY,
AND FISHERIES,

BY
PATRICK NEILL, A.M.

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OF EDINBURGH.

WITH
AN APPENDIX,
CONTAINING
OBSERVATIONS, POLITICAL AND ECONOMICAL, ON THE SHETLAND
ISLANDS; A SKETCH OF THEIR MINERALOGY, &c. &c.

Edinburgh:

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PREFACE.

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THE following journal of a Tour through some of the Orkney and Shetland Islands, originally appeared in the Scots Magazine. It was drawn up, as it suited my convenience, from time to time, and inserted in successive Numbers of that periodical work, from November 1804 to July 1805. This will partly account for some defects of arrangement, and for some repetitions, which might easily have been avoided, had the whole been written at once.

In reprinting, I have embraced the opportunity of introducing a few verbal corrections; but I have not materially altered any statement formerly made, without expressly announcing the alteration.

The objects which I principally attended to, were those connected with the study of Natural History, (and an apology is perhaps due to the reader for the number of technical terms appropriate to that science, which occur in the following pages); but it was almost impossible not to take some notice of the state of the Inhabitants of the Islands. The freedom of my remarks, however, on the unfortunate condition of the common

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people

people in Shetland, has brought upon me the censure of certain of the landholders ; which they have, very unnecessarily, vented in unmeaning scurrility, through the medium both of newspapers and of Grub-street pamphlets.

*The mere republication of the whole Tour will, to the Public in general, be sufficient for my vindication. Nothing, I trust, will be perceived in it, but the candid observations of a stranger on what he really saw ; and I cannot surely be condemned for depicting the wretchedness of the Shetlanders,—“ quæ ipse miser-
“ rima vidi,”—when my only object proves to be the melioration of their condition.*

The greater part of the Shetland tenants appeared to me to be sunk into a state of the most abject poverty and misery. I found them even without bread ; without any kind of food, in short, but fish and cabbage ;—living, in many cases, under the same roof with their cattle, and scarcely in cleaner apartments ;—their little agricultural concerns entirely neglected, owing to the men being obliged to be absent during summer at the ling and tusk fishery.

*The reader will probably be not a little surprised to learn, that these tenants, acting at one time as farmers, and at another as fishers, after enduring, in
the*

the latter capacity, for many weeks the greatest privations, and encountering stormy seas in their open boats, are not allowed to carry their dear-bought cargoes to the best market, but are compelled to deliver the whole into the storehouses of their landlords, at stipulated rates, below the market value! This statement is amply supported, by the Extracts subjoined in the Appendix, and indeed it has never been controverted: this alone would justify me for not having formed a very favourable opinion of the system of management adopted by the Shetland lairds. I shall only further state, that so slender are the advantages, if any, accruing to the tenants from this fishery, that it is, in general, an object of aversion to them; insomuch, that their agreements with their lairds are accompanied with an obligation to fish, under the implied, but well-understood penalties, of dismissal, and consequent starvation, or of heavy and arbitrary fines.

During my excursions through the Islands, I occasionally took notes; and from these the following journal was compiled: but as I then entertained no thoughts of publication, my notes were very short and incomplete. Indeed, I certainly would not have appeared before the public at all, had I not hoped that the consequences of the discussion might eventually be beneficial to the remote and neglected inhabitants of Shetland. It is my earnest wish that their condition should be
scrupulously

scrupulously inquired into by some of our public-spirited and patriotic characters; satisfied as I am, that from ingenuous investigation, and public discussion, a change will result, favourable not only to the emancipation and happiness of the poor people, but ultimately to the prosperity of the landholders themselves.

In the Appendix, there will be found some valuable remarks on the Shetland Islands, and on the means of improving them, by SIR ALEXANDER SETON of Preston, whom the author had the pleasure of accompanying as a fellow-traveller through several of those dreary wastes in 1804.—The mineralogist will find some interesting information respecting the mineral productions of Shetland, by DR TRAILL of Tirllet in Orkney.—A list of Plants indigenous to Orkney, supplementary to the catalogue contained in Dr Barry's History, and some remarks on the Birds found in the Islands, will perhaps interest or amuse the naturalist.

In the Notes, are contained some remarks on the importance of the Herring-fishery; and a particular account of the droves of small Whales which were, last year, stranded on the shores of Unst in Shetland.

P. N.

14th Nov. 1806.

CON-

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TOUR

THROUGH SOME OF THE

ORKNEY AND SHETLAND ISLANDS.

(*Scots Magazine*, Nov. 1804.)

WE embarked at Leith, on the evening of the 17th of July 1804, in a sloop bound for Thurso. On the 20th we anchored in Scrabster Road, opposite to the town of Thurso. Sir John Sinclair's house first attracts notice, being situated on the Bay. It has a bare appearance, from the total want of trees. Earl Harold's tomb, a neat modern monument, erected by Sir John, has a picturesque effect from some stations near the town. Under the auspices of this gentleman, a new town has lately been laid out; and about a dozen of handsome houses are already erected. A very neat new bridge adds much to the beauty as well as conveniency of the place. This happened to be a market-day in Thurso, and we saw the Highlanders from the high parts of Caithness and from Sutherland, dancing the *fling*

to the music of the bagpipe in the open street. A good deal of salmon is caught in Thurso harbour at the mouth of the river. In 1744, the greatest draught ever heard of, perhaps, was made here; two thousand five hundred and sixty salmon being caught at one haul, as certified in 1792*, by three persons who were personally present or assisted at the draught in 1744.—By land, Thurso is somewhat more than 290 miles N. from Edinburgh.

Next morning, at 5 o'clock, we left Thurso in an open boat, to cross the *Pentland Frith* to Orkney. On leaving Thurso Bay, off Holburn Head, we passed several large insulated masses of rock, the bases of which are washed by an almost perpetually furious tide, while their tops are covered by hundreds of gulls and auks. In the Pentland Frith there was a heavy dead swell, as it is termed, our boat mounting and sinking with the waves, without the least spray. So large were the waves, that every time one intervened, we lost sight of land, and of a sloop which was then in the Frith. After reaching Cantick Head, we crossed the entrance of the Long Hope, a most capacious and safe natural harbour. We passed the islands of Fotal and Cava. In the narrow sounds here, we saw many boats engaged in the fishery of *dogs* or *boes*, as they are here called, (*i. e.* piked dog-fish, *squalus acanthias*,) from the livers of which they extract oil, and the bodies of which they dry for winter food. The fishers remark, that the dog-fish are found in shoals only at change or full moon; it is highly probable
that

* Stat. Acc. of Scotland, vol. xx. p. 594.

that the strong tides which prevail in the Pentland Frith at these periods may force those fishes into sheltered places for a time. At mid-day we sailed up the Orkney mediterranean, called *Scalpa Flow*: here we got sight of the Cathedral of St Magnus in Kirkwall. As we approached the shore, I could not help remarking the uncommon pellucidity of the water, and the immense length to which fucus filum (here called *cat-gut*) had grown in one season; it was already about twenty feet long: its slow and regular undulations with the limpid tide, had a fine effect. We landed at Scalpa, about a mile and a half from Kirkwall, which is situated on the opposite sea. It is high water at Scalpa an hour sooner than at the shore of Kirkwall; this is owing to the former place being more immediately exposed to the press of the Atlantic waters.

The *town of Kirkwall* consists principally of one long street, near an English mile in length. In most places it is narrow and dirty; near the Cathedral it becomes spacious and clean. The houses are very generally placed in the Danish way, with their gables to the street. They are chiefly built of sandstone-flag, which naturally splitting into flat square pieces, saves both dressing and mortar. The mortar is almost wholly clay, a little lime being employed for the outside of the wall only. Some of the houses lately built, are in the modern style, and have an elegant appearance. The principal public buildings in Kirkwall are the Cathedral, and the Bishop's and Earl's Palaces.

The

The *Cathedral of St Magnus*, though part of it was built so long ago as 1140, is still entire. An addition made to it, in the 16th century, by Bishop Reid, has destroyed its proportions: it is now much too long for its breadth. The day after that on which we reached Kirkwall being Sunday, we had an opportunity of viewing the interior. Only the eastern half of the Cathedral is at present occupied as the parish-church. The effect of the church-music was grand: the lofty and vaulted roof re-echoed the melody of the psalm, and “swell’d the note of “praise!” Fourteen lofty pillars on each side, support the arched roof: each pillar is about 15 feet in circumference. The length of the Cathedral is considerably more than 200 feet: its breadth more than 50. The height of the roof, we were informed, is 70 feet; of the steeple, 130 feet. A rose window, on the south gable of the cross, of a fine appearance, has lately been renewed and ornamented, through the taste and care of the senior clergyman, Mr Yule. Principal Gordon remarks*, that the Cathedral of St Magnus, like most cathedrals in Scotland, reminded him of the *loca fœta situ* of Virgil: the *fitus*, however, with which the roof, the walls, and the pillars of St Magnus are covered, is no common production, but one which will interest the botanist: it is the rare *byffus æruginosa* of Linnæus. This *byffus* also invests the walls and pillars of Roslin Chapel, near Edinburgh, where it was observed a few years ago by Dr Smith of the Linnean

* Trans. Antiq. Soc. Edin. vol. i.

Linnean Society, for the first time since the days of Dillenius. From a small balcony-walk around the steeple, there is a noble prospect both of the southern and northern seas and the islands. There are three bells in the steeple, which are calculated to make a good chime, if they were well rung. At the east end of the Cathedral, near the altar, we saw the white marble grave-stone of Haco, king of Norway. It is on a level with the floor, and partly covered by one of the pews. This Haco died in 1263.

The *Bishop's Palace* is situated close by the Cathedral: it is entirely in ruins, with the exception of a tower at the north end. This tower is a handsome structure, the work of Bishop Reid,—whose effigies, rudely executed, and much defaced by time, still appears in a niche fronting the street.

The *Munse*, or parsonage-house, an old building, immediately adjoins the south end of the Bishop's Palace. Over the door appear the following doggerel leonines:

“ Omnia terrena, per vices sunt aliena :

“ Nunc mea, tunc hujus ; post mortem nescio cujus.”

The *Earl's Palace* fronts the Bishop's. It is also ruinous, but not so much decayed as the other. It is about 200 years old. The large hall is about 60 feet long, by 20 broad: it is lighted by four spacious windows, divided in the Gothic style, and with balconies in front. The arch of the great chimney in this hall bespeaks no common proficiency in building: the large stones are contrived so to lock into each other, as that the mantel-piece is, below,

low, perfectly horizontal. On each side of this mantel-piece, the disgustful vanity and bad taste of the owner has blazoned his initials, P. E. O., "Patrick, Earl of Orkney." There is an inscription over the outer door, which is now illegible. What was formerly the palace-garden is now rented in small patches, or *hundreds* (as much ground as will raise 100 cabbages), by the town's people, who plant it with kitchen-stuffs.

On the west side of the main street, fronting the Cathedral, or a little to the eastward of it, are the shattered remains of the *Castle of Kirkwall*, which appears to have been once a place of some strength.

About the middle of the town, also on the west side of the street, stands the gate leading to the old Bishop's-house, having over it the arms of Bishops Stewart, Maxwell, and Reid. It was in this house that James V. slept, in his visit to Orkney in 1540.

Over the gate of one of the oldest private dwelling-houses in Kirkwall, we observed the following inscription: "Patrie et posteris.—Nisi Dominus custodierit, frustra semen nostrum serviet ipsi. Anno salutis 1574."

A little to the north of the shore of Kirkwall, may be seen the remains of Oliver Cromwell's Fort. A 6 or 8 pounder still lies here, but rusted and honeycombed to a miserable degree.

The straw-plaiting manufactory in Kirkwall employs about 150 girls, who are paid 1 *d.* per yard, and will gain from 10 *d.* to 1 *s.* 6 *d.* a-day. From 30 to 40 sit at work in the same room; and it is, perhaps, very questionable, if such crowded establishments

ments be favourable either to the health, or to the morals and future prospects of young females.

At the back of the town, on the west side, there is an extensive salt-water marsh, called the *Oyce of Kirkwall*, which becomes a fine sheet of water at every flood of the tide. It is then called the *Little Sea*, and is highly ornamental, as well as useful to the place.

Flocks of starlings are to be seen perched on every wall and chimney-top about Kirkwall, being as plentiful as sparrows are at Edinburgh. Fifty-seven starlings have here been killed by one shot.

In all the gardens which we had an opportunity of seeing at Kirkwall, artichokes were growing with uncommon luxuriance. Cabbage and cauliflower were also in high perfection. As a proof of the mildness of the climate here, I may mention that, in one garden, I observed the following plants in blow: sweet marjoram, mignonette, loosestrife, polemonium repens, aster corymbosus, and some others; and several plants of tobacco above two feet high, raised this season from seed sown in the open border. In several of the gardens there are trees twenty or thirty feet high, generally ash or plane.

Since the introduction of the kelp-manufacture in Orkney, a great change has taken place in the state of society in Kirkwall. Country gentlemen have thus acquired from their bleak estates, sums of money, great beyond all former experience. This has gradually induced many of them to abandon, especially during winter, their lonely and dreary habitations in the isles, and to draw together in Kirkwall,

wall, where they may not only enjoy society, but can command better education for their children. In dress and polite behaviour, the superior class of inhabitants in Kirkwall equal those of the south: in hospitality they even excel. During winter, there are dancing assemblies and card assemblies, alternately, every week. During the two winters last past, popular lectures on chemistry were delivered twice a-week by a medical gentleman of the place *, and the profits generously given to the poor.

In the populous and rising town of Kirkwall, it surprised us to learn that there were *no* public markets, for butchers-meat, fish, poultry, or other articles. While the seas around are teeming with fish, it is really preposterous that there should be no fish-market, no place where the country fisher might quickly dispose of his cargo. The magistrate who shall first establish public markets in Kirkwall, will long be held in esteem by the community at large. The present slaughter-house of Kirkwall is a nuisance, being situated hard by the main street, in passing which the inhabitants must often be assailed by effluvia from the putrid blood. If new shambles be erected, it is to be hoped that the magistrates will take care to place them a few hundred feet farther to the west, where the Little Sea will wash away all impurities twice every 24 hours.

Although Kirkwall is a place of considerable trade, yet there is no quay at the harbour! no, not so much as a little pier at which a boat may land!

Passengers

* Dr Thomas Stewart Traill, now of Liverpool.

Passengers from the adjacent islands must either leap into the sea, or be carried ashore on men's shoulders! It is to be hoped that so great a deficiency will not long be overlooked.

(*Scots Mag. Dec. 1804.*)

Among the public buildings of Kirkwall, we must not forget to rank the *New Church*, a large meeting-house, so called, belonging to the class of Anti-burgher Seceders. It is a spacious church; and the preacher * being popular, the audience seldom falls short of a thousand. This is the only place of worship in Kirkwall, besides the established church.

We shall now briefly take a survey of the environs of Kirkwall.

Between two and three miles N. W. from the town, at a place called *Quanterness*, a large subterraneous building was some time ago discovered. It is vulgarly called a *Pecht's house*; but it differs materially in structure from the other ruinous buildings in Orkney which have got the name of Pechts' houses. It has more the appearance of having been intended as a cemetery. The entrance is long and narrow; and leads into a lobby, (if it may be so called), which is about fifteen feet long, by five broad. On each side of this lobby are two small chambers; and there is also a small chamber at each end of it. In one of these last, a complete human skeleton was lately found. We saw some of the bones: they are of a small size, apparently belonging to a boy or a

B

woman.

* Mr Broadfoot.

woman. This building appears to have been constructed before the properties of the arch were understood in Orkney; for the roof is formed, merely by a gradual approximation of the stones from the opposite walls.—In returning from Quanterness towards Kirkwall, the town and its lofty Cathedral are seen in the most advantageous point of view.

The house of *Corse*, belonging to Captain Gibson, possesses perhaps the most pleasant situation in the vicinity of Kirkwall. It stands on the brow of a green hill, commanding a prospect both of the southern and northern seas, and overlooking the town of Kirkwall. Here the traveller from the south-west of Pomona, first catches a view of the Cathedral of St Magnus: and there can be little doubt that in former days a *cross* had here been erected, where the devout pilgrim might kneel in gratitude for the welcome sight of the house of God: the name *Corse* encourages this supposition.

Scalpa is a charming bay, about an English mile south from Kirkwall. Its banks offer, in fine weather, the most inviting walks to the inhabitants of the town. A rivulet here falls into the sea, and attracts great quantities of sea-trout of a large size, which are disregarded by the Orcadians with foolish supineness. About the middle of August last (1804), a shoal of herrings *set* into Scalpa Bay: we could even see them from the shore, and could hear the rippling noise which they occasioned. Yet only a single boat from Kirkwall was sent to this rich harvest, and that boat was not provided with a suitable net. Two boats, however, came from Thurso

in Caithness, more than thirty miles distant, to share in the spoil. When we visited some of the cottages in the adjacent parishes of Orfir and of Holme, we found the poor inhabitants starving for want, while the sea, at their doors, was thus teeming with neglected food. The cottagers, however, are not able to purchase nets. How honourable would it be, were the gentlemen and merchants of Kirkwall to unite in procuring a store of herring-nets, so as to be ready to avail themselves of the occasional and temporary visits of the shoals, and thus to furnish in plenty to the poor, a cheap, a palatable, and a wholesome article of diet !

About Scalpa, the short-eared owl, (*strix brachyotos*), is not uncommon, during the summer months. A tame racoon, (*ursus lotor*), a native of the West Indies, plays about the meadows of Scalpa during the same period ; a proof, if any were necessary, of the general mildness of that season in Orkney.

Having been informed, that a Dr Sutherland of Orkney, (long ago deceased), a pupil of the great Boerhaave, was in the frequent practice of resorting to a small glen, called the *Guills of Scalpa*, to gather simples which he dispensed in his medical practice ; curiosity led me carefully to examine the spot. Valerian (*valeriana officinalis*), and wild angelica (*angelica sylvestris*), were common ; as were also eye-bright (*euphrasia officinalis*), and lady's-finger, or kidney-vetch, (*anthyllis vulneraria*). Purging-flax (*linum catharticum*), and ladies-smock (*cardamine pratensis*), were sparingly scattered. One or two plants of orchis latifolia appeared. In a marsh grew plenty

ty of the bog-bean, or marsh-trefoil (*menyanthes trifoliata*), and on the rocks by the sea, a few plants of Scots-lovage (*ligusticum Scoticum*). In an old garden at Kirkwall, I observed a large bed of bistort (*polygonum bistorta*); a remnant, I presume, of the Doctor's dispensatory. Most of the gardens are provided with elecampane (*inula helenium*),—a decoction of the root of which, is a frequent ingredient in Orkney ale.

The only properly made road in Orkney, is that which leads from Kirkwall to the parish of Holme, (or, as it is generally pronounced, *Ham*), being the road which the post-boy pursues, on foot, with the mail for the south*. There is, indeed, a kind of road between Kirkwall and Stromness: but to render it passable during winter, three or four single-arch bridges, over as many rivulets, together with one large bridge, over the outlet of the lake of Stennis, would be necessary. A very few hundred pounds, however, judiciously laid out, would greatly improve the communication between the capital of Orkney and its principal sea-port. Were Government fully aware of the state of Orkney; did they know, that many parents are unable, through want of employment, duly to feed or to clothe their children,—children, many of whom would, in a few years, add to the strength of the British Navy; they would not hesitate.

* Formerly Kirkwall had only one mail in the week. Since August 1804, however, there have been two arrivals and two departures every week, when the state of Pentland Frith admits.

tate to furnish them with some such public employment*.

Agriculture, &c.—The parish of Holme, to which we shall at present confine our attention, appears to be in as high a state of cultivation as any district which we had an opportunity of seeing in Orkney. But, throughout Orkney, the state of agriculture is indeed very low. The fact is, that in Orkney, at this day, the landholders pay attention to nothing but the manufacture of kelp: agriculture is quite a secondary consideration †: the fisheries, too, are utterly neglected. Such being the case, the reader will not, we believe, conclude we are prophesying, if we say, *that kelp will be the ruin of Orkney.* A failure in the demand for kelp, would make Orkney poor indeed.

In most places, the ground is not ploughed, but scratched merely. Alternate crops of oats and big are taken for many successive years. The soil, thus scourged, is able to produce its scanty crop, only by means of quantities of rotten sea-ware which are annually strewed on it. The kind of oat, here cultivated,

* The act of the 43d of the King, ordering money to be issued from the Treasury towards the making of roads and building of bridges in the Highlands of Scotland, will soon extend its beneficial influence over the counties of Ross, Caithness, and Sutherland; but it is doubtful if the remote Orkneys come within the compass of the act. When the commissioners, however, shall report on the roads and bridges necessary in Caithness and Sutherland, it is to be hoped they will extend their views across the Pentland Frith.

† See Notes in Appendix.—Note A.

tivated, is a different species from the common oat of the south of Scotland. The Orkney oat is the *Avena strigosa* of Linnæus; the Lothian oat is the *Avena fativa*. The former is known, in Orkney and in Shetland by the name of *black oats*, (sometimes *grey oats*), and is easily distinguished by its numerous awns, and by the circumstance of the heads all hanging in one direction*. It withstands the sudden blasts from the ocean much better than the white oats. Mixed with the black oat, in many fields we saw abundance of the tall hygrometric oat, *avena fatua*. A variety of *A. fativa*, called the Red Oat, is also cultivated, but is liable to shake: the Potato Oat, being an earlier kind, might be found preferable. The Orkney big is a variety of the common *hordeum vulgare*, called *bear* in Scotland. The fields are generally much infested with weeds, and with those weeds especially
which

* Each floret of the black oat, has two short awns from the end, and one very long crooked awn from the back; and as the florets grow in pairs, there thus appear together, in the black oat, four short awns and two long crooked awns, where there appears only one straight awn in the common white oat. Another very obvious distinction is this, that, in the white oat, the panicle or head is diffuse, and the grains or seeds hang on every side: in the black oat, however, the panicle is compact, and the grains or seeds are secundate, or hang all in one direction. We observed that this kind of black oat, is cultivated also at Thurso in Caithness, and receives there the same designation: we believe, indeed, that it is the most common oat in the more northern counties of Scotland. A straggling specimen of the *avena strigosa*, may sometimes be observed in the oat-fields around Edinburgh.

which indicate a poor soil and negligent husbandry. Spurry (*Spergula arvensis*); small bugloss (*Lycopsis arvensis*); and corn marigold* (*Chrysanthemum segetum*), are the most numerous and noxious. There is no wheat raised in Orkney.

Turnip husbandry has of late been introduced by a few, and found very advantageous. A Swedish gentleman of extensive information strongly recommended, in our hearing, the *colrabbie*, or *turnip cabbage*, (*Brassica oleracea*, var. *caulo rapæ*, of Linnæus,) as excellently adapted to the climate and soil of Orkney and Shetland,—as calculated to remain through the winter,—as very productive, and as being equally suited for culinary purposes, and for winter-food to cattle. A few seeds were at this time distributed by him in Orkney. There can be no doubt that it will ripen its seeds in the mild climate of those islands: And all the cabbage tribe, we know, agree well with a maritime situation. The same gentleman also recommended the culture, in these countries, of the tall plant Jerusalem artichoke†, (so named from the root possessing somewhat of the flavour of artichokes,) as an excellent and suitable winter vegetable. Winter-food for cattle is a principal

* This is the plant known in the southern counties of Scotland by the name of *Gules*, or *Guilds*, and for the extirpation of which, several acts appear in the old Scottish code. It has been well remarked that this plant flees from cultivation, and that the true way to extirpate it, is to manure, to summer-fallow, and to plough. It is now scarcely to be seen in the neighbourhood of Edinburgh.

† *Helianthus tuberosus*.

principal want in Orkney : in that bleak season, frequently, the cow of the cottager must prowl along the shore, and pick a scanty subsistence from among the *sea-weeds* thrown in by the tide.

The *tall oatgrasses*, (*holcus avenaceus*, or *avena elatior*,) grows naturally in every part of Orkney. It would flourish on the poorest soil, and would never fail to be an abundant crop. Yet it has never been cultivated for hay in Orkney. Large crops of it are every year raised in Sweden ; and as the cattle there eat it greedily during winter, there can be no doubt that the half-starved beasts of Orkney would find it a rich feast during the same period. This surely deserves the attention of some Orkney improver.

In different little inlets or bays near Carnes Point, opposite to the island of Shapinfa, I found several shells not common on the more southern shores of Britain. *Venus Erycina* was among them ; also *Venus Paphia*. *Trochus zizyphinus* was in great abundance ; but the common *trochus* of the south of Scotland, *T. umbilicaris*, was rare. *Cypræa pediculus*, or *John o'Groat's bucky*, is found on all the shores of Orkney.

On the 25th of July we rode nine or ten miles into the country south-east from Kirkwall, to a peninsular district named Deerness. On our way, and not far from Kirkwall, we remarked a variety of *Carduus lanceolatus* with pure white flowers. At this season the country was seen to the very best advantage, being in its highest state of verdure. Yet it
every

every where appeared to us, poor and steril; and the total want of trees or shrubs gave it an indescribably naked appearance. Several species of willows, (*salix arbuscula*, *prunifolia*, and *cinerea*), were indeed here and there scattered; but we scarce ever observed any of them above two feet in height. Common mugwort * far overtopped them. The district of Deerness is connected with the mainland only by a narrow and sandy isthmus. At this neck of land may be seen the remains of several *Pechts' houses*; and close by these, grows *thalictrum minus* (lesser rue-weed) in great plenty.

In a moist meadow, called Keygar's Meadow, near Capt. Richan's house of Brebuser, Deerness, we observed abundance of *anagallis tenella* (bog pimpernell); a plant which did not again present itself to us in any other part of Orkney. A small lake here was nearly filled with *potamogeton marinum*.

At Deerness we saw very strong ropes, calculated for different purposes in husbandry, made of the shoots of the crowberry-heath (*empetrum nigrum*). The ropes for hanging the *caseys* or baskets over the horses' backs, were made of the fibrous roots of sea-reed (*arundo arenaria*). Tethers and bridle-reins were wrought of long meadow grasses, such as *holcus lanatus*, which grasses here receive the name of *pounce*, or *puns*.

The Bay of Firth, in Damsay Sound, about three or four miles west from Kirkwall, affords excellent oysters,

* *Artemisia vulgaris*; in Orkney called *Grey Bulwand*—The tops of the stalks of this plant, are used, by the common people, in place of hops.

oysters, larger far than the finest *pandores* of Preston-pans or Edinburgh. The oysters are not dredged for, the ground being very foul, but are gathered on the ledges of the rocks at ebb-tide, with a pair of long tongs. Persons may be hired to fetch them to Kirk-wall, at the rate of from 1 s. to 1 s. 6 d. a hundred.

Stromness is situated on the same island with Kirk-wall, and about twelve miles south-west from that town. On our way to it, we stopped at the Lake of Stennis (or Stenhouse,) to view some truly curious and interesting remains of antiquity called the *Standing Stones of Stennis*. These standing stones (or stones set on end,) are arranged in the form of a large circle, and a smaller semicircle. We first viewed the latter, which perhaps had originally been a complete circle: in that case, it must have been 100 feet in diameter, the curvature of the semicircle that remains measuring somewhat more than 150 feet. Some of the stones of this semicircle are truly massive, rising about eighteen feet above the ground. At a little distance stands a solitary stone of great size, having, about two or three feet from the ground, a round perforation in it. This round hole, it has been supposed, was intended for tying the sacrifices offered at this rude, but magnificent temple, in times of Druidism. The common people still attach a good deal of veneration to it; if a lover and his mistress join hands through it, this (we are told) is considered as the sign of a vow of the most sacred kind: it is called the *promise of Odin*. The more superstitious of the natives also are of opinion, that if, when they are young, they pass their head through this

this hole, they will never shake with palsy in their old age.—The lake of Stennis is here divided into two by a kind of causeway or range of stepping-stones, which leads to the large circle. This circle had originally consisted of about sixty huge stones: about fourteen of these are still complete, and stand on end; several more lie prostrate on the ground. This circle is exactly geometrical: it is about 300 feet in diameter; consequently about 940 feet in circumference. It is completely surrounded by a ditch thirty feet wide, and generally about twelve feet deep. This ditch had formerly been filled with water; and to fill it again would be no very laborious undertaking, the great lake of Stennis being, as already mentioned, in the immediate vicinity. The whole stones are covered, in the upper part, with the finest specimens of lichen calicaris, of uncommon length,—giving the liveliest resemblance of hoary locks hanging over their aged shoulders. Many of these specimens were in complete fructification, or full of saucers. On a fragment of one of the stones, which I broke off, were the following lichens in fine state, *L. sulphureus*, *pulicaris*, and *ater*. The stones are of sandstone with numerous small specks of mica. They appear to have been dug from quarries on the south side of the lake.

Stromness is the principal port in Orkney; the resort of the whale-fishing vessels, and of the Hudson's Bay fleets. Many foreign vessels also touch at Stromness. The harbour is capacious and safe. The town is rapidly increasing; but unfortunately no regularity is observed in placing the houses:

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the main street runs zig-zag in the most whimsical manner, and is in several places so narrowed by projecting buildings, that no kind of cart can be driven along it. Stromness was formerly cramped by its supposed superior, the borough-town of Kirkwall; but the independence of Stromness on Kirkwall was finally declared by a judgment of the House of Lords in 1758. The houses are in general slated with slabs of shistose clay found in the neighbourhood.

The mineralogical appearances in the neighbourhood of Stromness have been well described by Professor Jameson, in his *Mineralogy of the Scottish Isles*. Here the only primary rocks in Orkney make their appearance. The junction of the primary and secondary rocks is seen near Stromness, at the *upper* mill of Cairston, at a line about twenty yards above the mill. Between the town and the clergyman's *manse* I saw a good deal of *compact* barytes*, in pretty large masses: it was generally studded with bits of galena. The common foliated barytes is also found in the neighbourhood.

Shapinsa.

* Having reduced a piece of this compact barytes to a coarse powder, I mixed it with powdered charcoal, and subjected it, in a crucible, to a red heat for several hours. Upon afterwards adding boiling-hot water, I obtained a solution, which, on cooling, presented some fine flaky crystallizations. Upon adding muriatic acid to this solution, a quantity of sulphuretted hydrogen gas was evolved, proving the native combination to be a sulphate, and the flaky crystals to have been sulphuret, or perhaps rather hydro-sulphuret, of barytes. I thus obtained a solution of muriate of barytes, capable of detecting the presence of the smallest portion of sulphuric acid in water.

(*Scots Mag. Jan. 1805.*)

Shapinsa.—From Kirkwall we passed, (29th July), in a small boat, to the island of Shapinsa, which is situated about three miles to the northward. Elwick Bay, where we landed, is a secure natural harbour. Here we were delighted to see something like a hamlet of comfortable cottages. In its immediate vicinity stands Cliffdale House, the seat of the late Colonel Balfour. This gentleman greatly improved his property in this island: he made Cliffdale his principal residence; ornamented it with a completely-furnished garden, and erected the first and only greenhouse and stove in Orkney. Near the centre of the island we saw a tumulus called the *Wart* or the *Ward*; and, at some distance from it, the *standing stone of Shapinsa*, a huge unshapen mass, completely invested with lichens. At the east end of the island some whinstone appears, inclining to the basaltic form*. Limestone is also found, but not of rich quality. The *hill-ground*, or common, of Shapinsa, is covered with *salix argentea*, or silver-leaved creeping-willow, which lies prostrate on the earth: its catkins were now bursting, and made the ground appear as if strewed with tufts of cotton. On the shore I saw abundance of *fucus esculentus*, (*F. teres* of Dr Goodenough). This large sea-weed is winged at the base (to speak botanically) with flat sword-shaped leaflets: these leaflets are known in
Orkney

* Described in Professor Jameson's Mineralogy of the Scottish Isles. Rock-oil occurs in it.

Orkney by the name of *mirkles*, and are frequently eaten, as well as the mid-rib of the principal leaf. We viewed Shapinsa church, which is in shameful disrepair. After spending the night at the hospitable manse of Dr Barry, the clergyman of the island, (who, we are happy to say, is about to publish a general history of Orkney *,) we next day crossed to the island of

Stronfa.—The day was nearly calm: we set out with the gentlest breeze: the tides, however, in Stronfa Frith, run with such velocity as constantly to produce a turbulent sea: in one part, near a promontory called Rothesholm Head, (pronounced *Roufom Head*), the tides were running counter to each other, and, by their collision, occasioned an appearance like the boiling of a great caldron. Our boat was tossed and shaken in a most disagreeable manner: such a piece of rough sea is, in Orkney, denominated a *roft*: it was curious to see the billows here rising into foam, while all around was comparatively tranquil and serene. In this frith we saw a good many *dunter-geese*, or eider-ducks, (*anas mollissima*), and great numbers of *toists* †, or Greenland doves, (*colymbus grylle*).

Upon

* *Addit. Note*.—This History has been since published in 1 vol. 4to, and very well received.—But alas! the worthy author is no more. He died in summer 1805, soon after the publication of his work.

† *Teiste* is the Norwegian name of this bird. See Pennant, Brit. Zool. in loco.

Upon the shores of Stronfa I first saw the small inclosures for raising cabbage-plants called *planty-cruies*. They are merely little square pennis, or *bughts*, inclosed by a dry-stone wall: black mould, or more frequently a mixture of clay and ashes, is laid on the inclosed area, and here cabbage-plants are raised, to be set out in the spring. These *planty-cruies* are always situated on the flattest part of the shore, close by the sea, where the frost is best avoided.

In traversing the *hill-grounds* of Stronfa, I was astonished at the vast flocks of golden plovers, (or, as they are termed in Orkney, *grey plovers*), which our approach occasionally disturbed and put upon the wing: they really seemed to darken the air.

In many of the inland parts of Stronfa, the pasture consists almost wholly of viviparous fescue grass (*festuca vivipara*). On the shores, again, it frequently consists entirely of the sea-plantain grasses (a narrow-leaved variety of *plantago maritima*, with *P. coronopus*). These, having a saltish flavour, form an acceptable pasture to sheep, who bite close: but they are so dwarfish, and so closely matted on the ground, that horses and cattle cannot browse on them. It is generally remarked in Orkney, that sheep fed on such pastures, fatten more quickly, and afford the best mutton. In one district of Stronfa, I observed several acres covered with the common yellow flag, or *seg*, (*iris pseudacorus*), of which a very coarse kind of hay is here made.

On the 1st of August we sailed from Airie, the seat of Misses Fea, along the rocky shores of Stronfa, to the Brough Head, a mural promontory, which presents

presents its solid front to the rage of the German Ocean. There are many caverns here into which a boat may enter in calm weather. These caves, and their unknown recesses, are the habitation of the seal, or *selchie*, and the sea-otter. We rowed pretty far into one of them: a gentleman of our party happening at this time to fire off his piece, we were astonished at the loud and reiterated reverberations of the report: it was indeed tremendous, resembling the firing off of a whole battery of great guns. All along the rocky shore here, our ears were dinned with the call of the wild pigeon, the loud shriek of the *chaldrick*, or sea-pie *, and the shrill scream of the *picketarnie*, or sea-swallow †.

On all the ledges of the rocks we observed many nests of *scarfs* or shags ‡, with a couple of young in each nest. The corvorant, or great *scarf* ||, keeps possession of the lofty rocks at Brough Head, where our boatmen amused themselves with dragging down some of the half-fledged young with their boat-hooks. These they esteemed very good food; and we were told, that it is not an uncommon practice to bury them for four and twenty hours in the earth,

* *Hæmatopus ostralegus*; sometimes called oyster-catcher.

† *Sterna hirundo*.

‡ *Pelecanus graculus*. This was the variety which is destitute of a crest, and which Mr Pennant mentions his having seen in the Hebrides. Br. Zool. vol. ii. p. 611. In the Frith of Forth it is called the *Scart*.

|| *Pelecanus carbo*. In the Frith of Forth, this bird is also called a *Scart*. *Scarf* is a nearer approach to the Norwegian name, *scarv*.—Pennant.

earth, which is said to render them more tender, and to abstract in a great measure the fishy taste. Soup then made with them is accounted not much inferior to hare-soup, and is thought to resemble it in flavour.

The Brough is a large isolated mass of rock, which seems to have been disjoined from the island by some violent convulsion. Its summit was at this time rendered quite white by the flowers of scurvy-grass,—*cochlearia officinalis*, mixed with *C. Danica*, which last is the most common species in Orkney. It is the resort and nursery of hundreds of *scaurics*, or herring-gulls, (*larus fuscus*). I believe the Orkney name *scaurie*, is applied to this gull only while it is young and speckled; and it loses its speckled appearance after the first year.

A little way from the Brough, we saw the prodigious effects of a late winter-storm: many great stones, one of them of several tons weight, had been tossed up a precipice twenty or thirty feet high, and laid fairly on the green sward. The Brough is directly exposed to the fury of the German Ocean, which is terribly agitated by east winds.

There is a common saying in Stronfa, that “ he who eats of the *dulse* of Guiodin, and drinks of the wells of Kildingie, will escape all maladies except black death.” Guiodin is a rocky creek, situated near the farm of Kerbuster. The name is supposed to mean the *geu** or creek of *Odin*. I

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* *Geu* appears to correspond to the *Voe* of the Shetlanders. Besides this *creek of Odin*, we have, in Stronfa, places called *Odnefs*

had the curiosity to examine what this salutiferous *dulse* might be; and found it to be the common *fucus palmatus*. I likewise visited the wells of Kildingie, and found them to be weak chalybeates. These wells, or springs, are situated in the Mill Bay, on the edge of the Links of Houton.

At Lamb Head are several of the tumuli called *Pechts' houses*, consisting of a very thick circular wall, inclosing a small area, with little oblong chambers within the body of the wall itself.

About two miles south from Lamb Head, in the middle of a rapid *tideway*, there is a flat *holm*, or small uninhabited and barren island, called Aukerry. One should suppose that such a spot would be of very little value; yet its low rocky shores, and situation in a *tideway* render it very productive in sea-weeds of the best quality for the manufacture of kelp, (for currents are universally admitted to favour both the luxuriance of these plants, and their richness in alkaline salts); so that this desolate spot yields perhaps more to the proprietor than a farm of some hundred acres, in the best of the islands.

It has been thought that there is no limestone in Stronfa*. Between the Nefs of Odnefs and Kerbustfer, however, there is a large bed of limestone, the inclined base of which is washed by the sea. It is of a bluish colour, but not very rich, containing probably not 50 *per cent.* of lime: in some places,
however,

Odnefs and *Tornefs*, meaning probably the *nesses* or points of *Odin* and of *Thor*,—the great Scandinavian deities after whom two of the days of our week (*Wednes* day and *Thurs* day) have been named.

* Mineralogy of the Scottish Isles, vol. ii. p. 236.

however, it is traversed by broad veins of calcareous spar. This bed of limestone lies between strata of coarse sandstone-flag, with which it is in immediate contact both above and below, though marked by a well-defined line.

Upon the north-east shore of Stronfa, near the Ness of Odnefs, there is a very large bed of shells, which, I was assured, was thrown up by the sea in the course of a single stormy night about twenty years ago. The shore here is very rocky, and the people say, that, till that event, it was a rarity to find on it any kind of shell. Upon examining the bed, I found that a great proportion of the shells consisted of single valves of the *arca glycymeris*, of uncommon size, twice the size of Penant's figure of the shell. Besides the *arca*, I picked up many water-worn and broken specimens of *ostrea maxima*. Neither of these kinds is to be found recent on the beach. From this shell-bank the farmers around might derive several hundred cart-loads of broken shells to lay upon their stiff or clayey lands. These shells would probably be nearly as efficacious as quicklime, which still, even after it has lost part of its causticity by absorbing carbonic acid, acts as a manure: but the farmers are at present prejudiced against the use of them.

At Kerbustfer, I observed laid out to dry, at a cottage-door, a large collection of the flowering-tops of the dwarfy milfoil (*achillea millefolia*), which grows on the dry commons, and which is here known by the oddly-corrupted name of *meal-and-folic*.

folie. These flowering tops they infuse and drink as tea,—this beverage being held in high repute for dispelling melancholy.

Before leaving Stronfa, we paid a visit to Whitehall*, formerly the seat of Mr James Fea, the gentleman who, as we were informed, first introduced the manufacture of kelp into Orkney. Mr Fea went to England in person with the first cargo, and sold it at Newcastle. This was in the year 1722. It is proper, however, to remark, that the possibility of making kelp in Orkney was known near thirty years before that period; for Dr James Wallace, in his account of Orkney, dated in 1693, thus writes: “There is plenty of that tangle growing on the rocks, of which, in other places, is made kelp for making of soap.”

No fitter place can occur for the introduction of a few remarks on the kelp-manufacture in Orkney.

KELP is manufactured from all the larger seaweeds. The most abundant kelp-plant is perhaps the sea-weed called *yellow tang* (*Fucus nodosus*): next to it, the *black tang* (*F. vesiculosus*): then the *prickly tang* (*F. ferratus*). On deep shores, as at the
 fea-holms

* Over the door of the house of Whitehall are the initials, P. F. (Patrick Fea), B. T. (Barbara Traill), and the date 1671. Fea and Traill are two of the oldest surnames in Orkney. Fea, indeed, is a Norwegian name. The descendants of Patrick Fea are still landholders in Stronfa. Traill is a very common name in Orkney. The Traills are said to be descended from a younger son of the Traills of Blebo in Fife, who had migrated northward. Traill of Holland, or Papa Westra, is the most ancient of the name in Orkney.

sea-holms of Aukerry, near Stronfa, and of Rouskholm, near Westra, great quantities of *red-ware* or sea-girdles (*F. digitatus*) are collected with long hooks at low water. *Fucus esculentus* (*badderlocks*) is likewise employed; together with *F. saccharinus*, (sea-belts), though this last is not much esteemed, as it is found to become bleached and saltless from exposure to the slightest shower of rain. The narrow thong-shaped sea-weed, *fucus loreus*, (here called *drew*), is abundant on some rocky shores, as at Tuquoy in Westra, where many tons of kelp are, every second year, manufactured solely from it. This plant, in the first year of its growth, covers the rocks with the appearance of small brown mushrooms. There is still another sea-weed called *catgut* (*fucus filum*), which here grows to an uncommon length,—often thirty or forty feet, and which is accounted excellent for making kelp suited to the manufacture of soap, the natives remarking that it falls small in burning, and washes like soap.

When the sea-weeds are somewhat dry, they are burnt by degrees, in what is termed a *kelp-furnace*, but which is generally nothing else than a *round hole dug in the earth* *. When the furnace is nearly filled

* I had frequent occasion to remark, that the old kelp-furnaces, that had been disused for a year or two, were overgrown with the moss called *Funaria hygrometrica*, (*mnium hygrometricum*), and that this moss was scarce to be seen in any other situation in Orkney. Indeed, it may be remarked of this moss, that it delights to grow upon ashes, or on spots where any kind of incineration had previously been going on. These circumstances are curious, as inferring a dissemination, by means

filled with the remains of the burnt sea-weeds, the whole is briskly agitated with a rake or hook, till it be compacted, or become of a shining glutinous consistence like melted iron : it is then allowed to cool, and is afterwards placed in storehouses for exportation.

Kelp is at best a very impure carbonate of soda *, being constantly mixed with a portion of the sulphate and muriate, and frequently the sulphuret, and always containing a quantity of charcoal. But it is evident that, by the careless process above described, it must be subjected to many foreign and adventitious impurities,—to sand, shells, stones, and to quantities of vegetable mould, which must of necessity separate from the sides and bottom of the furnace by means of the heat, and adhere to the kelp when in a liquid state.

Very often the *prickly tang* (*fucus ferratus*) is almost wholly covered with the little circular shells
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means of the atmosphere, of the truly impalpable seeds of mosses, more universal than can well be conceived. In former times, they would have been admitted as undoubted instances of equivocal generation.

* It has often been stated (Trans. Highl. Soc. vol. i. p. 10., Stat. Acc. Scot. vol. xvii. p. 240.) that kelp is the *vegetable* alkali : but although it is procured from marine vegetables, and although a small portion of potash is generally present, kelp is nevertheless to be considered as the *mineral* alkali, the same that may, by an expensive process, be obtained from pure seawater. It is not yet determined what effect the process of vegetation has, either in separating the muriatic acid from the soda, or in disposing it to separate on the application of heat : yet, that it has some effect, is beyond doubt. See Notes in Appendix.—Note B.

of the *serpula spirorbis* : such *tang* should be rejected from the furnace, and reserved for manure.

Until stone-built furnaces be introduced, and until greater care be employed in sorting and cleaning the sea-weed, kelp will not be manufactured in Orkney, of that desirable degree of purity, which would not only enhance the value and the price, but supersede in a great measure the importation of barilla.

It may not be improper here to remark, that the weed which grows on large flat rocks should never be very closely cut, but that a sufficiency should always be left for lashing the rocks with the undulations of the tide. Owing to the neglect of this rule, some very fine *tang* rocks, at Rapness, in Westra, have become covered with a *scaw* or scurf (or, in other words, the little barnacle shell, *lepas balanus*) which utterly hinders the vegetation of the *tang*, and which it is very difficult to remove. Rocks which are covered by the sea only at flood-tide, are particularly liable to become scurfy.

At the holm of Rouskholm, already mentioned, Capt. Richan, the proprietor, has erected several reverberatory furnaces after the plan of Col. Fullarton's in Ayrshire, for drying and burning the great *tangle* or *red-ware* during winter,—both what is tossed ashore by storms, and what is cut by his tenants at ebb-tide in moderate weather. The kelp manufactured in these furnaces is purer than the common kelp, and sells for a proportionably higher price. The want of coals is a discouraging circumstance, which will probably prevent the general employment

ment of these furnaces in Orkney,—peat-fuel being thought not to answer well : by perseverance, however, the operators would doubtless acquire greater dexterity in using the peat-fuel.

In Orkney, every consideration is sacrificed to kelp. Agriculture is now very much and very generally neglected. Less grain is raised than was raised thirty years ago. Should a cheap process for extracting the soda from sea-water happen to be discovered, or should the market for kelp, on any other account, unexpectedly fail, the landholders of Orkney will find, when too late, the great imprudence of thus neglecting the cultivation and improvement of their lands.

Kelp-making also occasions the almost total neglect of the fisheries. From the island of Stronsa we one day observed twenty or thirty whales, bounding and dashing along, at the distance only of a mile, or little more, from the shore ; great flocks of gannets and other sea-fowls were also there : these appearances were certain indications of herring : yet no notice was taken of this shoal. Cod-fish and haddocks were at the same time, abundant ; and when the poor natives did take some boat-loads of these, they had no salt to cure them ; they merely dried them in the sun, without one particle of salt.

Between 2000 and 3000 tons of kelp are annually manufactured in Orkney. The price paid at Leith, Newcastle, &c. varies from L. 7 to L. 10 *per* ton of 21 cwt. Fifty years ago, the price seldom exceeded L. 1 *per* ton.

(*Scots Mag. Feb. 1805.*)

Last winter, (1803-4), a very large mast was drifted ashore by a south wind, upon the south end of the island of Stronsa. This mast was found to be marked as belonging to the York,—one of our men-of-war of 64 guns, which had unfortunately foundered in these turbulent northern seas. When the mast was first found, it was complete and uninjured; and, being a new one, (dated near the foot, “1800”), must have been of considerable value. The ignorant, but avaricious natives, however, had laboured night and day, till they succeeded in cutting it into three divisions: and in this mangled state we saw it lying on the strand at this time (August 1804). It appears that the main object of this foolish labour, was to get at two of the great iron-hoops with which the beams composing the mast were bound together.

From Stronsa we passed (3d Aug.) to the island of

Sanda.—We landed on the point of Elfnæs. Here we observed much fine pasture-land ruined by the destructive practice of paring off the turf. In Sanda this is chiefly done for fuel, there being no peat in the island. In other parts of Orkney, the sward is peeled off, in order to swell the compost dunghil. Whatever be the motive, it is a practice ruinous to the face of the country, and which ought

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to be prevented. Sanda is the flattest of all the Orkney islands. When we landed at Elnes, it happened to be ebb-tide, and we walked dry-shod across a sandy bay, containing perhaps eighty acres, which is covered by the sea, (though with no great depth of water), at every flood of the tide. As the sea enters by a very narrow passage, the whole of this bay might be gained, and converted into pasture-land, if it were thought worth the expence.

This night (3d August) there was a great deal of very vivid lightning and loud thunder, accompanied with torrents of rain. Every flash of lightning made the sea appear like a vast sheet of flame. Next morning we found ourselves enveloped in an uncommonly dense mist*: at eight o'clock, instead of bright day, we had scarcely "darkness visible †."

We visited the house of Scarr, the seat of Mr Traill of Westove, who resides on his property, and is engaged in inclosing, draining, and other improvements. Here we were happy to find a most extensive and well-chosen library, which must be a
source

* During this thick fog, as I afterwards learned from the captain himself, an Irish vessel, laden with deals, unfortunately struck the rocks of Fair Isle, and went to pieces. The crew, and most part of the cargo, were saved, the wreck happening close in shore. The cargo, however, must lie at Fair Isle till next summer, it being impossible for any vessel to anchor at so exposed and tempestuous a place after August. Fair Isle lies about half-way between Orkney and Shetland.

† Milton.

source of great pleasure to an enlightened mind, during the dreary months of winter, in this lonely infular situation.

In a meadow, near a place called Saville, about half a mile from the church of Burnefs, Mr Traill fhewed us a large *moorstone*, or ifolated maf of primary rock. The whole ifland of Sanda is compofed of fecondary rocks,—fandstone, fandstone-flag, and limestone. The folitary exception in queftion feems to be a maf of gneifs. We endeavoured to eftimate the grofs weight of the maf, and calculated it to be about 14 tons. This *moorstone* we confider as one of the moft uncommon mineralogical appearances in Orkney; the neareft primary rocks being at Stromnefs, which is above thirty miles diftant, and feveral rapid friths intervening.

All the pasture-grounds of Sanda abound with the *field gentian* (*gentiana campestris*); and fome of them are adorned with the beautiful *bird's-eye primrofe* (*primula farinofa*), accounted a rare plant in many parts of the Britifh dominions*.

We vifited the rock of Heclabir, which the natives account very curious. We had been taught, indeed, that it was volcanic, or at leaft, “ calcined “ by fire †;” but we foon found, that its only volcanic refemblance confifted in the fimilarity of its
name

* *Addit. Note.*—Perhaps this Orkney primrofe may prove a diftinct fpecies.

† Stat. Account of Scotland, vol. vii. p. 459.

name* to that of the great volcano in Iceland:— for the rock of Heclabir is nothing else than a breccia, most of the component pieces of which are rounded and water-worn nodules of sandstone. The pieces are of different sizes, from balls of 3, 5, or 10 lbs. weight, to such as are of the size of sparrows eggs. A few quartz and calcareous nodules are interspersed.

From Heclabir we went to the old house of Stove, finely situated at the head of a sandy bay. The whole of this bay is one continued cockle-bed; and, we were told that in times of dearth, it is no uncommon thing to see some dozens of the half-famished inhabitants digging the cockles at ebb-tide. This, at best, is but a miserable fare, and it is painful to reflect, that the sea all around is at the same time swarming with neglected shoals of delicious and wholesome fish;—haddock, skate, cod, coal-fish, and sometimes herring, which are left to be the prey of thousands of gulls, corvorants, and solan geese. How precious to the natives would be the establishment on each of the Orkney islands, of one or two fishing families, with proper boats, nets, and lines, to prosecute with effect the different branches of the fishery!

Over the outer gate of the house of Stove is this inscription: “Soli Deo gloria. Septem proavi hæc
“ nobis

* *Hecla* (in Norwegian, I presume) is said to mean *health*. In Unst, in Shetland, there is a spring called Hiclaburn, accounted very salubrious by the common people. Account of Unst, Stat. Acc. vol. v. p. 185.

“ nobis reliquerunt. J. F. (Jacobus Fea), B. T. “ (Barbara Traill), 1671.” These *septem proavi* were all direct ascendants; all of the same name, James Fea, and holders of the same property and title, Cleftron. This ancient family, however, is now nearly extinct: the estate has become the property of Mr Laing the historian. At a little distance from the house, stands a very neat little chapel, where, about fifty years ago, the episcopal worship was performed. Over the door is this inscription: “ Keep thy foot when thou goest into the house of “ God.”—This handsome little chapel will soon be no more, being apparently considered as a legitimate *quarry* by the tenants and cottars around. As the family burying-place, however, it ought to remain inviolate.

Sanda is accounted the granary of Orkney. The soil is light and sandy, the bottom dry. I never saw finer fields of oats than those of Sanda at this time: they were all of the *grey* or *black* kinds, however. The shores are in general flat, so that the spray is never dashed over the face of the country, as is often the case in most of the other islands.

Sanda is equally productive in kelp. It is generally reckoned, that nearly a fourth part of the whole kelp made in Orkney is manufactured in this island. The sea-weed here, it is remarked, grows more quickly than in many other situations. In most parts of Sanda it is shorn every year: in other islands it does not admit cutting oftener than every second year; in some places, not oftener than every third year. The kelp of Sanda is generally accounted

ed of excellent quality. The tides around this island flow and ebb with the velocity of a rapid river: and to this circumstance is perhaps to be ascribed both the quick growth of the sea-weed, and its richness in alkali.

This fine island, however, labours under a considerable disadvantage,—the want of fuel. There is no peat-moss in it. Peat abounds, however, in the neighbouring island of Eda, from whence the inhabitants of Sanda are supplied. The poorer class, who cannot import a sufficiency of peats, have recourse to various shifts. They peel off the grassy sward for fuel,—a most destructive and detestable practice: they gather also cow-dung and dry it for this purpose: and lastly they dry the large stalks of *red-ware* (*fucus digitatus*), and burn them. In severe winters, however, with all these expedients, they must be miserably distressed for firing.

6th August. We crossed Sanda Sound, a rough frith, and sailed up Calf Sound, Eda.

Eda is a mossy island; a great part of it consisting of barren marshy heaths. *Juncus uliginosus** here covers whole acres; and the pretty little plant *radiola millegrana*, or *all-seed*, is every where strewn. In passing across the island, we saw at some distance the great *stone of Seter*,—a huge flag, rising about sixteen feet upright in the midst of a moor. Some little salt, of very indifferent quality, is still † manufactured

* Little bulbous rush.

† Eda was noted for the manufacture of salt, as early as the middle of the 17th century.—*Brand*.

factured on the shores of Eda, where fuel is plentiful. It could be sold for 6 *d.* or 8 *d.* a bushel, but the duty is 1 *s.* 6 *d.* on the bushel. This however is, no doubt, often evaded. Indeed, the salt is so impure, being made in small vessels on their common cottage-fire, that its trifling value bears no reasonable proportion to so heavy an impost. The cottars who manufacture it, exchange it with their neighbours for meal and other commodities.

From Eda we crossed in the evening Ferfness Sound, to Rapfness in

Weftra.—Here we first saw a favourite supper dish of the Orcadians;—*fillocks*, that had been just taken from the sea. Sillocks are the fry of the coal-fish *, and they swarm about the shores of Orkney in myriads. The rocky shores of Rapfness present many rugged precipices and deep caverns. On the rocks here, we saw the Scots lovage (*ligusticum Scoticum*) growing in great plenty.

Near the house of Clet, a seat of Mr Stewart of Brough, we were gratified to see a considerable field of flax of very tolerable quality. The foreign weed called *gold of pleasure* † was, however, rather common among it. The *blaw-wort*, or blue-bottle ‡, which appears in our wheat fields in the south, here shewed its flowers among the flax. Between
the

* *Gadus carbonarius*. After the first year, the *sillock* becomes a *cooth*: it is next called a *coothin* or *cuddin*; and when full grown, the same fish is called a *setbe*. See Notes in Appendix.—Note C.

† *Alyssum fativum*.

‡ *Centaurea Cyanus*.

the house of Clet and the new church, I saw much of the beautiful *bird's-eye primrose*, already mentioned as growing in Sanda.

In Westra there is a natural harbour called Piero-wall. Here are still the remains of a village; for some shipping-trade was formerly carried on at this place. Now, however, that trade has vanished. Probably a considerable portion of it was of the contraband kind.

From Piero-wall a beautiful smooth grassy lawn extends upwards, with a gentle ascent, to a grand ruinous edifice, called the *Castle of Noltland*. The walls are lofty, and, when contrasted with the humble cottages around, give the castle a majestic appearance. It is curious, that a belief still prevails among the common people (who can have no source of information but tradition) that this vast house was built by orders of Mary, Queen of Scots, as a place of refuge to Bothwell. Of the date of its erection, however, no traditional hint is afforded; and it is not very consistent with the character of the unfortunate Queen to suppose that she foresaw or expected the disastrous fate of her lover, and prepared for him a refuge against the day of calamity. Bothwell, however, may have ordered this castle to be built for himself. He was created Duke of Orkney in summer 1566; and to Orkney he retired from the vengeance of the Confederate Lords in the summer of the subsequent year. I confess, however, I would consider the castle of Noltland as a building of considerably more ancient date than the
days

days of Mary and Bothwell.* It appears never to have been finished according to the original plan; but to have been mutilated and disfigured by some less potent lord, who had patched up to himself a dwelling in it, and stuck up his armorial bearings, which remain to this day a monument of his pride and poverty.

In the neighbourhood of the castle, much havoc has been produced by the blowing of the sands. No measures are employed for putting a period to this kind of devastation. Were the *sea-reed* (*arundo arenaria*) every where sown or planted, (and it is a common weed at Piero-wall in the neighbourhood), the ravages of the sand-flood would soon be bounded.

From Westra we crossed a narrow sound to

Papa Westra,—a beautiful little island, and the most northerly of all the Orkneys. Never did our eyes behold richer tracts of natural-clover, red and white †, than in this island. The soil is good, and was at this time clothed with abundant crops of oats, bear, and potatoes. On one side, Papa Westra is exposed to the swell of the Atlantic Ocean,

F which

* *Addit. Note.*—This conjecture has since been verified by the publication (in the appendix to Dr Barry's History of Orkney) of a Latin Description of Orkney dated 1529, from a MS. in the Advocates Library. In that description it is said, "Est in Westray excellentissima arx sive castellum, sed nondum adhuc [1529] completa."

†. *Trifolium medium*; T. alpestre of Lightfoot; known in Orkney and in various other parts of Scotland, by the whimsical name of *Red Curldoddy*: and *Trifolium repens*, called *White Curldoddy*.

which in winter-storms dashes the spray entirely across the island. On the other side it is protected from the rage of the German Ocean, by a *holm* or *islet*, the habitation of innumerable sea-fowls. We visited this holm; and though it was now the 8th of August, we found in their nests the young of the *toist* or Greenland dove; of the herring-gull, called *scaurics*; and of the *picketarnie**. The *dunter*, or eider-duck, breeds here in great abundance; and its nest is twice robbed in the course of the season, by the people, for the sake of the eider down †. The auk ‡ and razor-bill || also make their nests on this holm, as well as the corvorant and shag. On one point we saw near a dozen of seals basking themselves in the sun. Both the common seal (*Phoca vitulina*), and the great seal (*Phoca barbata*), are natives here.

On

* *Sterna hirundo*. The name *Picketarnie* is a close imitation of the call of the bird. In Shetland it is called the *Rippock*.

† *Addit.*—This is the bird of which Buchanan, in the close of the first book of his History, has given an account, under the name of *Colca* or *Colk*. “In hac insula (Suleskerry) rarum, “et aliis regionibus ignotum genus avis conspicitur: colcam “vocant, magnitudine paulò infra anserem. Ea vere singulis “annis eò adventat, pullosque exclusos eousque educat, dum “ipsi sibi prospicere possint.—Illud quoque eis est singulare, “quòd earum pennæ caulem non habent; sed levi, et cui nihil “prorsùs duri adest, pluma totum corpus velut lanugine vesti- “unt.” This account, it may be remarked, has been copied by Buchanan from Donald Monro’s Description of the Western Isles, 1549,—a curious little tract, republished by Messrs Constable and Co. Edin. 1805.

‡ *Alca pica*.

|| *Alca torda*.

On the margins of the lakes and marshes in this island, we saw many birds of the phalarope genus, which the inhabitants very appropriately name *half-webs*. We shot the *tringa lobata*, or grey phalarope.

This island is excellently adapted for the carrying on of the white fishery, a fine cod bank being situated about two English miles only off the Moulhead of Papa Westra. But this field of industry, and source of wealth, is at present entirely neglected. Every cottar, indeed, fishes for his own family; but his tackle is suited only to the catching of *rock-fish*, or such as remain near to the shore. While we were in Papa Westra, we were fortunate enough to find among the cargo of one of these fishing-boats, a most beautiful fish, the Ballan Wrasse of Pennant*, the *Bergil* of the Orcadians. It was then fresh from the sea; its back shone with brilliant red; its sides were barred with orange and resplendent gold colours. Although we carefully preserved its skin, the beauty of the colours has nearly vanished. From the tip of the nose to the extremity of the tail, it measures 18 inches; and it is about 6 inches in depth. The natives account it very good eating.

The whole island of Papa Westra belongs to one proprietor, who resides in it, in the midst of many contented, though poor, cottars, whose happiness, we believe, it is his study to promote, and with whom he mingles with the most perfect familiarity. In this sequestered spot, the total want of competi-
tion

* *Labrus balanus* of Dr Shaw's Zoology.

tion seems, however, to shed a languor over all the motions of the inhabitants. In their work, they exhibit a dulness and slowness which form a perfect contrast with the activity of most servants in the south. The alarm of war hath never disturbed the repose of the inhabitants of Papa Westra: they speak of it as a thing at a vast distance, with which they have little or no concern. For many weeks during winter, they have no intercourse with Kirkwall, the post town, and consequently hear nothing of the great transactions of the nation.

We left Papa Westra with regret, as, we believe, every visitant must do.

(Scots Mag. March 1805.)

From Tuquoy in Westra, we set out, on the evening of the 9th of August (1804), for the island of Rousay. We soon found that our boatmen were very unskilful, and unable duly to trim the boat*. We were therefore tossed about for several hours, in a tumultuous frith, and overtaken by a dark, rainy, and squally night. Before midnight, however, we reached the shores of Rousay in safety, though wet with spray and rain, almost as if we had

* The ferries of Orkney are under no regulation. Often the boats, and still oftener the boatmen, are of the worst kind. Yet they charge on a stranger very high fares. Indeed they exercise very generally a low cunning: if they discover that their employer is unacquainted with the customary dues, they rise in their demand, telling perhaps abundance of soothing lies, to make their extortion less unpalatable.

had been drenched in the sea. The manse was the only place of refuge within our reach. We were thus compelled to trespass on the repose of the family, but were received with the kindest hospitality.

Roufay (or, as it is spelled by the old writers, *Rewes-oy*) is a very hilly island. It abounds with red grouse, or *moor-fowl*, being covered with pretty long heath, of all the three kinds * that are indigenous to Scotland. Along the course of Trumbland Burn in this island, and especially at a *lin*, or little waterfall, near the sea, I was agreeably surprised to find a considerable variety of native shrubs and plants, rather of the more ornamental kind. Among others were honeysuckle or woodbine, (*lonicera periclymenum*); apple-rose, (*rosa villosa*); bramble, (*rubus fruticosus*); French-willow or rosebay willow-herb, (*epilobium angustifolium*); strawberry, (*fragaria vesca*;) wild angelica, (*angelica sylvestris*); and great wild valerian, (*valeriana officinalis*). A collection and intermixture of these in one spot, seemed, in so bare a country as Orkney, peculiarly grateful,—to an eye, especially, accustomed to the vegetable variety of the south, and tired with the uniformity of the heath-covered hills of *Roufay*. The honeysuckle and apple-rose, indeed, we scarce remember to have found native in any other situation in Orkney.

On the shores of *Roufay*, a good deal of sponge
may

* *Erica vulgaris*, common heather; *E. cinerea*, bell heather; and *E. tetralix*, rinze heather.

may be picked from among the rejectamenta ; not, however, the officinal sponge, but a kind that is less bilobous and less flexible, viz. *spongia palmata* of Ellis, with occasionally great quantities of *spongia oculata*.

Mr Paterfon, the clergyman, has an exact list of the name and surname of every person in his widely-extended parish, which is one of the most laborious charges in Orkney, consisting of four islands, Rousay, Eglishay, Weir, and Enhallow. By far the most prevalent surnames in this list are Craigie, Morwick, and Mainland.

In the Loch of Knitching, which occupies a hollow near the top of the high hill of Knitching, in the vicinity of the manse, I observed an aquatic plant, apparently a *sparganium* ; but although the plant is abundant, I could not find it in flower. Its leaves float on the surface of the water, in the manner of *poa fluitans*. It differs from *sparganium natans*, in having narrower, coarser, and longer leaves. Any naturalist who may happen to visit Rousay, at a different season of the year, may find it worth while to examine this plant. The Loch of Knitching, it may be remarked, abounds with the *black mofs trout*, which is a variety of the common *salmo fario*. Trumbland Burn, formerly mentioned, is the outlet of this lake.

On the afternoon of the 11th August we left Rousay, and, crossing Enhallow Sound, landed at *Aikerness**, in the Mainland of Orkney. Here we saw many rich fields of grey oats and bigg, and were
very

* See Notes in Appendix.— Note D.

very well pleased to remark some attempts at the culture of rye-grass and Dutch clover. The procuring of a store of proper food for his cattle, is, however, a consideration that has scarce any influence with an Orkney farmer. Any thing is thought good enough for the *staigs* and the *stirks*; by the former of which names, year-old horses are distinguished, and by the latter, young oxen. The Loch of Aikernefs has been nearly drained with the view of getting at the luxuriant but coarse aquatic grasses with which it abounds. I shall perhaps scarcely gain credit when I say, that great quantities of *carex ampullacea* *, and of *typha latifolia* †, with a small proportion of *holcus lanatus* ‡, were here carefully gathered and dried, and denominated *meadow hay*. None but the half-starved beasts of Orkney would eat such fodder. It is to be mentioned with regret, that though several of the sweetest and best pasture-grasses are natives of all the islands, (for example, *Festuca duriuscula*, *F. rubra*, *F. elatior*; *Poa trivialis*, *P. pratensis*; and *Alopecurus pratensis*; yet no attempt has hitherto been made to cultivate any of them.

There is a spacious old mansion-house at Aikernefs, which is rapidly going to decay. The whole district is the property of Lord Armadale.

In the neighbourhood of Aikernefs-house, is the manse

* Beaked Seg, or slender-beaked bladder carex. The leaves are very rough, both on the edges and the keel; and the straw or stalk is three cornered, and so sharp, as frequently to cut the fingers in attempting to pluck it.

† Great cat's-tail, or reed-mace.

‡ Meadow soft grass; not one of the best pasture-grasses.

manse of Mr Duguid, minister of the united parishes of Evie and Rendall, who has rendered incalculable service to this district of Orkney, by introducing in his own family, and promoting with his own hand among his parishioners, the vaccine inoculation,—a preventive of small-pox—that terrible scourge, which used formerly to desolate whole parishes of Orkney.

Hoy,—(which was the last of the islands of Orkney that we visited), is situated to the south-west of the Mainland or Pomona, and contains by far the loftiest hills in Orkney. On the 15th of August we took a small boat from Stromness, and in less than half an hour landed in Hoy. On the shore, between the manse and the church, we saw a vein of kidney-form iron-ore, which has been partially worked, and which appears rich enough to deserve further attention. On the beach are scattered many nodules of hæmatites. Galena, with abundance of heavy-spar, (sulphate of barytes), are found in several places of this island. We walked towards the *Keam meadow*, which is a beautiful flat, at the foot of the high rocks, near the north-west end of Hoy, possessing a fine echo, and looking directly upon the Atlantic: the shades of night, however, overtook us, and without the worthy clergyman for our guide, we should scarce have made our way through the trackless fields and commons to our home. At a little township we called for the most active *rockman* or bird-hunter of the island, and engaged him to go a *lyre*-catching next morning. The *lyre** or shearwater (procellaria

* *Lyra* of Sir Robert Sibbald's *Prodromus*.

(*procellaria puffinus*) breeds only in the precipitous headlands of Hoy, and in one or two similar places in the island of Eda. The rockman, at this time, caught only two young ones. The young are very fat, and much relished by the natives.

The 16th August we spent in examining the huge and towering *bill of Hoy*, and in traversing the mossy valleys at its base.

We first visited the far-famed *Dwarfy-stone*, the supposed residence of a hermit in former days; but it fell unspeakably short of our expectations. A large mass of sandstone has tumbled from the neighbouring lofty cliff; and in this mass some idle fellow has amused himself by cutting two holes, or cells, sufficient to admit a little person to crawl into them. These cells are very awkwardly cut: they are in no degree squared; the one is a faint imitation of a close bed; but it is little more than four feet long, and is full of inequalities: the other is intended as a chamber; but a person can scarce sit upright in it, except he put his head out at the chimney,—a large round opening, which must have completely exposed the supposed hermit, even while in bed, to the mercy of the storm. The door, or exterior aperture in the side, is little more than two feet high, and as much in width. In short, the *Dwarfy-stone* of Hoy, the fame of which has been resounded in every account of Orkney, ancient or modern*, is quite an inferior ef-

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fort

* To give the reader some idea of the marvellous descriptions which have been given of it, I may mention, that although the excavated chamber would scarce contain two children of ten years of age, and the bed would certainly very much cramp them

fort to that at Gilmerton *, near Edinburgh, where a smithy, with a forge, &c. is very neatly cut out in a solid sandstone rock. In my opinion, the mass of stone itself, which is a coarse grit, is more admirable than the holes which have been cut in it: it is about 30 feet long, by 16 broad, and 7 thick: it must have fallen with a tremendous crash, yet, instead of being shivered, it is, except where hollowed by art, quite solid. In some places it is covered with lichen *saxatilis* †, which we found bearing *faucers* (the fructification) an inch in diameter. Some moist banks not far from the Dwarfy-stone were at this time gilded with the flowers of *saxifraga aizoides*, or yellow mountain-saxifrage.

We

them for want of room, Martin (in the Appendix to his History of the Isles, &c.) gravely tells us, that “the common tradition is, that a *giant* and his *wife* made this their place of retreat.”

* Accurately described in the Account of the Parish of Libberton, in the 1st vol. of Trans. Antiq. Soc. Edin.

† Throughout the north of Scotland called *Steinraw*. This lichen (mixed with *L. omphalodes*, or *croffil*), is sometimes used for dyeing. Prepared with stale household-ley, it gives a reddish-brown colour. Lichen *parietinus*, thus prepared, gives a dirty orange yellow. *Corkir*, or, as it is now called, *cudbear*, (*L. tartareus*, mixed with *L. calcareus*), is gathered in harvest; dried, and reduced to a coarse powder; then steeped for three weeks in the liquid already mentioned; it is afterwards formed into balls, and when boiled with woollen-yarn communicates a fine purple-red. It does not however dye flax-yarn, or the vegetable fibre. Alum is the mordant generally employed. But none of the lichens are now much used in Orkney.—*L. calcareus*, if pure, and if treated with liquid ammonia, gives nearly a crimson colour, though fugitive.

We next proceeded down the valley of Rackwick, by the margin of a rivulet which is skirted with dwarfish willows, (*salices arbuscula* and *prunifolia*), and a few very stunted birches and hazels. In this valley I was much gratified to find *Hypericum elodes*, *Marsh St John's wort*, which is rather a rare plant.

We could not help admiring the local position of the township of Rackwick, situated in the extremity of the valley, closed in on two sides by very lofty precipices of sandstone, but opening with a fine bay towards the western entrance of the Pentland Frith, so that every vessel which passes the Frith must necessarily come into view. The inaccessible crags here, are the habitation of the *ern* (*falco albicilla*), and the *black eagle* (*falco fulvus*),—which reign with “savage majesty,” among the desolate cliffs and noiseless valleys of Hoy.—The people here are very poor. We entered what promised to be one of the best cottages in Rackwick; but still it appeared to us miserable in the extreme.

We now directed our steps to the *Wart-hill of Hoy*, the summit of which is the pinnacle of Orkney, being about 1600 feet above the level of the sea. On the side of this mountain I picked up the *Lycopodium annotinum*, or *Welsh clubmoss*,—a rarity to a lowland botanist, but which seems to be common to the moist sides of the high mountains of Scotland with those of Wales. Four other species of clubmoss were common here; *Lycopodium alpinum*, *clavatum*, *selago*, and *selaginoides*. In the course of ascending, we passed whole acres of *Scirpus pauciflorus* or chocolate-headed clubrush. As we approached

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ed the top, we found the ground covered with the trailing shoots of *Arbutus alpina*, or mountain strawberry tree. The very summit afforded us abundant specimens of lichen *frigidus* in full fructification. A thick chilly mist here enveloped us, and hid all nature from our view. As the day had been hitherto clear, and was rather windy, we trusted that we were only overtaken by a cloud which had been attracted by the heights. Our conjecture was right. In about ten minutes the mist became thinner: sea and land began to appear below: as the cloud passed off, they seemed to emerge, as it were, from a chaos, and we were almost tempted to think that we were witnesses of a kind of creation. The sun was still shining bright on the adjacent scattered islands, and had continued to do so while we were wrapped in the cloud. The prospect from this point is truly extensive. One may almost fancy that he is looking down on a vast expanded map of the Orkney Islands. In the distance on the south, are seen the high mountains of Caithness and Sutherland. Towards the north-west, the eye is lost on the boundless Atlantic; but it is agreeably relieved by white sails ever and anon appearing on the verge of the horizon, and making towards the high land of Hoy, which is one of the earliest land-marks of the mariner, in approaching from the north-west.

In sheltered spots among the rocks of Hoy, a few stunted shoots of the mountain-ash (*pyrus aucuparia*) make their appearance. The juniper-bush is here very common. The black-berried heath (*empetrum nigrum*), and the blaeberry bush (*vaccinium myrtillus*),

lus), are also abundant. The berries of these two last are gathered by the common people and carried to Stromness, whence they are often sent as presents to Kirkwall and other places. The berries of the arbutus are seldom got in any considerable quantity.

On the sides of Hoy hill we observed several small bristly hogs digging with great keenness. On examination we found, that it was the tuberous root of tormentil (*tormentilla officinalis*) which they were in search of; and which, being plentiful here, forms, together with the roots of rushes, their principal food. The root of tormentil is frequently gathered by the natives for the purpose of tanning; and not without reason, it having been lately ascertained that it contains a larger proportion of the tanning principle than any other astringent wood or bark.

Besides the birds already mentioned, the short-eared owl * is very common on Hoy hills, during the summer months. The *solan-goose* or gannet, the *emmer-goose* †, and the *taminorie* or puffin ‡, are numerous in the seas around. The *sly-goose* or shieldrake || is common on the sandy parts of the beach,

* *Strix brachyotos*, formerly mentioned, p. 11.

† *Ember-goose*, *Colymbus immer*. The name *Emmer-goose* is also given to a larger and more beautiful fowl, the Northern Diver or *Lomen* (*Colymbus glacialis*), which however visits Orkney only in the winter; whereas the true *emmer* spends the whole year, and probably breeds in Orkney, though its nest or young have not been discovered by the inhabitants.

‡ *Alca arctica*.

|| *Anas tadorna*.

beach, making its nest generally in a rabbit burrow. It has got the name of *Sly-goose* from the arts which the natives find it to employ to decoy them from the neighbourhood of its nest: it frequently feigns lameness, and waddles away with one wing trailing on the ground, thus inducing a pursuit of itself, till, judging its young to be safe from discovery, it suddenly takes flight, and leaves the outwitted Orcadian gaping with surprize.

In short, Hoy will be found to be the most interesting district of Orkney, either to the botanist or the ornithologist; and well deserving the attention of any naturalist that may hereafter have an opportunity, leisurely to examine it, at different seasons of the year.

(*Scots Mag. April 1805.*)

Having finished the journal of my progress through the principal islands of Orkney, I shall (before proceeding to Shetland) add a few general and desultory remarks applicable to the whole.

TREES.—At present, the whole face of Orkney is bare of trees. That this was not formerly the case is abundantly evident, from inspection of the peat mosses; in every district where these have been laid open by the digging of peats for fuel.—I never failed to find in such places, pieces of the bark, frequently little branches, of the *birch-tree* (*betula alba*). The bark is generally more perfect than the timber. In some specimens the thin silvery laminæ of the outer skin are easily separable. The birch

must

must therefore, at some former period, have been very abundant: it seems, however, now to be nearly extinct.—In a moss belonging to Captain Richan, in the parish of Deerness, whole bushels of hazel-nuts are occasionally dug up, the exterior being of a black colour, but firm in texture; the kernels, however, entirely wasted. Of the *hazel-tree* (*corylus avellana*) which must also have abounded in former times, we have already recorded the expiring remains in Hoy island.—Trunks and cones of the common *Scotch-fir* (*pinus sylvestris*), I was told by Captain Richan, the proprietor, have also been found in the moss of Deerness; together with cones and branches of the *pitch-pine* or *silver-fir* (*pinus picea*), the twigs of which are remarkable for burning with a bright flame. I am aware that twigs of any kind of wood taken from some peat-mosses, burn with as brilliant a flame as those of the pitch-pine; and that this has, with much probability, been thought* to depend, not on the presence of the natural resin, but on a partial conversion of the twig into a bituminous substance. The existence of two kinds of pine in the Orkney mosses, however, is proved by the occurrence of two kinds of cones; one small and round, belonging to the Scotch-fir; the other oblong, and having reflexed scales, characteristic of the cones of the pitch-pine. The Scotch-fir is now totally extinct in Orkney. The pitch-pine has once been indigenous to those islands, and probably to the northern extremity of the

* Parkinson's "Organic Remains of a former world."

the continent of Scotland : it is now extinct in the British dominions ; but it is still native in Norway, where it covers the rocky coasts down to the water's edge.—The *mountain-ash* or roan-tree exists, but barely exists, in Hoy, at this day.—Several species of the *willow* tribe are natives of different islands. I pretty generally met with the following : *Salix arbuscula*, *salix prunifolia*, and *salix aquatica*. But they seldom exceeded four or five feet in height, even in the most favourable situations. Probably they are cut for hoops, staves, &c. and are thus prevented from attaining that height which they would otherwise acquire. *Salix argentea* and *salix repens*, both creeping along the ground, can scarce be mentioned among trees.—In gardens in the town of Kirkwall several *plane-trees*, *ash* &c. being sheltered by the surrounding houses, have reached the height of twenty or thirty feet.

We were often told in Orkney, “ Trees will not grow here : the climate and soil are very unfavourable : the spray is utterly destructive : attempts have been made and have uniformly failed.” The circumstance of the shores of *Norway* being thickly wooded is sufficient evidence that there can be nothing in the climate or the soil of Orkney, to prevent the growing of trees* : and we deny

* Buchanan seems to have been aware of this. His words are : “ Nulla usquam arbor, ac ne frutex quidem præter ericam ; nec id tam cæli aut soli vitio, quàm incolentium ignavia, quod facillè ostenditur ex arborum radicibus quæ in pluribus locis eruuntur.” *Hist.* lib. i. ad fin.

dēny that the experiment has ever been fairly made. In the first place, it is not a fair trial to plant here and there, as has hitherto been done, an isolated seedling tree; large clumps ought to be planted together, so that, as the trees rise in height, each may afford shelter to another. In the second place, it is not a fair trial to transplant seedling trees from the rich and warm beds of the nurseries at Edinburgh, to the comparatively poor and chilly soil of the far northern Orkneys. It is evident that young plants brought from Norway,—from a country equally cold, and equally exposed to blasts and to spray, would have many more chances to succeed. The Pitch-pine or Silver-fir clothes the shores of Norway to the very edge of the sea. This is the principal kind of tree, the culture of which should be attempted in Orkney; and surely a sufficient number of seedlings might, without much difficulty, be transported from Norway. To this might be added the Larch, and the Plane-tree*, both of which grow very freely; and the Birch and the Hazel, the bark and branches of which are abundant in most of the peat-mosses. The Mountain-ash, too, is very hardy, and, as we have seen, is scarce yet extinct in Orkney †.

Sheep.—The sheep are still allowed to run at large over the whole country, being restrained during summer only by the *bill-dikes* which protect the arable land. When sheep are to be caught, they

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are

* In England called Greater Maple, or Sycamore.

† For some additional remarks on the practicability of raising timber in Orkney and Shetland, see Notes in Appendix.—Note E.

are still, in most places, hounded down by dogs, instead of being driven into folds, and seized by gentler means. In many places, still, the wool, instead of being shorn with scissars, is forcibly torn from their backs. During winter the sheep betake themselves to the shores to pick up the tender sea-weeds cast up by the waves; and many of them perish in this pursuit, being washed away by sudden swells of the billows. It has long been remarked in Orkney*, that if a man and a dog land upon some of the islands in *vor*-time, i. e. Spring, almost all the pregnant sheep take to running, and run till they fall down dead. On inquiry, I found that this was only in holms, where the sheep are very wild and much frightened, not being accustomed to see either men or dogs.

Although rocky eminences and cliffs, abounding with tufts of the finest grass, but inaccessible to sheep, are common in Orkney, I did not see a single *goat* in the whole country,—the only animal that could get at such grass.

Bees.—The honey-bee has scarce ever been carried into Orkney, or properly attended to. I have no doubt, however, but it might succeed. The coltsfoot (*tussilago farfara*) is too common, and must be one of the earliest blooms in Orkney. The creeping willow (*salix repens*) covers many upland pastures, and its catkins must also afford an early banquet to the native bees. The sea-gilliflower or thrift (*statice armeria*), well known
in

* Wallace, Brand, &c.

in Orkney by the name of *Arby**, covers the shores, and is also a pretty early flower. To these succeed the grafs of Parnassus (*parnassia palustris*), rendering many meadows wholly white; the plantain shore-weed (*littorella lacustris*), fringing the margin of every lake; and the marsh-trefoil or *bogbean* (*menyanthes trifoliata*), occupying whole acres of marsh grounds. In July the different kinds of heaths, and the wild thyme (*thymus serpyllum*), put forth their flowers and offer abundant sources of mellifluous food to the busy tribes. The most common wild bee in Orkney is the humble bee (*apis terrestris*); but the brown bee (*apis muscorum*) is also a native.

Game.—The only game found in Orkney is the red grous or *moorfowl*, which is particularly abundant in the hilly islands of Rousay and Hoy. I could not learn that the white grous or ptarmigan, has ever been observed. Partridges have never been seen in Orkney. Hares are unknown, although rabbits are very plentiful in most of the islands. The sportsman, however, will here never want employment. If he should fail for some time to raise a pack of grous, he will not pass a marsh without starting several wisps of snipe: every pool will afford him a chance of a team of ducks,—chiefly the wigeon, golden-eye, mallard, and teal. The lakes and downs are inhabited by wild geese (bernacle, bean and

* Formerly its thick tuberous roots, sliced and boiled with milk, were highly prized in Orkney as a remedy in pulmonary consumption.

and brent goose) in abundance. The air is often darkened by the flocks of plovers. The curliou, or *whaap*, and the lapwing or *peewit*, are every where common. It is almost unnecessary to state, that an excursion in a boat along the shores of some of the *bolms* and less frequented islands, will afford the sportsman a chance of many aquatic birds which are rare on the southern shores of Britain; particularly, the eider-duck, the sheildrake, the ember-goose, the arctic gull, the shear-water, &c. For these, as well as for the geese, very long-barrelled fowling-pieces, with slug-shot, are required.

Molucca Beans.—Large exotic nuts or seeds, which, in Orkney, are known by the name of Molucca Beans, are occasionally found among the rejectamenta of the sea, especially after westerly winds. I was presented with two or three of them by my friends in different islands. There are two kinds commonly found: the larger (of which the fishermen very generally make snuff-boxes) seem* to be seeds from the great pod of the *mimosa scandens* of the West-Indies; the smaller, seeds from the pod of the *dolichos urens*, also a native of the same region. It is probable that the currents of the ocean, and particularly that great current which issues from the Gulf of Florida, and is hence denominated the Gulf Stream, aid very much in transporting across the mighty Atlantic these American products.—They are generally quite fresh and entire, and afford an
additional

* According to Dr Wright.

additional proof* how impervious to moisture, and how imperishable nuts and seeds in general are †.

FISHERIES.—A great proportion of the Orkney farmers are depressed by poverty. From this low state it is almost impossible for them to raise themselves, on account of the smallness of their farms; most of them possessing only a few acres, and paying for their farm perhaps from L. 3 to L. 8 of yearly rent. Such men cannot possibly have it in their power to fit out large boats, or to purchase long lines for the cod and ling, or a train of nets for the herring fishery; the expence of a long line and a train of herring nets amounting, together, to about L. 30 Sterling. The boats of the Orkney farmers are in general miserable *cobles*, between 1 and 2 tons burden: whereas the cod and ling fishery would require boats of at least 5 or 6 tons, with proper sails and rigging. It is to be hoped that the patriotic exertions of the Highland Society, and of the Society for the Improvement of the Fisheries, will soon extend their beneficial influence to the Orkneys.—To give some idea of the richness of this field of industry, I shall here mention the principal fishes that are found in numbers around the Orkney islands.

Dog-fish (*squalus acanthias*) are caught in vast quantities with hand-lines, in July and August, the bait being a piece of the small grey fish called *cooth*, or a piece of the dog-fish itself. One man will sometimes catch 15 score in a day. There are twenty-four

* See p. 55.

† See Notes in Appendix.—Note F.

four boats belonging to the parish of Orphir alone, engaged in this fishery, with four or five men in each boat*. Much oil is made from the livers of the dog-fish, while the bodies are dried by the natives, without salt, and stored up against winter. Their taste is rather oily and heavy, but still they are not a despicable food. Many of them are, every winter, accidentally caught in the herring-nets in the Frith of Forth; but here they are, through prejudice, neglected as food, and allowed to rot on the dunghil. It was long ago well observed by Mr Knox, that if the name were changed from *Dog-fish* to *King-George-fish*, this groundless prejudice would probably soon subside.

Sillocks, the fry of the coal-fish, and *cooths*, the coal-fish when a year old, are taken, close by the shore, in inconceivable numbers at the beginning of winter. Much oil is also made from these *grey-fish*, as they are termed †: but this kind of oil is nearly appropriated to the use of the inhabitants themselves, it being found to become rancid when kept for any considerable time, and being therefore not very fit for exportation.

Cod-fish are common on different banks around the Orkney islands, especially off Stronla, Westra, and Papa Westra, in the north; and Hoy and Walls in the south. The little farmers of the parish of Walls, at the intervals they could spare from their labours on land, have been known to catch 40,000
fine

* Report of Orphir, by Mr Liddel, Stat. Acc. vol. xix.

† Appendix—Note C.

fine cod, in one season, on the shores of the Pentland Frith*. *Ling* are sometimes taken; but are less common, and are generally meagre, in the Orkney seas. *Tusk* are rare in those seas, being truly a northern fish.

Haddocks are in general very abundant in most of the large founds or friths. In Enhallow Sound, stretching between Pomona and the islands of Gairfey and Roufay, they were very plentiful last season (1804), in August and September.

Thornbacks (*raia clavata*) are also caught pretty generally and plentifully in the friths of Orkney, as in Stronsa Frith. They are known by the name of skate; but few of the real *Skate* (*raia batis*) are found. The thornbacks are dried by the people without salt, and may be seen hanging about the chimneys of the meaner cottages thickly covered with dust. *Holibut* are frequently met with, of a very large size: but they are not much esteemed by the poor, as they must be eaten green, and cannot be laid up in store. *Turbot* are also caught, though seldom in numbers.

The *Ballan-wraffe* or *bergil* is found in the summer months. The *Saury-pike*, or *skipper* †, sometimes passes southward in shoals, in September, in company with the herring. *Mackerel* are generally found in considerable numbers once a-year, preceding

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* Dr Barry's statistical report of Kirkwall, Stat. Acc. vol. vii.

† *Esox saurus*, Lin. Trans. vol. vii. In the Frith of Forth, it is called *Gundannock*. It has uncommonly long slender jaws, so that its mouth resembles very much the bill of the avocet.

ing the herrings; and the *Sea-pike* accompanying the mackerel.

Herrings generally come once a-year into Pentland Frith in vast shoals, filling all the bays and sheltered places. Last September, (1804), a shoal occupied the whole of Scalpa Flow (the Orkney Mediterranean, as it has been termed). for a considerable time, and, as formerly remarked (p. 10.) was almost totally neglected. The progress of the shoals is easily observed, by the sea being there spotted with hundreds, often thousands of fowls,—gannets, divers, corvorants, and gulls.

In the rivulets and lakes, *Sea-trout** (*salmo trutta*) of a large size, are very abundant. I was informed by an Orkney gentleman, that, in the course of one flood-tide, he once caught with a net fourteen dozen of large trouts, endeavouring to force their way into the burn of Scalpa near Kirkwall. Orkney offers many stations, promising to be equally productive. Yet this fishery of sea-trout is almost quite disregarded. *Salmon* are frequently caught in the seas around Orkney: and there can be no doubt but they might annually be taken in considerable quantity at the outlet of the great lake of Stennis, in the bay of Stromness. Large *Eels* are very common in the fresh-water lakes: but the natives despise them, calling them water-serpents. *Congers*
of

* Sometimes called *red-trout*, from its flesh becoming red on being boiled; and sometimes *white-trout* or *whiting*, from its shining silvery scales. The year olds are called *berlings* in the south of Scotland; and, it is believed, *finnock*s in the north.

of a great size are frequently caught in the friths ; but these the fishers esteem tolerable food.

Bars to improvement.—The principal obstacles to the improvement of the Orkney islands, are at present the following : 1. The smallness of the farms. 2. The want of leases; or the shortness of those granted: 3. The want of inclosures. 4. The total neglect of herding ; all the cattle, sheep, hogs, geese, &c. being preposterously allowed to traverse and *poach* the arable land for one half of the year. 5. The want of markets, where the small farmer or fisher may readily dispose of his superfluous produce to the highest bidder. 6. The exclusive eagerness shewn by the proprietors to increase the quantity of kelp manufactured on their shores, to the neglect of agriculture or the rearing of stock. 7. The ignorance of the natives of the proper method of prosecuting the fisheries, and their inability through poverty. To these may be added several circumstances that may probably require parliamentary interference ; such as, the almost total want of roads :—the heavy duties of various kinds paid to Lord Dundas, as donatary of the Crown, and as *tackfman* of the bishoprick of Orkney:—the great intermixture of property in many places,—and the quantity of unimproved because undivided common. For remedying these two last-mentioned evils, indeed, the laws already enacted respecting runrig lands and commonties would prove sufficient, were the whole proprietors inspired with the proper spirit to act upon them ; and were the statute-labour duly exacted, the communication between the different

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districts

districts of the Mainland might soon be considerably facilitated.

Defenceless state of Orkney.—I cannot take leave of Orkney without remarking, that it is totally defenceless. The rapid tides and dangerous rocks which skirt these islands, together with their comparative poverty, may no doubt be considered as affording ample security against foreign invasion. But it will hardly be pleaded that it is consistent with sound policy that towns of such magnitude and consequence as Kirkwall and Stromness should be left, as at present, without the slightest means of defence against the sudden and transient attack of an enemy's cruiser or a privateer. The sagacious Cromwell had less reason to dread an attack upon Kirkwall, or a defection from his interest there, than that town now has to expect a hostile visit from some of the enemy's cruisers, (for British armed vessels, though frequently in Kirkwall Roads, are not always there); yet the remains of a fort reared by Cromwell still exist in the neighbourhood, and one of his rusty cannon still lies on the rampart.—Government seems, indeed, to have been sensible of the necessity of some shew, at least, of a place of strength: several carronades having actually been transmitted to Kirkwall: but, strange to tell, these carronades have never been mounted, but lie tossed about and exposed on the beach, some of them even within sea-mark, and overwhelmed by every flood-tide! No regular soldiers are quartered in Orkney: the militia does not extend to these islands, which are judiciously excused, as a more valuable nursery for the
navy:

navy: though many hearts are willing, no volunteer corps have been embodied in Orkney. Internally, therefore, Orkney is quite defenceless. The people, however, as already observed, are doubtless able and willing to defend themselves from any sudden attack, were the means fairly put in their hands.

(*Scots Mag.* May 1805.)

Aug. 24. 1804.—An armed vessel in Kirkwall Roads happening at this time to be ready to sail for Shetland, and the captain understanding, by my friends, my desire to visit that remote part of the empire, kindly offered me a passage.

We weighed anchor in the afternoon, and got under way with a gentle breeze. Next morning we were off Papa Westra, and in sight of the headland of that island, called the Moul Head. The sailors being provided with strong lines, we here *lay to*, and fished for cod and haddock. So abundant were these kinds of fish in this place, that in an hour our deck was strewed with about fifty fine firm cod-fish, besides some haddocks of a large size. This was not two miles distant from Papa Westra; yet we saw no boat engaged in this rich fishery! How supine is such conduct!—In the evening we passed North Ronaldsha light, which is very elevated; the tower rising, I believe, about seventy feet.

SHETLAND.

Aug. 26.—Early in the morning I found that we were off Nones Head in Shetland, having had a favourable

yourable breeze through the night. The general aspect of the country, as we coasted along towards Lerwick, was hilly, bleak, and sterile. At 9, we anchored in Brassay Sound, opposite to Lerwick. It being Sunday, the colours were displayed from Fort Charlotte, a fortress situated to the north of the town. We had scarcely landed, when some of the inhabitants asked of me, whether we were direct from *Scotland*?—a question that rather surprised me, as seeming to imply that the Shetland islands themselves did not constitute a part of that country. In Lerwick there is only one established church, and there are no dissenters. The church appeared to be well attended, and the common people were in general very neatly dressed.

The town of Lerwick consists of one principal street next the quay, with several lanes branching off. No regularity has been observed, in former times, in the position of the houses, some of which project almost quite across the street. The general appearance of the town has of late years been much improved by several handsome houses built in the modern style. The town is computed to contain about 1000 inhabitants. Fort Charlotte is a great ornament to it. Several large cannon command the harbour and protect the town. This fortress is said to have been originally erected during the protectorate of Cromwell: it was completely repaired, by order of Government, in 1781, and named Fort Charlotte, after our gracious Queen. At present (1804), it is garrisoned by a part of the 6th Royal Garrison Battalion.

Upon

Upon a little island, in the midst of a fresh-water lake, about a mile west from Lerwick, are situated the remains of a Pictish fort, in a better state of preservation than most others which we saw in Shetland. It consists of a thick circular wall, inclosing an area of about thirty feet in diameter. In the wall itself, which is about twelve feet thick, are several oblong recesses or little chambers, ten or twelve feet in length, by three in width. No kind of cement or mortar appears to have been employed in these rude structures. All around the banks of this lake I found abundance of a dwarfish variety of *Jasione montana* (hairy sheep's scabious), both with blue and with white flowers. This is by no means a plant generally found in Scotland: but here it grows abundantly on all the dry turfs which form around half-sunk stones, or which project on grassy banks. Upon this little lake, one of the officers from Fort Charlotte, about this time, shot a truly northern bird, the red-throated diver (*colymbus septentrionalis*), which was politely presented to me. The Shetlanders name it the *rain-goose*, its shrill and harsh call, as it flies along, being thought to prognosticate rain. The *black*-throated diver is generally seen in company with the *red*, and is perhaps the female? They breed in Shetland.

Near Fort Charlotte there is a quarry of very hard sandstone breccia, in which vast numbers of large water-worn nodules of red granite, some of them (as remarked by the quarriers) most exactly resembling the common round Dutch cheeses, are compactly imbedded. About half a mile
south

south from Lerwick, below a projecting eminence called the Knab*, at the entrance of Brassay Sound, several thick strata of sandstone have been exposed to view by the action of the sea. Imbedded in the upper strata of this sandstone, I observed a few scattered nodules of the same kind of granite. The lower strata are whiter, and are *free-stone*, (*i. e.* may be hewn in any direction), and are therefore quarried for the new buildings in Lerwick. On the grassy banks of the Knab, *Scilla verna* (vernal squill) grows in profusion. At this time I gathered some of the ripe *seeds*, which have since vegetated in one of the stoves of the Botanic Garden at Edinburgh. I also brought home some of the bulbs, which have grown freely. (*April 1805*). The vernal squill is considered as rather a rare plant in Scotland.

The hills around Lerwick have a gloomy look, being but thinly clad with stunted heath, and many naked rocks appearing. The soil is a wet peat-turf, unfavourable to the vegetation of the better kinds of grasses, and yielding only a few of the coarser sorts, (such as *nardus stricta* and *festuca vivipara*), mixed with carices and dwarfish rushes. There are two chalybeate springs in the neighbourhood of the town; one somewhat stronger than the other, but neither highly impregnated.

At

* From Fort Charlotte to this point, called the Knab, Government has caused a road to be made, by means of which cannon could be brought hither in the course of a few minutes; and here they would effectually command the southern entrance of Brassay Sound, at least against an enemy's cruiser or privateer

At Lerwick there is a straw-plaiting manufactory, but not on so extensive a scale as that at Kirkwall. When we visited it, more than fifty girls were at work, in two rooms, which however were rather crowded. They receive 1 *d.* per yard, and can make, as we were told by the manager, from 12 to 16 or even 20 yards a-day. This manufactory is carried on by a London Company. Before its introduction, there was no kind of manufacture in Lerwick, in which young women could advantageously exert their industry,—the knitting of stockings being only a waste of time.

Mackerel were at this time very common at Lerwick, and were sold very cheap. Eggs were brought aboard to us in Lerwick Roads at 2 *d.* a-dozen; but they were very small, even the poultry partaking of the diminutive size of all the domestic animals of Shetland.

At Lerwick, and indeed throughout Shetland, Dutch and Danish coins are more common than British. A *stuer*, or stiver, (a small piece of base metal silvered over), passes in circulation for one penny; the Danish 6 skilling passes for 5 *d.* &c.

Aug. 27th—we visited Brassay island, which lies immediately over against Lerwick. All along the western shore of this island, sea-beet (*beta maritima*) grows naturally in great plenty; together with Danish scurvy-grass (*cochlearia Danica*.) Intermixed with these, we observed many strong stems of wheat and of white oats, which had sprung from seeds accidentally cast ashore. In a gentleman's garden here, too,

we observed that several shewy annuals had reached perfection in the open border, particularly convolvulus tricolor (coloured bindweed), and crepis rubra (red hawkweed). *Jasione montana* and *scilla verna* are very common natives of this island. Near the church of Braffay are situated the quarries which supply the town of Lerwick with slates. These quarries consist of beds of laminar micaceous shistus*. Such slates may make a very secure roof; but it must also of necessity be a ponderous one. Great quantities of black compact peats are dug from the mosses of Braffay, and sold to the inhabitants of Lerwick.

This island forms the eastern protection of Braffay Sound, the safe and commodious harbour or roadstead of Lerwick, where, it is believed, the whole British Navy might ride in safety. Braffay Sound is the resort, in time of peace, of several hundred Dutch buffes which annually rendezvous here, at the beginning of June, preparatory to the herring fishery †.

On the 28th of August we left Braffay Sound, in a large open boat, for Unst, the most northerly of the Shetland islands. In passing out by the north entrance of the sound, the site of the Unicorn rock was pointed out to us; but it was at this time covered by the sea. When Bothwell was driven to
 extremities,

* *Addit. Note.*—This fossil would, I understand, have been more correctly denominated *sandstone-slate*. It has a very bright silvery shining surface, from numerous small unconnected scales of mica.

† On the extent and importance of this fishery, a few remarks will be found in the Appendix.—Note G.

extremities, he, as is well known, commenced pirate. Kirkaldy of Grange was sent in pursuit of him, in a vessel called the Unicorn. While Kirkaldy entered Brassay Sound by the south, Bothwell narrowly escaped by failing out at the north entrance. Bothwell's pilots, it is said, had the cunning to fail very close by a funk rock, with which they were familiar; thus leading their pursuers, who, in the hurry of the chase, would naturally follow their track, to a hazard which actually proved fatal to them, and which ensured the escape of the unhappy fugitive. Since that day, this rock has received the name of *the Unicorn*. This tradition is uniform and general, and may, I believe, be depended on.

While we scudded along with a favourable breeze, our boat's crew amused themselves with catching mackerel, which swim faster than any other small fish, and may therefore be caught while a vessel is running at the rate of seven or eight *knots* (or miles) an hour*. A pretty heavy weight is in such cir-

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cumstances

* In fact mackerel are caught with most success in a breeze of wind: they always swim fast; and being rather a shy fish, the rapid motion of the bait is probably useful in deceiving them and enticing them to hazard a bite. Besides, the mackerel is proverbially fond of a gale: the fishermen in the north of Scotland have a foolish rhapsody which begins thus:

“ The herring loves the merry moon-light,

“ And the mackerel likes the wind.”

A moderately stiff breeze is therefore sometimes termed a *mackerel-gale*. Dr Johnson, *in verbo*, supposes that a mackerel-gale means a “strong breeze, such as is desired to bring mackerel fresh to market:” but this, it is evident, cannot be the origin of the phrase, which is perfectly understood, where no such motive can possibly come into consideration.

circumstances required to sink the lines to a proper depth. The bait at first employed, on this occasion, was a bit of red woollen-cloth! after which the *heart* of the mackerel itself was preferred.

In the middle of the day we landed at Goffa-burgh, in the island of *Yell*, and had some of our new-caught mackerel prepared for dinner. The fields here were so small in dimensions, that they appeared to us like little garden patches. Instead of a plough, a coarse kind of awkward spade is employed. As the men dig the fields with this spade; the women and children, we were told, drag the harrows!—As in Orkney, so in Shetland, only the grey and black oat is cultivated; and it is here mixed with a good deal of the wild oat with hygrometric awns, (*avena fatua*). The white oat of the south is scarcely known. *Bear*, or bigg, is also raised here in considerable quantity. We saw some promising lazy-bed potatoes; rather, however, too closely planted. During our short stay at this spot, I made a hurried visit to a heathy eminence in the neighbourhood. The ground was very wet and boggy, which, I believe, is the case with a great proportion of the pasture-ground of *Yell*. Most of the little pools shewed a scum of the oxide of iron; and bog-iron-ore, of different degrees of consistence, is here a common production. *Narthecium ossifragum* (bastard asphodel); *Pinguicula vulgaris* (butterwort or *sheep-rot*); and *Pedicularis palustris* (marsh lousewort), were indeed too common. *Melica cœrulea* (purple melic); *Nardus stricta*, (heath matweed); and

and *Festuca vivipara* (viviparous sheep's-fescue), were the principal grasses ; together with carices *recurva*, *distans*, *panicea*, &c. and some junci or rushes. To a mixture of all these, when heath is absent, the natives give the name of *lubba*. The water-worn stones on the shore were chiefly of micaceous flintus, sometimes with the remains of small garnets ; with abestus, serpentine, &c.

We reached Uyea Sound, in the island of *Unst*, early in the evening. Most of the rocks in this district of *Unst* are of the magnesian kind *. The serpentine is finely variegated ; and its fresh fracture possesses such lustre, that the inhabitants call it *jasper*. The exterior of the rocks, however, is of a dull rusty hue, being altered or partly decomposed by the action of the weather. Pieces of pure white steatite are frequently found on the shore : these, I believe, the people call *clemmil*, and employ for drawing white lines on cloth or wood.—Chlorite, imbedded in large masses of quartz, is also very common on the shore. A little way east from Uyea,

great

* The whole of the Shetland Islands are much more interesting to the mineralogist than those of Orkney. The few detached notices here given, are extracted from notes taken on the spot. For further information, especially with regard to the geognostic situation of the different minerals, I beg leave to refer to Professor Jameson's Mineralogical Description of these Islands, 1 vol. 8vo. 1798 ; republished in 4to. (1800), vol. ii. And in addition to the interesting information conveyed by Professor Jameson, I am happy to be able to communicate, in the Appendix, some valuable mineralogical observations, by my friend Dr Traill of Liverpool, who visited the islands in 1803.

great rocks of micaceous shistus appear, which are sometimes quarried for building, especially for lintel-stones. Here a rude pillar of this shistus, rising about twelve feet from the ground, has, in former days, been erected, probably as a land-mark to vessels entering the harbour or roadstead of Uyea *. In this remote and dreary country, we were somewhat surprised to find several handsome modern houses, with small gardens, gravel-walks, &c. in a neat style. The principal of these is Belmont, the seat of Mr Mowat of Garth.

The remote situation of the Shetland Islands, and the little intercourse they have, especially during winter, with the mother country, frequently render the inhabitants strangers for many weeks to the greatest national occurrences. It has often been alleged that the Revolution 1688 was not known in Shetland for six months after it happened. Thus Brand (Description of Zetland. 1701) says: "The late Revolution, when his Highness the Prince of Orange, our present King, was pleased to come over to assert our liberties, and deliver us from our fears, falling out in the winter, it was May thereafter before they heard any thing of it in Zetland; and that, first, they say, from a fisherman, whom some would have had arraigned before them, and impeached of high treason because of his news." And to the same purpose Martin (Appendix to History of

* *Addit. Note.*—Great numbers of small whales were forced ashore here in 1805; of which some account will be found in the Notes in Appendix.—Note H.

of the Isles, 1703), copying and improving upon Brand, says: "The Shetlanders had no account of the Prince of Orange's late landing in England, coronation, &c. until a fisherman happened to land in these isles in May following; and *he* was not believed, but indicted for high treason, for spreading such news." But from an old letter in possession of Mr Mowat of Garth, it is proved, that this common report is without foundation, or at least is greatly exaggerated: for it hence appears, that *before* the 15th of December 1688, the report of the Prince of Orange's landing in England had accidentally reached Unst, the most northerly of the islands,—though the fact of a Revolution having been effected, was not, probably, ascertained for some considerable time after. Having, with Mr Mowat's permission, copied part of this letter, I shall give the exact words: "15th Dec. 1688.—I can give no account of news, save only that the skipper of the wreckt ship confirms the former report of the Prince of Orange his landing in England with an considerable number of men, bot upon what pretence I cannot condishend. (Signed) And. Mowat." (Addressed) "To the much honoured George Cheyne off Eslamonth."—The Prince landed at Torbay on the 5th of November 1688.

In the kitchen-gardens here, an uncommon kind of artichoke is cultivated. It has numerous but very small heads, scarcely larger than those of the common spear-thistle. The inhabitants think it

more

more hardy than the large-headed kind, and also superior in flavour.

In the neighbourhood of Belmont I had an opportunity of viewing a Shetland water-mill. It was truly an awkward piece of machinery. The wheel (a very trifling one) was placed horizontally instead of vertically; consequently it could do but little work. The millstone was of micaceous *shistus**.

The gables of the cottages here, were at this season hung round with hundreds of small coalfish, called *piltocks*, strung upon spits, and exposed to dry, without salt. The fishes dried in this manner are called *scrae-fish*.

Never was I more surprised or shocked than to learn that there was *no school* in the whole island of Unst †! The instruction of hundreds of children is thus in a great measure neglected; many of the parents being utterly incapable of communicating even the knowledge of alphabetic letters to their offspring. That an island of above twenty miles in circumference, and containing about 2000 inhabitants,

* *Addit. Note.*—The wheel had about a dozen of small float-boards, placed in a slanting direction, at an angle perhaps of 40 degrees. The water striking these boards, revolved the wheel. An iron spindle, passing from this wheel, through the eye of the under-millstone, was fixed in the upper. The millstones (blocks of compact micaceous *shistus*, found in the neighbourhood) were about three feet in diameter.

† *Addit. Note.*—I am here to be understood as speaking of a reputable public or parochial school.—See the conclusion of the paragraph,—and also Appendix, No. II. 1.

tants, should be destitute of a *parochial* school, is to me an inexplicable circumstance*.

Upon careful inquiry we learned that the Norwegian language is now finally extinct in Unst, where it subsisted longer than in any of the other islands: for we were repeatedly assured, that, no farther back than thirty years ago, there were “several old people that spoke the *Norns*,” i. e. the Norse, or Norwegian tongue.

Eagles, or *erns*, (*falco abicilla*, and *falco ossifragus*), reside on the hills and bold sea-precipices of Unst. The *taminorie* or puffin, and *lyre* or shearwater, breed here. The *calloo*† (*anas glacialis*)—named from its evening call, which resembles the sound *calloo, calloo*,—arrives from the arctic regions in autumn, and spends the winter here. Great flocks of wild swans come at the same time; but these generally migrate farther south.

It

* *Addit. Note.*—Having, in July 1805, received some further information on this subject, I inserted the following note in the *Scots Magazine for August 1805*: “It was formerly mentioned, that in the whole island of Unst, which contains about 2000 inhabitants, there was no public school. Since that part of these remarks was printed, the writer has learnt, that a school-house is now building in the centre of that island: but that there has been no proper school in Unst for a number of years past is evident from this circumstance, that there are at this moment about *three hundred* children in that island who never had an opportunity of attending school!”—Unst school was opened for the first time in the end of November 1805.

† *Addit. Note.*—In Dr Barry’s History of Orkney, lately published, the *calloo* is, by mistake, stated to be the *Anas acuta* or pintail duck, which is a much rarer bird.

It is curious that the common house-mouse has not yet found access to the island of Unst*. The bat is quite unknown †. The untravelled natives of Uyea ‡ had never seen either frogs or toads, and indeed had no idea of the appearance or nature of those animals.

After spending some days in this extreme northern island of the British dominions, we again failed to the southward. In the evening, after much toiling with a contrary wind, we landed in Yell, at a fine arm of the sea called Brough Voe. We viewed the *Pechts' Brough* or little circular fort, which has given name to the place. It is nearly of the same dimensions and construction with the many other *broughs* or *pechts-forts* in Shetland, (one of which has already been described, p. 69). These *broughs* seem to have been calculated to communicate by signals with each other; the site of one being uniformly seen from that of some other. A gentleman of our party here procured a kind of rude stone-bason, which was, some years ago, found among the rubbish in the *Pechts-fort*. It is shaped like a large soup-dish, or *tureen*, having two hollows for handles. Perhaps it

is

* *Addit. Note.*—Should have been *Uyea*.

† *Addit. Note.*—Mr Pennant, in his *Arctic Zoology*, has, by mistake, mentioned the Bat as being found in Orkney and Shetland.

‡ *Addit. Note.*—Should have been *Unst*.—See Appendix, No. II. 2.

is an old stone *quern*, or vessel in which grain used to be ground with a pestle*.

Early next morning (Sept. 1.) we again set sail, and, wafted by a fair breeze, before mid-day reached Lerwick Roads, where we now found His Majesty's frigate *La Chiffonne* lying at anchor.

(*Scots Mag. June 1805.*)

4th Sept. 1804.—We walked across Brassay Island, and paid a visit to Nofs, to view the far-famed *cradle of Nofs*. This island is situated to the east of Brassay, from which it is separated by a narrow channel. The tide was here running with considerable violence and velocity; yet the only ferry boat we could procure was a miserable skiff, which could not without difficulty convey two passengers at a time. The two boatmen afforded us a remarkable instance of stupid apathy, which we were apt to ascribe to that state of oppressive degradation so feelingly described by Pennant, Knox, and others †. We observed that one of the boatmen was not tugging at his oar half so busily as the other, and consequently that the boat was turning to the one side: upon remonstrating

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* The same gentleman was presented, while in Shetland, with a kind of stone knife, or cutting instrument, which was found in clearing away part of a *Pech's-house*. This knife is formed of a thin piece of spotted greenish steatite, of considerable induration. Both it, and the stone basin, have been deposited in the museum of the Society of Antiquaries of Scotland.

† *Arctic Zoology*, vol. i.; *View of the British Empire*, vol. i.; *Bath Papers*, vol. vi.; *Trans. Highl. Soc.* vol. i.

with the sluggish ferryman,—he, instead of quickening his motions, made a full pause, and hung on his oar gaping with surprize: the other, meanwhile, continued tugging away as hard as ever, nor did he observe what he was doing till he was alarmed by the boat wheeling about, and almost completing a circle; and all this in the midst of a boiling current, and about equally distant from either shore.

The island of Nofs is wholly the property of Mr Mowat of Garth. It forms one large farm. Mr Copland, the tenant, kindly offered to accompany us to Nofs Head, where we might have a near view of the *holm*, or islet, to which access is had by the celebrated *cradle*. This holm is situated on the south-east side of Nofs, and is immediately exposed to the ocean. Although its sides are every where perfectly precipitous, its surface forms a pretty extensive flat, which is thickly covered with grass. Mr Pennant, has, in his “Introduction to the Arctic Zoology,” given a representation of this holm; but it is by no means an accurate one. He has even gone so far wrong as to mention Orkney as the site of the Nofs holm, instead of Shetland. In the description, too, several things are mistaken or exaggerated. The height of the precipitous rock is great, probably from 160 to 200 feet; but certainly Mr Pennant more than doubles it, when he states it as 480 feet. The chasm over which the cradle is run, is indeed, to use Mr Pennant’s words, “of matchless horror;” the swelling billows of the ocean frequently sweeping round the holm on both sides, and meeting

meeting each other with the most tumultuous collision. The width of the chasm is more than a hundred feet. The *cradle* is a kind of oblong box, strong, and of very coarse workmanship, having two round holes at each end, through which the cable is passed by which the box is suspended. Mr Pennant is mistaken in thinking that the cradle serves only to enable the natives to get at the eggs or young of the gulls; had this been all the object, that machine (considered as a very expensive one in Shetland) would never have been erected. The fact is, that they annually transport thither, in June, by means of the cradle, a certain number of sheep, which they take out in November in excellent condition. This kind of cradle has here been employed beyond the memory of man. It is accurately described in Brand's Account of Zetland, Edin. 1701, and in the Appendix to Martin's "Description of the Islands," &c. Lond. 1703. It is mounted and dismounted twice a year, in order to save the rope or cable from the action of the weather. I had no opportunity at this season, therefore, of seeing it used.

We now ascended the peak of Nofs, a lofty eminence in the neighbourhood of the holm. Upon charts this peak is named *Hangcliff*,—a name unknown to the natives, and which, it is believed, was first imposed by Sir Joseph Banks, when on his voyage to Iceland. It is perhaps more than twice the height of Nofs holm, and yet from the sea to the summit, the rock is perfectly mural. At some points, however, even the timid may advance without difficulty,

ficulty fo as to fee the white foam of the waves below,—which here feemed diminutive and noifelefs, but which we knew to be far otherwife. The *scarfs* or corvorants, which fat on the ledges of the rock near the fea, appeared to us no larger than black-birds. The many fucceffive fandstone ftrata compofing the cliff, are here moft excellently feen.

Nofs ifland is chiefly pafture, and in general good pafture. Here we were prefented with the beft milk and butter we had feen in Shetland. Mr Copland complained that a prejudice exifted againft Shetland butter, which prevented him from exporting it to Leith and other ports of the fouth. This prejudice arifes from *table-butter* being confounded with *greafe-butter*, which however are two entirely diftinct articles of Shetland produce. The prejudice is quite unfounded; for the *table-butter* of Nofs ifland would ftand a comparifon with any butter made in the Lothians. The milch-cows, however, are here rather of a diminutive fize, and yield but a fmall quantity of milk. Even in July and Auguft, when the pafture is beft, they give only about 2 or $2\frac{1}{2}$ pints a day; while a good milch cow in the fouthern counties of Scotland will give from 12 to 14 pints a-day. The tenant of Nofs pays L. 50* of rent for the whole ifland, and is allowed to exert himfelf in the fifhing of tusk and ling for his own behoof. This is a great improvement; tenants throughout Shetland being generally taken bound to deliver their fifh to the landlord at a ftipulated rate,

* Only L. 40, 5 s. Supplement, art. 1.

rate, below the market-value, and being absolutely prohibited from themselves carrying them to the best market. Even the tenant of Nofs, however, has not been able to procure a lease of that duration that would encourage him to make permanent improvements. Two or three years bound the lease*.

5th Sept. 1804.—We this day paid a visit to *Scalloway*, formerly the capital of Shetland, the seat of justice, and the occasional residence of the Earls of Orkney and Zetland. In going thither we resolved, in order to see the country, to pass directly across the hills westward from Lerwick, instead of proceeding by the usual track through Tingwall. The hills here are excessively wet and swampy, and to travel but a few miles over them becomes very fatiguing. We had frequently to fetch circuits around stagnant pools or deceitful marshes. We passed a large lake among the hills, where we found soldiers from Fort Charlotte fishing for trout: the kind of trout caught here seems to be the sea-trout (*salmo trutta*): they are often got of a large size: they have probably forced their way up the outlet of the lake when swollen during some very rainy season, and have been afterwards unable to make good their regress to the sea. At present, there is no apparent communication of the lake with the sea.

After wandering for several hours over the most bleak and barren hills, which presented no botanical

* I afterwards found that I had committed a mistake with respect to this lease. See Supplement, art. 2.

cal rarity, but yielded only a few of the coarser plants that are commonly found in moist moors*, we at length caught a distant glance of the castle of Scalloway, at the bottom of a fine valley below us. The castle stands on the brink of an arm of the sea, which being protected from the rage of the ocean by a number of little islands, Burra, Tondra, Oxna, Papa, and several holms, forms a safe natural harbour. The town of Scalloway consists only of a few scattered houses in the neighbourhood of the castle. Only one of these is genteel or in the modern style: this is the house of Mr Scott of Scalloway. Around it is a neat garden, in which we observed several small fruit and timber trees, and different shrubs, all of which are rare things in this part of the world. The castle of Scalloway (to borrow the words of Mr Giffard of Busta) † “has been a very handsome tower-house, with fine vaulted cellars and kitchen, with a well in it; a beautiful spacious entry, with a turret upon each corner, and large windows.” It was built above two centuries ago. The erection of such a building, in so poor a country, must have been attended with the most oppressive exactions of services and contributions.

* *Eriophorum angustifolium* and *E. vaginatum* are very common, and their leaves here formed a good deal of the greenest of the sward; together with *Narthecium ossifragum*, *nardus stricta*, *festuca vivipara*, *agrostis vulgaris*, and some others.

† *Biblioth. Brit. topograph.* No. 38.—The description which I formerly gave, in the Scots Magazine, was, I find, inaccurate: I have therefore substituted Mr Giffard's.

contributions. The memory of the founder Earl Patrick Stewart, is, for this reason, still held in detestation by the natives. The whole edifice has been long unroofed, and is now in a state of irremediable decay. The stair seems to have been taken away by the inhabitants of Scalloway when in want of stones for building. Had not the building been originally very strong, it could not so long have withstood the vicissitudes of a Shetland climate. Over the main door is an inscription, the first part of which is still perfectly legible, and favours not a little of the egotism and vanity of the founder, viz. "Patricius, Orcadam et Zetlandiæ comes." The lower part of the inscription is nearly obliterated by the action of the weather; but may thus be decyphered: "Cujus fundamen saxum, domus * illa manebit: labilis, e contrà, si arena, perit." During the time of the Commonwealth, it was occupied as barracks by a party of Cromwell's soldiers, to whom, it is said, the inhabitants were indebted for several improvements, particularly the culture of cabbages.

There is no inn or public-house at Scalloway. We easily, however, procured eggs and milk, but could get no bread of any kind: indeed, throughout Shetland, at this time, bread was only to be seen in the houses of the more wealthy. Potatoes, however, of good quality, were presented as a substitute;

* The word *domus* is here enigmatical: but whether it be understood of the castle or the family, the folly of the founder is the same, both having equally vanished away.

substitute ; and we understood that, in the district of Scalloway, they have generally an excellent and an abundant crop of this useful root.

From Scalloway we proceeded, up a fine dry valley to Tingwall. It seemed to be the best land, and was loaded with the richest crops we had seen in Shetland ; and the corns were now ready for cutting. The whole valley has a bottom of rich primitive limestone, of a pale blue colour ; none of which, as far as we could learn, has ever been wrought, though peat-fuel is here abundant. At one place we observed that a ditch having been dug, had exposed a bed of good marl : this too, however, was utterly neglected. In the pastures in this pleasant district, there is a good deal of natural clover, both red and white (*trifolium medium* and *trifolium repens*) ; but these pastures are infested, to an uncommon degree, with the plant called sneezewort, (*achillea ptarmica*) ; indeed I do not recollect ever to have seen elsewhere such quantities of that plant growing in one place. Much, it may easily be believed, might be done to increase the fertility and value of the vale of Scalloway. Instead of granting leases for a certain number of years, one of the principal proprietors chooses rather to stipulate for one half of all that is produced on the ground, without taking any part whatever in the expence or management of seed or labour :—A worse plan, either for landlord or tenant, could scarce perhaps be devised. The new church of Tingwall is situated near the head or north end of a lake in this valley, and from some points of view, forms

forms the termination of a very beautiful prospect. The name *Tingwall*, it is believed, signifies in Norwegian, *the place of the court*; and on inquiry, we were told, that on a small green island in a fresh water lake near the church, there is a mound surrounded by large stones, on which, as tradition reports, justice was formerly administered, and which still retains, among the natives, the name of the *law-ting*. A range of stepping-stones, leading through the most shallow part of the lake, to this green *holm*, remains to this day: and these stones are of such size as to evince more than ordinary exertion and expence in placing them there.

In returning to Lerwick, we travelled along the whole stretch of the only properly-made road in Shetland, the joint work of Mr Ross of Sound, and of the late Mr Scott of Scott's-hall. This road passes over a mossy hill between 200 and 300 feet above the level of the sea. Even on the highest part of the hill, we observed that the covering of the peat-moss is ten or twelve feet thick, the road being cut through it. The peat-moss is of a kind that is very spongy, and very retentive of water: for wherever it has fallen down upon the road, it has formed a miry sludge.

In ascending this hill, we had a prospect of the eastern boundary of Tingwall valley. It terminates in an arm of the sea called Laxforth Voe. The gentleman whom the writer of this account had the pleasure to accompany at this time, happening to understand a good deal of the Norwegian language, inquired if salmon were ever caught there,

as *lax*, in that language, signifies falmon; and he was informed that they were more frequently found there than any where else in Shetland. Laxforth, or *Lax-fiord*, is therefore a significant name, and means the Bay of Salmon.

After the 6th of September, it was too late in the year to attempt to visit other parts of Shetland which we at first had in view. At this season, sudden and violent gales are here to be expected, which render travelling between the islands both disagreeable and dangerous, if not impracticable. In returning to Orkney we met with a pretty hard gale, which produced a most tumultuous sea. We passed at no great distance the lofty and precipitous Fair Isle, on which, it is generally believed, the Duke de Medina Sidonia, in the flag-ship of the Invincible Armada, was wrecked in 1588, in attempting to return to Spain by sailing north round the Orkneys. Many marine birds still kept the sea, tempestuous as it was; particularly razor-bills, shearwaters, and, if we mistake not, skua-gulls, large brown birds*. We were detained two days in the Orkneys, by a dreadful gale from the S. W. Although,

* The Skua (*Larus cataractes*), though scarcely known in the south of Britain, is doubtless a distinct species. Its bill is considerably hooked at the point, and the upper mandible is partly covered with a cere in the manner of the eagle. The plumage is almost wholly brown. It has very strong hooked talons like the eagle, and it is a very bold bird. It grows to a large size, being inferior only to the *Larus marinus*, or great black-backed gull. Its principal breeding-place is the island of Foulah; but it breeds also in the Fair Isle, and in one or two other places. The Shetlanders call it the *Bonxie*.

Although, after this, the wind had entirely ceased, we found that we had to encounter what the sailors termed a "heavy head-sea," which had been "set down" by the preceding gale, and which produced a tumbling motion of the vessel, very apt to occasion nausea. A favourable breeze, however, soon sprung up, and carried us forward in what seamen term "great style;" so that, on the evening of the second day after leaving Orkney, we passed the *May light*, at the mouth of the Frith of Forth, and got sight of the new light-house on Inch Keith, which had been recently finished, and appeared at this time exceedingly brilliant.

A few general remarks on Shetland, and especially on the condition of the people, shall next be given; and with these we shall conclude.

GENERAL OBSERVATIONS ON SHETLAND.

Tea.—The families of the Shetland *cottars* or little farmers, however poor, are very partial to tea. Happening to enter on a Sunday evening, a miserable *bootie*, or cottage, about two miles from Lerwick, I was surprized to observe an earthen-ware tea-pot, of small dimensions, simmering on a peat-fire;—while in this very cottage, they told me, they had not tasted any kind of *bread* for two months! Considering the indigestible and poor quality of their common food, (dried fish, often semi-putrescent, and coarse red cabbage), it is to be regretted that they are
 not

not encouraged to spend their scanty pittance of money on some more substantial and nutritive delicacy.

Piltocks.—These are the coalfish (*gadus carbonarius*) in the second year of its growth*. In size they seldom exceed a herring. They are caught in myriads. In coasting along the different islands, we frequently observed an old man, and perhaps one or two boys, seated on a projecting rock, holding in each hand a wand or fishing-rod, and catching piltocks as fast as they could bait their hooks. The bait is limpets parboiled. The fisher keeps a few in his mouth, and baits his hook with one hand, assisted by his lips, by a single motion, with the greatest ease and rapidity. Now and then he squirts out a quantity of the oily matter of the chewed limpets upon the surface of the water, this being thought to be very attractive to the young coalfish.

In the course of the past year, when scarcity prevailed in Shetland to a most distressful degree, till partly relieved by the bounty of Government, these piltocks, or coalfish, formed the principal food of the poorer inhabitants. Even in September (1804), when in some of the meanest cottages, I inquired what they generally had for breakfast? they answered, “Piltocks.” What for dinner? “Piltocks and cabbage.” What for supper? “Piltocks.” Some of them declared they had not tasted oat-meal or bread for five months.

Shell-

* See Notes in Appendix.—Note C.

Shell-fish.—On the flat shores of the islands, a variety of edible shell-fish is found. Oysters are common in Basta Voc, Yell: and besides cockles, mussels, and razor-fish or *spouts*, they have abundance of what are called *culleocks* and *smurlins*. The *culleock* is the *Tellina rhomboides*; and the same name seems to be sometimes applied also to the *Venus Erycina*, and *Mastra solida*. The *smurlin* or *smuthlin* is the *Mya truncata*, remarkable for a shrivelled leathery process at one end. Both these shell-fish are highly relished by the Shetlanders.

Game.—Moorfowl or grouse, which are common in Orkney, are not known in Shetland. The heath here is probably too stunted to afford them that shelter which they require.

Trees.—There are none in Shetland*. Trunks and branches, however, are found in the peat-mosses; and the remarks formerly made, p. 57. (and those in Appendix, Note E.), on the practicability of raising wood in Orkney, are equally applicable to Shetland.

Light-

* Shetlanders who have never been from home have no idea of trees. Lately, a native, who had hitherto spent his days in his own island, having occasion to visit Edinburgh,—when trees were first pointed out to him on the coast of Fife, said they were very pretty; “but,” added he, with great simplicity, “what kind of grass is that on the top of them?”—meaning the leaves; for the term grass or *girfe* is, in Shetland, applied to all herbs having green leaves.

Light-houses.—There are none in Shetland, although they are greatly wanted. One light-house upon the low rocks called the *Skerries of Whalfey*, would render secure nearly the whole *east* coast:—while another on *Papa Stour*, would be equally useful on the *west* coast. Seafaring people, perfectly experienced in the navigation of the Shetland seas, pointed out these places as the most eligible. Were these lights erected, many shipwrecks would doubtless be prevented; and vessels would be enabled to approach the islands for shelter, in the darkest night, without dread. It should also be considered, that they would prove of the greatest advantage to the King's vessels, some of which are almost constantly cruising between the Naze of Norway and Shetland.

Packet.—The irregularity of the communication with the south is exceedingly unfavourable to commerce. The Post-office makes a bargain with some trading sloops to convey the Shetland mail; but the sum given, it would seem, is not sufficient to induce them to observe regularity in the time of sailing. Sometimes the letters for two or three months arrive at one and the same moment: This actually happened when we were at Lerwick. As a proof that the business of the Post-office is considered merely as a secondary object by the proprietors of these trading sloops, it may be mentioned, that one of them sailed from Aberdeen without carrying the bag at all,—the conveyance of which ought, by bargain, to have been her principal errand. Post-office

office packets ought therefore to be established by a new and more efficient contract, either from Aberdeen or from Leith (which last would perhaps be preferable) direct for Lerwick in Shetland, and to sail every fortnight. It is not improbable that merchants in Leith and Lerwick would soon find it a pretty lucrative contract.

Commission of the Peace.—There are no Justices of the Peace in Shetland, although, as we were told, a commission lies ready for the gentlemen of that country; each having only to take the oaths, which may be done at Kirkwall in Orkney, and to pay a small sum (it is believed about 7 s. 6 d.) of clerk's fees. There is not a magistrate of any kind in Shetland except the Sheriff-substitute. Were the principal Shetland proprietors to qualify as Justices of the Peace, the business of the Sheriff-court would be considerably lightened, as very few of the Shetland debts exceed L. 5 Sterling, to which amount a decree of the Justice of Peace Court is competent. It may be added, that if a few of the resident landlords were invested with the powers of Justices, incipient culprits might sometimes be checked and reformed, who, at present, in many places of these scattered islands, must be hardened in guilt by the prospect of impunity*.

Freehold.—None of the freeholders of Shetland (if we may so call them) having ever qualified, they have never yet exercised their franchise of voting for

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* See Supplement, art. 3.

a Member of Parliament ; which seems to be an unaccountable circumstance*.

State of the common people.—At first view, it seems to a stranger, that the common people are here involved in a state of more complete vassalage than is perhaps known in any other part of the empire. “ In these distant islands (says Mr Pennant), the hand of oppression reigns uncontrolled : The poor vassals (in defiance of laws still kept in bondage) are compelled to slave and hazard their lives in the capture, to deliver their fish to their lords, for a trifling sum, who sell them to adventurers from different parts at a high price*.” In confirmation of this remark of Mr Pennant, it has been stated, that, after deducting the expence of salting and drying the fish, the landlords of Shetland at this day export them at a profit (including the bounty from Government) of about 400 *per cent.* †!

“ They *must* fish for their *masters*,” says the intelligent Mr Menzies, minister of Lerwick ;—“ they must fish for their masters, who either give them a fee entirely inadequate to their labour, and their dangers, or take their fish at a lower price than others would give. It is true that, in years of scarcity, they must depend on their landlords for the means of subsistence, and are often deep in their debt. But why not,” (he adds with energy), “ why not
not

* See Appendix, No. II. 8.

† Introduction to the Arctic Zoology, (3d edition) vol. 1. art. *Shetland*.

‡ This is too high an estimate. See Supplement, art. 4.

not allow them to make the best of their situation? Why not let them have leases upon reasonable terms, and dispose of their produce to those who will give them the best price? Why not let them fish for themselves? Why should the laird have any claim except for the stipulated rent *?"

Before making any remarks on this apparently deplorable state of dependance of the poor Shetlanders, it is proper to premise, that the evil is not solely to be ascribed to some peculiarly rigorous or tyrannical spirit in the Shetland landlords; but arises, in some measure, out of the nature of things,—depending partly on the natural poverty of the country, and partly on a variety of unfavourable circumstances in its civil regulation, of Danish origin.

Further, it must be considered, that, in Shetland, some of the most salutary laws of Britain are unknown, or do not operate †, so detached and overlooked are these islands.

The tenantry look up to the Shetland landlord from a state, generally, of hopeless poverty and abject dependance; for if they are not tenants at will, they seldom hold leases of more than two or three years; and they are often drowned in debt to their lairds.

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* Stat. Acc. of Scot. vol. x. p. 197.

† The excellent *berding-añ* (as it is commonly called) is laughd at. The acts about inclosing, and about dividing runrig property, are scarcely known, at least they are not acted on.—See Supplement, art. 5.

It is the landlord's interest that his tenants should be fed and should multiply ; he takes care, accordingly, that, even in times of scarcity, none shall perish for want, and he encourages marriage. But in some other points, the Shetland landlord's interest has been thought to run almost directly counter to that of the tenant ; and here his overwhelming influence must secure him success. For example, it has been thought to be against his interest, that his tenants should attain in any degree that envied state of independence which is the grand motive of every description of tenants in the south of Scotland, and which animates the exertions even of a *moor-laird* * in Stirlingshire. Although, therefore, it is by no means an avowed principle, it has been alleged to be a practical one, with the Shetland landholders, to keep their tenants as poor and as dependant as possible. " They *must* fish for their masters." Every tenant, or at least every cottar-tenant, is expected to fish during summer. And as a striking proof of the subjection in which the Shetland cottars are held, I may mention as an undoubted fact, that for every lad who goes to the Greenland whale-fishery for the summer, the cottar-family to which he belongs must pay to the landlord *one guinea* of fine. This is an exaction which the landlords who practise it, may well wish to slur over : but if the fine be not levied avowedly on that ground, we have been credibly informed that a guinea is always added

to

* A name given to the tenants in the great improved moor of Blair-Drummond.

to that year's rent, and that the reason of the addition is perfectly understood by both parties*.

It must ever be kept in view, that the value of Shetland estates depends not so much upon the money-rents paid to the landlord (which in many cases have not been nominally raised for a century past), as upon the fishings which their tenants are obliged to carry on for them, which more than double the land-rents. "The rents of this country (says the author of the Statistical Report of Dunrossness) are principally paid out of the sea. The tenants have from their landlords, 3 *d.* for a ling, 1 *d.* for a cod, or for a tusk, &c. (this was in 1792), and these, when salted and dried, will, in the Hamburgh market, yield four or five times as much, besides debentures from Government. Add to this, double or triple the prime cost for goods brought back, and sold to the people, viz. linen, tobacco, spirits, hooks, lines," &c. If this statement be correct, (and there is little reason to doubt but it is), it is evident that the profits of the Shetland landlords upon their fishings and *fishers*, after deducting a large *per centage* for expences, must still be very great indeed.

It may be thought that there is no harm in the landlord supplying his tenants with clothes, linens, and such things, and that it is even a favour to them to do so. Frequently it is a favour: But sometimes it is far otherwise. It sometimes proves the gulf in which the poor tenant is overwhelmed in misery. For the landlord gives to his tenant unlimited

* See Supplement, art. 6.

mited credit for such articles : the tenant, again, as may naturally be expected, indulges with less scruple the taste of his family for clothing and finery : meanwhile, the account imperceptibly swells ; and frequently the day of reckoning, alone, opens his eyes to the state of irretrievable ruin and dependance, in which he has thus blindly involved himself*.

It may be proper to remark, that where the landlords themselves are resident, and become contractors with their tenants, the exhausted cottar or fisher generally obtains mercy : but where the landlords let in lease their fisheries, as is often done, to *tacksmen*, who are interested to make all they can of the cottars or under-tenants, pitiful is said to be the state of the poor fisher and his family !

We were told of two recent innovations, which, if really put in practice, favour strongly of deceit and oppression.

1. The butter-debt, as it is called, is paid in quantities called *lisponds*. Formerly a lispond consisted only of about twelve, or, at most, sixteen pounds Dutch. By artifice it is said now to be raised to about two-and-thirty pounds Dutch ; and still the tenants must pay the same number of lisponds ! And a certain portion of butter, wool, or other articles, it will be observed, is not only generally paid as *rent*, but every where as *teind* and as *superior's duty*.

2. *Teind*

* See Statistical Report of Delting, by the Rev. John Morison, vol. i. p. 385, *et seq.*

2. Teind has always been exigible on the produce of the *baaf* fishing, viz. ling, cod, and tusk. This *baaf* fishing (as the word *baaf*, or distant sea, implies) is carried on at the distance of from 25 to 50 miles from land. Besides this fishery, which can only be practised during summer, the Shetland cottar or farmer has always been accustomed to apply himself, during winter, to the shore-fishery, where *fillocks* (the fry of the coalfish), and *pillocks* (coalfish a year old), with thornbacks, plaice, &c. are caught. From the coalfish fry, oil is procured to supply the cottage-lamp in that dreary season; the others are often the principal food of the inhabitants. Where a cottar has become superannuated and unfit for the distant ling-fishery, this shore-fishing is likewise his summer employment, and he then chiefly catches haddocks, and *boes*, or piked dogfish. Will it be believed that, of late years, the lessees of the teinds have endeavoured to extend their claims to this shore-fishery?—a burden which it cannot bear, and from which, we were informed, inveterate and immemorial practice ought most forcibly to keep it free. The pretence, we understand, is, that ling are sometimes caught in the shore-fishery; but although it cannot fail to happen, in these northern seas, that while the grey-headed Shetlander is paddling along the shore in his skiff to collect a dish of *podleys* and *flounders*, his bait will occasionally attract the eye of a young ling or tusk, it is certain, that all the ling, cod, or tusk, thus caught in a year would not amount in value even to the sum itself claimed for teind-duty! *

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* See Appendix, No. II.

It is evident that in Shetland matters are thus in a bad train : but it were no easy thing to point out a general and suitable remedy. In most cases the tenants are so poor, that, were the landlord, at once, to withdraw his aid, and leave them to manage as they best could, many of them would probably perish for want. For the landlord has, in most places, not only to provide boats for the fishery, but lines, hooks, &c. and gin or whisky, without a small stock of which the fishers could scarce venture 30 or 40 miles to the main-sea in an open boat. He furnishes the fishers also, as already remarked, with clothing ; and he sees to the aliment of their families in their absence. In a bad season, when the crops fail, the fishermen and his family depend on their laird for subsistence ; and in this way, also, a debt is often incurred, from which the gains of several successive years of prosperity may not perhaps be able to relieve him. It deserves therefore to be considered, that if the fishers were to be entirely emancipated from their present state, it would be but just that the nation should reimburse the landlords the sums thus, *bonâ fide*, expended in alimenting their tenants in years of scarcity.

The cottars, as formerly seen, are almost tenants at will, or at best have only a biennial or triennial lease. This is a great evil, effectually preventing any attempts at agricultural improvements ; but the extreme poverty of the present little farmers of Shetland, would, perhaps in many cases, prevent them from accepting a nineteen years lease, if put in their option.

In many places, as above observed, the money-rents of the land have not been raised for a hundred years : —this irresistibly proves what high profits the landlords must be making on the resale of the fish, the oil, the butter, &c. received from their tenants at stipulated prices. Were the size of farms enlarged, and leases of nineteen years duration granted, the whole lands of Shetland would doubtless give more than double the present rents. But even in such event, unless manufacturers were here and there, at the same time, established, it is not improbable that many of the present cottars would either starve, or be compelled to *indent* themselves to America !

- Were some fishing-villages established in Shetland, and were a few opulent Scots or English companies to open warehouses there, where the natives might dispose of their fish, either green or salted, and where they might procure boats, lines, salt, &c. as they wanted or could purchase, the advantage to the country would probably soon appear. The landlords would then find it their interest to invite more substantial tenants, and to grant long leases, in order to have their lands improved and their rents increased. While one part of the natives would thus be engaged in raising crops and improving the breed of sheep and cattle ; another would be employed, in summer, at the ling and tusk fishery, and in winter at the piltock and shore-fishery ; and each would mutually supply the wants of the other.

It does not readily occur that an increase of the bounty on the fishery would be of advantage to Shetland in general.

The

The conversion of the teinds into money would doubtless be of essential advantage, both to the agriculture of the country and to its harmony, and would remove a great bar to the beneficial influence of the example and instructions of the clergy*.

It would also be highly advantageous, to convert into money-sterling, the whole of the superior's *debts*, (*scatt, wattle*, and other exactions of Danish origin), at present paid in oil, butter, and wool.

It must be evident to the reader, that these remarks on the state of the common people in Shetland, and on the means of improving that state, can only be considered as cursory hints. Although no opportunity was omitted of acquiring information on these topics, or of hearing opposite opinions, on the spot; yet candour requires us to say, that our stay in the country was much too short to enable us to speak with confidence on so important a matter. We know that different pamphlets have been published on the subject; but we regret, that, owing to their being out of print, we have had no opportunity of availing ourselves of the information they may contain. Meantime we trust that the rectitude of our intentions, and the general and impartial nature of our observations, will be admitted as a sufficient apology for any occasional warmth of expression; admitted even by the Shetland lairds (should these

* See Appendix, No. II. 9.

these remarks ever come under their eye), though their ideas of the freedom of animadversion may perhaps be less expanded than those of their more southerly countrymen.

EDINBURGH, }
9th July 1805. }

P. N.

SUPPLEMENT.

(Published in *Scots Magazine* for February 1806, but transmitted by the author for publication in the beginning of November preceding.)

SINCE my remarks on Shetland were published, a few inaccuracies have been pointed out to me, which I beg leave to correct:—Some of my observations have, I find, been misconstrued; these I shall endeavour to render more plain:—And I shall interweave some additional articles of information which have lately come to my knowledge.

1. *Nofs Island*.—I formerly stated, that the tenant of Nofs pays L. 50 of rent for the whole island. I am now informed that I should have said only L. 40, 5 s.; but this is evidently a matter of no importance.

2. In speaking of the same island, after expressing my approbation of the “great improvement” of allowing the tenant to prosecute the fishery on his own account, I have stated, that “even the tenant of Nofs, “however, has not been able to procure a lease of “that duration that would encourage him to make “permanent improvements; and that two or three “years bound the lease.” I have since been

informed that I have here fallen into a mistake ; as the tenant of Nofs forms a noted exception to the Shetland tenants in general, and holds a lease of the island for his own lifetime, and two years to his family after his death. This is better than I formerly understood : but I cannot help remarking, that if the period of the certain duration of the lease (after the expiry of its contingent subsistence by the principal lessee's death) were extended only to ten or twelve years, there can be no doubt that it would prove eventually more beneficial both to landlord and tenant. The tenant would not probably scruple to incur some expence in improving, if he foresaw that his heirs at least would reap some of the advantage ; and indeed the landlord might, in that case, most properly stimulate the tenant's exertions, by stipulating for the erection of inclosures, offices, &c.

Very few leases of any considerable duration are to be found in the whole of Shetland. Two or three years in general limit them. For most of the small farms, there are no written leases. But this, I am told, is, in many cases, owing to the poor people themselves, who are terrified at pen and ink, and often tell their lairds, in a whining style, " They will take the ground *for the time* ; God only knows if they will live to the year's end," &c. I am unable to trace this " stupid apathy," (for such I must still call it), to any other cause than the state of hopeless poverty and irretrievable dependence, in which, by a variety of unfavourable circumstances,

cumstances, the great body of the Shetlanders are certainly involved.

3. *Commission of the Peace.*—I formerly remarked, that there were no Justices of the Peace in Shetland. I am happy to hear that two gentlemen have lately qualified. At their first sessions, above a hundred delinquents, it is said, were convened before them, chiefly, however, for making malt in private. It is believed that the Board of Excise urged this first establishment of Justices, as they found that a quarter-sessions at Lerwick was indispensable to the suppression of practices inimical to the Revenue. It will be fortunate for Shetland if similar motives should speedily lead to the establishment of Justices in the detached islands, where there are at present no kind of magistrates, to give decreet for trifling debts, to call for the statute-labour*, to awe the turbulent, or curb the petty offender. It was in this sense that I affirmed there was no magistrate in Shetland but the Sheriff-substitute: and I was correct. I am aware that the Admiral and Commissary may also be accounted *Magistrates*, in the extensive meaning of the word; but certainly these judges, whose jurisdiction is very limited, and who hold their sittings in Lerwick, do not in any degree supersede the necessity of Justices of the Peace in the scattered islands of Shetland.

4. *Profits of Landlord and Tenant on the fisheries, &c.*—In my remarks on the state of the common people,

* This, it is to be hoped, well now speedily be done. As yet there is only *one* made road in Shetland.

people, after quoting a severely chiding passage from Mr Pennant, it was stated, that, after deducting the expence of salting and drying, the landlords of Shetland, at this day, export their fish at a profit (including the bounty from Government) of above 400 *per cent.*" It will be observed, that I was here narrating only what "had been stated." For the arithmetical accuracy of Mr Pennant, Mr Morrison, or perhaps others, I am not answerable. I myself am inclined to think, that, in general, the profits of the landlords on their fishers and fish do not nearly amount to the enormous *per centage* above mentioned. It has even been affirmed to me that "they have commonly only 20 *per cent.*" This, however, is, I am convinced, running to the opposite extreme: their profits must "commonly" be three times, in some cases six times that amount. I must here enter more into detail, and specify the data on which I proceed. I shall first examine the profits of the landlords, and then those of the tenants. The task is, to me, irksome, and I am aware that it may seem invidious: but it is rendered necessary by the conduct of some of the landlords of Shetland; and I shall strictly abstain from personal allusions.

It requires I understand $2\frac{1}{2}$ cwt. of wet fish to make 1 cwt. of dry. The hundred-weight of green fish costs 3 s. 6d. The whole expence of splitting, salting, drying, &c. does not exceed 2 s. 6d. *per cwt.*; the hundred-weight, therefore, of dry fish costs the landlord, in all, 11 s. 3d. The fish is sold at 19 s. or 20 s. *per cwt.* or at a profit of above 70 *per cent.*, besides

sides 3 *s.* *per* cwt. of Government bounty upon exportation ; making, in all, a profit of nearly *cent. per cent.* But I must add, that the fish is often sent, on commission, for retail in the Leith or Edinburgh market *, when it brings 28 *s.* or 30 *s.* *per* cwt. or about 150 *per cent.* from which the expence of conveyance, &c. is to be deducted.

The landlords have besides a profit on boats, lines, sails, &c. which does not, I believe, (on an average), exceed 20 *per cent.* On some articles it is probably considerably less ; and some gentlemen, I have been informed, furnish hooks and lines to their tenants nearly at prime cost.—The lairds have a large profit also, on every article of produce raised by the tenant's industry, butter, wool, hides, oil, † &c.

Let us now contrast with these various profits, (the aggregate amount of which I shall not pretend to estimate), the advantages which the tenant derives from the summer's fishings, as stated by the Rev. Mr Morrison of Delting (Stat. Acc. vol. i. p. 389) ; and declared to be accurate by the Rev. Mr Jack of Northmavine (vol. xii. p. 360).—“ How far the “ people in general are benefited by the fisheries,” says Mr Morrison, apparently with a sneer of
generous

* The fish imported from Shetland into Leith, pays tithe to the minister of North Leith, amounting to about 5 *per cent.* or the twentieth fish ;—a most ungracious tax, considering that the fish had already paid tithe in Shetland.

† *Addit. Note.*—These profits, though incidentally mentioned, should not here be taken into account. The profits on the fisheries only are in question.

generous indignation, “ will appear from the following statement.” He states the total annual expence of a six-oared boat to be, on an average, L. 19 : 5 : 10 ; and the total annual returns, only L. 19 : 10 : 6 ;—so that there remains of free profits the insignificant pittance only of 4 s. 8 d. Sterling ! which if it be divided among six sharers in a boat, amounts to the sum of *ninepence farthing* Sterling to each man as the *free* profits of the summer’s fishing ! But in the above calculation, wages are included in the annual expence, and these are averaged at L. 1 : 13 : 4 to each man for the season ; so that if the tenant himself be the fisher, as he generally is, this sum falls to be added to his 9 $\frac{1}{4}$ d. of summer gainings, making in all L. 1 : 14 : 1 $\frac{1}{4}$. “ But, “ (adds Mr Morrison), the fishers carry many articles from their own houses to the fishing-stations, such as butter, milk, &c. on which no value is here put.”—I observe that the Rev. Mr Thomson, in his report of Walls and Sandness (Stat. Acc. vol. xx. p. 103), makes the profit on a six-oared boat about L. 6 Sterling, or L. 1 to each man (exclusive of wages). But I also observe that he omits to take into account the expence of the boat itself, an expensive and perishable article. It costs above L. 8, and if it be supposed to last about six years, the average annual expence on the article of boat may be stated at L. 1, 7 s. which must be deducted from the alleged L. 6 of profits.—If I have misunderstood either Mr Thomson or Mr Morrison, I shall be happy to be corrected.

5. *Runrig.*

5. *Runrig*.—I formerly stated, that the herding-act and the act for dividing runrig property, have been much neglected in Shetland. I have since been assured that, in some parts of the country, the latter act has been almost completely carried into effect. These, however, are only praiseworthy exceptions; for it is unquestionable, that runrig lands are still to be found, in greater or smaller quantities, in almost every corner of Shetland. [Though there may be little in Unst, there is a great deal in Yell.]

6. *Whale-fishing exaction*.—I formerly stated (p. 98.) that for every lad who goes to the Greenland or Davis Straits whale-fishery for the summer, the cottar family to which he belongs must pay to the landlord one guinea of fine or of additional rent. I have been challenged for making this statement without having previously examined all the “land-mails legers” of the country, (by which I presume, are meant the rental-books), I adhere to my former statement; and yet am ready to believe, that, if the whole land-mails legers of the country were examined, no trace of this exaction might be found. This would not prove that the evil does not exist, but only that, if it does exist, the landlords who practise it are not insensible to its flagrant injustice. These gentlemen may perhaps deny that it is either a *fine**, or an *exaction*, or an *additional rent*.

* *Fines*, I must observe, appear to be avowedly exacted on other occasions. The tenant is taken bound to deliver all his produce

rent. Let it, then, be called a *bargain*, to which they surely cannot object. I give them the option of the name; for the name will not alter the spirit of the transaction. As an indubitable proof that it does exist, and that it is not a private bargain with the tenant, but an arbitrary and fluctuating imposition, I have now to state, on the best authority, that *advertisements* were, last spring, (1805), affixed to some of the parish-church doors of Shetland, informing the poor Shetlanders belonging to particular estates, that no permission would henceforth be granted them to go to the whale-fishery, under *three guineas*, instead of one! This dictatorial method of announcing a rise of price, is quite inconsistent with the notion of a previous fair bargain with a tenant. It proves, on the contrary, the previous existence of the smaller exaction of one guinea, as I had formerly stated. Such an advertisement, pasted on the church-doors, could only be directed to men who were considered as *adscripti glebæ*, or, at least, as abjectly and inevitably dependant.—Whether this advertisement be engrossed in any of the “land-mails—legers” of Shetland, I know not: but its existence

produce to his landlord at a stipulated low rate; “and as he
 “ knows that he cannot obtain the same price from his master
 “ for the articles he has to dispose of, that another would give
 “ him, he is often tempted to trespass his contract: and when
 “ found out (which is most frequently the case) he is *fined*
 “ at discretion, or has a summons of removal immediately execu-
 “ ted against him. This is subversive of every virtuous princi-
 “ ple, and introduces a low cunning and chicanery in the trans-
 “ actions of the people.” Stat. Acc. vol. xx. p. 116.

ence and authenticity will not, I am certain, be called in question. It may be proper here to repeat what I formerly hinted, that several of the Shetland landlords have disdained, at all times, to make the unequal bargain in question with their poor and dependant tenantry.

To conclude: In my former remarks I rather vindicated the landlords of Shetland from the unqualified charges of severity and oppression brought against them by Mr Pennant, in his Introduction to the Arctic Zoology; by Tompson, in Bath Papers, vol. vi.; and by the writer in the 1st volume of the Transactions of the Highland Society. But I cannot certainly agree to that unlimited approbation, to which I understand they lay claim, and which they assume (erroneously perhaps) as having been awarded to them by the Committee of the House of Commons in 1785: For I cannot help remarking, that the act passed next year (1786), for establishing the Society for improving the Scottish fisheries, mentions the *want of public stores*, where the islanders might freely purchase the implements of fishing, as one evil to be remedied; and that it states the essence of the evil to be, that, in whole districts, there were “only a few private stores
“ where some articles are dealt out for the fisheries,
“ *on condition of selling the fish to the owners of the*
“ *stores at their own prices.*” Is not this the exact state of matters in Shetland at this day, and one principal evil still to be remedied.

EDINBURGH, }
1st Nov. 1805. }

P. N.

APPENDIX.

NO. I.

*Letter to the Editor of the Scots Magazine.—
Published January 1806.*

SIR,

IN your Magazine for December last, there appeared certain "strictures," by a person styling himself a *Zetland Landlord*, on my "tour through some of the Shetland islands."

Some gross misstatements * in these "strictures" require immediate contradiction.

I.

* *Addit.*—Thule, in a separate pamphlet which he has published on this subject, and of which I shall immediately have occasion to take particular notice, has said that I should not have accused him of "misstatements," as his assertions were "deductions from premises." But I cannot allow that his assertions were entitled to the name of "deductions from premises;" but, not to dispute about words, I affirm that his "deductions" were, at any rate, erroneous, rash, and absurd. For example, he says, "If my conclusions are not valid, let P. N. explain satisfactorily how the expression "flur over" crept into his paper; *if he cannot do that, he stands convicted.*" (p. 12). Now, I cannot possibly trace the slightest connexion between the premises here, and the conclusion, which Thule has emphatically marked in Italics;—I cannot perceive any thing extraordinary in my employing the phrase "flur over," to express the evasive nature of the answers which I received, when in Shetland, to my inquiries on a particular subject. I therefore naturally formed the conclusion that this same expression "flur over" was somewhere to be found in the obnoxious pamphlet of *Vindicator*, and that Thule meant, from the accidental circumstance of my also hitting upon it, to infer my acquaintance with that pamphlet, which I had expressly denied. But having very lately

1. I am represented as the "partifan of a clergyman's affiftant near Edinburgh," who, it feems, is the author of one of the pamphlets lately published on the ftate of Shetland. This gentleman, it appears, did not choofe to give to his writings the fanction of his name, but affumed the title of *Vindicator*. His effay, I find, has (whether with or without reafon, I do not inquire) proved exceedingly offensive to fome of the Shetland landholders. But I thus publicly declare, that I am no "partifan of " *Vindicator* ;" and that, fo far from being his partifan, I do not even know the gentleman*.

2. Although I had, in the concluding paragraph of my "tour," explicitly ftated that I had not enjoyed any opportunity of confulting the pamphlets lately published about Shetland, an ungracious attempt is made to fhew, from fome trifling coincidence in expreffion and opinion, (which I affirm to be entirely fortuitous), that I muft, notwithstanding my previous negative ftatement, either have perufed

lately (7th September 1806), been favoured with a fight of that pamphlet, I was not a little furprifed to finish the perufal of it without once meeting with the magic expreffion "flur over," and without meeting with any clew by which I could follow Thule in his above myfterious "deductions from premifes."

* *Addit.*—In Thule's feparate publication, this "clergyman's affiftant near Edinburgh" is metamorphofed into a "Reverend paftor in a Chapel of Eafe," who it is alleged is now afhamed of his own pamphlet. This, I have no doubt, is the mere unwarranted affertion of Thule, or perhaps one of his pretended "deductions from premifes." I have now (as already ftated) read *Vindicator*, and I do not fee any reafon that author has to blufh for his writings, as far efpecially as regards the general queftion refpecting the ftate of Shetland. Some difagreeable perfonal hoftility is, no doubt, apparent; but I fhould fuppofe that proportionate irritation had been given. I again repeat, that I have no acquaintance nor connexion with *Vindicator*; and Thule's laboured imputations of concert, are therefore abundantly idle.

used these tracts, or that I must have implicitly adopted what was dictated to me by Vindicator or his abettors. This last supposition is out of the question. As to the former, it is not without feelings of indignation and disdain, that I find myself called upon to declare, a second time, that at the date on which I transmitted the concluding packet of my MS. for publication, (which was in the beginning of July last, 1805), I had read *none* of the pamphlets in question;—and I must add, that hitherto I have only been able to procure a perusal of the publications on one side of the question,—not on that factious side, however, to which I am alleged, by this *Zetland Landlord*, to be so trusty an adherent, but on the side of that landlord himself and his friends *. My remarks were drawn up from flight
notes

* *Addit.*—Thule had asserted, (Scots Magazine for December 1805), that a pamphlet “was published in 1799, under the form (title) of Observations on the Zetland Islands,” &c. After fruitless inquiry at the bookfellers of Edinburgh, who never heard of such a pamphlet, I at last learnt from a private gentleman, that the Observations in question, although printed, never were published. I was told, that the Secretary of the Society for propagating Christian Knowledge, upon his return from officially visiting the Shetland Islands in 1799, had laid before the Highland Society some remarks on the state of those islands. The Society voted their thanks for the communication, and ordered it to be printed as a constituent part of one of the volumes of their Transactions. Some few copies of this paper having been handed abroad before publication, so vehement an outcry was raised by some Shetland lairds, (who, it may be presumed, without any breach of charity, felt sore), that the whole impression was *cancelled*, or thrown out. I can state on the best authority, that the Society’s sole motive in thus suppressing the Observations, was to avoid the necessity of admitting an Answer, and thus allowing their Transactions to become the medium of an odious paper-war. The essay on Zetland actually published in the 1st volume of their Transactions, is equally severe on the lairds as the suppressed Observations.—For, having lately procured a perusal of the above unpublished tract, I must say that it appears to me to
contain

notes taken in Shetland, chiefly from conversations with the little fishing farmers, (who possibly never heard of Vindicator, nor of the literary campaigns, in the south, of their own lairds). These notes I afterwards revised (at the particular request of the former editor* of the Scots Magazine), and compared with the accounts of Shetland published in Arctic Zoology, vol. i.; in Bath Papers, vol. vi.; in the Transactions of the Highland Society, vol. i.; and in Sir John Sinclair's Statistical volumes; the only sources of information to which I then had access. I know that some gentlemen of the same pleasure-party in Shetland, did, while the vessel was lying wind-bound in Lerwick Roads, borrow and peruse various pamphlets on the state of that country; but I spent my time in traversing the hills and shores around Lerwick, and had no opportunity of reading those pamphlets, (which were left at Lerwick). I heard, indeed, of the *name* Vindicator; and I heard his performance *condemned*. But I never learned more of him, till the inventive faculty of this Zetland landlord dubbed me his partisan. From the specimen, however, which I myself have now received of the candour of a *Zetland Landlord*, I confess that I am inclined to receive with extreme caution his heavy charges against Vindicator.

3. The *Zetland Landlord*, is pleased to say, that immediately on seeing the Magazine for June last (which was published on 1st July), he "wrote a note to the Editor of the Scots Magazine," correcting various mistakes into which *I* had fallen, and

contain some valuable hints, and to be written in a very candid though bold style. A few mistakes may, no doubt, be detected; with respect, for example, to the extent of surface in the islands, the cannons of Fort Charlotte, &c.; but these are blemishes *quas incuria fudit*, and do not derogate from the general merit of the tract, since, on the leading topics, the author will be found incontrovertibly correct.

* Mr Stevenfon, now Librarian to the Treasury, London.

and warning *me* of the difficulty of the subject I had proposed to treat, viz. the state of the common people of Shetland. He then proceeds to affect to regret that his friendly private cautions (which he says, were not intended for the public eye), had little good effect on *me*, &c. Now, all this seems very strange; for the truth is, that I never saw these kind and secret warnings* till they appeared *in print* in the Magazine for December last, four months *after* the publication of the last of my remarks on Shetland.

I would be sorry, after all, to accuse this anonymous Zetlander of intentional falsehood; but I must at least affirm, that he has fallen into the grossest mistakes, and has indulged in personally injurious insinuations with reprehensible carelessness. While *he* declines to undertake the responsibility which would attach to his name and character, I feel myself, in this instance, called upon to follow a different line of conduct.

I am, Sir,

Your most obedient servant,

Patrick Neill.

*Old Fish Market Close, }
Edinburgh, Jan. 7. 1806. }*

NO. II.

* *Note by the Editor of the Scots Magazine.*—The truth is, the Editor immediately after receiving the letter, happened to learn that Mr Neill had had some communication with a Zetland landlord, and proposed making alterations in consequence. He naturally supposed that it must have been with the same gentleman, though it turns out to have been otherwise.

NO. II.

*Answers to Thule's Strictures**.—Published in *Scots Magazine* for February 1806.

SINCE the Supplement was prepared, some very severe strictures on my *Tour* have appeared in the

* The republication (in this Appendix) of these *Answers* to Thule's *Strictures* becomes necessary, in consequence of some recent occurrences. Thule, it seems, had prepared a *reply* for insertion in the *Scots Magazine*; but the unreasonable violence of his style, the extraordinary prolixity of his paper, and his foolish accusations of combination between P. N. and the editor of that Magazine, (which that editor must have known and felt to be utterly groundless), had prevented its insertion, without undergoing some material abridgment and modification. Thule, it appears, refused either to abridge or correct, or to suffer these operations to be done for him; and preferred an appeal to the Public in a separate pamphlet. That pamphlet was intituled, "A Statement of some late conduct of the Conductors of the *Scots Magazine*, 1806. By Thule." The first ten pages only, I found, corresponded to the title: the remaining thirty pages consisting of a very irksome and very ill-natured Reply to my *Answers*.

The first part of this pamphlet has already been treated with suitable indignation and contempt by the Editor of the *Scots Magazine* (July 1806); and I shall here say only a very few words on the charges in which I appear to be personally implicated.

Thule most feelingly complains of having been denominated a *Zetland Landlord*, and zealously denounces that "casual monopoly (to use his own sublime language, p. 4.) of the miscellaneous periodical press of Edinburgh," which could bestow on him such a title. Among the motives which he conjures up, he declares, that this denomination *Zetland Landlord*, was intended to "furnish facilities for argument to the Editor's friend P. N.!" I assure Thule, that I had no share whatever in dubbing him a *Zetland Landlord*, and that, if the Editor thereby intended to furnish me with facilities for argument, he lost his pains, my understanding being too dull to perceive any possible facility arising to me from that denomination. On the contrary, I conceive, that

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the Scots Magazine. Having already disclaimed any secret understanding with former writers on the state of Shetland, or any knowledge even of their publications, I now proceed to a dispassionate review of some of these Strictures. I may observe in

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the designation *A Zetland Landlord* was calculated to operate against me, and to give more weight and importance to what should be said than the signature THULE, which either means nothing, or means "*darkness or obscurity* †." It now appears that the Editor had, in a subsequent Number of the Scots Magazine, intimated that Thule was *not* a Zetland Landlord; but, this alas! was equally offensive, and Thule now avows that he is a Zetland Landlord, yet protests that he shall not be called so with impunity!

Thule next alleges, that the Conductors of the Magazine "took an interest in having an answer to him concerted before he appeared in print," p. 5. This must be a mistake; at least I was not consulted on the occasion; and yet I apprehend, I must have been a *sine quo non* in the business. The fact is, I did not see Thule's paper till after its publication in the Magazine, when all the world might have seen it.

He farther alleges, that the "Editor was my personal friend," p. 6. This happiness I did not enjoy. Thule himself could not fail to have been conscious that no such intimacy existed; for in that case, the mistake about Thule's MS. communication could not possibly have occurred.

I beg the Reader's pardon for obtruding so ludicrous a controversy on his notice; but the self-conceit and folly of Thule have led him to fill the first part of his pamphlet with such trash. That my own language may not here appear too strong, I shall merely mention, that in one place he presumes to talk of the "*personal safety of the publishers*," (p. 2.); and, in another, works himself up to such a frenzy of rage, that he declares, "the *Conductors began to tremble for the consequences*!" (p. 3.)

With regard to the latter part of his pamphlet, much of it is occupied by unmeaning and unnecessary invective, and must be passed over. Some parts contain unfair inferences, and perversions of my meaning, and most erroneous assertions. These I shall endeavour to obviate, in additional foot-notes. In the midst of much refuse, I would not be understood as denying that some useful information may be found in his paper. This I shall also endeavour to extract, and to convey in my notes, giving Thule due credit for such remarks.

† "THULE is a Phœnician word, signifying *dark or obscure*."—Campbell's Political Survey, vol. i. p. 677.

the entry, however, that it seems strange that a production teeming with palpable blunders (as Thule is pleased to affirm) and the most glaring self-contradictions,—from an obscure and humble pen,—should attract the slightest attention: it seems “passing strange” that it should call up cries of vengeance even from the extremities of the earth, the *Ultima Thule*; that it should be honoured, in short, with so laboured an invective, by way of refutation, from the greatest critics of Hethlandia!

1. *Unst School*.—It is alleged that I had said, that “there is no school in Unst,” and that I had “quibbled myself into the misstatement.”—The quibbling is all on the side of the Zetland critic. He himself admits that there is no *parochial* school; and it must be evident to any person who reads the *whole* passage*, that I was speaking of established parochial schools only, and not of uncertain and occasional schools kept by persons totally unqualified, viz. illiterate old men and old women.—In a subsequent passage †, I speak of there having hitherto been no “*public* school” in Unst; but add, that at last a school-house is building ‡.

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* *Suprà*, p. 78, 79.

† *Suprà*, p. 79. *Note*.

‡ *Addit*.—The heat of controversy on this subject has led Thule, in his pamphlet, to commit himself by making most unfounded assertions. He positively asserts (p. 11.), that the “persons” who gave information to the Reverend author of “*Observations on Zetland*”, and to his defender *Vindicator*, had “lastly condescended to instil the same ideas into P. N.” Upon inquiry who those persons might be, I learnt that they were two gentlemen of the first respectability and character in Lerwick. I should have been proud to have received information from these gentlemen; but I never got the least assistance from either. Thule’s unqualified assertion, therefore, is utterly groundless. It is curious that the additional intelligence which I received respecting Unst school, and which Thule (p. 11.) conceives had been furnished by some of *his* confidential friends,

was,

2. The author, foreseeing that he must yield my position that there is no parochial school in Unst, searches out a more serious blunder, and accuses me, in the next place, of credulity in believing—what! (*Parturiunt montes, nascitur ridiculus mus*)—that there are no mice in Unst, triumphantly declaring that these little creatures have not been wanting in Unst “during the memory of man.” A controversy on such a subject is mighty pleasant: it tends to enliven one’s spirits in wading through grave disquisitions on oppression and parochial schools. But I cannot yield even the point about the mice. I have great authorities against Thule, though, for the sake of the feline race of Unst (the parties chiefly interested in this part of the dispute) I shall not be sorry to find that my authorities are naught, The Statistical account of Unst bears to be “drawn “up from the communications of Thomas Mouat “Esq; of Garth and the Rev. J. Barclay;” that is, the principal landholder and the clergyman of the island.

was really sent me by a gentleman in the North Isles, whom Thule would probably account an opponent.

Thule is pleased to say that “the institution of Unst school “took place on the 11th of May 1803, nearly eighteen months “before P. N. visited the island.” This is certainly an instance of quibbling: for it is an undoubted fact, that the foundation stone of the school-house was not laid till two years thereafter; and the school itself was taught for the first time only in the end of November 1805.

When the Secretary of the Society for propagating Christian Knowledge visited Shetland in 1799, only *two* of the *twelve* parishes of which it consists, possessed parochial schools. Owing greatly to *his* commendable exertions and representations, the whole of these parishes now enjoy that advantage. But that they are little indebted for this blessing to Thule and his friends, most evidently appears from the style in which he speaks of such establishments. He considers the Shetlanders, as a people “sent by a *distant Government*, (these are his words, p. 12.) *with “an awkward substitute for education,”* i. e. parish-schools!

island. In this account, it is said, "Rats, *mice*,
" frogs, toads, and adders, are unknown here *."

Quoth Hudibras, "I smell a rat ;
" *Landlord* †, thou dost prevaricate !"

BUTLER.

3. I

* Statistical Account of Scotland, vol. v. p. 118.

Addit.—Thule says, that there is an error here ; but he palms it upon the editor of the Statistical Account, alleging that mere "force of habit" had led him to write *mice* after *rats* ! I am sorry to demolish this beautiful theory of the "habitual sequence" (as Thule elegantly terms it, p. 13.) of *rats* and *mice* ; but I can now account for the mistake in a much more simple and natural way, viz. That through the chafing of the paper and indistinctness of the handwriting of my original notes, or perhaps through mere oversight, I had, in transcribing, written *Unst* in place of *Uyea*, and *Uyea* in place of *Unst* : by making these words change places, the whole becomes consistent and correct.—Uyea, I may observe, is a small island near Unst, in which not only no mice are found, but, if we may give credit to the vulgar report, no mice can live. Haskassy is an islet in the same predicament ; and we were told that the common people so firmly believe in the foil of these islets being antipathetical to mice, that they fetch bags of it in their boats, and place some of it in their cupboards, to guard their stores from the attacks of those vermin !

† In the same way that *Thule* has endeavoured to prove a connexion between *Vindicator* and P. N., it would be very easy for me to infer the privity of *Thule* with the principal author of the Statistical Report of Unst, and of the Letter to the Highland Society in 1802.

Addit.—This passage has been bitterly complained of by Thule. But to me it appears perfectly defensible. *Thule* affirms, that he has proved (from similarity of expression, &c.) a connexion between *Vindicator* and P. N. ; and yet no such connexion exists, or ever did exist. I here state, that, by *Thule's* method of induction, I could infer a connexion between *him* and the *author of the Letter to the Highland Society in 1802* ; and it now appears that such inference would have been equally erroneous. The fact is, that till the publication of Thule's pamphlet, I not only believed in a connexion between these authors, but in their identity. Immediately after seeing Thule's pamphlet, therefore, I wrote the following letter, apologizing for my mistake, and it was printed in the Scots Magazine for July 1806.

“ 76

3. I have next to expose a perversion of my meaning, so barefaced, that it must tend greatly to impeach either Thule's understanding or his candour. He alleges, and *repeats* his allegation, that P. N. has said that "it is for the Shetland landlords' interest that their tenants shall be poor;" and he quaintly, but correctly adds, that "nothing can be more perfect in its kind than this." Now, the truth is, that the very object of my paper was to prove the erroneoufness of the sentiment here held out as being my own. In proof of this, I have only to refer the reader to the passages in the paper itself,

"*To the Editor.*—Sir, In an angry pamphlet, published the other day, intituled, "Statement of some late conduct of the Conductors of the Scots Magazine," it is alleged that I had, in the Magazine for February last, "mentioned a gentlemen by name, a third party; and had accused him of matchless inconsistency, of ignorance or folly, and of prevarication." I beg leave to state, that the gentleman who is probably referred to is only mentioned by name, as the joint author, along with the clergyman of the parish, of the Statistical Account of Unst, from which a quotation is made; or as a subscriber, along with four others (who are also named), to an advertisement in the public prints. I must further observe, that the alleged charge of prevarication must only be fought for in a couplet which I borrowed from Butler's *Hudibras*, in which the word *prevaricate* happens to occur; and that I conceive I proved to demonstration the inconsistency of *five* Shetland lairds, in saying Amen, in the newspapers, to an unqualified eulogy of Mr Pennant; while that author had, in his writings, been tenfold more severe in his remarks than P. N. had been, whom their champion Thule has so violently traduced.

"I readily acknowledge that I now find that I have guessed wrong, in conjecturing that the gentleman referred to was concerned in those papers that bore the signature of *Thule*. I am happy to be able to free him of the disgrace which must attach to any concern in such writings. While I regret the mistake, I cannot help observing, that the person who, by concealing himself under fictitious names, gives occasion to such misconceptions, ought to be the last in the world to complain of those whom he thus virtually misleads. I am, &c.

"*July 23. 1806.*

P. N."

self, (*suprà*, p. 98). There, I uniformly speak, not of what *is* for the landlords' interest, but what "*has been thought*" to be so; of practical though not avowed principles of the landholders themselves. Instead of adopting the absurd opinion ascribed to me by *Thule*, I immediately afterwards shew, that it would be "for the landholders' interest to invite "more substantial tenants, and to grant long leases," (p. 103.)

4. I do not know what to think of *Thule's* next sentiment. He exultingly remarks, that the poorest Shetland tenants are more independent than substantial tenants possessed of stock. But their independence, he is pleased to argue, lies in their poverty; they have nothing to lose, and (to use his own words) "being fishers, they may become failors in a moment." This is miserable consolation, surely, to a poor Shetland tenant, with a numerous family!—When *Thule* thus argues, that the independence of the tenantry consists in their wretchedness and poverty, he exposes more of the cloven foot than his brethren will probably thank him for*.

In a subsequent paragraph of the strictures, we are told, that "the *tenant* in Shetland pays for his farm from one half to two thirds less rent than "the landlord could obtain from a *tacksman*." Now, what is a *tacksman*? a person from whom
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* *Addit.*—In his pamphlet, (p. 18.) *Thule* has attempted to evade the consequences of his own argument; but in vain. His original words are, indeed, that "the *more frugal* part of the "Zetland tenantry are independent; but (he adds) they are "much more under the influence of their landlords" than "the "poorest tenants," who may become failors in a moment. It is clear as sunshine, that, in *Thule's* secret but unavowed opinion, these poorest tenants are more independent than the others; and that the criterion of their independence is, their extreme poverty, and the power of becoming failors in a moment!

the landlord receives a money-rent, and to whom he has no more to say. The opposition here stated by *Thule* himself, between a *tenant* and a *tacksman*, seems evidently to imply that the Shetland tenant is a dependant creature of the landlord.

5. *Whale-fishing exaction.*—*Thule* assures us that he knows of “many hundreds of Shetland lads who have often gone to Greenland, and have never been *fined*.” But does not *Thule* see, that his own language at the same time implicitly admits that other hundreds have gone to Greenland and have been *fined* for going? In my supplement I have called the exaction a *burgain*; but the Zetland critic himself here styles it a *fine*. “A guinea (he says) I should suppose a very small *fine* for a breach of paction, &c. I do not believe any thing so small is accepted.”—What right, I would ask, has a Shetland landlord, more than a Lothian one, thus to *fine* his tenants at discretion? *

I

* *Addit.*—On the subject of this arbitrary exaction, *Thule*, in his pamphlet, (p. 19.) says, “I have formerly stated, that I know many who have gone to Greenland, and have never been *fined*: I now add, that I never knew an instance of any one being *fined*.” This appears rather surprizing, such fines being common in most parts of the country. *Thule* may possibly, however, be ignorant of the state of Shetland in general; but it might be expected that he should know something of occurrences that take place on or near his own property; (for, notwithstanding his unmeaning outcry about being denominated a “Zetland Landlord,” (p. 1.), he is, if I be not greatly deceived, a very considerable landholder in that country). Is it really possible that *Thule* does not know that the tacksman of the estate of Lunna, in summer 1805, summarily intimated to those families from which the father or a son went to the whale-fishery, that “they must either pay *three guineas* of fine out of their Greenland wages, or need not think of returning again to their farms!” I do not say that these were the precise words employed by the tacksman; but they express the substance of the demand and threatening.—On what sort of subleaves must these
poor

I have been informed, that this whale-fishing exaction was never before exposed to the public, till the publication of my remarks. If this be the case, the language of *Thule*, who speaks as if it had been the subject of recently previous discussion, is to me inexplicable*.

“ The generality of the Shetlandmen who have been at the whale-fishery, do much” (according to *Thule*) “ to corrupt the rest of their country-men.” Their ample wages doubtless enable them to

poor people possess their little farms under this tacksman? Will it not naturally be presumed, that the tacksman must have the landlord’s authority or connivance for acting in this tyrannical manner?

In the next page, (p. 20.) *Thule*, evidently vexed that he should have at all admitted the existence of the fining system, has ventured to pretend that he was here speaking of fines imposed in the *Sheriff-court*, not perceiving the evident incongruity of his own language to such a pretence: for if the tenant be fined by the Sheriff for a “breach of paction,” by which, as *Thule* informs us, his “fellow tenants” as well as the landlord are injured, it is surely to be presumed that that Magistrate would do justice, and, instead of giving the whole to the laird, would award a due proportion of the fine, or rather *damages*, to the equally suffering tenants. At all events, if the Sheriff be the awarder of the fine or damages, it does not occur how the landlord can possibly have any option whether he will “accept” or not, (unless by appealing to a superior court, which is out of the question). In short, if *Thule* had been speaking of the Sheriff, instead of saying, “I do not believe any thing so small is *accepted*,” he would have said, “I do not believe any thing so small is *awarded*.”—I understand that the late Sheriff-substitute, Mr Scott, gave his decided opinion *against* the whale-fishing exaction.

* *Addit.*—This subject, I have since found, is slightly touched on, in *Vindicator’s* Letter respecting Shetland, printed 1803. The following are his words: “How often are the Shetland tenants warned to remove for allowing their sons to go to the Greenland fishing! Indeed some lairds oblige every young man who goes to this fishing, to pay out of his wages a guinea for the *indulgence*. When this is agreed to, a father may be allowed to remain!” (p. 50.)

to buy smuggled gin, when it can be had in the islands: but how the gin is brought thither, I cannot divine, while the landlords (as *Thule* informs us) are so sedulously engaged in watching over “the morality of the people!” *Honi soit qui mal y pense* *.

6. *Increase of the weight called Lispound.*—*Thule* is pleased repeatedly to allege, that I have “represented tenants as the sole persons aggrieved” by this increase; and he anxiously states that the “proprietors whose lands pay *teinds* are principally “aggrieved.” Now, the fact is, that my language does not by any means necessarily imply that *tenants* are the sole persons aggrieved; for I have expressly stated, that the same increased weight which is demanded in the payment of *rent*, is required in the payment of *teind*, and of “*superior’s duty*.” It really appears as if *Thule* had never considered my paper, but had criticised it at random †.

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7. *Wrecks*

* *Addit.*—*Thule* does not seem to understand the meaning of introducing the “motto of the garter” here, and thinks it far-fetched. *Vindicator* speaks more plainly perhaps: “Smuggling has been carried on in Shetland to a great extent; and “to say that the lairds have been chiefly concerned in the traffic, is no vile slander,—it is a well-known truth. A very “few years ago, several of them were owners of smuggling “vessels, and some of them still try the trade.” (p. 25.)

† *Addit.*—In his pamphlet, *Thule* repeats his unwarranted assertions, and seems even to argue that the *landlords* are the *only persons* aggrieved by the illegal increase of the lispound. The *tenant* pays boat-teind, in fish; sheep-teind, in wool and lamb; cow-teind, in butter; and corn-teind, in butter and oil,—the lispound being now, in all cases, taken at 32 lbs., instead of 16 lbs. as in former days. Is not this increase to the immediate detriment of the tenant, not of the landlord? But when I state that the landlord exacts his *rent in kind* according to the same increased weights, it must be evident that the *whole* hardship of the increase falls on the *tenant*. It might be worth while to inquire, if some of the *landlords themselves* did not lead the way in raising the lispound from 16 to 32 lbs.

7. *Wrecks*.—Justices of the Peace in the different islands might not only greatly promote the improvement of the country, by enforcing the statute-labour, and thus gradually forming some sort of roads; but they might suppress much of the immorality that undeniably prevails in the islands, for example, the pilfering of wrecks. Both in Orkney and Shetland, wrecks are, by the vulgar, still considered as *God-fends*. But, in some late cases, even the lairds themselves have not kept clean hands. “These are my rocks!” said a Shetland proprietor to an officer in his Majesty’s naval service, who interfered to protect the cargo of a vessel which was wrecked on them:—“These are my rocks!” repeated the laird, as if this circumstance gave him an undoubted right to appropriate the cargo to himself. While the landlord avowed such sentiments, what could be expected of the poor tenantry? The seamen from the King’s ship had to beat off the people with sticks, “just as we beat off *malducks* (fulmars) from tearing the blubber, while *fleuching* whales “in Greenland,” said one of the sailors to me, who had formerly been in that service. The morality of Shetland is still very loose with respect to wrecks: but striking instances of humanity and honesty in particular landlords are on record; and a great majority of the present landlords would, I believe, exert themselves to relieve the shipwrecked mariners, and to secure the property for the true owners: what I argue is, that, were these gentlemen invested with the legal powers of Justices, they would be able more effectually to remove that greatest reproach of a civilized country.

I believe that a very erroneous opinion generally prevails in Orkney and Shetland, viz. That, in the case of a wrecked cargo, if the owners do not appear to claim, within a year, the cargo may lawfully be divided into three shares; one to the High Admiral of those seas; another to the *proprietor of*
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the ground (who has not, surely, a vestige of right); and a third to the cottar-families who are supposed to have assisted in saving the cargo. This barbarous notion is most probably of "Danish origin." If ever a case occur, the landlords and their tenants will doubtless be taught, that British Courts will peremptorily refuse their sanction to such lawless seizure and partition of the property of others*.

8. On

* *Addit. Note.*—I should have been happy if Thule had left my statement on the subject of wrecks unchallenged, as it would have saved me the disagreeable task of here recording, in justification of the language I formerly held, a recent disgraceful case, in which several Shetland lairds (according to my information) were more or less implicated, and in which that laird is said to have been a leading party, who, on occasion of another wreck, pleaded, "These are my rocks."

In winter 1794-5, the Peggy and Jenny of Dundee, loaded with timber, tallow, wine and other goods, was wrecked on the southern coast of the Mainland of Shetland, and all hands perished. Several of the dead bodies were found cast ashore by the tide, and were buried by the Shetlanders. No investigation, as far as I have been able to learn, was made by the landholders or gentry in the neighbourhood, to discover to whom the property belonged. This could very easily have been ascertained. It was given out however (as I have been told) that it was Dutch or foreign property, and the *ground-masters* and *salvers* instantly proceeded to appropriate and divide it. Instead of advertising it in the newspapers, methods of concealment, it is said, were resorted to. I would ask Thule, whether he has not heard of one laird, who wrote to his factor, to hide the sails of the wreck in a mill-loft, that they might be out of sight? To any laird, who scrupled not to commit such instructions to writing, the vice must certainly have been familiar. I would farther ask Thule, whether he has not heard of another, who, having seized some barrels of tallow, had it melted and moulded into candles, before the news of the wreck could reach the south of Scotland? I would lastly ask him, whether he has not heard of a third laird having dispatched a large boat loaded with barrels of the tallow, to a distant uninhabited holm or islet, and ordered them there to be buried for a time: and of this singular sort of funeral having been detected by Captain Malcomson and a party of the Garrison Battalion of Fort Charlotte? In the course of the following summer, the proprietor, (Mr Watt of Dundee), having received notice of the fate of his cargo, (owing chiefly, it is said, to the sharers in the spoil having disputed among

8. On the impropriety of levying teind on the shore-fishery, I am fortunate enough to meet with *Thule's* approbation, though even here he cannot think of allowing me this consolation, without branding me with the inflammatory name of a "bawler about oppression," and without declaring that it is the "*only* paragraph in my *whole* paper in which my information and my judgment are correct*." To
 prove

among themselves), immediately repaired to Shetland to claim it. Here, I have been told, he met with every possible discouragement: His having any interest in the vessel wrecked, was strenuously denied. He was compelled to procure a magistrate's order, to raise even the dead out of their graves to be witnesses; and having actually dug up the putrid corpses, was able, from marks on the linens of the drowned mariners, (who had been buried in their common dresses) to ascertain, to the satisfaction of the Sheriff, his concern in the vessel!—The conclusion is said to have been, that the Dundee merchant having instituted a process, received from the lairds concerned, between L. 2000 and L. 3000 Sterling to compromise the business.

Thule seems to argue that there can be little harm in allowing the proprietor to have a share of *unclaimed wrecks*,—cautiously avoiding any notice of the fact that I stated, That a *single year* is the longest period allowed in Shetland for claiming. I must add, that, if my information be correct, the ceremony of advertising has often been thought superfluous, and been dispensed with: and I would ask *Thule*, whether he has not heard that, on occasion of the above-mentioned wreck, some of the lairds, instead of waiting for *a year*, were busily employed, *the very night succeeding the fatal accident*, in secreting some of the most valuable articles of the cargo?

After learning these facts, which are currently reported and believed throughout Shetland, the reader will probably be of opinion that I have gone as far as possible, in praise of the present landlords, when I stated generally, that "I believe they would exert themselves to relieve the shipwrecked mariners, and to secure the property for the true owners."

* *Addit.*—*Thule's* candour and complaisance in allowing the justness of my remarks in this single instance, will lose much of their merit, when I inform the reader, (which I do with pleasure), that the innovation in question has been successfully resisted by the poor old people, in the Court of Session, during the past year; and that *Thule* was evidently aware of this judgment of the Supreme Court, while I was ignorant of it.

prove that this sweeping criticism is nothing but empty declamation, I beg leave to ask him, *1st*, If I am not correct in the paragraph which treats of *trees*, when I affirm that there are none in Shetland, but that the circumstance of the shores of Norway being clothed with tall pines, shews that there can be nothing in the climate of Shetland incompatible with the growth of timber? *2dly*, If I am not correct in my judgment, that one light-house on the east, (at the Skerries of Whalfey), and another on the west coast of Shetland, (at Papa Stour), would be of infinite advantage to the shipping*? *3dly*, I would ask, If I was not correct in my information when I stated that there were no Justices of the Peace in Shetland; and correct in my judgment that they would be useful in the scattered islands? And, *4thly*, If I was not correct in my information in saying that none of the gentlemen of Shetland had hitherto qualified as freeholders; and correct in my judgment in condemning their supineness †?

9. *Teinds*.—*Thule* affirms that my proposal of converting the teinds into money, would only tend to “cheat the clergy of their livings.” This, at least, is proof to demonstration, that I cannot be in concert with any of those clergy. Perhaps, *Thule* catches at the generality of my expression. I certainly did not mean that *no* payment in *kind* should be made to the minister himself, for the use of his family. But it is well known that the ministers of Shetland let their livings to the highest bidder,

* See Note K.

† In the Statistical Account of Scotland, vol. xx. p. 108., we are told, that “no valuation has ever taken place in Shetland.” This must be one grand bar to the gentlemen of Shetland establishing the exercise of their undoubted right of voting for a representative in Parliament. *Thule*, however, takes no notice of this circumstance, but informs us, that “it is well known, that they have postponed their claims only to the necessity of yielding to the predominant influence in Scotland, supported by the late prejudices against reform.” (p. 23).

der, (and at present they cannot well do otherwise) ; the leffee again naturally tries to make the moft he can of his bargain : and it is equally well known that the tenants, befides their rent, pay *corn-teind*, in oil and in butter, to the leffee of the ftipends. A fair converfion would furely be preferable to fuch a fyftem.

10. So confident is *Thule* of a triumph, that he next puts a ftring of queftions in the moft dogmatical ftyle : When or where I found the people of Shetland in a ftate of vaffalage ? What is meant by unfavourable circumftances, of Danish origin ? &c. and he tauntingly calls upon me to unſay my aſſertions in my own words. That I am ready to admit and to correct my miſtakes, appears, I think, pretty plainly from the Supplement which I had voluntarily prepared : but I will never agree to be dragooned into a palinode dictated by an infuriated Zetlander.

On the contrary, I repeat, that the great bulk of the people of Shetland are at this moment in a ftate of vaffalage, in the popular ſenſe of the word. What is meant by a ftate of vaffalage ? Dr Johnson defines *vaffalage* to be *tenure at will, dependance, &c.* Are not the great body of Shetlanders *tenants at will* ? are they not therefore neceſſarily *dependent* ?

Again, I would aſk, Are not the payments called *ſcatt* and *wattle*, of Danish origin ? are they not paid by the tenants to Lord Dundas, as donatary of the Crown ? do not his Lordſhip's factors generally exact them in oil and in butter ? and is all this not unfavourable to a poor fiſhing farmer ?—See Statiſtical Account of Scotland, vol. i. p. 399.

11. *Thule* denies that the tenants receive “ unlimited credit.” Yet the truth is, that the circumſtance of unlimited credit being allowed by the landlords to their

their tenants, is expressly stated in the paper given in to the House of Commons on behalf of the Shetland lairds in 1785; where it is candidly confessed that “this unlimited credit has been attended with “the bad effects, of increasing luxury, dissipation, “and immorality*.”

12. He objects to my proposal of the division of employments in Shetland, insisting that an extensive market for the produce must first be acquired. I acknowledge that I proceeded on the supposition that such a market did exist: and I have yet to learn for what article of Shetland produce a market is likely to be wanting. There is a market for its ling and tusk, and for its herring; for its beef, its hides and calf-skins, its oil, and its grease-butter: for the copper-ore found in its bowels, and the kelp manufactured on its shores. The landlords have themselves informed me, that, even in the best seasons, the agricultural produce of the country is utterly inadequate to the demand of its own population; and that, in indifferent seasons, the produce cannot meet above four or five months consumption. They have proclaimed aloud the large sums which they annually

* *Addit. Note.*—In Thule’s pamphlet, this extract is denounced as a “false quotation,” and it is alleged that the word “unlimited” is *interpolated*. It will perhaps scarce be credited, that such bold assertions should be quite groundless, or should be founded only in sophistry: but the *fact* is, that the paper given in to the House of Commons expressly states, that “UNLIMITED credit has been allowed to the tenants and fishers;” that though it has succeeded in promoting population and the fisheries, it has not bettered the state of the people; for, (it is added), “this credit has been attended with the bad effects of increasing luxury, dissipation, and even immorality.” I submit to my readers whether the expression “this credit” can be understood as applying to any other credit than the “unlimited credit” immediately previously mentioned; and I leave them to form their own conclusions as to *Thule’s* candour as a disputant.

nually disburse in importing grain for the aliment of their tenants: And yet I am now coolly told, that a market would be wanting for any additional Shetland produce. Is *Thule* seriously afraid that, under a different course of management, Shetland would become too productive, and would overstock the market?

13. *Villages*.—*Thule's* chief objection to the establishment of villages, is, that the inhabitants might feel difficulty in procuring fuel. But the large islands are every where intersected by *voes*, or winding gulfs and bays; and villages situated on the banks of these, would, by means of boats, have an easy communication with an extent of peat-moss, which would not be exhausted in ages.

14. *Rents*.—*Thule* explicitly admits that the Shetland landlords “do not allow the tenants a price for their fish equal to their full value:” and the reason assigned for this conduct is, that “the rents are excessively below the real value of the lands.” But this apology loses much of its plausibility, when we learn, that, though the rents have not been *nominal-ly* raised for a long period of time, they have *in reality* been raised: for that, though the tenant pays only the same number of shillings, the shilling, instead of being valued by the laird at 5 s. as formerly, is now valued at 16 s., that is, while the tenant pays only the same number of shillings as formerly, the landlord now takes more than three times the quantity of produce he formerly took.

15. Let us now hear the leading improvement proposed by *Thule* himself. “All the money-rents in Shetland (he says) ought to be abolished, and these made payable wholly in the most common productions of the country.” One would think it a conclusion clear as sunshine, that such a plan would

would completely fetter the tenant in the management of his farm. By what standard, further, would the value of the productions be ascertained? for even *Thule* would not, surely, propose that the landlord should be the sole valuator, or that the tenant should derive no advantage from a rise in the market.—What security would the tenant have that his laird would give him a proportionably higher price according to the goodness in quality of his produce? and without this spur, what motive would the tenant have to improve, by care and skill, the various processes through which the articles of his produce must pass before being ready for market*.”

16. The landlords, we are told, “are the exporters of the produce of their own estates.” They are not, it would appear however, compelled to be so; for they complain bitterly of what they call *yaggers*, *i. e.* pedlars, who surreptitiously pass through the islands, and, by giving a much higher price than the lairds, obtain the best articles of produce from the little farmers! It is evident that these *yaggers* must find their profit in this traffic; and it is equally evident that *yaggers* of a higher order, or travelling merchants, would regularly visit Shetland, and relieve the lairds of the trouble of exporting the produce of their own estates, if these lairds did not

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stipulate

* *Addit.*—In his pamphlet, *Thule* confidently states, that where rents are paid in kind, “no valuation whatever is required.” But it appears self-evident that, as payment in kind must occasionally be impracticable, any stipulation for the annual delivery into the landlord’s storehouse, of specific quantities of particular articles of produce, must of necessity be in some measure conditional: A valuation or conversion is therefore requisite: In Shetland, owing to the uncertainty of the fishery in small open boats, and the precariousness of the harvests, it would be indispensable.

stipulate with their tenants for the delivery, into their own stores, of their produce of every kind.

To crown all, we are told that the "landlords' profit on the fishing is about 16 per cent." *Credat Judæus apella.*

Thule has thought fit, as an appendix to his strictures, to exhibit a string of absurdities, alleged to have been published as discoveries in political economy, by those whom he accounts his adversaries. Those that are ascribed to me, are one and all of them unfounded (as I have shewn in the course of the preceding review); they are the inventions of *Thule's* own prolific brain, to which he has seen fit to foist in my initials. It is not my business to defend *Vindicator*; and *Thule* may plume himself on a victory in his absence from the field. Mr Menzies, the worthy clergyman of Lerwick, is indeed slightly known to me; but I never conversed with him on these subjects, and I am confident he can answer for himself*.

Thule

* *Note.*—*Vindicator* and Mr Menzies were also attacked in the papers signed *Thule*; and I was ridiculously accused of having entered into a conspiracy with them. I have not the pleasure even to know *Vindicator*, and have only very lately seen his publication.

In the conclusion of his virulent and inconsistent pamphlet, *Thule* says, "Some of the pleasure-party, I understand, claim all the honour of having made the remarks, leaving to P. N. only what is to be obtained from having his name put to them." Sir Alexander Seton was the only gentleman who took notes, or to whom *Thule* could have reference; and on pointing out the above passage to him, he wrote me as follows: "*Preston, September 11. 1806.*—The insinuation, as far as regards me, must be absolutely false.—Your views and mine were directed to different objects. Mine were particularly turned to the antiquities of the islands; now and then to rural economy, and the character of the people. Your attention was directed to different objects, with which I was less intimate, botany, natural history, mineralogy, the fishery, and some few strictures on economics, which last may certainly have been a
subject

Thule has said, that, besides *Vindicator* and *P. N.*, he has not seen “any publication that mentions “the mode of managing in Shetland, in terms of decided disapprobation.” But this seems to imply only the limited extent of *Thule’s* reading: For I am well entitled to retort the converse on *Thule*, and to say, that besides *Thule*, and “*A Friend to Zetland*,” I have seen no publication that decidedly *approves* of the Shetland management, though, of late, I have endeavoured to acquaint myself with every book that touches on the subject. I know that Mr White, in his prize essay on the Scots Fisheries, gives the Shetland landlords credit for producing well-cured fish; but this praise he would equally have bestowed, had they employed Negro-slaves, instead of fishing-farmers, in the catching and curing of the fish.

I beg the reader’s particular attention to the conclusion of the letter addressed by the Shetland landlords to the Highland Society in 1802. It is concluded with an ardent apostrophe to the shades of CAMPBELL and PENNANT: “O Campbell! Pennant! friends of human kind! had your soft pencils depicted *our country* and *us*, how pleasing a contrast would have been produced! Where you could not approve, you would mildly have marked our errors, and by the suavity of your rebuke, allured us from them. You would have concluded, that even Shetland was the work of God!” This letter was publicly avowed, (in name of “many more”), by “Thomas Bolt, John Mouat, Gideon Gifford of Busta, Robert Robertson of Gossaburgh, and Thomas Mouat of Garth,” five of the principal landholders in Shetland. It so happens that Mr Pennant *has* given his opinion of Shetland

subject of conversation between us during our excursions. That we should coincide in opinion is little wonderful, since the remarks were of themselves so obvious.—I shall never forget the agreeable time that we passed together in Hialtland,” &c.

land and of Shetland lairds, of *their country* and of *them*; and I shall lay it before the reader in Mr Pennant's own words: "In these distant islands the hand of oppression reigns uncontrolled. The poor vassals, in defiance of laws still kept in bondage, are compelled to slave, and hazard their lives in the capture, to deliver their fish to their lords for a trifling sum, who sell them to adventurers from different parts at a high price." (Arctic Zoology, 3d edition, vol. i. article Shetland). [For Dr Campbell's opinion of the state of Shetland, see No. III. of this Appendix, art. 2.]

After experiencing the harshness and severity of Thule's criticisms, I confess that I am not displeas'd thus to catch this whole host of Shetland landlords in the toil. They are evidently reduced to this dilemma: They must either admit that Mr Pennant, whose candour and gentleness they have so highly extolled, is less candid and more harsh than *P. N.* whom their champion has so violently traduced: or, they must admit, that they united their pens in apostrophizing an author whom they never read: By the former alternative, I involve them in matchless inconsistency; by the latter, I convict them of ignorance or folly*.

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* *Addit.*—It is stated by Thule, in his pamphlet, that the above paragraph is not to be found in the 4th edition of the Arctic Zoology. I have only seen the first three editions, and in all of them the paragraph appears. Possibly, if Thule examine more carefully, he may find the passage; for it is not likely, if Mr Pennant became sensible of the censure being unfounded, that he would have rested satisfied with merely dropping it from his book, leaving it quite uncontradicted;—the candour for which Thule's friends have justly celebrated, him, would surely have led him expressly to obviate and contradict it.—It is farther stated by Thule, with a kind of triumph, that "Mr Pennant never was in Shetland." But the Rev. Mr Low *was* in Shetland, and well acquainted with it; and from his Notes on Shetland, preserved in Gough's edition of *Britannia*, it pretty plainly appears that Mr Pennant, in this instance, rested his censure chiefly on Mr Low's authority.

The severity of Thule's animadversions has not, I trust, made me appear to lose temper, though it may justify some little warmth of reply. I assure this champion of the Shetland landholders, that my remarks had no object in view but the unimpeachable one of improving the situation of the natives. Conscious of upright intentions, I shall never be influenced by his unmeaning invective, timidly to abandon my statements or opinions; and I would remind him, that to declaim and to vilify, is a different thing from disproving or refuting.

EDINBURGH, }
7th Feb. 1806. }

P. N.

NO. III.

*Extracts respecting Shetland, from various works of authority**

1. *From Mr Giffard of Busta's Account of Zetland, [1733.] Gough's edit. of Camden's "Britannia," 1789, vol. iii. p. 741.*

"The landlords generally take the wrong way for encouraging the tenants to improve the lands; for it is the common practice with many of them, if they see the tenant *thriving*, and by his industry becoming richer than his neighbour, he must be *warned to remove*, unless he will pay more rent yearly,

* Having, in the course of the preceding pages, made several references to works not in very general circulation, or which might not, *à priori*, be expected to touch on Shetland, I have judged that it might prove satisfactory to the reader to see the particular passages referred to. They will convince him that I am not altogether singular in my unfavourable opinion of Shetland management, and will probably incline him to believe that there must be some foundation for that unfavourable opinion.

yearly, or a large entry for a short tack; and when that tack is out, he is again where he was, and must pay a new entry, or remove. This makes many tenants careless, nay even averse to remove; whereas, were those tenants that are frugal and industrious, encouraged by *long tacks*, and entitled to the benefit of their own improvements during the improver's life, without any augmentation of the rent, the landlord, after the improver's death, might set that land to another for a greater rent than it formerly paid, and might give the next tenant the same encouragement to improve."

2. *From Dr Campbell's Political Survey of Great Britain*, 4to. vol. i. art. *Shetland Islands*. [1774.]

"The Shetlanders might, with a little attention, bring more of their country into cultivation; but the people are so much addicted to their fishery, and feel so little necessity of having recourse to this method for subsistence, that they are content, how strange soever that may seem to us, to let four parts in five of their land remain in a state of nature. This is not a greater misfortune to the commons of Shetland, who work hard, and fare yet harder, than to the community; for if their lands were improved, and the people in general lived better, they must become thereby more useful to the public.—

"To facilitate their fishery, magazines should be erected, to supply them with all things requisite for that employment, without respect of persons, at equal and at the lowest rates; and means must be likewise found, to enable them gradually to procure larger boats.—

"The people of the Shetland Isles are our subjects, and as well affected as any subjects can be, which affords them a just claim to our protection and assistance. That they have not either wealth or rich commodities to attract notice, is alike their misfortune and ours. But if, even in this state,
they

they should be so fortunate as to draw the attention of Government, there is no room at all to doubt they would, in a very short space, emerge from this *unhappy situation*, to the common benefit of themselves and the mother country."

3. *From Pennant's Introduction to the Arctic Zoology.* 4to. vol. i. p. 38. (Third edition, 1792.)

"Cod, ling and torsk furnish cargoes to other adventurers. I wish I could speak with the same satisfaction of this as of the free fishery of the herring: but in these distant islands *the hand of oppression reigns uncontrolled*. The poor vassals (in defiance of laws *still kept in bondage*) are *compelled to slave*, and *hazard their lives* in the capture, to deliver their fish to their *lords* for a trifling sum, who sell them to adventurers from different parts at a high price."

4. *From Knox's View of the British Empire*, 8vo. vol. i. p. 335. art. *Shetland Fishery*. [1784.] (Referred to *suprà*, p. 81.)

"As the North Seas are boundless, the fish inexhaustible, and the demands unlimited, a fishery might be established to the extent of some thousand tons annually, not solely by the natives, who are in a *state of servitude*, and in the *utmost indigence*, but by adventurers from the whole eastern coast of Scotland, and the Orkneys."

5. *From a Letter (dated 11th October 1784) by a Merchant Company at Greenock to Mr Knox, and published by that gentleman.*

"The ling, tusk and cod fishery on the coasts of Shetland and the Hebrides, appears to us to labour under the greatest hardships, and to be the most neglected

glected by Government of any of the Scots fisheries. There are annually caught on the coast of Shetland, from 800 to 1000 tons of those fish, the greatest part ling. They are taken by the inhabitants in small boats, in a tempestuous sea, at the hazard of their lives; and no sooner do they bring them on shore, than the fish are taken from them by their landlords or their substitutes, at such a price as they choose to give.——

“ We are of opinion, that if the poor inhabitants of Shetland were relieved from their present *servitude* to their landlords, and allowed to cure and sell their own fish to the merchants, a much greater number of fish would be caught, the merchants supplied at a cheaper rate, and the fishermen properly recompensed for their industry. At present they are in a *state of slavery* to enrich their landlords.

“ It may be argued by interested people, that the fishermen in Shetland are so very poor that they cannot purchase salt and the other necessaries for catching and curing fish. This argument we readily admit; as, in their present state, they can hardly earn a scanty subsistence; but were they allowed to dispose of their fish to the best advantage, the intending purchasers would supply them with every necessary, to be paid for in fish next season.”

6. *From Transactions of the Highland Society*, vol. i. p. 275.—“ On the state of the Fisheries of Zetland, 1786: By a native.” (Referred to, *suprà*, pp. 81. and 113).

“ In order to increase the number of fishermen in these islands, the arable lands have been divided into very small possessions; the occupiers of which are bound to sell their fish, to their respective landholders, at about 3 s. 6 d. *per* cwt. of fresh fish. These fish are afterwards cured at the expence of the landlords; and by them sold to the different merchants who incline

cline to export them, at about 17 s. or 18 s. *per* cwt. exclusive of the debenture allowed by Government.

“ At the close of the season, accounts are settled. From the tenant’s share of the summer’s fishing, his land-rent, and the articles furnished him, are deducted; and the balance, (if there be any), is applied to the extinction of old debts, if any remain. If all be clear on that score, which seldom happens, the balance is given in cash.

“ The landholders, finding their small incomes insufficient to enable them to indulge their propensity to show and hospitality, at first imagined that, by raising the land-rent upon the tenants, and exacting more rigorously the services which their tenants owed them, they might not only be extricated from their difficulties, but enabled to prosecute the line of conduct they so much relished. This also proving fallacious, they at last adopted a system which, instead of answering the end proposed, has been the mean of bringing upon their posterity, and the country in general, all the miseries which have followed. I allude to that most unjustifiable and most destructive of all trades, the smuggling of foreign spirits.

“ The landholders, in order to support that rank to which they have been early accustomed, are obliged not only *rigorously* to exact their rents from the tenants, but also a great number of *petty services*, introduced in the days of *tyranny* and *oppression*, and confirmed by long and inveterate custom*.—The

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tenants,

* According to the best information I have been able to procure, the following are the principal public burdens, payments, &c. to which Shetland tenants are subjected. They pay, 1. *Scatt*, or the old *Danish land tax*, from 5 d. to 12 d. on each merk-land, generally payable in butter and oil, to Lord Dundas. 2. Their proportion of the *British land-tax* to King George. 3. *Land-mail/s*,—a payment which I do not find explained in books. 4. They pay *Wattle*, an ancient Popish tax, to the donee of the Crown. 5. *Ox-money* and *Sheep-money*, an arbitrary tax of 3 d. on each

tenants, groaning under a load of debt, which they despair of ever being able to extinguish, and unable to resist that passion for gaiety which is so prevalent, chuse rather to soothe their cares and labours, by yielding to that destructive impulse, than to apply their dear-bought gain to the payment of debts which they imagine their utmost efforts can never liquidate."—" In addition to this, the tenants hold their possessions, not only without writing, but *at the pleasure of their landlords*. It is not therefore wonderful that they should bestow no great pains upon the cultivation of the ground, when they can hardly promise themselves the possession for a single year. In order to put a period to this *slavish dependence* of the tenants upon their landlords, it will be necessary to enlarge their possessions; to allow them long leases; and wholly to put an end to the many

each *reek* or chimney, imposed by the Earls of Orkney in the seventeenth century, also paid to the donee. 6. *Umloth-duty*, or Bishop's rents. 7. *Corn-teind*, or tithe, one-half to the patron, and the other half to the parish-minister. This corn-teind is paid in grease-butter and oil, at 32 lbs. to the *lis-pound*,—to the loss of the tenant, not of the landlord. Besides this, they pay, 8. *Boat-teind*, in fish; 9. *Sheep-teind*, in wool and lambs; and, 10. *Cow-teind*, in table-butter. 11. They must give *three days service* to the clergyman of the parish. 12. Also *three days service* to their masters or lairds, or a day's service of one person for each acre. 13. A *pair of poultry* for every merk-land, to their landlords. 14. The *school-penny*, a trifling sum on every merk-land. 15. A *hawk-ben* to the King's falconer.

I cannot help remarking, that it seems preposterous to exact from the Shetlanders both the *Danish* and the *British* land-tax. The payment of *wattle*, I must also observe, ought to have ceased upon the abolition of the rite, (the distribution of holy water), for the performance of which, it is generally believed, it was originally levied. The payment of *ox-money* and *sheep-money* ought to have fallen with the decline of the arbitrary barons who imposed it. The *hawk-ben* is a payment not more absurd than *wattle*, or than *ox-money*; yet, as falconry is now fallen into utter defectude, this tax, I understand, is likely soon to be entirely abandoned. A very few years ago, however, it was regularly let in lease to the highest bidder.

many petty services, at present exacted from them, which are so inimical to the interest of both parties.”

7. *From the Bath Society's Papers*, vol. vi. p. 277. *et seq.* “*On Shetland*,” by J. Tompson. [1792.] (Referred to, *suprà*, pp. 81. 113).

“ The landholders of Shetland let their lands from year to year, on condition of some personal services, and all their product at a small price in the option of the buyers, who are often tacksmen, and rent the people's services at about L. 500 for forty or fifty boats with six men each. The people are said to be indolent; the reason of which is, that the landholders, by a *barbarous policy*, and by a variety of means, contrive to bring them into debt, to prevent their leaving the country; and they despairing of independence, become hopeless and indolent. Few of the people can either write or number; for the same policy prevents good schools being kept.

“ The causes of the decrease of sheep in Shetland are many.—1. The landholders subdivide their lands so often for the purpose of getting a number of fishers—(six acres is a large farm)—that few tenants are rich enough to purchase sheep; wherefore the master gives them some in steelbow, that is, the tenant keeps them, and the tenant has the half of all the product: but as he never claims the dead, the tenants, urged by hunger and dispirited by oppression, often *find* sheep dead by accidents unknown. 2. The master receives part of his rent, and the parson his tithes, in lambs; and the people, to prevent a true account, never gather them from the hills, nor tend them, but mark them, and let them run. Some are stolen. 3. As tenants seldom receive money from these *monopolizing masters*, they are forced to sell their stock privately, to purchase necessaries. 4. From a short-sightedness peculiar to this people, they seldom look beyond the enjoyments of the day.—*Cause*: As soon as a farmer is thriving,

thriving, he gets a warning to remove, and must buy his peace by a sum of money proportioned to his circumstances.”

8. *From Professor Jameson's Outline of the Mineralogy of the Shetland Islands*, 8vo. p. 17. [1798].

“ The fisheries of this country have been often the subject of discussion ; but the state of the lower order has hardly touched the heart of the traveller. It is foreign to my present purpose, but worthy of an abler pen, to set in a proper point of view, the *miseries* and the *deplorable state* of our countrymen in that quarter.

But Oh ! what crowds, in every land,
Are wretched and forlorn ;
Thro' weary life, this lesson learn,
That man was made to mourn.

BURNS.”

9. *From Sir John Sinclair's STATISTICAL ACCOUNT of SCOTLAND*, 8vo. Edin. V. Y. *

(1.) *From the Rev Mr Morison's Account of Delting*.
Vol. i. p. 385. *et seq.* [1791].

“ Improvements by lime, or any other means, are seldom attempted here ; for this obvious reason, that
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* The Ministers of the different parishes of Shetland must evidently possess the very best means of knowing the effects of the present Zetland system on the bulk of the people ; they must be the most impartial judges that can be referred to, and perhaps also the persons best qualified to point out the most rational and practicable means of reform and improvement. I have, therefore, made rather copious extracts from most of the Statistical Reports furnished by the clergy to Sir John Sinclair some years ago. The ministers of Shetland, it will be found, almost unanimously *disapprove*, in some respects, of the system of management adopted by the landlords of that country. Most of them agree in the means of improvement recommended ; and I am not without hopes, that the concentrating of information
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the tenants have no leases : they consider themselves as the tenants of a day, and have neither inclination nor spirit to attempt any effectual improvement of the grounds they possess; thinking, and with justice, that another may reap the benefit of all the endeavours they might use to meliorate their farms.—

“ When the lands are let in lease, or, as it is here called, tack, the tacksmen commonly pay rent and half-rent, and, in many instances, double the usual rents, for the profits of fishing.—

“ The general poverty of the inhabitants; their being obliged to be from home during the fishing-season; the smallness of their farms, and the precarious tenure by which they hold them, all conspire to *keep them in a state of indigence*. Every man, from the age of 18 to 70, *must* attend the fishing from the 1st June to the 14th August. None are left at home but a wife, with perhaps a number of young children, who require all her attention. Every thing in the farming line must consequently go to wreck.—

“ The inhabitants have not been long *compelled* by their landlords to prosecute the ling-fishery; but since the proprietors thought proper to employ their tenants in that line, it has become an object to have as many men as possible on their grounds. This circumstance has induced them to split the farms, and make them so small, that there are now, in many instances, four families on a farm which was possessed twenty or thirty years ago, by one *.—

“ No

on this topic, which has hitherto been scattered through many volumes, may eventually be useful.—It will amuse the reader to learn, that in a pamphlet published on behalf of the Shetland lairds in 1805, it is alleged, that “ *ten out of twelve*” of the ministers of Shetland *approve* of the present Zetland system!

* *Addit.*—In a “ Letter by a Zetland Landholder to the “ Highland Society, 1802,” a pamphlet which I have seen since my remarks were first printed, it is stated, that the population

“ *No proper division of the waste-lands or commons has yet taken place, nor perhaps ever will. For this reason, the sheep and cattle of different proprietors must occasionally encroach on each other’s property: no herds attend to prevent these encroachments.*—

“ The people are rather expensive and luxurious, for their circumstances. This may be ascribed to many causes; one in particular is, that *their landmasters give them unlimited credit.*—Whatever they want, or think they want, is furnished from the booth or store-house of the proprietors, or bought from the shops of Lerwick. When the day of account comes, it very often happens that the gainings of the year cannot nearly pay for the expence.”

(2.) *From the Rev. Mr Disbington’s Account of Mid and South Yell.* Vol. ii. p. 572. [1792.]

“ The rents, as paid by the tenants, give a very inadequate view of the landlords’ income. For although it may be true that the lands are let by the proprietor or tacksmen below their real value, it is *invariably*

lation of Zetland has increased, in the last 40 years, 4000 souls; and it is argued that this disproves the charge of oppression, as oppression would have checked population. But the subdivision of the farms, the breaking them down to mere shreds and patches, as here described by Mr Morison, (and the same fact is testified by all the other clergy of Shetland, in their statistical reports), sufficiently accounts for the increase of population, and is not inconsistent with the charge of oppression. In the Zetland Landholder’s “ Letter,” it is stated with the air of a conclusive argument against larger farms, That Shetland contains at present 4000 families; but that if the farms were as large as Mr Copland’s of Nofs Island, there would not be 90 families in the country! But it is to be presumed that the author means 90 farmers’ families; for he cannot surely doubt that the farmers’ servants would have families, as in the south; neither can he doubt that the professional *fishers* would have families; nor that *manufacturers, net-workers, rope-makers, ship and boat builders,* would all have families!

invariably on this *condition*, That the tenant or fishing-farmer shall deliver to his land-master, or order, every article that he can raise (fish, oil, butter, &c.) at a certain fixed price; by the sale of which, the landlord *more than doubles* his rent.

“ The people being poor, and *not* enjoying the benefit of long leases, until these obstacles be removed, it is not to be imagined that any remarkable exertions will take place among them, in cultivating the ground.”

(3.) *From the Account of Unst, drawn up from the communications of Thomas Mouat, Esq. of Garth, and the Rev. James Barclay. Vol. v. p. 197. [1793].*

“ Before the fishery became an object of such general attention, agriculture was in a more thriving state. The farms have been since subdivided into smaller portions, and the number of ploughs has decreased.

“ The rents remain, *nominally*, nearly the same as they were 200 years ago. But these being paid in fish, in oil, in butter, the landlords continue to receive these articles nearly at the ancient prices; but they sell them at advanced rates, proportionate to the increase of wealth, of industry, of population, and of luxury throughout Europe; and thus *in reality* enjoy an augmentation of income as well as the proprietors of lands in other parts of the British dominions.

“ The butter, it is also to be observed, is delivered to the landlord in certain cases by the *lispound*. This weight consisted originally of only 12 Scotch or Dutch lbs. *By various arts*, however, and different imperfect agreements, it has been gradually raised to 30 lbs. The same number of lispounds still continue to be claimed by the landlord for his grassum-rent, and by the proprietor of the teinds and Crown-rents, for what is payable to him in butter,

ter, notwithstanding so great an augmentation in the value of the lifpound. This circumstance has operated very considerably to increase the value of the landholders. Complaints have, indeed, been made of the injustice with which the proprietors of the teinds and Crown-rents have availed themselves of it."

(4.) *From the Rev. Mr Mill's Account of Dunroffness.* Vol. vii. pp. 397, 398. [1793].

" The rents of this country are chiefly paid out of the sea. The tenants have from their landlords, 3 *d.* allowed for their ling, 1 *d.* for a cod or tusk, and $\frac{2}{3}$ *d.* for a sethe (coal-fish); and these when salted and dried, will, in the Hamburgh market, yield four or five times as much, besides debentures from Government. Add to this, double or triple the prime cost for goods brought back and sold to the people, viz. linen, tobacco, spirits, hooks, lines, &c.

" A great improvement on the state of this country would be a better division of the small farms, which are parcelled out in discontinuous plots and runrig, here termed *rig and rental*; even the most inconsiderable merk-lands lying scattered in several patches intermixed with patches possessed by other people."

(5.) *From the Rev. Mr Barclay's Account of Aithsting and Sansting.* Vol. vii. p. 583. 593. [1793.]

" Each tenant receives his possession from the landlord, *on condition* of putting out the sixth share of a boat to the ling-fishing, and delivering the wet fish to him or his tacksman at 3 *s.* 6 *d.* *per* quintal or cwt., and his oil at 10 *d.* or 1 *s.* *per* cann: So that the real rent of the parish depends on the profits the landlords make on the fish and oil, and is only known to themselves.

" Formerly the landlords were little concerned in the ling-fishing. Many of the tenants then had large
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large flocks of sheep and cattle, and found their profit in staying at home to look after them, and others went to Northmaven fishing, for fees; and if they paid their rent to the landlord, nothing more was asked. The landlords now prosecute the fishing on their own account.

“ The tenants have *no tacks*, but sit from year to year at the will of their landlords. By this means they are discouraged from improving their farms; because, when they grow old, or unable to go to sea, they may be turned out, and are very often overbid by stout young men !”

(6.) *From the Rev. Mr Menzies' Account of Bressay and Burray.* Vol. x. p. 195. 197. [1794.]

“ The value of estates in Shetland is not to be estimated from the rents payable to the landlords. The fishing, which their tenants are *obliged* to carry on for them more than doubles it. Services are also demanded, which are sometimes commuted for money.

“ The fishing is a great obstacle to improvements in agriculture, the chief object of the proprietors being to have as many fishermen upon their grounds as possible. The farms consequently are very small. Few leases are granted. Many services, the sad marks of slavery, are demanded. They *must* fish for their masters, who either give them a fee entirely inadequate to their labour and their dangers, or take their fish at a lower price than others would give. It is true, that, in years of scarcity, they must depend upon their landlords for the means of subsistence, and are often deep in their debt. But why not allow them to make the best of their situation? Why not let them have leases upon reasonable terms, and dispose of their produce to those who will give them the best price? Why not let them fish for themselves? Why should the laird have any claim except for the stipulated rent ?”

“ To better the circumstances of the people, it will be necessary to give them larger farms, long leases, and liberty to dispose of their produce to the best advantage.”

(7.) *From the Rev. Dr William Jack's Account of Northmaven.* Vol. xii. p. 354. 362. and 367. [1794.]

“ The tenant engages to fit out, at his own expence, a certain share of a boat to the ling-fishing: also to sell his fish, at a certain stipulated or understood price, to the landlord, and to make the first offer of all his other products to him, preferable to all others.

“ The fishers complain that they are not permitted to dispose of their fish and produce to the best advantage; that the toil and peril of fishing is imposed upon them, without a prospect of profit. The landlords say that the tenant pays but half-rent for his lands, and every necessary for the fishing provided first by them. But not to enter farther into the cause, although the present practice may have advantages equal to its disadvantages, yet the appearance of a *monopoly* is a circumstance which seldom fails to be considered as a grievance. A friendly and benevolent behaviour towards their tenants, is a characteristic that will apply, in general, to proprietors in this country; but *their granting no leases*, is much against improvements, and keeps the tenants in *constant dependance*.

“ Can it be doubted that the situation of the tenants might be much improved, by granting leases, by giving larger farms, by a full assurance and confidence that they were entirely free from all restraints in their dealings with others when they paid their landlord agreeable to contract?—Is it not clear also, that the tenants possessing large farms and sheep-pastures, should be employed solely in that way, and by no means engaged in the fishing?”

8. *Franç*

(8.) *From the Rev. Mr Gordon's Account of North Yell and Fetlar.* Vol. xiii. p. 285, 290. [1794.]

“ We have no fine wool in this island ; but on the other part of the minister's charge, there would be sheep in great abundance, did not *theft* prevail there, and in a great many places of the country, to such a degree that it beggars description ! Neither will this be wondered at, if it is taken into consideration that there has not been one capital punishment inflicted in the lordship of Shetland (which contains at least 24,000 persons) for a century by-past, for any crime whatever. The punishments inflicted for the crime of *theft* in particular, are so extremely mild, that they rather excite to the commission of the crime than deter from it.—

“ Our farms are divided into such small parcels, that the people who cultivate these small spots are a good many of them poor, and with the greatest difficulty live upon their small farms the half of the year.—

“ The writer, after forty years study of the constitution of this country, must frankly own he can see no way of preventing the impending ruin of the poor land in general, and of every honest man in particular, unless the gentlemen of the country, *unâ voce*, enlarge the farms in the first place, and then let them to none but such as are of approved morals. Next, that they put the laws of their country in execution against some few of the many culprits that have infested this country for a number of years past.”

(9.) *From the Account of Nesting.* By a person who resided there in a public character, in 1781. Vol. xvii. p. 501. [1796].

“ The agriculture in this ministry is in the same wretched state that it is in all the Shetland Islands. The people direct their sole attention to the fishing, and consider the cultivation of the lands as only a secondary object.

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“ One observation applies to this ministry, as well as to all the other parishes in Shetland, namely, that they never can be made of such importance to the British Empire as they might be, unless proper manufactures are introduced among them;— leases granted of a proper duration, and manufacturing villages established.”

(10.) *Tingwall, by the Reverend Mr Sands.* [1797.]
Vol. xxi. p. 280, 281.

“ The tenants carry on the ling-fishery from stations, 10, 20, or 30 miles distant from their own houses. Thus they are from home during the summer months; and all that they can earn by it, is but a poor compensation for what their farms, their flocks, and their families must suffer by their absence.

“ The want of inclosures in a country where there are *no berds*, and *where the berding act has hardly been heard of*, must operate powerfully against all agricultural improvements.”

(11.) *From the Rev. Mr Thomson's Account of Walls and Sandness.* Vol. xx. p. 108. 115. [1798.]

“ The rent of the parish cannot be easily ascertained, because the tenants are *obliged* to fish to their landmasters, at a stipulated *low* price, besides paying a small rent for the land they possess. The fishing-farmer, as he may be called, has his lands for about 5 s. or 6 s. a merk; but being *obliged* to fish to his landlord, and receiving from him a *lower* price for his fish and oil than he could otherwise obtain, the proprietor thereby increases his rent considerably.

“ The farms are by far too small, many of them, within these forty years, being split into triple the number. This has proceeded from the impolitic rage for prosecuting the fishing; but it is accompanied with hurtful consequences to the tenants, as
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the smallness of their farms keeps them in indigence. It tends only to enrich the landmaster for the present, as he takes the products at a *much lower* price than would be given by a *neutral* merchant.

“ From the *want of leases*, and the tenants being frequently obliged to have recourse to his landmaster for supplies in his exigencies, it renders him *servile* and *obsequious*. That manly independent spirit, which characterizes a free-born Briton, and prevails among the peasantry in the south, is here lost. As the tenant has only a *verbal* tack, he promising to fish for the landmaster, and to give him all his products, and to remain upon the land during pleasure, this proves a bar to all improvements, as he knows not if he will reap the benefit thereof longer than one year.”

NO. IV.

Observations, chiefly mineralogical, on the Shetland Islands, made in the course of a Tour through those Islands in 1803. By Dr T. S. TRAILL. (Communicated by the Author.)

THE first land we made after passing Fair Isle, was the southern extremity of the Mainland of Shetland. We approached first to Fitful-Head; a bold promontory composed of micaceous schistus. Pass through Cliff-Sound for several miles. The western side of this narrow channel is formed by a chain of low islands, seemingly composed of micaceous rocks. The eastern side is formed by a ridge of hills, which in many places present craggy precipices of the same material. The rocks along this side are all micaceous. Where Cliff-Sound terminates in Scalloway Roads, I found a micaceous rock, forming the shore for a considerable way, in which there were no particles of quartz visible: it was formed of thin plates somewhat bent or undulated. This kind is reckoned, I believe, very rare; the

the fresh fracture, if I was not deceived, had somewhat of a silky lustre, and the rock was uncommonly tough.

Part of Scalloway Roads, especially towards the west, is surrounded by micaceous rocks. From Mr Scott's house, quite through the valley of Tingwall, the general rock is limestone, in which are no vestiges of any marine production, and which, from its vicinity on each side of the valley to micaceous rocks, I suppose, is *primary*. These limestone strata were in most places highly inclined. This valley is the finest in Shetland, both for extent and cultivation. There are two lakes in the midst of it; one of which is said to be fifty fathoms deep. Observe a rude pillar of a single block of granite erected near one of these lakes. Probably it is a Scandinavian monument. Ploughs are more used in Tingwall-parish than in any other part of these islands. All I saw had only one stilt like the Orkney plough. The spade is much used in Shetland instead of the plough. The harrows I saw here had iron teeth on one side, and wooden teeth on the other.

After traversing half of this valley, ascend the hills to the eastward for Lerwick. Observe fragments of micaceous schistus and granite, as we ascended. Descend towards Elsvoe, by a steep road, where micaceous rocks were prevalent. Observe near the road a vein of *whinstone* traversing these rocks; it was visible but for a short way; it was dense, and dark-coloured. Ascend from Elsvoe a sterile hill of micaceous schistus; pass several ridges of mountains covered to a great depth by peat-moss, which concealed all that could interest a mineralogist. On the top of a high hill, find great numbers of rounded nodules of granite, quartz, and micaceous rocks, which the rains have probably separated from a very coarse sandstone breccia, of which this hill is composed. This breccia appears at the surface, as we approach Lerwick, taking place
of

of the primary rocks. The included nodules become less in size near to the town, where there is no other stone, an argillaceous sandstone excepted, which is much used at Lerwick for building. The hills around Lerwick are in most places absolutely denuded of the peat-moss which had formerly covered them, but which is the common fuel; so that well might the Stirlingshire parson exclaim, "I see nothing but the skeleton of a departed country," when his eyes were directed to this scene.

Return to Scalloway in a day or two. West of Mr Scott's house, find the micaceous rocks to succeed the limestone; veins of quartz often pervade these micaceous rocks, and sometimes large veins of red felspar. The micaceous rocks are succeeded, as we go westward, by granite, which forms the principal rocks of the western part of the Mainland. On the *Wart-Hill*, find in many places, where the surface was broken, bog iron-ore, arising from the decomposition of vegetables or of the rocks.

Sail by a coast partly micaceous, partly granitic, to Selivoe, where the bay was filled with innumerable medusæ. This name is a corruption of *Silvoe*, which signifies *herring-bay*; but no herrings are now taken in it. Walk from Mr Barclay's manse to Bixetvøe, another deep bay that intersects this part of the island. The rocks here are of granite, gneiss, and micaceous schistus. These continue round the headlands, in a few places mixed with limestone, as far as Selivoe. The schistus is sometimes formed into millstones. It is curious, that the stones of the hand-mills, now common in Orkney, are of a similar rock, which has been said to have been brought from Norway for this purpose, in ancient times.

In crossing the micaceous hills from Sandvøe to Sansting Manse, find, on the summit of a hill, a large white rock, called *marble* by the natives. It is composed of very large masses of pure white felspar and white quartz, with here and there a little silver-coloured mica. It may be considered as a
granite,

granite, in which the constituent parts are uncommonly large and distinct. The whole seemed to me to fill a vein in micaceous schistus; but of this I could not be certain, as the hill was thickly covered by turf and short heath.—In my walks around Selivoe, find only primary rocks, chiefly granite and micaceous schistus.

* Sail for Foula. Pass grand precipices of red granite. Near the only landing-place on this romantic isle, (the *Ibule* of the ancients), the rocks are all micaceous schistus. North of the landing-place it is filled with garnets well formed, but none of them large. This schistus is of a silver colour for the most part, but I found it quite black in several places. I found also here dark-green hornblende rock in considerable masses. The shores on either hand, as we recede from the landing-place, gradually become bold, and the micaceous rocks give place to tremendous precipices of red granite. The island contains three hills; the highest is about 1100 feet high; precipitous towards the north-west, but sloping towards the south-east. Two of these hills seem, as if, in some grand convulsion of nature, they had been rent from top to bottom, and that one-half had been buried in the waves. The cliffs are very magnificent, and inhabited by innumerable sea-fowl. Among the short heath on the highest hill, find many nests of the *Skua-gull*, among the largest of the gull tribe, and so bold as to dart at us, and even strike us with its wings, when near its nest. Its colour is ash-grey; its body seems about the size of a small goose; its bill is more hooked than the common gull. The *Skua* does not inhabit any other island of this group; it is found at the Ferroe Isles. Observe swallows in the valleys, the only ones we saw in Shetland. The natives say, that their ponies are the best in Shetland. The people seem intelligent and curious. They see the parson only once a-year, when he stays with them some weeks, officiates,

cates, baptizes children, and collects his dues. Observe many granite veins traversing the schistus, some of them two feet thick; all are very dense in their texture.

Sail for the Mainland. Pass *Papa Stour*. The north-west coast of this island is of a red colour, but I was not near enough to ascertain the rock. It is hollowed out into grand caverns, through which the waves rush with inconceivable fury, forming a sublime spectacle. Anchor in Hillswick-voe. Sail for *Papa Stour* in the long boat, but are forced into *Vementry*. Land on a beach composed of rounded nodules of granite, hornblende, and hornstone porphyry. Towards the south end of the island, the rocks are red granite. The end next to the Isle of Mickle Rhoe is partly micaceous schistus, hornstone-porphry, and hornblende rock.

Pass over to *Mickle Rhoe*, and observe the hornstone porphyry on the end next to *Vementry*. A little way from the beach, find a cliff of compact felspar.

The island rises towards the west into vast precipices of red granite, much eroded by the fury of the waves, forming stupendous arches, that mock the feeble efforts of human ingenuity. We observed enormous masses, detached from the island, forming gigantic isolated columns of wonderful magnificence. In a valley that crosses near the middle of the island, find in two or three places black hornblende rock, and hornstone-porphry, the felspar of which presents regular oval plates, in a dark grey ground, rising through the heath, which was often mixed with *uva urfi**, used by the natives for tanning. On either hand, the hills rise abruptly, and vast precipices of red granite, entirely destitute of even moss or heath, overhang the valley. In some places, one

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granite

* *Arbutus uva-urfi*. Bear-berry bush.

granite rock was piled on another in horrible confusion, producing, as far as the eye can reach, an indescribably sterile appearance. Barren as this island is, its inhabitants are happy, compared to what they are in some other parts of Shetland. They are emancipated by the proprietor, Mr Hunter of Lunna*, from the *slavery of fishing*,—a system fraught, as it is carried

* *Note by P. N.*—I am sorry that the following extract from a pamphlet, published in defence of the Shetland landholders, should seem to derogate from the praise, which Dr Traill so candidly bestows on this gentleman.

In an “Answer to Vindicator,” bearing to be printed at London in 1804, it is stated (p. 45.), “Mr Hunter has found it necessary and convenient to permit his tenants to return to *bondage*, as Vindicator is pleased to denominate it, under a tackfman; and it is effected without a murmur!—I have the best evidence for averring, that when Mr Hunter first proposed this change to his tenants, out of more than 130 householders, only 8 accepted their freedom, and he was obliged to summon all the rest to remove, before they could be brought to try it, even for one year. He then offered leases to all who would take them; only eight or nine applied, and a greater number absolutely refused to take any.”—“These circumstances,” it is added, “are alone sufficient to convince every unprejudiced person of the advantages of the old system.” It appears to me quite otherwise; and I would draw precisely the opposite conclusion. These circumstances seem to afford ample evidence, not only of the extreme indigence, but of the abject dependance of the Shetland tenantry; of the “stupid apathy,”—the extinction of the British spirit of independence,—which has here been effected by the old system; which must therefore be a bad one. Mr Hunter, I must remark, seems to have proceeded in his experiment with too great haste, and thus not to have given it a fair chance of succeeding. I do not question the purity of his motives; but I think that it was rather rash, to summon one hundred and twenty-two poor tenants all at once to remove! I have been found fault with for endeavouring to subvert the established order of matters in Shetland; but the alterations which I suggested, I proposed should be gradually accomplished; I even expressly protested against precipitancy. My words were, (p. 102.), “In most cases the tenants are so poor, that, were the landlord, at once to withdraw his aid, and leave them to manage as they best could, many of them would probably
“perish

carried on in some of these islands, with the greatest injustice, most flagrant and infamous oppression, which scarcely less deserves the notice of the Legislature, than some branches of *traffic*, that lately occupied its attention. I say this from a conviction of its truth. It is not now general: There are several proprietors in different districts, who have emancipated their tenants; but still it is in some places carried on, and prevents my giving unqualified praise to a people, among whom I met with the greatest hospitality and kindness.

The valley terminates in lofty cliffs of red granite. The boat waited for us at a small beach, covered with granitic sand, over which two vast granitic rocks impend, which formed a grand, but rugged vista of naked rock, as we put off shore.

Arrive again at Hillswick-voe. Walk to Hillswickness, a promontory chiefly composed of silvery-coloured micaceous schistus, containing immense quantities of garnets, of a very large size: those that were in the upper layers were much decomposed; but below some of them were complete, and finely crystallized.

“perish for want.” Again, (p. 103.) “Even if the size of farms were enlarged, and leases of 19 years duration granted, unless manufactures were here and there, at the same time, established, it is not improbable that many of the present cottars would either starve, or be compelled to *indent* themselves to America.” If, with these moderate sentiments, I incur the charge of being a “bawler about oppression,” &c.; with what language of reprobation ought not *Thule*, if consistent, to declaim against his friend *Mr Hunter*, who, *at once*, subverted the established order of a whole district, and by his *fat* turned 122 tenants adrift!

The tenants of Lunna, it is stated, submitted to be replaced under a tackfman “without a murmur.” This was about 1803, or 1804. If I knew the author, I would ask him, whether they submitted with equal tameness, to the arbitrary increase of the “whale-fishing exaction” from 1 guinea to 3 guineas,—which, as already observed, was effected (probably without Mr Hunter’s knowledge) by the tackfman of this district in 1805, but, according to my information, *not* without murmuring!

crystallized. On the west side, this bold headland is perfectly precipitous; but on the east side, in one place, it slopes towards the shore. At this slope, observe a vein of a light-green stone, (probably schistose talc), traversing gneiss. This vein contains most beautiful specimens of common actynolite, some pieces in fibres, others in pretty distinct six-sided prisms; in some cases approaching in lustre to glassy actynolite. The actynolite is imbedded in talc, and was found mixed with steatite. The serpentine is called *kleber* by the natives, who use it as an excellent substitute for metallic oxides in ointments. They apply this ointment to burns with success. Near this place, find black hornblende rock of great hardness; sienite, in one place, containing a large mass of silky-white felspar. A reddish-coloured hornstone porphyry, in rounded masses, was scattered on the shore. Observe great veins of granite in some places, traversing the micaceous rocks. As we approach the junction of this promontory with the Mainland, gneiss is found succeeding the micaceous schistus. Some grand pillars are detached by the fury of the Atlantic from the sides of this *ness*; the height of these is equal to that of the adjacent cliffs, which impend so over their bases, as to impress the spectator with sublime emotions, not unaccompanied by fear.

Set out for *Rona's bill*, the highest point of Shetland. Walk over a granite country to *Rona's-voe*; cross this long and narrow voe, and land at the foot of precipices of red granite, in which the hill terminates towards the south and west. The hill is at first heathy, but towards the top it becomes naked rock. Its top is a long ridge, covered with fragments of decomposed granite. I attempted to measure its altitude by a portable barometer. I observed the barometer accurately when at the sea side, both before and after my ascent, and found it stood exactly at the same height at each time, from which

I concluded that no material alteration in the pressure of the atmosphere had taken place during my stay on the mountain. The barometer fell when on the summit 15 tenths of an inch, but I had no thermometer, which is necessary to perfect accuracy*. From Rona's hill, see to a vast distance around,—all the Mainland, near seventy miles long, Foula, Fetlar, Yell, Unst, &c.

Sail close to the promontory of Hillswickness, and observe a great many reddish veins, traversing the micaceous rocks which compose these awful cliffs. Some of them were apparently several yards in diameter.

Pass at some distance a stupendous, insulated, and inaccessible rock, called the *Drongs*. It appears somewhat like a vast ship under sail. It is of a red colour, like some granite cliffs at a considerable distance on the Mainland, the nearest rocks on shore being micaceous.

Pass Isle of *Doreholm*, another insulated rock, perforated by a magnificent natural arch, through which the distant shores of the Mainland were visible. The colour of this is similar to that of the *Drongs*. Both are probably either granite or wacken, similar to what Professor Jameson describes as found in Papa Stour. A sailor who had been the day before on the shores of the Mainland nearest Doreholm, brought me fragments of both granite and wacken, of a brick-red colour.

Observe that the parish of *Northmaven* (which was not visited by Professor Jameson), is bounded towards the west by tremendous precipices of granite, similar to what compose Rona's hills, presenting a strong barrier against the encroachments of the Atlantic Ocean.

Pass *Offa Skerries*, lofty insulated rocks, apparently of reddish granite. Pass in a fog the isle of Yell.

Double

* Supposing the temperature 50°, the height here indicated was about 1400 feet.

Double *Ska*, the most northern point of his Majesty's European dominions. It is a small island, composed of gneiss, which forms shores of considerable boldness, and is only at a little distance from the isle of Unst. Anchor in *Balta Sound, Unst*.

The shores around this fine basin are entirely composed of serpentine rock, and the beach is covered with fragments of the same. The neighbouring hills, some of which are of considerable height, are also serpentine, and in many places are totally divested of vegetation, (even of lichens), presenting to the wearied eye a naked waste, of an iron-brown colour. The shores, from *Balta Sound* to *Norwick Bay*, rise gradually into vast cliffs, all of serpentine, in which are frequently found veins of talc, lamellar actynolite, and common actynolite. Observed imbedded, in one place, a substance very like *Labrador hornblende*, but was not able to force out a single good specimen, on account of the hardness of the serpentine matrix. In the bottom of the bay of *Norwick*, the shores are low, and a curious striated micaceous schistus presents itself. The striæ are in parallel straight fibres, of a grey colour, with but little lustre, intermixed with small particles of quartz. Near the junction of the serpentine and schistus, close by the sea, in a serpentine rock, find fine specimens of talc in a vein. This vein also contained tremolite in quartz. The serpentine hitherto mentioned has an iron-brown colour, from exposure to the air; but the colour of a fresh fracture is generally of a dark-greenish grey. The striated micaceous schistus begins in the bottom of the bay, and forms part of the western side of it, rising into lofty cliffs, when it is succeeded by a rock containing large masses of whitish felspar, often crystallized in rude rhomboidal figures. This compound rock is by Mr Jameson called *gneiss*. This rock constitutes the coast as far as *Burra Frith*, a bay very bold and broken on the east side, where there is a hollow called

called *Saxe's Kettle*. It is formed by an enormous mass, that seems as if separated from the Mainland, and afterwards joined at its extremities by the falling in of less masses. In bad weather the waves are driven with violence through a small opening towards the bottom, and fill the whole yawning chasm with foam.

The hills that lie between Norwick Bay and Burra Frith are composed to the top of the striated micaceous schistus above mentioned; and, though the highest on the island, are covered with coarse grass and mosses, while the serpentine ones, though inferior in height, are, for the most part, destitute of vegetation. Does not this imply the hostile nature of magnesian earth to plants in general?

At the bottom of Burra Frith, the same kind of undulated micaceous schistus, before seen near Scalloy, again presented itself. From Burra Frith, the coast westwards is composed of gneiss and micaceous schistus. At *Hermaness*, the latter rock abounds, and often contains finely crystallized garnets of a large size. Saw one at a gentleman's house found there, which was nearly $1\frac{1}{2}$ inch in circumference, beautifully crystallized, and of a pretty good colour. At *Hermaness* are said to be grand caverns, into which the tide flows, and which contain fine natural pillars. These pillars are conjectured by Mr Jameson to be of *gneiss*. The heavy surf prevented me from exploring these caverns. Towards the south, the isle of Unst is less bold on its shores, and the rocks above described are succeeded by argillaceous schistus and sandstone. In crossing the island to Mrs B.'s, find in the declivities plenty of bog iron-ore, and in one or two places both earthy and schistose chlorite.

The little island of *Balta*, forming one side of Balta Sound, is composed of serpentine of various shades of colour.

Sail for Lerwick: Pass the bold coasts of Yell and Fetlar,

Fetlar, and sail between Out Skerries and Whalsey ; (for an account of these see Professor Jameson's Outline). Sail close under the stupendous *Nofs Head*, a grand promontory on the east coast of Nofs Isle, composed of sandstone of different hues, hollowed out below into innumerable caverns, the retreat of myriads of sea-fowl, whose various pipes sound harsh discord when heard alone, but when united, form a solemn concert, a tribute of gratitude for that portion of happiness they enjoy. The island of Nofs and its holm are composed of sandstone. Over a chasm between the island and the holm a strong rope is stretched, on which a basket is slung, in which the natives pass over to plunder the nests of the sea fowl that inhabit the holm, and to carry over a few sheep. There is an incorrect engraving of this place, and the method of passing in the basket, published in Pennant's Arctic Zoology, (and from that copied into the Encyclopædia Britannica), from a rude sketch taken by the late Mr Lowe, an Orkney parson.

Anchor in Lerwick Roads: Pass over to *Brassa*, an island composed of sandstone, and of a coarse breccia with a sandstone base, like that already noticed in the neighbourhood of Lerwick. The eastern shores of this island, where they are exposed to the ocean, are lofty precipices like Nofs Head, but the southern shores slope gradually to the water's edge. In Brassa and Nofs, the strata are not very much inclined.

Walk along the shore west from Lerwick towards Scot's-hall. The breccia and sandstone continue beyond the north-west entrance into Brassa Sound. The nodules imbedded in the former are larger than in that found near Lerwick. As we go more westerly, the primary rocks again make their appearance. Leave the shore, and cross some hills, on which we observed micaceous schistus, gneiss, and hornblende rock. Descend into the northern end of the vale of
Tingwall,

Tingwall, where we again find limestone. Return to Lerwick by the manse of Tingwall, and pick up in several places fragments of striated micaceous schistus, but not so remarkable as that found in Unst.

Set out in the long-boat to coast the eastern sandstone shores of the Mainland. The coast from Lerwick for some miles seems to be of sandstone or breccia, and is perforated in many places by caves formed by the sea, and into some of these we rowed for several hundred feet. Soon after, we land, and find a compact limestone, interspersed with veins, or reddish calcareous spar, to succeed the sandstone. As we advanced, the hills on our right became higher, and were composed of micaceous schistus, especially at Coningsburgh. From this point they gradually fell in height, and sandstone of a dirty brown colour succeeded.

At *Sandlodge*, in 1803, (when I was there), a copper-mine was wrought, which has, I understand, been since given up, but which, I have been told, it is in contemplation soon again to open. There was then a small but well constructed steam-engine on it. The principal shaft was sunk within a few fathoms of the sea. The miners had penetrated to the depth of about twenty-two fathoms, and were but little incommoded with water. The upper rock was sandstone; and below it, at twenty-two fathoms, lay a petrosiliceous, or perhaps quartz rock, traversed by many veins of brown quartz. This was the greatest depth to which they had then penetrated; and I believe that the hardness and unpromising nature of this rock, was the cause of their so quickly giving up. At that time, there were but two Cornish miners, besides a Cornish *Captain of the Mines*, engaged, and these were chiefly occupied in giving directions to the natives employed to work in the mine. The want of men sufficiently skilled in mining, was certainly one cause of their failure. The principal manager was a partner, who had chiefly directed his atten-

ation to the corn-trade, as I was informed, and who was totally ignorant of the art of mining. The principal *lode* or vein lies between the sandstone and the petrosiliceous rock, in a direction from N. E. to S. W. The copper-ore is chiefly green carbonate, and the sulphuret; it is imbedded in an iron-ore, which is sometimes pulverulent, and was called by the Cornish miners *gozzan*. The iron-ore is by much the most abundant. When Mr Jameson visited this place, the copper-mine was not opened; and he only mentions iron-ores as the product of the mine, which many years ago had been wrought by an English iron company, but afterwards abandoned. It was subsequent to Mr Jameson's visit that the copper-ore was much noticed. The iron-ores here found, are, 1. Dark-brown, fibrous, and mamillated hæmatites; 2. Columnar bog-iron-ore; 3. Micaceous iron-ore; 4. Iron-ochre of a brown colour; 5. Stalactitic iron-ore, colour dark-brown; 6. Earthy matter, much charged with iron, seemingly arising from the debris of other ores. The copper-ores are, 1. Friable and amorphous carbonate of copper, colour rich green; 2. Beautiful carbonate of an emerald green, crystallized in capillary fibres of a silky lustre, diverging in radii from a centre. This species is found imbedded in iron-ore; 3. Sulphuret of copper, disseminated through felspar in some places, and, in others, in great masses in iron-ore. The rich carbonates were found near the bottom of the mine. The levels and shafts of the old company, seem to have passed within three or four feet of this rich vein, but never to have touched it. I walked through the galleries scooped out in former attempts for about forty fathoms, but saw only little appearance of copper-ores, while there was iron in abundance all around. The roads near the mine were all paved with fine iron hæmatites, which the Cornish miners who were there did not seem to regard as of any value, nor indeed almost to know. Some of them
imagined

imagined it was a new kind of copper-ore. Some pieces of bog iron-ore I had collected, were called *copper-spume* by one of them; hence, it is evident, we cannot trust much to the mineralogical opinions of the generality of miners. From the saline taste of the waters of the mine, and the crust of copper it left on my knife, I proposed to the workmen to try to procure *copper of cementation* in the usual way. This company had already expended between L. 9000 and L. 10,000 on the work, and had shipped one or two cargoes of ore; for, when dressed and washed, it was carried to England to be smelted. I was informed, that the best of it sold for L. 70 *per ton*. The hills in the vicinity afford both copper and iron pyrites in considerable quantity. Near *Cöningsburgh cliffs*, a vein of copper pyrites was wrought a few years ago, which yielded Mr Jamefon 18 *per cent.* of copper; but it so much decreased in width as they descended; that it was finally abandoned. The appearance of the ores, was judged, by the Cornish miners, to improve as they descended in the Sandlodge mine; and, at their lowest level, the quantity of fibrous malachite, when I visited the mine, was such as to afford a most beautiful spectacle by the light of our candles. They have since, however, I am told, unfortunately met with such obstacles, as to induce them to give up the work. Still, it appears to me, that it would be worthy the attention of some mining company, who had capital and enterprize to prosecute the undertaking.

Rocks of sandstone and breccia form the east coast from Sandlodge to Sumburgh. The micaceous hills now cross the Mainland, towards Fitful-Head; and from Quendal Bay to Sumburgh Head, the chief mineral production is sandstone. At *Quendal Bay*, a copper-mine was discovered several years ago, and was, in 1803, slowly worked by a very few miners. In the tract from Sandlodge to Quendal Bay, there are many indications of metallic ores, chiefly iron.

From Levenwick Bay, sail along the shores of the Mainland to Sumburgh Head, the southern extremity of these islands. It is composed of sandstone cliffs, moderately high. Am informed, that a slate quarry has been lately opened, not far from the top of this promontory.—Bid adieu to Shetland.

With regard to the general distribution of the rocks which compose the Mainland, the western side of it is composed of micaceous schistus and granite; and is much more bold than the eastern, which consists chiefly of sandstone, and sandstone breccia. The parish of Northmaven contains most granite; and, if I am not mistaken, Rona's Hill, the highest ground in Shetland, stands in this parish. A similar distribution of the strata is, I believe, pretty generally observed in most countries, but the cause has not been well explained. All the theories on the subject are lame and unsatisfactory. In the other Shetland isles which I have examined, the western coasts are generally the most bold, and are composed of rocks more indisputably belonging to that class called *primitive*, than those on their eastern shores. The same remark may be extended to the sister isles of Orkney, and even to Great Britain.

Preston's chart of the Shetland islands, is the only tolerable one we have; but it is inaccurate in the northern part, which, I have been told, he did not live to survey. The southern parts of Shetland were laid down by himself, and are extremely accurate; but the northern parts were carelessly added by some inferior hand at his death. I have even seen a small island or rock that is always uncovered, which is not in the chart at all. Mr Jameson's small map is pretty correct. It would certainly be worth the attention of Government to cause a nautical survey of these islands to be made, with the same minuteness and accuracy that the Orkneys are laid down in the admirable charts of Murdoch Mackenzie,

Mackenzie. Pinkerton, in his Geography, seems to have supposed, that the Orkney coasts are as ill laid down as those of Shetland. He says, "We have " better charts of the coasts of New Holland than of " the isles of Orkney and Shetland." Strange, that he should be unacquainted with *Mackenzie's Charts*, which every vessel that sails the North Sea invariably carries!

NO. V.

Letter from Sir ALEXANDER SETON of Preston, containing Observations on the state of the Shetland Islands, and on the means of their improvement.

Dear Sir,

In answer to yours of the 10th October, I shall endeavour to collect from my jottings the few Political and Economical Observations I had occasion to make, while I had the pleasure to be in Zetland with you in the 1804.

POLITICAL.

Representation in Parliament.—The Islands of Zetland, viewed in a political light, are certainly in the most peculiar situation of any part of the British Dominions; they form a part of the shire or stewartry of Orkney, but have no share in the Representation of Scotland, the Freeholders of Orkney choosing the Members for both. The reason seems evidently to be, that the general valuation of the landed property of Scotland (which originated in Cromwell's time, and was adopted and confirmed by Parliament in the beginning of Charles II's reign, by which standard the taxes are paid, and the freehold qualifications determined) had never extended to these islands; the proprietors of which still continued

nued the division and valuation of their land, as adopted and regulated by their Norwegian ancestors. By this mode, the infield or arable land is divided into *mark-lands*, and these again into *penny-lands*: To each mark-land, according to its extent, is annexed a due proportion of pasture on the hills, beyond the corn-field dikes, called *scatol*, for which a separate rent is paid. The measure or extent of the *mark-land* is ill defined; yet it is said that marks of land bear a pretty accurate proportion to one another within the township or *room*, though some of these mark-lands consist of unequal numbers of penny-lands, from four, up to twelve pennies, and are rented according to their number of penny-lands.

It being thus very difficult to form any criterion, by which these mark-lands can be compared and proportioned to the valued rent of the rest of the kingdom, and thereby the freehold qualification of L. 400 discovered, it seems to be a defect which can alone be remedied by the Legislature. If regard, indeed, were paid to the proportion of land-tax paid by Orkney and Zetland, it might facilitate the arrangement; for, according to my information, Orkney pays two-thirds and Zetland one-third of the cels imposed on the whole stewartry; and the valuation of Orkney, including the bishops' lands, being L. 5600, that of Zetland should on this principle be L. 2800.

Udal-tenure.—Originally landed property was possessed in these islands by *udal-holding*, that is, it passed from man to man by simple disposition or bill of sale, confirmed by the Judge-Ordinary, without acknowledging any superior whatever, till 1664, when Douglas of Spynie, Chamberlain of George, Viscount Grandison, in right of the Crown, had the address to persuade most of the poor unsuspecting *udallers* to resign their lands, and take out charters from the Crown; and thus, instead of their former
 admirable

admirable and simple transmission of property, which at this day exists in the North of Europe, they subjected themselves to that multiplicity of intricate writings enjoined by feudal laws till then unknown. Some instances of the udal-tenure are still to be found in the islands.

ECONOMICAL.

In travelling the dreary wilds of these islands, where neither tree, bush nor shrub is to be seen, and where the heath itself is stunted, seldom exceeding three or four inches in height, one's feelings are naturally awaked to the situation of the poor inhabitants, who seem to be the most primitive unmixed people of the British Isles, having little intercourse with foreigners, in which class they even consider the *Scots*: their manners are little corrupted, but they are depressed by extreme poverty: they are certainly in a greater degree in want of the conveniences of life, and often of its necessaries, than any of their fellow-subjects of Britain. They are very civil and even polite; and from that inquisitive disposition they seem all possessed of, one is led to believe that they wish to be better informed, and that much might be made of them. Their country is indeed poor, but it must be a wretched one surely which will admit of no melioration. Almost all the gentry have been educated in Scotland; their manners are similar to those in the north of Scotland; and in hospitality, they are not behind any of their fellow-subjects.

Draining.—That great obstacle to all improvement, the wetness and sponginess of the soil, here occurs in the extreme: it prevails with few exceptions over the surface of the whole country, to which the coating of peat-moss and peat-earth with which it is covered, even to the tops of the eminences and hills, greatly contributes. On such a soil nothing can
be

be produced, till it be freed from superfluous moisture. Now, as declivities are not wanting everywhere, it is far from being impracticable to drain many places, especially sloping hills, by open drains or ditches, in ranges above one another, at such distances as may be found necessary, always observing that the water have a sufficient fall or descent; these intervals may be presumed, then, capable of culture, either by the plough or spade, especially if a little lime could be procured, of which there is a field, together with excellent shell-marl, in the valley which intersects the Mainland between Scalloway on the south, and Laxfirth or Laxfiordvoe on the north. These substances, when mixed with moss earth, according to the theory introduced by Lord Meadowbank, form a rich and powerful compost. I should not then despair of their producing crops of *potatoes*,—*to the plantation of which root every exertion and encouragement should be employed*: these and the subsequent crops would gratefully repay any extra-labour.

Many of the hills, however, it must be owned, from the great quantity of large surface-stones and outbursting rocks, are incapable of being meliorated in this manner; but there are also many of the *scatols*, whose declivities are quite gentle and smooth. Such only can be the subject of the proposed improvement.

Winter-fodder for Cattle.—The climate of Zetland is not more severe than that of the north of Scotland, where turnips now form a part of the rotation, and stand the winter; the *Swedish Turnip* or *Brassica radice napiforme*, and the *Cabbage-leaved turnip*, or *Brassica caulorapa*, are reckoned still more hardy. By this proposed additional cultivated surface taken in and fenced from the *scatol*, the inhabitants might be enabled to sow part of their marklands, or old worn out corn-fields, with turnip, and even with grass-seeds; for in all the dry grounds of the islands, the red and white clover, and *avena elatior*, are found indigenous, and thrive well. What a blessing

bleffing, then, would it be, could a little *winter-fodder* be afforded to the horses, cattle, and sheep, instead of turning them out to range the dreary hills, where they very often die through want.

I view this subject with pleasure, because it yields a hope that these islands, instead of being obliged to their neighbours for subsistence, may, in a course of years, be enabled, without aid, to support a greater amount of population than at present they possess. But, alas! this cannot be expected on the present system, nor from the present tenantry. They are extremely poor, have no stock, and nothing to risk in speculation; besides, they have no time, being employed in the summer months at a distance from home in the ling-fishery, at the very season when works of the field should be attended to, and which are thereby transferred to the women, children, and the infirm, who proceed as they have done for ages, in the faulty routine left them by their Norse ancestors. It is from the efforts of the Proprietors any change must be expected, many of whom are patriotic, well-informed men: would they lead the way to an improved system of economy, they would naturally be followed at a distance by their inferiors, as example operates with more force than many volumes of instructions, especially when they see their interest concerned.

Separation of the professions of the Fisher and Husbandman.—To facilitate, however, this end, it is a question worth consideration, if the ling-fishery and agriculture, as they seem to be incompatible, should not be distinct professions. Could this change be introduced, the landlord might expect an adequate rent for his land, which, on account of the advantages he derives from the tenants' fishing, he has hitherto let at a very low rate; and the fisher might expect a fair and equitable price for his fish, which at present he delivers to his landlord at an under
Z value,

value, on account of the easy terms on which he possesses his land. Were this reform practicable, it seems highly probable that many of the inhabitants would, through choice, attach themselves to the *fisb-ery*, and be satisfied with a cottage and small portion of ground for potatoes and cabbage, and then their former small possessions would fall to be added to their neighbours mark-lands who made choice of *agriculture* for their profession: to these should be granted a lease of reasonable duration, with the rent particularly defined, either in money or part of the produce, with few onerous services, and these as much as possible restricted to the time not employed in their own fields.

Although it be unsafe to condemn *in toto* the received customs of any country, which are generally founded on the experience of ages, and adapted to the climate, and the genius of the people, yet a stranger, from a country farther advanced in civilization, cannot fail to remark, that, from the extreme rudeness and simplicity of every part of their rural economy and customs, it seems to be evident, that no attempt at improvement has been made since the departure of the Norwegians. On the contrary, it is more probable, from the ingenious and industrious character possessed by the present inhabitants of Norway, that things have been rather retrograde in Shetland. The poor people are miserably lodged; their houses, furniture and utensils, rude as the country. Materials for the mason are every where found: But alas! want of timber, which can only be procured from Norway or the Highlands of Scotland, is a prodigious defect.

Zetland Plough.—That their instruments of agriculture are rude and imperfect, will not admit of a doubt. The *plough* left them by their Norwegian ancestors is very light, and in principle much the same

same as that used on the opposite Continent for ploughing their old corn-fields and fallow-land, but for nothing else; for from want of a mould-board and coulter, it is only scratching, not ploughing; and it is incapable of breaking up grass-grounds. In the Statistical Account of Unst, (vol. v.), an accurate drawing of it is given. If, in place of the broad-pointed sock, the Zetland husbandman would adopt the narrow-pointed one of the old Scots plough, he would find it much better adapted to a stony soil than the other; and with a feather on that sock, capable of ploughing grass-ground. Indeed, the old Scots plough, upon a small scale, proportioned to the powers of two of the small horses of the country, might prove a great acquisition to Zetland.

Trees.—The wild nakedness of these islands must naturally strike every stranger with surprise. That in some remote period it has been otherwise, has been universally believed. The fact has been handed down by tradition; it is evinced by the remains of trees being found in the peat-mosses; and is farther confirmed by some names of places, which intimate their being covered with timber (for instance, *Lund* in Unst, which signifies a *grove*). It is now the general opinion of the inhabitants, however, that trees will not grow; and it must be admitted, that in a country subjected to such violent winds for at least eight months in the year, considerable difficulties will attend the attempt. As it is not, however, said, that any fair trial was ever made and persevered in, it were to be wished some patriotic proprietor would make the experiment; and surely a single failure should not intimidate. It is in vain to plant single trees or single rows; an acre at least, or more, should be chosen in an inland place, somewhat sheltered from the violent winds, either by rising grounds or earthen walls. Seedlings or very young plants are the most proper; and could they be procured from about Bergen, or even farther north, where the firs
in

in particular are found growing spontaneously in the woods, they would be preferable. It is of the utmost importance to prevent such young plants from being smothered for the first year or two by weeds and grass; indeed the speediest way of raising a plantation in the south, is by planting potatoes or sowing turnips among them, and keeping them clean by the spade and hoe. The trees which grow in the same latitude on the opposite continent, are, *Norway* or *Spruce Fir*, *Scots fir*, *Alder*, *Birch*, *Mountain-Asb* or *Roan*, *Hazel*, the *Crab Tree*, *Wood-Saugb*, and the shrubs *Hawthorn*, *Juniper* and *Barberry*.

Roads.—The last observation I have to make, respects roads of communication, of which these islands are totally destitute; and as they facilitate the execution of every other improvement, they may be said to be the mother of all, and should be attended to as the very first. The late Mr Scott of Laxfiordvoe and Mr Rofs of Sund, have shewn what may be done, so far as they have executed the road of communication between Lerwick and the valley of Scalloway; a road of the first importance. It is said some of the landholders have now qualified themselves to act as Justices of the Peace. This is a lucky circumstance; because it will enable them to execute the laws relating to the highways by *statute-labour*, as far as consistent with the situation of the poor people, who must have many leisure days in winter and spring. Could they be prevailed on to perform their six days statute-work then, it would tend greatly to their own and the public advantage. One great obstacle, I am aware, here meets us; The Commissioners of Supply in Scotland assess themselves annually in highway and bridge money; but it is doubtful if the Zetlanders have any such commission. In default, could the Justices and proprietors impose a penny on each mark-land,
it,

it might raise a small fund in the different parishes, for buying tools, and defraying other unavoidable road-expences: Their power, however, is equally doubtful, and an application to Parliament is attended with an enormous expence.

From the smallness of the horses, and inequality of the country, it is not probable that heavy carriages will ever be used in Zetland; and indeed they never should. A small light single horse-cart, which in most countries the commons can make themselves, is best adapted to the country. In this view, the road-making should not be expensive. Let the roads, however, if possible, be 22 feet broad; smoothed, by rolling off the large stones and filling up the hollows; with a small ditch on each side: not above 8 feet of this breadth need be metalled; and if this be on one side, the other part being soft road, may be used in summer or dry weather.

I have thus, at your request, collected and thrown together the few loose Remarks I made while in Zetland. All I can say for them, is, that they are well meant. I retain a lively sense of the polite attention paid us there by the gentry, and of the civility of the commons: And could any of the foregoing observations conduce in the smallest degree to the comfort and happiness of these islands, it would give me infinite pleasure. I am, Dear Sir, &c.

ALEX. SETON.

Preston, Oct. 23. 1806.

No. VI.

NO. VI.

List of Plants indigenous to Orkney, OMITTED in the List published in Dr Barry's History of Orkney, 1805 ; with Remarks on some doubtful species which appear in that work.

[While in Orkney in 1804, I had several opportunities of being in company with the late Dr Barry, the laborious author of the "History of Orkney," 1 vol. 4to. I was even favoured with a sight of the MS. of a *Flora Orcadensis*, compiled by the Doctor, partly from his own observations, and partly (as he informed me) from MSS. left by the late Reverend Mr Lowe, the northern assistant of Mr Pennant. Of the rarer plants mentioned as natives of Orkney, on the authority of Mr Lowe, Dr Barry, I may remark, was not possessed of any specimens. This, I found, was the case with *Pinguicula alpina*, *Arabis alpina*, *Orobanchis niger*, and *Trifolium montanum*, none of which have hitherto been discovered by botanists, either on the mountains of Scotland or Wales. It is, with some confidence, therefore, that I set down these as mistakes. From this *Flora Orcadensis* the Botanical List published in the History had been extracted. During my excursions through the islands, I either collected specimens, or took notes of the names, of all the different species of plants which occurred. Upon my return home, and long before the publication of the History, I sent to Dr Barry, by his own desire, a note of such omissions and inaccuracies in his MS. Flora as my botanical excursions had enabled me to supply or correct ; under the disadvantage, however, of depending merely on my recollection of the plants already contained

ed in the Doctor's list. I afterwards learned, with regret, that before my packet reached him, he was unhappily confined to his chamber by the illness of which he died. Since the publication of the History, I have compared the Botanical List which it contains, with a catalogue made up by myself from my private notes, aided by my Orkney hortus ficcus; and in the following Table, I have stated, as fully and correctly as possible, all the different species which I found in Orkney, which are *not* mentioned in Dr Barry's List. I have, in general, added the local habitats, though for these I depend chiefly on memory. In foot-notes, and at the end of the Table, I have subjoined some critical remarks as to doubtful species, which the recollection of what passed in my personal communications with the author, (who, though a man of very extensive general information, had never been a practical botanist), persuade me to think, will, in general, be found pretty near the truth.—I have followed the improved nomenclature to be found in Dr Smith's *Flora Britannica*; but where it appeared useful, I have added the synonymes of Mr Lightfoot's *Flora Scotica*.]

LIST

 LIST,

Supplementary to Dr Barry's Catalogue.

<i>Linnean Name.</i>	<i>English Name.</i>	<i>Localities.</i>
Chara		
vulgaris,	Common chara,	Pools and ditches.
hispida,	Prickly chara,	Loch of Airie.
Veronica		
Chamædrys *,	Germanderspeedwell,	Very common.
Anagallis,	Water speedwell,	Ditches at Scarr, Sanda.
Scirpus		
pauciflorus,	Chocolate club-rush,	Hoy hills, plentifully.
fluitans,	Floating club-rush,	Loch of Knitching.
lacustris,	Bull-rush,	Loch of Aikernefs,
Eriophorum		
angustifolium †,	Narrow cotton-rush,	Peat-bogs, common.
Alopecurus		
geniculatus,	Floating fox-tail-gr.	Meadows of Crantit.
Agrostis		
stolonifera,	Creeping bent-grafs,	Moist pastures.
vulgaris, var.	} Dwarfish bent-grafs,	Pastures, common.
pumila,		
Aira		
præcox,	Early hair-grafs,	Dry pastures.
Melica		
cærulea,	Purple Melic grafs,	Moors, plentifully.
Poa		
trivialis,	Rough meadow-grafs,	Meadows at Crantit.
maritima,	Sea meadow-grafs,	Salt-marshes, common.
Festuca		
duriuscula ‡,	Hard fescue-grafs,	Dry pastures.
elatioer,	Tall fescue-grafs,	Moist meadows.
loliacea,	Spiked fescue-grafs,	Moist meadows.
		Bromus

* While Dr Barry omits this common species, he enumerates *V. spicata*, a species which I did not see in Orkney. Possibly *V. chamædrys* has been taken for *V. spicata*.

† Dr Barry mentions *E. polystachion*, which also occurs; but the most common species of cotton-rush is *E. angustifolium* of Dr Smith, which is indeed *E. polystachion* of Lightfoot.

‡ While the Doctor omits *Festuca duriuscula*, he mentions *F. ovina*, which, if it occurs in Orkney, is not common. Indeed, I suspect that *F. duriuscula* has been mistaken for *F. ovina*. The former, together with *F. vivipara*, forms much of the best and driest upland pastures of Orkney.

<i>Linnean Name.</i>	<i>English Name.</i>	<i>Localities.</i>
Bromus mollis,	Soft brome-grafs,	In pastures, common.
Avena pubescens,	Downy oat-grafs,	Guills of Scapa,
Arundo Phragmites,	Common reed,	Loch of Aikernefs.
arenaria *,	Sea-reed,	Sandy fhores.
colorata,	Canary reed-grafs,	Sides of ditches.
Scabiofa arvensis †,	Field fcabious,	Cultivated places.
Ruppia maritima,	Sea Ruppia,	Salt-marshes, common.
Sagina apetala,	Small-flow.pearl-wort	By the fea fhore.
Anagallis tenella ‡,	Bog pimpernel,	Marsh at Deernefs.
Convolvulus arvensis,	Small bindweed,	In fields.
Hydrocotyle inundata,	Floating white-rot,	Moift places, by Carnefs.
Æthusa Cynapium,	Fool's-parsley,	Kitch. gardens, Kirkwall.
Chærophyllum sylvestre,	Wild chervil,	Way-fides near Kirkwall.
Ægopodium Podagraria,	Gout-weed,	Near Kirkwall.
Sium angustifolium,	Water parfnep,	Ditches, common.
Conium maculatum §,	Common hemlock,	Waysides, common.

Parnassia

* Dr Barry mentions *Elymus arenarius*, and omits *Arundo arenaria*. The former I did not find in Orkney; the latter is common in different islands. As the plants are very similar, I suspect that the *Arundo* has been taken for the *Elymus*.

† A white-flowering variety of *Scabiofa fuccifa*, or devil's-bit, is not uncommon in Orkney.

‡ This elegant little plant is not general in Orkney.

§ In his catalogue, the Doctor puts down, "*Cicuta, passim*." I did not see the *Cicuta virofa* in Orkney. Certainly either *Conium maculatum* must have been meant, the old officinal name of which was *Cicuta*; or, as the English name given is, "Long-leaved water-hemlock," *Sium angustifolium*, may have been intended. Neither the *Conium* nor *Sium* appears in the Doctor's list.

<i>Linnean Name.</i>	<i>English Name.</i>	<i>Localities.</i>
<i>Parnassia palustris</i> *	Grass of Parnassus,	Meadows, very common.
<i>Radiola millegrana</i> ,	All-feed,	In Eda, abundantly.
<i>Juncus bufonius</i> ,	Toad-rush,	Moist ground.
<i>bulbosus</i> ,	Round-fruited rush,	Side of Hoy hill.
<i>uliginosus</i> ,	Little bulbous rush,	Island of Eda.
<i>pilosus</i> †,	Hairy rush,	Roufay.
<i>Epilobium angustifolium</i> ‡,	Rosebay willow-herb,	Trumbland, Roufay, rare.
<i>tetragonum</i> ,	Square willow-herb,	Guills of Scalpa.
<i>Triglochin maritimum</i> ,	Sea arrow-grass,	Salt-marsh, Deerness.
<i>Polygonum bistorta</i> ,	Great bistort,	Near Kirkwall, rare.
<i>Saxifraga hypnoides</i> §,	Mossy saxifrage,	Hoy hills, plentifully.
<i>Silene maritima</i> ,	Sea campion,	Sea-shore, common.
		Arenaria

* In the beginning of September 1804, I found many acres of pasture in Westra rendered quite white with the flowers of the *Parnassia*; the plants were dwarfish, seldom exceeding four inches in height.

† In Dr Barry's list, a *Juncus sylvestris* appears. This may be a mistake for *sylvaticus*: but it is most probable that *J. pilosus* is the plant intended. A *Juncus triformis* is also mentioned: this is probably a typographical inaccuracy, and *J. trifidus* may be meant, which it is very likely may grow on Hoy hills.

‡ The French-willow is one of the most showy native plants of Orkney, and its omission in Dr Barry's list seems almost unaccountable. It is undoubtedly indigenous to the banks of Trumbland-burn, in the island of Roufay. Dr Barry mentions an *Epilobium ramosum*; but no such species is described in botanical works.

§ Dr Barry states *Saxifraga cæspitosa*; but as *S. hypnoides* is entirely omitted, though pretty common, I am inclined to think that this has been mistaken for *S. cæspitosa*, which I did not observe in Orkney. *S. autumnalis*, it may be remarked, is only *S. aizoides* flowering late.

|| This plant covers a gravel foot-path at Kirkwall-shore, which is one of the most public walks near the town; and it is abundant on the shores of most of the islands and holms. It could not fail to be observed,

<i>Linnean Name.</i>	<i>English Name.</i>	<i>Localities.</i>
<i>Arenaria marina</i> *	Sea spurrey sandwort,	Salt-marshes.
<i>Sedum acre</i> ,	Biting stone-crop,	On dry banks.
<i>Agrostemma Githago</i> ,	Corn-cockle,	In corn-fields, rarely.
<i>Cerastium latifolium</i> †,	Broad leaved chickw.	Hoy hills.
<i>tetrandrum</i> ,	Tetrandrous chickw.	Kirkwall shore.
<i>Rosa villosa</i> ,	Apple-rose,	Trumbland, Roufay.
<i>Rubus idæus</i> ,	Raspberry,	Trumbland, Roufay.
<i>Mentha hirsuta</i> ,	Hairy mint,	Wet meadows.
<i>Glechoma hederacea</i> ,	Ground-ivy,	Waste grounds.
<i>Bartsia Odontites</i> ,	Red bartsia,	Fields, common.
<i>Melampyrum pratense</i> ‡,	Yellow cow-wheat,	Barren clayey ground.
<i>Alyssum fativum</i> ,	Gold of pleasure,	Among flax, Westra.
<i>Thlaspi arvense</i> ,	Penny-cress,	Fields at Scalpa.
<i>Bunias Cakile</i> ,	Sea-rocket,	Sanda, not common.
		Trifolium

observed, therefore, by Mr Low and Dr Barry: but they had confounded it with *Silene inflata*, which is mentioned in their list, under the old name *Cucubalus Behen*. The English name of this plant, I may add, is *Bladder-Campion*, not *Berry-bearing Chickweed*, (as Dr Barry makes it), which is a very different and very rare plant; *Cucubalus baccifer*.

* In Dr Barry's catalogue, *Arenaria saxatilis* is put down. It is not probable that this species is to be found in Orkney. Perhaps *A. tenuifolia* may occur.

† Dr Barry mentions a *Cerastium tomentosum*; by which, most probably, is to be understood *C. latifolium*.

‡ Dr Barry includes in his list, *Melampyrum sylvaticum*; but this is a very rare plant, and I doubt not that *M. pratense* has been mistaken for it.

<i>Linnean Name.</i>	<i>English Name.</i>	<i>Localities.</i>
Trifolium friatum,	Soft knotted trefoil,	Bare dry knolls.
procumbens *,	Hop-trefoil,	Dry hilly pastures.
Hypericum pulchrum,	Small St John's-wort,	Moist banks.
elodes,	Marsh St John's-wort,	Rackwick, Hoy, rarely.
Hieracium Pilofella.	Mouso-ear hawkweed,	Dry spots at Scalpa.
Gnaphalium rectum,	Upright wood Cudw.	Quanterness, not general.
Pyrethrum maritimum,	Sea feverfew,	On the shores, not uncom.
Carex stellulata,	Little prickly carex,	In marshes.
flava,	Yellow carex,	Moist meadows.
fulva,	Tawny carex,	Moist ground.
distans,	Loose carex,	Marshes by the sea.
præcox,	Vernal carex,	Dry pastures.
extensa,	Long bracted do.	Salt marshes.
panicea,	Pink-leaved carex,	Moist pastures.
recurva,	Glaucous heath carex,	Moist heaths.
cæspitosa,	Tufted carex,	Moist ground.
ampullacea,	Bladder carex,	Loch of Aikernefs.
arenaria,	Sea carex,	Sandy <i>links</i> or downs.
Viola tricolor,	Pansy violet,	Cultivated grounds.
canina,	Dog's violet,	Gulls of Scalpa.
Typha latifolia,	Reed-mace,	Loch of Aikernefs.
Sparganium simplex,	Bur-reed,	Lakes and ditches.
Atriplex laciniata,	Frosted sea-orache,	Sea-shores, rarely.
patula,	Spreading orache,	Sea-shores, common.
Myriophyllum verticillatum,	Verticillate wat.-milf.	Loch of Airie, Stronfay.
Empetrum nigrum,	Black crowberry.	Heaths, common.
Urtica urens,	Stinging nettle.	Streets of Kirkwall.

Salix

* *Trifolium montanum* is mentioned by Dr Barry ; but it is found only on the Alps and Pyrenees. Probably either *T. striatum*, or *T. procumbens* is the plant referred to.

<i>Linnean Name.</i>	<i>English Name.</i>	<i>Localities.</i>
<i>Salix</i> *		
<i>arbuscula</i> ,	Little tree-willow,	Roufay and Hoy.
<i>prunifolia</i> †,	Plum-leaved willow,	Hoy valleys.
<i>argentea</i> ‡,	Silky sand-willow,	Downs of Sanda.
<i>arenaria</i> §,	Downy willow,	Wart-hill, Shapinsa.
<i>aquatica</i> ,	Water fallow,	Sides of rivulets.
<i>aurita</i> ,	Round-eared willow,	Vale of Rackwick, Hoy.
<i>acuminata</i> ,	Long-leaved fallow,	Moist grounds, Deernefs.
<i>Equisetum</i>		
<i>sylvaticum</i> ,	Branched horfe-tail,	Trumbland, Roufay.
<i>Lycopodium</i>		
<i>clavatum</i> ,	Common club-mofs,	Hills of Hoy and Roufay.
<i>alpinum</i> ,	Savin-leaved do.	Mountains of Hoy.
<i>annotinum</i> ,	Interrupted club-mofs	Wart-hill of Hoy, rarely.
Selago,	Fir club-mofs,	Hills of Hoy and Roufay.
<i>Selaginoides</i> ,	Prickly club-mofs,	In the moors, common.
<i>Aspidium</i>		
<i>dilatatum</i> ,	Gr. crested shield-fern,	Moist rocky places.
<i>Filix mas</i> ,	Male shield-fern,	Moist banks.
<i>Filix fœmina</i> ,	Female shield-fern,	Moist banks.
<i>Asplenium</i>		
<i>Adiant. nigrum</i> ¶,	Black maidenhair,	Cleft of rocks, Roufay.
<i>Blechnum</i>		
<i>boreale</i> ,	Rough spleenwort,	Banks at Scalpa.
<i>Grimmia</i>		
<i>maritima</i> ,	Sea <i>Grimmia</i> ,	Rocks by the sea, common.
		Dicranum

* Several of the salices (*S. prunifolia*, *arenaria*, and *argentea*) were still in flower in Orkney in the end of July 1804; but it was difficult to ascertain others (*S. Arbuscula*, *acuminata*, *aurita*, and *aquatica*), the catkins of which I could not find; and I acknowledge, with pleasure, the assistance I derived from that acute practical botanist, Mr G. DON of Forfar, in determining the species, by means of the specimens which I brought with me from the islands.

† *Salix myrsinites* of Lightfoot's *Flora Scotica*.

‡ *S. arenaria*, Lightfoot. § *S. Lapponum*, Lightfoot.

|| *S. cinerea* of Withering's *Botany*, by which name it is mentioned *suprà*, p. 17.

¶ In Dr Barry's catalogue, *Acrostichum septentrionale* appears; but I have reason to believe, that *Asplenium Adiantum-nigrum* was the fern intended.

<i>Linnean Name.</i>	<i>English Name.</i>	<i>Localities.</i>
Dicranum varium, aciculare, purpureum,	Fork-mofs.	Sandy pastures. Sides of rills, Hoy. On <i>bill-dikes</i> .
Trichostomum lanuginosum,	Fringe-mofs.	Hills and moors, common.
Tortula muralis, stellata,	Screw-mofs.	Old walls, common. Sides of rivulets.
Funaria hygrometrica,	Twisting-mofs,	Old kelp-kilns, common.
Bartramia arcuata, fontana,	Bartramia.	Moorish grounds. About springs.
Bryum nutans, hornum, ventricosum, punctatum,	Thread-mofs.	Moorish places. Moist banks. Marshy places. Trumbland, Roufay.
Hypnum fericeum, ruscifolium, uncinatum,	Feather-mofs.	Dry banks. On stones in brooks. Moist rocks, Hoy.
Fontinalis antipyretica, squamosa,	Water-mofs.	Ditches and rivulets. Rivulets in Hoy.
Polytrichum, commune, nanum,	Hair-mofs.	Boggy places. Dry sandy places.
Jungermannia julacea, undulata, platyphylla,		Hoy mountains. On shaded rocks. Dry rocks.
Lichen frigidus, fragilis, globiferus, uncialis, ericetorum, calicaris, rangiferinus,	Rock-mofs.	Summit of Wart-hill, Hoy. Hoy mountains. Hoy and Roufay. Heaths, common. Turfy heaths, Kirkwall. <i>Stones of Stennis</i> .
hirtus, hispidus, cocciferus, parietinus,	Rein-deer lichen.	Heaths, common. Heathy grounds, Sanda. Rocks in Hoy. On the heaths. On walls.
Ulva compressa,		On the shores, common.

<i>Linnean Name.</i>	<i>English Name.</i>	<i>Localities.</i>
Ulva diaphana *		Cast on shore with sponges.
Fucus filum,	<i>Cat-gut</i> , Orkney.	Bay of Scalpa.
loreus,	<i>Drew</i> , Orkney.	Tirlet shores, Westra.
faccharinus,	<i>Skerter</i> , Orkney.	Deep shores, common.
articulatus,		Sea beach at Newark.
sanguineus,		Beach near Kirkwall.
rubens,		Bay of Scalpa.
sinuofus,		Beach at Scalpa.
plumofus †,		Shore at Deerness.
Byffus purpurea,	Crimson byffus,	Caves in Westra.
æruginea,	Verdegry byffus,	Cathedral of Kirkwall.
Agaricus, cylindricus,	<i>Paddock-stool</i> ,	Waste grounds, Kirkwall.
campestris,	Ketchup mushroom,	Dry pastures, Carness.
Oreades,	Fairy-ring mushroom,	In circles in old pastures.

* Dr Barry includes in his list a species which he calls *Ulva pappilosa*. Perhaps *U. diaphana* may have been intended.

† *Fucus plumofus* grows to a greater size in the Orkney seas than in England. It is described as being there about five inches high; but here I have often seen it exceeding a foot in height.

Besides *Pinguicula vulgaris*, Dr Barry mentions *P. alpina* as being found on the hills of Waes and Hoy. This, I am inclined to believe, is a mistake: at least, the only species I could perceive on the hills of Hoy was *P. vulgaris*, or common butterwort, which in Orkney is known by the name of *Ecclegrafs*.

Panicum Crus-galli, or Loose panick-grass, appears in the Doctor's list; but it ought to be struck out, there being no *Panicum* in Orkney.

Sorbus domestica, or True service-tree, is mentioned by the Doctor as growing in Hoy: but I should strongly suspect that *S. aucuparia*, or *Roan-tree* (*Pyrus aucuparia* of *Flora Britannica*) is the only species to be found there.

Beta vulgaris, which is the garden-beet, is put down in place of *B. maritima*, or sea-beet, which grows on some of the shores of Orkney.

It may be proper to remark, that *Plantago Lœflingii*, and *P. montana*, which, in the Doctor's list, are numbered as distinct species, are only varieties of *P. maritima*, which in Orkney is very abundant in the best sheep pastures, and varies extremely in appearance, according to the soil and situation. *Plantago uniflora* of Dr Barry's list, is *Littorella lacustris* of *Flora Britannica*.

Cochlearia armoracia, or horse-radish, which is contained in the list, has probably only escaped from gardens.

Arabis alpina is not entitled, I fear, to a place in the catalogue. It is not unlikely that *Turritis hirsuta* may be found in Hoy and Rousay, and this may be the plant referred to.

Orobus niger, I suspect, stands in the same predicament. It has not been found in Britain; nor did I observe any species but *Orobus tuberosus* in my Orkney walks.

Imperatoria, or *Martin-wort* (Master-wort) is said by Dr Barry to be found in Hoy; but I saw nothing there which approached nearer to it, than *Ligusticum Scoticum*, or Scots lovage, which grows on the rocks by the sea; and in Sir Robert Sibbald's writings, this plant is described as "*Imperatoria affinis*."

By *Euphorbia fegetalis* is probably meant *E. exigua*; but I did not happen to observe it in Orkney.

Carduus crispus, it may be remarked, is only another name for *C. acanthoides*, the species which immediately precedes it in the list.

Sometimes Dr Barry only gives the generic name: This is the case with *Stellaria*. *S. holostea* and *S. graminea*, Greater and Lesser stitchwort, are both in Orkney.

Lamium

Lamium rubrum, it may be observed in passing, is printed in place of *L. purpureum*. *Mucor cespitosus* in place of *M. septicus*.

Fucus turbinatus is mentioned among the seaweeds. It is a native of the West Indian or American seas, and may have been wafted across the Atlantic, and cast upon the shores of Orkney. *F. natans* is, in this manner, frequently thrown upon these shores.

Some very ornamental plants are to be found in Shetland, which I did not meet with in Orkney. For instance, *Scilla verna* and *Jasione montana* near Lerwick, and in Braffay island; and *Dianthus deltoides*, Maiden pink, in the island of Vailey, observed there by my friend Mr G. Whyte. On the other hand, the elegant little Orkney plants, *Primula farinosa* and *Anagallis tenella*, did not occur in the course of my Shetland perambulations.

Dr Barry enumerates 312 species in his work, but from these, half a dozen may be deducted as spurious. The preceding list contains 156 in addition. So that the Flora of Orkney, at present, includes 462 species of plants; no inconsiderable number for those exposed northern islands. But I have no doubt, that a keen botanical eye, and a more thorough examination of the islands, especially of Hoy and Rousay, would add at least another hundred species.

NO. VII.

List of the Popular Names of some of the principal Birds found in Orkney and Shetland, with their English and Linnean synonymes.

[The uncertainty which attends popular nomenclature is often a source of great perplexity to the naturalist. To him, therefore, this List will not appear an idle or useless compilation. Only those birds which have provincial names in Orkney and Shetland, or which are known by names peculiar to Scotland, are enumerated*. In notes at the bottom of the page, I have introduced a few remarks, which may, perhaps, amuse other readers. To Dr Barry's History, it will be seen, I am indebted for several of the names; some I found mentioned in books; and others I picked up during my excursions through the islands. To those names of birds which I consider as peculiar to our Northern Islands, I have prefixed an asterisk. Most of these are doubtless of Norwegian origin.]

Erne,

* The *Wild Swan*, which is rather an uncommon bird, is thus excluded from my list. Large flocks of swans annually arrive in Orkney and Shetland in the month of October, and spend the winter about the numerous fresh-water lakes in the islands. Early in the spring they take their departure for the peaceful arctic regions, where they may incubate, and rear their young, without molestation. Till within these twenty years, (as I was told in Orkney), a few pairs regularly remained during the summer in the islets of the great lake of Stennis, and there produced their broods. But, about that time, having been much harassed, this little colony finally abandoned this Orkney breeding-place.

On the same account, the *Wigeon*, *golden eye*, *teal*, with the *sand-martin*, *martin*, *house-swallow*, *blackbird*, *thrush*, *common sparrow*, *golden-crested wren*, and others, are omitted.

LIST.

**Erne*, Cinereous-Eagle, *Falco albicilla*.—Besides this species, the Golden-eagle, *falco chrysaëtos*; the Black-eagle, *falco fulvus*; and the Osprey, *falco ossifragus*, are occasionally called Ernes. They all have their eyries in the tremendous precipices of Hoy and Eda.

Gled, or *Greedy-gled*, Kite, *Falco Milvus*.

**Kutabella*, Henharrier, *Falco cyaneus*.—(Hist. of Ork. p. 312.) The *Ring-tail hawk* is the female.

Windcuffer, Kestrel, *Falco tinnunculus*, (Hist. of Ork. p. 312.)

**Katogle*, or *Stock-owl*, Great Eared-Owl, *Strix Bubo*.—(Hist. of Ork. p. 312.) In addition to Dr Barry's account of this bird, it may be added, that it often attacks rabbits and red grouse, which are abundant in several of the islands. *Kat-ugle* is the Norwegian name.

Corby, Raven, *Corvus corax*.—Breeds in Orkney and Shetland, building in inaccessible rocks.

Hoody, or *Chough*, Ruyfston crow, *Corvus cornix*.—This is the most common kind of crow in Orkney and Shetland. The *carrion-crow* sometimes appears: the *rook* scarcely ever. The name *hoody* is here sometimes applied also to the *Pewit-gull*, (Barry, p. 303.)

**Kae*, Jackdaw, *Corvus monedula*. (Hist. of Ork. p. 311.) Often simply called *Daw* in Scotland.

Gouk, Cuckoo, *Cuculus canorus*. (Hist. of Ork. p. 311.) The name *Gouk* is common throughout Scotland. *Gog* is the Norwegian.

**Skeel-goose*, (*supra*, p. 53.) Shieldrake, *Anas Tadorna*.—Some account of its cunning, from which it derives its common Orkney name of *Sly-goose*, has already been given. In Orkney it is sometimes also

also called *skeeling-goose* or *skeel-duck*. In Shetland *scale-drake*. The male of this species is the most beautiful bird of the duck tribe.

**Horra-goose*, or *Horie-goose*, Brent-goose, *Anas Bernicla*. (Hist. of Ork. p. 302.)—The horra-goose is one of the smallest of the wild-geese. It is sometimes called the *rood-goose*; and I suspect that *quink-goose* is another name for the same bird, though this last may possibly be the golden-eye duck, *anas clangula*, (the *quinn-ænd* of Norway), which makes a loud noise, as it flies along, with the vigorous quick strokes of its wings.

**Routheroo k goose*, Bernacle-goose, *Anas erythropus*.—The name *routheroo k* occurs in the old writers on Orkney; but is now nearly unknown in the islands; Dr Barry does not mention it. This was also in former times called *Claikis*, or *claik-goose*. It was this species which was long believed to spring from the bernacle-shells, which are still common in Orkney. Butler (by a poetical licence, no doubt) makes it the *folan-goose*:

“As bernacles turn folan-geese

“In the islands of the Orcades.” *Hudibras*.

Dunter-goose, (*suprà*, p. 22.) Eider-duck, *Anas mollissima*.—This is also called *Colk*; see *suprà*, p. 42.: and sometimes *edder-duck*.

**Caloo*, or *Calaw*, (*suprà*, p. 79.) Long-tailed Duck, *Anas glacialis*.—This has also got the whimsical name of *Coal-and-candle-light*, from a fancied resemblance of its long and plaintive winter-call to these words. The name *caloo* has the same origin. Dr Barry (Hist. of Ork. p. 301.) states the *caloo* to be the *Pintail-duck*; but having been favoured with stuffed specimens from Orkney, I find that it is only the *Long-tailed-duck*.

**Attile-duck*, Pochard, *Anas ferina*.—Dr Barry seems to think, that the “*atteal* is only a variety” of the teal: but, according to the description I received,

ved, it must the pochard, or poker. *Attile* is also a Shetland name.

Stock-duck, Mallard, *Anas Boschas*. (Barry, p. 301.)

**Harle*, Goosander, *Mergus Merganser*.—(Hist. of Ork. p. 302.) I suspect that Mr Pennant and Dr Barry are mistaken, and that the *harle* of Orkney is the *Mergus ferrator*, or Red-breasted merganser. It is curious that *harle* should be the *French* name for the goosander.

**Taminorie*, (suprà, p. 53.) Puffin, *Alca arctica*.—This bird is very common in the Orkney seas: it is there frequently named the *Tommy*; also the *Coulterneb*. In Shetland it is called *tomnorry*. In the south of Scotland it has various names, *willick*, *Bass-cock*, *Ailsa-cock*, *sea-parrot*, *tomneddy*, *cockandy*, *pope*, &c. In the Hebrides it is called the *Bowger*. In Norway the *Lunde*.

**Barwie*, Razor bill, *Alca Torda*. (Hist of Ork. p. 305.) In the Hebrides this bird is called *Falk* or *faik*. It is sometimes called *marrot*.

**Alk*, or *Oke*, Black-billed auk, *Alca Pica*.—Vast flocks of these attend the shoals of herrings. The razor-bill is sometimes also called *alk*.

**Ratch*, Little auk, *Alca Alle*.—In Shetland, *rotch* and *rotchie*.

**Allamotti* †, Stormy petrel, *Procellaria pelagica*.—This is also known by the whimsical name of *Mother Carey's chicken*. It appears chiefly in winter, but it has occasionally been seen in Orkney as late as the beginning of June: Mr James Erskine of Kirkwall, however, who is practically versed in the ornithology of the islands, assures me, that it does not breed in Orkney. Dr Barry must be mistaken, therefore, when he says that it breeds on the rocks, and remains there only during the breeding-season. It is seldom or never
seen

† In Dr Barry's work, the name is printed *Allamonti*, by mistake, in place of *Allamotti*.

seen on land, and not often at sea, except immediately before or during the continuance of a strong gale of wind. It dives very rapidly, and is therefore very difficult to shoot; the interval between the flash and the projection of the shot being sufficient for its escape. In the Hebrides it is called the *Affilag*.

**Malmock, Mallémock, or Mallduck, Fulmar, Procellaria glacialis*.—Appears in the friths of Orkney, and voes of Shetland, especially during winter. It is not mentioned by Dr Barry, and is probably more common in Shetland than in Orkney. During the whole of the winter 1805-6, many fulmars remained in Uyea Sound, Unst, feeding on the *krangs*, or carcases of whales which had been stranded there some months before.

**Lyre or Lyar, (supra, p. 48.) Shearwater, Procellaria Puffinus*.—This is called *Lyrie* in Shetland. In Norway, *Skrabe, or Skraap*.

**Norie, (supra, p. 24.), Cormorant, Pelecanus Carbo*. This is also called the *great scarf*, (Barry, p. 300.); and in the south of Scotland the *scart* †.

Scarf,

† The Cormorant has generally been considered as a very voracious and gluttonous bird. This character has partly been stamped on it, from an imperfect observation of its manners. It possesses, in common with its congener the Pelican of Africa, a large bag or pouch at its throat; and when it goes a-fishing, it catches perhaps two or three mackerel in immediate succession, and deposits them in its bag. Sometimes the pouch is so full, that the tail of the fish is seen hanging out of the mouth of the cormorant. If it were supposed, as is vulgarly done, that the bird was attempting to swallow all this food at a meal, it might well be considered as the emblem of rapacity. But it merely carries the fish to its lodging-place; immediately empties the pouch; and either feeds its young, or satisfies its own hunger. It is certain, however, that it eats greedily; for it is remarked by the sea fowl catchers, that, immediately after a meal, it is lazy and stupid, and makes scarcely any exertion to escape. The poets have improved upon the bad character of this poor bird. Milton, it is well known, pitches upon it as the representative of Satan himself:

“ So

**Scarf*, (*supra*, p. 24.), Shag, *Pelecanus Graculus*.— This is called *scart* in the Frith of Forth; and *scarv* in Norway. The subspecies with a crest, is common in Orkney: In Norway it is termed *top-scarv*.

Solan-goose, (*supra*, p. 53.) Gannet, *Pelecanus Bafanus*. (*Hist. of Ork. p. 300.*)—Gannets are common in the Orkney and Shetland seas, but breed chiefly

“ So clomb this first grand thief into God’s fold :—

“ Thence up he flew, and on the Tree of Life,

“ The middle tree, and highest there that grew,

“ Sat like a Cormorant.” *Parad. Lost*, b. iv.

Mr Graham, again, in his *Birds of Scotland*, sends it “ scouring awa in lang excursion” to the “ blood-stained coast of Africa,” to attend the slave-ships, and watch for the carcasses of murdered Negroes :

“ On distant waves, the Raven of the sea,

“ The Cormorant, devours her carrion food,—

“ Lur’d by the scent, unweariedly she flies,

“ And at the foamy dimples of the track

“ Darts sportively, or perches on a corpse.”—P. 80.

Now, the truth is, that the Cormorant, far from thus hunting after human flesh, will not touch carrion of any kind, but, as above stated, feeds only on the best and freshest fish. In confirmation of this remark, I may observe, that during the time I resided at Airie in Stronsay in 1804, a draught-ox having sickened and died, was dragged to the shore and flayed. The carcass was speedily beset by multitudes of gulls of different species,—the great sea-gull, the herring-gull, the white mew, and others. But, although the headlands and rocks in the immediate neighbourhood, were the resorts and breeding-places of hundreds of cormorants and shags, not one of these approached the carrion; they often flew past it, indeed, without turning aside, or taking the least notice of it. I may further remark, that having, on one occasion, clambered to some of the nests of the cormorants, on the ledges of the rocks which form the promontory called the Brough Head of Stronsay, I found the environs of these nests strewed with innumerable heads and back bones of cod, haddock, coalfish and mackerel, but saw no marks of any other kind of food.—If poetical licence be pleaded, I answer, that the author of the *Birds of Scotland*, professes to unite, (and in general does unite), the minute accuracy of natural history with the charms of poetry; and that such a violation of Nature ought not therefore to appear in his poem.

chiefly on the Stack of Suliskerry †. This solitary, uninhabited islet used to be annually visited for the sake of the seals and sea-fowls which it afforded. The vessel having been wrecked upon the Stack several years ago, the *felchies* and *solan-geese* enjoyed a jubilee till last summer, 1806, when, a new vessel having been equipped, they were again attacked, and were found to have multiplied to an inconceivable degree. In one cave the seals were so numerous that the people found it necessary to let some hundreds escape before they could venture to make an attack. Nests of gannets, gulls, and eider-ducks, covered every part of the rock.

Rain-goose, (*supra*, p. 69.) Red-throated Diver, *Colymbus septentrionalis*.—(Hist. of Ork. p. 304.)

Ember-goose, (*supra*, p. 53.) Immer, *Colymbus Immer*. (Dr Barry, p. 304.)

Great Loon, Northern Diver, *Colymbus glacialis*.—The name *ember*, is also frequently applied to this bird. As its eggs or young have not been found in Orkney or Shetland, the natives very generally believe that it hatches its eggs under its wings, and never leaves the sea. This notion is even countenanced by Pontoppidan, (Nat. Hist. of Norway, vol. ii. p. 80.) Horrebow, however, (Nat. Hist. of Iceland, Lond. 1758), gives us a much more rational account: “The *lom*” (or northern diver) “is unmolested; for the people give themselves no trouble to look after its nest or brood, neither their flesh nor eggs being fit to be eaten. They build in remote places, near fresh water.”

Loon, Speckled diver, *Colymbus stellatus*.—(Barry, p. 304.)

**Toist*, *Tyst*, *Taiste*, (*supra* p. 22. 42.) Black Guillemotte, *Colymbus Grylle*.—In Shetland it is called *Teisty*. In the south of Scotland it is called *Greenland-*

† *Sule* is the Norwegian name for a gannet, and *skerry* means rock.

land-dove, sea-turtle, and puffinet. In the Hebrides, *scraber*. A spotted variety is sometimes found.

Scout, Foolish Guillemot, Colymbus Troile.—(Barry, p. 305.) This is the *lavy* of the Western Islands.

Kittiwake, Larus Rissa and Larus tridactylus.—Also called *kishifaik*. See note on *Tarroch* or *pictarny*.

**Scaurie* or *Scorey*, young of the Herring-gull, *Larus fuscus*.—Dr Barry (p. 303.) correctly states the *scorey* to be *larus nævius* of Linnæus; but this Linnæan species is now incorporated with *L. fuscus*, being found to be only the young of that species.

Black-head, Pewit-gull, Larus ridibundus.—*Black-head* is a Shetland name. This gull is also sometimes called *Hooded-crow*.

**Swart-back, Great black-backed gull, Larus marinus.*—(Hist. of Ork. p. 304.) This is the largest of the gull tribe. In Shetland it is called the *fwabie*. In Norway, *Swart-bag*.

**Scouti Allan, or Scoutiaulan, Arctic gull, Larus parafiticus.*—This bird is sometimes simply called the *Allan*; sometimes the *Dirten-allan*; and it is also named the *Badoch*. It breeds on the hills of Orkney among the short heath. In August 1804, we saw many of them chasing the white mews and kittiwakes, in the outer harbour of Stromness; for they pursue and harass all the small gulls, till these last disgorge or vomit; they then dexterously catch what is dropped, ere it reach the water. The common names are derived from the vulgar opinion that the small gulls are *muting*, when they are only *disgorging* fish newly caught; and it is observable, that the arctic gulls never chase the others but when they find them fishing.

**Bonxie, (supra, p. 90.) Skua-gull, Larus Cataractes.*—This is the Port Egmont Hen of our circum-

navigators. It breeds chiefly in Foulah, but has been also shot in Unst. See Dr Traill's description, App. No. IV. p. 160. It is also called *skuie*.

**Tarrock* †, or *Pictarny*, (*supra*, p. 42.) Sea-swallow, *Sterna Hirundo*.—This bird is known by a great variety of names, most of which seem to be imitations of its different calls. In Orkney it is generally named the *rittock* or *rittock*, (Barry's Hist. p. 303.); sometimes the *tarrock* or *tarriet*. In Shetland it is commonly called the *rippock*; sometimes the *tirrick* or *tarrack*. In both sets of islands, as well as in the south of Scotland, the names *kirmew*, *tarney*, and *pičternie* or *picketarnie*, are occasionally applied to it. In England it is called the *tern* or *sea-swallow*. In Wales, the *spurre* and the *scraye*. In Norway, *tæn*, *tærne*, *sand-tærne*.

**Hegrie* or *Skip-hegrie*, Heron, *Ardea major*.—This is the common name in Shetland; but I do not recollect to have heard it used in Orkney. *Heyre* or *begre* is the Norwegian.

Hoarse-

† In his History of Orkney, (p. 303.) Dr Barry says, "The *tarrock*," (*i. e.* the tarrock of Pennant), "*Larus tridactylus* Lin., seems to be our kittiwake; it is by far the most common of the gull kind in this place: indeed, to such a degree does this species cover the rocks with its numbers, that they appear white at a distance." The kittiwake (or, as it is sometimes called, *kisbifaik*) is now admitted to be the *larus rissa* of Linnæus, and the description here given of its gregarious numbers is just and applicable; and ornithologists seem now to be agreed, that the *Larus trydactylus* of Linnæus is merely the kittiwake before it have attained its full growth. The tarrock of Orkney is, as already stated, the *sterna hirundo* of Linnæus, and to it, the above account as to numerous flocks does by no means apply. Mr Pennant, it appears, had adopted the name *tarrock* from Willughby; and on turning to that author, (*Ornithologia*, Lond. 1675, p. 263.), I find, that *tarrock* is a provincial Cornish name for the young of the kittiwake. When Dr Barry mentions the tarrock, therefore, he must be understood as speaking of the Tarrock of Cornwall (*larus trydactylus*), not the Tarrock of Orkney (*sterna hirundo*).

**Hoarse-gouk* or *Horse-gauk*, Snipe, *Scolopax Gallinago*. (Hist. of Ork. p. 307.)—Very plentiful in the moist moorish pastures in Orkney. *Horse-gog* and *Rof-gauk* are Norwegian names for birds of the snipe kind.

Whaap, or *Stock-whaap*, Curlew, *Scolopax arquata*.

**Tang-whaap*, Whimbrel, *Scolopax Phæopus*.—This species is omitted by Dr Barry.

Half-web, Grey phalarope, *Tringa lobata*, (p. 43.)

**Tee-whaap*, Lapwing, *Tringa Vanellus*.—In the south of Scotland this bird has several names, which, like *tee-whaap*, are imitations of its querulous call; *peeseweep*, *peewit*, *teewit*, *teuchit*, &c. It is also called *green plover*.

Sand-lark, Ringed plover, *Charadrius Hiaticula*.—(Barry, p. 306.)

**Chaldrick*, (*supra*, p. 24.) Sea-pie, *Hæmatopus ostralegus*.—This bird is in Orkney also called *scolder*, *skeldrake*, and *skelder-drake*, probably from its incessant shrill discordant call when disturbed, which may not unaptly be compared to what the lower orders in Orkney term *skeldering*, or scolding. In Shetland it is generally called *chalder*. In the Hebrides *tirma* and *trillichan*. In Norway, *kiæld*, *tiæld*, or *glib*.

**Snytb*, Coot, *Fulica atra*.—Loch of Aikernefs, &c. (Hist. of Ork. p. 300.)

Corn-crake, Land-rail, *Rallus Crex* †.

Teeting

† The land-rail is exceedingly abundant in Orkney, and is also pretty common in Shetland. It appears in the end of April, and disappears in October. It has generally been considered as a migratory bird :

“ Behold the corn-crake ; she too wings her way
 “ To other lands ; ne'er is she found immers'd
 “ In lakes, or buried torpid in the sand,
 “ Tho' weak her wing contrasted with her bulk.”

GRAHAM.

I made

- **Teeting*, Titlark, *Alauda pratensis*. On the heaths in Orkney.
- **Stare*, Starling, *Sturnus vulgaris*. In Orkney and Shetland common. It is sometimes called *Stirling*. In Norway, it is the *staer*.
- Feltifer*, Fieldfare, *Turdus pilaris*.—Feltifers only spend a few days in Orkney and Shetland in their way southward in autumn.
- **Snow-fowl*, *Snow-flake*, or *Oat-fowl*, Snow-bunting, *Emberiza nivalis*.—Vast flocks of snow-fowls spend the winter in the Orkneys. It is the *snee-fugl* of Norway.
- Chack*, or *Check*, Wheat-ear, *Motacilla Oenanthe*.—(Hist. of Ork. p. 308., where the English name is printed *white-ear* in place of *wheat-ear*.)

NOTES.

I made frequent inquiry whether corn-crakes had been seen to migrate from Orkney; but could not learn that such a circumstance had been observed. It is the opinion of the inhabitants, indeed, that they are not able to undertake a flight across the sea. Mr Yorston, the farmer at Aikernefs, further related a curious fact, rather leading to the conclusion that they do not migrate. In the course of demolishing a *bill-dike*, (*i. e.* a mud-wall) at Aikernefs about midwinter, a *corn-crake* was found in the midst of the wall: it was apparently lifeless, but being fresh to the feel and smell, Mr Yorston thought of placing it in a warm situation, to see if it would revive. In a short time it began to move, and in a few hours it was able to walk about. It lived for two days in the kitchen, but would not eat any kind of food. It then finally died, and putrefied.—I do not assert that this solitary instance ought to be regarded in any other light than as an exception to the general rule of migration, till further observation have determined the point.

 NOTES.

NOTE A. (p. 13.)

AGRICULTURAL SOCIETY OF ORKNEY.

I AM happy to have it in my power to mention, that a number of the landholders and principal farmers in Orkney, sensible of the low state of husbandry in the islands, and desirous of its improvement, formed themselves into an Agricultural Society at Kirkwall, in the beginning of the year 1805. The Society, I am informed, now consists of about seventy members. Mr Malcom Laing, advocate, (an extensive proprietor in Orkney), is preses: Dr Monro of Kirkwall, vice-preses: Mr Mitchell, writer in Kirkwall, secretary. Hitherto, indeed, the Society has done very little; but I understand it is speedily to commence more extensive operations; and important beneficial consequences will doubtless result from any example it may set, in promoting draining, inclosing, planting, &c. by offering premiums, and otherwise. No lands in Scotland, it is believed, are more capable of melioration than some districts of Orkney. I shall here only observe, that it will first of all be necessary that the landlords grant long leases; and, in these, stipulate with their tenants as to draining, ditching and fencing, or rather engage to aid them in accomplishing such indispensable steps towards improvement.

Most of Sir Alexander Seton's remarks on the means of improving Shetland, (from p. 175, to p. 180.), are equally applicable to Orkney.

The notice of Lord Meadowbank's theory of *peat-composts* at p. 176. being rather short, and not perfectly

perfectly distinct, the following explanation is added from the first authority. “ Even *till*, or a sub-soil of coarse clays and sand, when spread on drained peat, has been found to produce very quickly a kindly grass; but there can be no doubt that the addition of a little shell-marl would prove highly beneficial. And according to Lord Meadowbank’s experiments, it is proved, that peat laid up with a fourth part of farm-yard dung into a compost dunghil, or with a still less proportion of the refuse of fisheries, or any other animal substance, from a tenth to a twentieth, undergoes a powerful fermentation, which renders it, in four months in the former case, and in twelve months in the latter, a powerful dung, even without the aid of lime or marl; which, however, if mixed in very small quantities with the compost, to the extent of $\frac{1}{25}$ th part or so, was found to hasten the preparation of the peat. And these composts have been found to raise potatoes and carrots equally well with farm-yard dung, when laid on drained peat-fields, and to afford a succession of crops that gradually prepared a soil for oats and grass.”

NOTE B. (p. 30.)

KELP AND BARILLA.

The theory of the production of the soda in kelp is not yet well understood. Gren and La Métherie affirm, that soda exists ready-formed in marine plants. Jacquin, on the contrary, says, that only sea-salt is present, the soda being produced by the pyro-lignic (or acetous) acid decomposing the sea-salt; and in proof of this he mentions, that when the *salsola* plant was raised in inland situations, its ashes yielded only potash. From a series of experiments, (detailed in the “*Annales de Chimie*” for 1791) Bouvier concluded, that no uncombined alkali is present in marine plants; but his experiments were made on the *fuci* only, or plants which grow *immersed* in the sea. The experiments

experiments of Vauquelin (“*Annales de Chimie*” for 1793) decided the question as far as regards the *salsola soda*, which grows on the sandy shores of France, and, by analogy, other saline vegetables growing on the land. He found, “*que la soude existe toute formée dans la salsola, et que le feu ne fait que la développer,*” by separating the other principles of the vegetable. The fuci or sea-weeds are doubtless less complete plants than the different species of *salsola*, *salicornia*, &c. which grow on the land, and from which *barilla* is prepared; yet as they do *vegetate*, we may perhaps suspect an inaccuracy in Bouvier, and extend Vauquelin’s doctrine to them also. If Bouvier be correct, it is evident that the *soda* found in kelp must be derived from the muriate of *soda*, decomposed either by the acetous acid, or, what is more likely, by the potash present, during combustion and fusion. Upon the whole, it may be regarded as extremely probable, that, in the case of sea-weeds, the muriatic acid is partly discharged by the vegetation of the plant, and that a portion of *soda* comes thus to exist ready-formed in it; or at least, that the state of combination is so altered or modified by the process of vegetation, as to enable heat alone to effect the disengagement of the acid. If vegetation have no effect, as Bouvier would lead us to conclude, one might almost expect to procure kelp by incinerating any kind of vegetables, or even old linen, that had been thoroughly drenched in sea-water.

Various tests have been prescribed for ascertaining the value of a cargo of kelp. One method proposed by Mr Kirwan is a very simple one, viz. To determine what quantity of pure *soda* is requisite to saturate a certain quantity of sulphuric acid, of one specific gravity: then to try what weight of the kelp is requisite for that quantity of the acid. This plan would, no doubt, nearly ascertain the quantity of *alkali* present; but it would not determine the quantity of *soda* present: it is, in short, a test that

that might be employed by the glass-maker or the bleacher, but not by the soap-boiler. Further, as the sulphuric acid might decompose portions of the muriate of potash and the muriate of soda, which are always present, we might perhaps be led to reckon the kelp richer in *soda* than it would prove to be when merely dissolved in boiling water.

More lately, Mr Kirwan has proposed a more exact method,—by adding a solution of a certain quantity of alum to a solution of a given portion of the alkaline substance, and weighing the precipitate. For the details of the process, see Irish Transactions 1789, or Henry's Epitomé of Chemistry, 8vo. p. 389.; where the means of ascertaining the proportional quantities both of the mineral and vegetable alkali present, are pointed out.

Fucus vesiculosus, or yellow bladder-wrack, has been generally considered as the sea-weed most productive of alkali; but Dr Traill informs me, that experiments made by him in Orkney led him to conclude, that *fucus digitatus*, or great tangle, is the richest kelp-weed. He employed only the leaves of the tangle.

While successful attempts have been made to cultivate the fuci, by rolling into sandy bays large blocks of limestone or whinstone, which in three years become thickly covered with *fucus nodosus* and *vesiculosus*, (with the seeds of which the sea seems to teem), it has often appeared to me surprising, that no attempt has been made to convert the salt-marshes and dry sandy shore of Britain to profitable use, in producing native saline plants from which barilla might be prepared. In the salt-marshes, *salicornia herbacea* and *fruticosa*, (marsh samphire), with *aster tripolium* (the only star-flower indigenous to Britain), might easily be cultivated, and these plants taste strongly of sea-salts. On the dry sands, might be sown *salsola kali* or prickly glasswort, with *bunias kakile* or sea-rocket, and *arenaria peploides* or sea-chickweed. All these are

are native plants; but probably some others might without much difficulty be introduced and naturalized. It may be proper to state, however, that Pallas * has thrown some doubt on the fitness of *falicornia herbacea*: “On s’imagine (he observes) “qu’ on peut tirer la soude de cette simple, ainsi que “de la plupart des plantes salines; mais les essais faits “à Orenbourg ont prouvé que cette plante contient “trop de sel commun.”

NOTE C. (pp. 39. & 62.)

GREY-FISH, OR COALFISH.

The coalfish, in the different stages of its growth, being found in vast abundance on most of our shores, is known by a greater number of names than perhaps any other fish. In Orkney and Shetland, the fry are called *fillocks* or *sellocks*; at Edinburgh, *podleys*; and at Scarborough, *pars*. The year-old coalfish is the *cooth* of Orkney; the *piltock* of Shetland; the *pollock* of the Hebrides; the *glasscock* of Sutherland; the *cuddie* of the Moray Frith; they *grey-podley* of Edinburgh; and the *billet* of Scarborough. The appearance of the coalfish varies much with its age: hence a new series of provincial names. In Orkney it is 1. a *fillock*; 2. a *cooth*; 3. a *barbin*; 4. a *cud-den*; and, 5. a *setbe*. The full-grown fish is also, in different places, termed a *sey*, a *grey ling*, a *grey lord*, &c.

In Dr Campbell’s Political Survey, under the article *Shetland Islands*, it is stated: “As for fillucks “and piltocks, which are a kind of small whales, “the meaner sort live on their flesh, such as it is.” As above observed, the *fillock* is the young fry of the coalfish, and the *piltock* the same fish a year old. The Doctor has probably been led into the ludicrous mistake of describing them as “small whales,” from

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the

* Voyages, tom. i.

the similarity of the name *piltock* (or *pillock*, as it is sometimes pronounced), to *palach*, the name by which the porpeffè is universally known in the Orkney and Shetland islands.

NOTE D. (p. 46.)

AIKERNESS.—WINTER-FODDER.

The remarks to be found on the subject of winter-fodder in Sir Alexander Seton's letter, p. 176., and which are equally applicable to Orkney as to Shetland, supersede in a great measure those which I meant here to have introduced. The hay which I saw preparing at Aikerness, was truly coarse; but in many places, no store of fodder whatever is provided, but the horses and cattle are turned adrift in mid-winter to seek their food on the dreary hills and moors. The Meadow soft-grass, (*Holcus lanatus*), though not one of the best pasture-grasses, deserves perhaps the attention of Orkney improvers: The seed being abundant, could be easily collected: it affords a sure and ample crop, and might probably be sown on poor chilly exposed soils with much greater advantage than Dutch clover and rye-grass seeds,—which, after costing considerable sums in the south, are here sometimes nearly thrown away on soils not congenial to their growth.

Dr Graham of Aberfoil, I observe, recommends the culture of *Holcus mollis* in an earnest manner. He says, "It is particularly grateful to cattle. It has broad leaves. It spreads, and forms horizontal stools from 14 to 18 inches in diameter; and from the abundance of its seeds, and its disposition to multiply by shoots, it seems peculiarly fitted for covering the ground expeditiously*." From the whole description and account of this grass,

* Communications to the Board of Agriculture, vol. iv. p. 197.

grafs, it would appear that it is the Meadow soft-grafs or *Holcus lanatus* (above mentioned) that is intended to be recommended. Indeed the *Holcus mollis* is a much less common plant; and though it has creeping roots, yet only one stalk arises from each plant; while a single plant of *H. lanatus* forms a tuft from which numerous stalks arise. *Holcus mollis* grows naturally on dry soils, generally in corn-fields; while *H. lanatus* prefers wet soils, and, as Mr Swayne, in his *Gramina pascua*, observes, flourishes on “moist turf or peat land.”

NOTE E. (p. 57.)

GROWING OF TIMBER IN ORKNEY AND SHETLAND.

The circumstance of the shores of Norway being clothed with fir-trees*, is doubtless a strong analogical argument in favour of the practicability of raising timber in the Orkney and Shetland islands.

“In respect to the soil,” (says the Bishop of Bergen †), “it is not the good, rich and black earth, that favours the fir-trees; nor the clayey soil; but rather the gravelly, sandy, or moorish lands.” This is an observation well calculated to inspire hopes of success.

Thousands of young fir-plants are cut, every spring, by the peasants of Norway, for food to their cattle. It would not probably be difficult, therefore, to procure quantities of saplings from that country. But if this were found to be too troublesome, it may be suggested that the ripe cones might be brought over (and these could easily be collected), and that the seeds might, by way of trial, be sown where the trees were intended to grow. This simple plan might possibly

* The fir-trees of Norway are, I find, the *fure* or spruce, *pinus abies* (not the silver-fir, as supposed at p. 57.); and the *gran* or pine, *pinus sylvestris*, well known by the name of Scots-fir.

† Nat. Hist. of Norway, vol. i. p. 143.

possibly be found preferable to raising the plants in nurseries or gardens in the islands. We should, in such cases, adopt every approximation to the methods of nature. Pontopiddan even suggests, that instead of inserting the seeds in the soil, it would be better to hang the branches, containing the cones, upon poles at different distances, and to allow the seeds to drop out and sow themselves. At any rate, the seeds might be merely raked in. The experiment might be tried on any piece of dry rocky land (an acre or more), which could most easily be protected from the inroads of sheep or cattle, the exclusion of these being indispensable. The seeds might be sown very close; and if only one in ten or twenty were to vegetate, (and that is not a very sanguine expectation), a flattering foundation would be laid for ultimate success.

Having mentioned this subject to Mr JAMES HOY at Gordon Castle, he observed to me, that "it is remarkable that trees thrive naturally on the *west* coast of Scotland, as well as on the *west* coast of Norway, in some places very nearly down to the sea side; while, in several places on the *east* coast of Scotland, they cannot be reared at all; and therefore whatever cause of difference may lie in the *soil*, it would appear that much is owing to *exposure*. The exposure to strong, sweeping unchecked winds, seems to be the chief obstacle to the raising of timber. Hills act upon the wind as a dam-dike does on a running stream, in producing considerable stillness or even calm upon the side from which the current flows. This consideration should induce planters to begin always at the bottom of hills, and extend their plantations gradually towards the sea. A hedge upon the side next the sea, though desirable, could scarcely perhaps be reared of any tree or plant. *Hippophae rhamnoides* (sea buckthorn) might be tried: but *Sambucus nigra* (elder bush) would probably be found preferable."

For

For the raising of larch, ash, sycamore, and others, nurseries should be established in the islands themselves; it being certain that plants resemble animals in becoming gradually habituated to particular climates and soils.

In places where *Salix acuminata*, *S. arbuscula*, *aquatica*, and others, grow, various willows might be cultivated, suited for wicker-work and cooperage. *Salix fragilis* or crack-willow would grow freely; it makes large shoots every season, and bears cropping admirably. It answers well for making crests, cradles, and large baskets. The name *fragilis* only intimates that the annual shoot is very easily detached from the trunk, the twig itself being very flexible and tough. *Salix viminalis* or common osier, also grows very freely, and is much in request by coopers. *Salix Helix*, or rose willow; *S. triandra*, or long-leaved osier; and *S. vitellina* or yellow osier, would doubtless succeed, and they are all employed in basket-making. To these might be added *S. Forbyana* or basket osier, for the nicer kinds of work; and *S. Ruffelliana*, which would be very useful not only for making crests and creels, but in tanning,—the bark being superior for this purpose perhaps to oak-bark. A decoction of it would form an excellent liquor in which to steep their herring nets.

NOTE F. (p. 61.)

MOLUCCA BEANS.

I have lately observed a paper “on the beans cast ashore in Orkney,” in *Philosophical Transactions* 1696, No. 222. by Sir Hans Sloane. He mentions three kinds as pretty common: the Cocoon; the Horse-eye-bean; and the Ash-coloured nickar. The two former are the kinds which I got in the islands, in 1804. The *cocoon* of Sloane is evidently the seed of the *Mimosa scandens* of Linnæus, the *Gigalobium* of

of Brown's "Jamaica." It is the largest of the beans figured in Wallace's "Description of Orkney," 1693. 2. The *horse-eye-bean* of Sloane is distinctly the seed of *Dolichos urens* *Lin.*; the *Zoophthalmum* of Brown, who calls the seed, *ox-eye-bean*. This is the smaller bean figured by Wallace, and is easily known by the hilus or welt which surrounds it, and which gives it somewhat the appearance of a horse's or ox's eye. 3. The *ash-coloured nickar* is the seed of the *Guilandina bonduc* *Lin.* It is not so commonly found as the others. It is a perfectly round hard seed, little larger than a musket-bullet.

NOTE G. (p. 72.)

HERRING-FISHERY.

This immense field for industry,—this inexhaustible source of wealth,—has been often described; but still it is in a great measure neglected; at least we certainly do not derive from it those vast advantages which it is calculated to afford, and which it did, for a very long series of years, afford to the States of Holland. At a moment when we are listening to the eloquent and plausible, but I fear seductive and dangerous arguments of the Earl of Selkirk in favour of emigration, I cannot omit this opportunity of very briefly calling into view the extent and the value of this fishery, which, if duly prosecuted, would afford cheerful and profitable employment at home, to any number of those deluded men who are every year abandoning their native country, in quest of imaginary happiness and riches in the woods and fens of America;—and I presume it will at once be conceded, that ten or twenty thousand Scotsmen engaged in the Shetland herring-fishery, would, in this eventful period, be a much more agreeable object of contemplation to the mother country, than the finest imaginable settlement

in Prince Edward's Island, or on the banks of the St Lawrence.

It is scarcely possible to form an idea of the immensity of the grand northern shoal of herrings which approaches the Shetland Islands every month of June. "The flocks of sea-birds, for their number," it has been observed, "baffle the power of figures:"

—Where the Northern Ocean in vast whirls
Boils round the naked melancholy isles
Of farthest Thule;—
Who can recount what transmigrations there
Are annual made? what nations come and go?
And how the living clouds on clouds arise?
Infinite wings! till all the plume-dark air
And rude resounding shore, are one wild cry*.

"But the swarms of fishes, as if engendered in the clouds, and showered down like the rain, are multiplied in an incomprehensible degree. Of all the various tribes of fishes, the Herring is the most numerous. Closely embodied in resplendent columns of many miles in length and breadth, and in depth from the surface to the bottom of the sea, the shoals of this tribe peacefully glide along, and, glittering like a huge reflected rainbow or aurora borealis, attract the eyes of all their attendant foes †."

Let it not be thought that this swelling description exaggerates the amount of the shoals: let it be coolly considered that for more than a century the Dutch annually loaded above a thousand decked vessels out of this grand northern shoal, and yet that this immense capture never in any year sensibly diminished the number of herrings around Shetland, which, after these foreigners were glutted, regularly continued to press forward toward the islands in vast bodies, frequently crowding into every creek and bay!

The

* Thomson.

† Bewick, *Introd.*

The Dutch, it is well known, accounted this fishery their "gold mine." It seems generally agreed among authors, that it yielded them, for a long course of years, L. 3,000,000 Sterling yearly. Dr Campbell, after premising that the value of the Dutch fishery has often been exaggerated, and that he will therefore give a "modest computation," proceeds thus: "It would however be no difficult thing to prove, to the satisfaction of the candid as well as critical inquirer, that, while it continued to flourish in their hand, they drew from their fishery out of the ocean washing the coast of Shetland, to the amount of TWO HUNDRED MILLIONS Sterling*." From 1500 to 2000 sloops were employed in fishing: this gave occasion to the freighting of 6000 more; and thus the herring-fishery gave employment and subsistence to above a hundred thousand persons †.

Captain Smith, who was sent to Shetland so long ago as 1633, expressly to report on the Dutch fishery, says, "I was an eye-witness of the Hollanders' buffes fishing for herrings on the coast of Shetland, not far from Ounst, one of the northernmost islands. Demanding the number of them, I was informed that the fleet consisted of 1500 sail, of 80 tons burden each, and about 20 armed ships, carrying 30 guns a-piece, as convoy." The conclusion drawn by the captain, is quite characteristic of a British sailor: it is stated with much spirit, and though his plan is not a practicable one, his language forcibly shews how strongly his mind was impressed with the vastness of this fishery, and the absurdity of neglecting it: "If the King ‡ would send out such a fleet of buffes for the fishing-trade, being in our own seas, and on our own grounds, and
all

* Political Survey, vol, i. p. 696.

† Ibid.

‡ Charles I.

all strangers were discharged from fishing in those seas, that the subjects of the three kingdoms only may have it, it would make our king rich and glorious, and the three kingdoms happy; not one would want bread,—and God would be praised,—and the King loved.”

About half a century ago, the herring-fishery on the coast of Shetland was very successfully prosecuted by some English companies. But, through unaccountable mismanagement, it has for many years past been abandoned. At present, also, owing to the troublous state of the North of Europe, this fishery is more neglected by foreigners than at any period during the last two centuries. Very few Danes, Swedes or Prussians, I understand, now make their appearance. The French and Dutch dare not. A few sloops from ports on the east coast of Scotland are scarcely worth mentioning.

With respect to local position, the Shetlanders themselves are best situated for carrying on this fishery: But owing to poverty, the tenants or fishers are quite unable to engage in it: they can only take a few hundred barrels of the inferior kind of herrings which enter their *voes* in harvest. In summer 1804, a scarcity approaching to famine prevailed in Shetland; yet herrings, in countless myriads, were known to be off Unst. How deplorable to think that the people should starve while there was, at the same time, a “waste, at their doors, sufficient to feed half the human race!” The capital requisite for the purchase of sloops, nets, salt and casks, in order to an effectual prosecution of the fishery at sea, would, it is believed, exceed the ability even of most of the Shetland lairds.

From Shetland, however, this fishery, if undertaken by English or Scots companies, could best be carried on. It would here be accompanied with least trouble and risk of delay, and with least expence. Shetland is near to the scene of the fishery: the Shetlanders are remarkably patient of fatigue in
E e fishing:

fishing: they are accustomed to very sorry accommodation: and being habituated to indifferent fare, would not require that expensive victualling which is indispensable to an English crew.

The rules observed by the Dutch curers are now generally known*, and in some degree practised. But still it would probably be of considerable advantage if the influence of Government were employed to encourage some fishing-families from Holland to settle in Shetland. A few Dutch curers thus dispersed among the British smacks, might prove exceedingly useful.

May it not be hoped that some opulent English and Scottish companies,—under the fostering care of a paternal Government,—will undertake this Shetland fishery on a great scale,—a speculation which, if persevered in, would surely, in the event, become exceedingly profitable. The Hamburgh market alone would take off the produce of a hundred sloops, except the taste for Shetland herrings has declined in the north of Germany. There is a great demand for herrings from our West India colonies, for the food of Negroes; and the home consumption would surely not be inconsiderable. If every inhabitant of the island were to eat only *two* herrings in the year, it would open a market for the produce of another hundred sloops, even supposing them to fish with the greatest possible success. The herring-fishery is an undertaking, indeed, of national importance, not merely as a source of wealth, but as an additional nursery for our navy.

If this fishery were to be extensively carried on from Shetland, some additional villages would become necessary, and winter employments would be wanted. The manufacture of herring-nets might properly and advantageously occupy many during the

* They are printed in the Transactions of the Highland Society of Edinburgh, vol. ii. 328—345.

the winter: and with this, might commodiously be joined the manufacture of lines for the cod and ling fishery.

To these very cursory and imperfect hints on the importance of this fishery, I shall subjoin a few remarks connected with the natural history of the Herring, for the principal part of which I am indebted to my friend Dr HALLIDAY of Edinburgh, (now of Halesworth in Suffolk).

I am aware that Dr Anderson, in his *Agricultural Recreations*, has rendered it highly probable that the herrings, instead of rendezvousing near to the North Pole, as was formerly imagined, only retire a little way from our coasts, or sink deeper in the sea, at particular seasons. He remarks, That the fishery commences sooner in some *southern* bays, than in others that are more *northerly*: That the return of the grand shoal to the northward is never observed: That from peculiarities in the shape and size of the herrings at different fisheries, it is evident that the herrings of the same breed, or partial shoal, return annually to the same shores: and, that they do not retire towards the North Pole to spawn, as was formerly imagined; but on the contrary, are taken on our coast, both when full of roe, and immediately after spawning, when the fry are seen.

This last observation of the Doctor's is undoubtedly correct. The fry is, at particular seasons, seen in the Orkney and Shetland seas in incredible numbers: it is then called the *herring-foil*, and is accompanied by thousands of the smaller gulls and divers.

The growth of the fry is very rapid; it has been watched by Dr Halliday, who informs me, "that on the western shores of the Isle of Mull, he has observed, in the months of March and April, the herring-spawn which was accidentally entangled by the

the cod-lines, to be vivified ; the two eyes and head of the herring being then discernible ; and that this spawn was raised by those lines only, which were set on the banks at some distance from the shore. In a fortnight, however, he observed the fry, about an inch in length, in great swarms close by the shore ; and in six weeks they were three inches long."—Hence Dr Halliday concludes, that it is possible the herring may attain its full growth in one year, instead of requiring three, as Dr Walker and others have supposed.

Dr Halliday further informs me, that he has observed that the herrings leave the western shores of Mull when about six weeks old, and steer to the northward : but that they do not go many leagues from land, he considers as beyond doubt. He conceives that some place not far distant from the island of Unst may be their rendezvous or grazing-ground, (if we may be allowed the expression) :—That during the harvest and winter they keep near the bottom, where they feed and grow to maturity : that in the spring they collect, rise to the surface, and begin to move off in various directions to the southward, for the purpose of spawning.

As already remarked, they do not deposite their spawn near the shore, but in the middle of the lochs or bays, or on the banks which are generally to be found at the mouths of the lochs. If, however, they are frightened from the spawning ground, they fly towards the shores, and are then full of roe ; but they soon retire again, and do not return till freed from their load. They then range along the shores for some time, and at last retire towards the north, following the fry of the former years.

It may be proper to add, that it is frequently observed on the western coast of Scotland, that a few weeks after the first shoal has left the lochs, a second shoal enters them, in full roe. This second shoal appears in the end of October or beginning of November :

vember : they deposite their spawn and leave the lochs as before. It is possible that the fry which leaves the coast in the beginning of May, may be the same that returns to it next year about the same period, and that these may proceed from the spawn deposited in the latter end of the season ; while the fry of the June spawn having got off before the winter commenced, may return the following November ;—thus allowing, from the depositing of the roe, to the maturity of the herring, eighteen months.

NOTE H. (p. 76.)

UYEA SOUND WHALES.

By a letter from a gentleman at Uyea Sound, Unst, I was informed, that “ on the 21st February 1805, no fewer than 190 small whales, from six to twenty feet long, were forced ashore at Uyea Sound ; and on the 19th March thereafter, 120 more at the same spot ; in all, 310. In this second shoal there were probably about 500, but very many escaped.” To a series of queries addressed to the same gentleman I received in substance the following answers. “ They measured from 6 to 24 feet in length : the small ones appeared to be the young of the others. They had two long and narrow pectoral fins, from between 4 and 5, to even 9 feet long. They remained at the surface of the water 10 or 15 minutes, just as the boats were near or distant. They had one small fin on the back. The people called them *bottle-noses*, and *common black whales*, but most generally *ca'ing whales*. They had a row of teeth, $1\frac{1}{2}$ inches long, in both jaws, about two dozen in number in each jaw. The upper jaw was rather the widest. They had no whalebone in the mouth, and had only one blow-hole, situated in a small hollow at the back of the head. Most of the females
were

were either with young or giving suck. Many of the young ones had got no teeth. They had all very fine black skins, as soft and smooth as silk. They appeared to be very inoffensive animals, and shewed much natural affection for each other: When any one first struck the ground, it set up a kind of howling cry, and immediately others crowded to the spot, as for its relief. *Sandy giddocks* (sand-lances) were found in their mouths." From information furnished by another gentleman, I further learned, that "from the tip of the nose to the last vertebra of the back-bone, the generality of the whales measured 20 feet: that the head was short and round, resembling in shape the head of a seal; and that the upper jaw projected three or four inches over the lower."—"Numbers of the females (this gentleman adds) were suckling their young when driven ashore; and while they continued alive, the milk was seen to issue from their nipples: of these they had only two, resembling the teats of a cow, but larger."

This kind of whale sometimes appears, in large herds, off the Orkney, and especially the Shetland islands. Being of a gregarious disposition, the main body of the drove follows the leading whales, as a flock of sheep follows the wedders. Hence the name *ca'ing whales*, bestowed on them by the natives, who well know that if they are able to guide the leaders into a bay, they are sure of likewise entangling multitudes of their followers. Though the above description proves that they belong to the genus *Delphinus*, and are nearly allied to the *Delphinus Orca* or *Grampus*, they appear to me to differ in several respects from that, or any of the other species described by naturalists,—so much at least, as to deserve the attention of gentlemen who may hereafter enjoy opportunities of accurate observation.—I shall briefly enumerate the points of dissimilarity.

The

The grampus has the snout "spreading upwards" according to Shaw *; "waved upwards" according to Stewart †; "sursùm repando," as Linnæus expresses it. But this character was not to be found in the *ca'ing whale*, in which the nose was neither spread nor turned up at end, but rounded and dropping. But I must remark that La Cépède (the able continuator of Buffon's "Histoire Naturelle," and whose general accuracy is great) takes no notice whatever of the "waving or spreading upwards," the "sursùm repando," mentioned by preceding authors.

In the grampus, according to Shaw, "the lower jaw is much wider than the upper:" in the *ca'ing whale*, however, we find that "the upper jaw was rather the widest."

The grampus is said, in books, to have 30 teeth in each jaw: the Uyea Sound whales had only 24 in each jaw. But La Cépède remarks, that the number of visible teeth varies with the age of the animal.

In Dr Shaw's figure of the grampus (which, I must confess, is inferior in accuracy to that of La Cépède), the pectoral fins are short and round; according to La Cépède, they are "larges et presques ovales ‡." In the *ca'ing whale* they are said to be "long and narrow,"—thus bearing more resemblance to those of the *Delphinus gladiator*, (to be afterwards spoken of.)

"The back-fin," says Dr Shaw, "measures 6 feet in height." In the largest of the Uyea whales it did not exceed 2 feet. La Cépède does not make it so long as Shaw.

The

* "General Zoology," *in loco*.

† "Elements of Natural History," 2 vols. 8vo.

‡ "Histoire Naturelle des Cétacées, par le citoyen La Cépède," p. 301. 4to, Paris, l'an xii.

The eye of the ca'ing whale, I am informed, was placed higher in the head than in Shaw's figure; and the spiracle, as we have seen, was "situated in a small hollow at the back of the head," and behind the eye: no such hollow is delineated in Dr Shaw's plate; but this is probably an oversight, as it is distinctly depicted in La Cépède's representation of the same animal.

The Uyea whales had not the white spot on each shoulder, near the eye, described as appearing in the grampus, and figured by Shaw. But La Cépède only says, "On voit *souvent* derriere l'oeil une grande tache blanche*."

The neck, breast and belly were not, I am told, white, as in the grampus, nor was there a defined line between the dark and light parts. Some of the ca'ing whales were, according to my information, quite black; others, especially females, had only a little grey on the belly.

The grampus, we are told †, "feldom remains a moment above water:" the Uyea whales, however, as formerly observed, "remained 10 or 15 minutes at the surface, just as the boats were near or distant."

The grampus is stated by Dr Shaw to be a "very ferocious animal, attacking seals and porpoises;" it has long been considered as the formidable *sea-monster* spoken of by the ancients ‡: but the
ca'ing

* "Histoire des Cétacées," &c. p. 300.

† Bingley's "Animal Biography," vol. ii. p. 152.

‡ The *small eyed cachalot* (*Physeter microps*) must certainly be a much more terrible-looking animal. Its head is very large, forming indeed nearly one half of the whole body, which is from 40 to 60 feet long. It is known to be very ferocious, having been seen to attack and tear to pieces the huge Greenland whale.

ca'ing whale appeared to be a very inoffensive animal, and the common sand-lance was observed to be its food.

Under the name of *grampus*, a similar animal, called by La Cépède, *Le Dauphin gladiateur*, has generally been confounded. The dorsal fin, however, stands much higher than in the grampus, and nearer to the head. The pectoral fin is long and narrow, like an oar. It is this species, and not the common grampus, that attacks whales, fastening round them like so many bull-dogs, and making them bellow with pain: hence sailors call it the *killer*. One of this species was, in 1793, taken in the river Thames; a drawing and description of which appears to have been sent by Sir Joseph Banks to La Cépède, who has figured it in his “*Histoire des Cétacées*.”

The small whales in question, of whatever species they be, afford a great deal of blubber; and it appears surprising that the value of the oil does not induce some of the Shetland and Orkney gentlemen, or some of the few substantial tenants, to prepare and keep in readiness an ample store of harpoons, ropes, whale-lances, blubber-knives, and other implements, so as to enable their dependants to avail themselves, more completely than is at present possible, of the occasional visits of those cetaceous inhabitants of the northern seas. Harpoons and lines

F f

are

whale. It is not without reason, therefore, that La Cépède rather considers this animal as the *sea-monster* of the ancient mythologists,—from the devouring jaws of which Perseus delivered the fair candidate for the prize of beauty (Andromeda), and the horrid aspect of which struck terror into the fiery steeds of Hippolytus. It was a cachalot of this kind that was, in the end of the year 1769, stranded at Cramond, near Edinburgh, and which attracted many thousands of spectators from that city. Stark's Picture of Edinburgh, p. 465.)

are indispensably necessary. The best harpoons, I believe, may be commissioned from Prestonpans at the rate of 7 s. 6 d. each. A single line for each harpoon would suffice, and that line needs not be of the thickness required for Greenland whales: the Greenland whale lines cost L. 5; but a line sufficient for the small whales might be had for L. 2 Sterling. Each boat might carry six harpoons and lines, provided only care were taken to keep the lines clear of each other. Each man should be furnished with a *lance*, *i. e.* a kind of spear with a wooden handle six feet long, costing 5 s. each. Blubber-knives may be had at 2 s. 6 d. each. The hooked instrument called *tomahawk* or *pickihawk*, is also very useful for laying hold of the blubber, and keeping it on the stretch till it be cut. If the blubber is to be barrelled, it should be allowed to lie exposed to the air for a day or two, till incipient putrefaction be perceived; for the swelling that accompanies the commencement of that process would infallibly burst the barrels. It is scarce necessary to add, that a large caldron would be found very useful for boiling down the blubber.

The exertions of the Shetland tenants, with respect to such droves of small whales, must certainly be much cramped by the usage of the country, which I have now to relate, and which appears to me equally destitute of foundation in law and in equity. I shall state the usage in the words of Mr Giffard of Busta, which are certainly above all exception: “As soon as the whales are got ashore,” (*i. e.* by the exertions of the people, who, surrounding them with boats, embay them, and force them ashore), “the bailie of the parish is advertised, who comes to the place, and takes care that none of them are embezzled; and he acquaints the Admiral thereof, who forthwith goes there, and holds a court, where the fiscal presents a petition, reciting the number of whales, &c. that the judge may give judgment thereupon,

“ thereupon, according to law and the country
 “ practice. Whereupon the Admiral ordains the
 “ whales driven ashore to be divided in three equal
 “ parts; one to belong to himself; one to the fal-
 “ vers; and the third to the proprietor of the
 “ ground on which the whales are driven ashore*.”
 It is added, that the minister of the parish demands
 tithes of them, and that the bailie of the parish
 claims the heads as a perquisite. Mr Giffard for-
 tunately informs us, that the “biggest” of the whales
 of which he is speaking, “are from 18 to 20 feet
 “ long.”

Let us now examine how the law stands on this
 subject. “By the *Leges Forestarum*, § 17.,” (says Mr
 Erskine †), “all *great* whales belong to the King,
 “and also such smaller whales as may not be drawn
 “from the water to the nearest part of the land on
 “a wain with six oxen. But no whales have, for at
 “least a century past, been claimed, either by the
 “King, or by the Admiral his donatary, but such
 “as were of a size considerably larger than there
 “described.”

Now, it is certain, that, by the old law already
 mentioned, great whales, either of the mysticete or
 cachalot kind, might be claimed as royal property.
 But, in the first place, at no period does the royal
 claim appear to have extended to any other than
great whales; and, 2dly, This royal right is scarce
 ever known to have been exercised in cases where
 even large whales were *forced ashore* by the industry
 of the subjects. It is at best an ungracious law,
 and has very properly been suffered to fall nearly
 into desuetude in other parts of the British domi-
 nions. If the King have thus waved his legal right
 to great whales found on our coasts, we might per-
 haps

* Account of Zetland, by Thomas Giffard of Busta, 1733, in
Bibliotheca Britannica topographica, No. 38.

† Institute, b. ii. tit. i. § 10.

haps expect that his Noble Donatary in Shetland would follow his example. But, at all events, the right which may lawfully be claimed by the donatary, or his depute the Admiral of Shetland, cannot be more extensive than the difused and latent right of the Sovereign himself. Now, if the above criterion were applied to the *ca'ing whales* of Shetland, none of them, I apprehend, would be found to fall under the denomination of "*great whales.*" But, it may here be stated, that, by an *ordonnance* of Louis XIV., small whales became royal property, "when they had run aground upon the shore;" but if they were caught *en pleine mer*, they became the property of the captor*. Our law, it is to be presumed, will be interpreted with a similar regard to equity, and as favourably for the subject. If the *ca'ing whales* be attacked "*en pleine mer,*" surrounded by boats, embayed and urged ashore by the people, they seem fairly to become the fruit of labour, and cannot, we conceive, be interfered with under the pretence of the royal right, without the most manifest injustice.

This tripartite division of whales in Shetland has probably had the same Danish origin as the absurd division of wrecks in these islands, (already treated of, p. 130.), and both should immediately be abolished, as barbarous, unjust, and impolitic.

NOTE K. (p. 94. & 133.)

LIGHT-HOUSES IN SHETLAND.

In my original remarks, I mentioned the Skerries of Whalsay, as the most eligible place for a light-house on the east coast, and Papa Stour on the west coast, on the authority of a gentleman who
has

* Erskine, *ubi supra*.

has had ample experience in navigating the Shetland seas. I lately applied for the opinion of another gentleman officially versant in such subjects; and in a letter dated 12th September 1806, he writes me, “If only *two* lights were proposed to be erected for the protection of vessels off Shetland, they must either be erected upon the places you mention, or on others contiguous, to be generally useful; and surely no one is possessed of more practical information on this subject than the gentleman you mention, as Captain G. has been long stationed on that coast. For my own part, I had always considered the Out-skerries of Whalley as a proper station:—but I never venture to be positive on questions of this kind, without an actual survey.”

In the late Memorial to Parliament relative to erecting a light-house on the Cape or Bell Rock, I find it stated (p. 27.), that “there are still several light-houses to erect in the North: one, or perhaps two, upon the Shetland Islands; one upon Cape Wrath, &c.—which the Commissioners have for some time past had in contemplation.” The light-house on the Bell Rock is perhaps well entitled to have precedence of the others; and certainly it must prove a work of no less danger and difficulty than the famous Eddystone Light-house of England; but I doubt not that the zeal and perseverance of the Commissioners, and the activity and enterprize of their Engineer, will ultimately overcome every difficulty, and disarm this enemy of our shipping, which has often proved fatal by vessels splitting upon it, but tenfold more fatal by the terror of its name, in preventing them from approaching the coast for shelter during storms, and thus exposing them to the risk of foundering in the turbulent northern seas. It may be hoped that the dismal and dangerous coast of Shetland will, as soon afterwards as possible, be rendered secure.

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In the 10th volume of the Statistical Account of Scotland, p. 203., the Rev. Mr Menzies urges the propriety of erecting a light-house upon *Nofs Head*, on the *east* coast of Shetland: he says it could be done at no great expence; would be seen to a great distance, and would prevent many disasters. In vol. xii. of that work, p. 366., an enumeration will be found of some dismal shipwrecks which have, of late years, happened on the *west* coast of Shetland, most of which would have been prevented by a light-house on *Papa Stour*.

It has been remarked by Thule (p. 23.), and his observations on this subject certainly merit attention, that “two light-houses, one on Skerries, and the other on Papa, so far from rendering secure the whole east coast and the whole west coast, could neither of them be seen from vessels approaching the coast between Stenhouse and Balta, a coast of at least forty miles, nor the coast from Nofs to Fitfull-Head, thirty miles; and vessels approaching the coast between Fitfull-Head and Vailey, more than thirty miles, could seldom receive any benefit from that at Papa, and never from that at Skerries.”

Perhaps, to render the *whole* coast of Shetland secure, *three* light-houses might be necessary: one on the northern, and another on the southern extremity of the islands, and a third about the middle. The *northern* light-house might be placed on the Holm of *Ska*, or the point of *Lambanefs* in Unst: the *southern* about *Sumburgh Head*: the *middle* one, about *Whalsay Skerries*. If either the northern or southern light could always be timeously seen in approaching the coast from the *west*, no light-house in that quarter, it is evident, would be necessary: if not, a *fourth* light house, placed on *Papa*, would be requisite to complete security.

Correspondence with Vindicator.

HAVING very lately, and since the preceding sheets were sent to the press, learned on undoubted authority, that *Vindicator* was a respectable clergyman in Canongate, Edinburgh, and having at the same time received his address, it occurred to me, that as he had been conjoined with me in the violent and unmannerly attacks of *Thule*, I ought to offer him an opportunity of defending himself: at the same time I was determined not to print any defence, unless it was accompanied with the name of the author. I therefore wrote the following letter:

“ Sir, *Edinburgh, 20th October 1806.*

“ Having some time ago learned, on good authority, that you are the author of the pamphlet respecting Shetland, signed *Vindicator*; and having lately had an opportunity of reading that pamphlet, I use the freedom of thus addressing you, in order to mention, that I am about to publish, in a connected form, my tour through the Orkney and Shetland Islands, which may possibly have attracted your notice in the Scots Magazine; and as your pamphlet has been repeatedly referred to by the anonymous writer *Thule*, who has attacked me, and as the truth of your facts and conclusions has been equally denied by him, I think it right to offer you an opportunity of briefly replying to him, if you think it worth while; as I can easily give a short paper from you, a place in my Appendix, the printing of which is not yet finished.—Along with this, I send you, for your perusal, an Answer to your pamphlet, bearing to be published at London, but which was presented to me by a Shetland gentleman in Edinburgh, last year. You will find it there stated, that you pledged yourself to give *your name* to the public, provided

ded the Shetland lairds gave *their names*; and that you are called upon by no fewer than *five lairds*, to redeem your pledge. After having carefully read your pamphlet, I can figure to myself no reasons why you should not do so, unless either an inclination to treat them with silent contempt, (which perhaps, in your case, may not be improper), or the want of such an opportunity as I now take the liberty to offer you.

I shall expect your answer as soon as convenient, as the proper season for publication is now at hand, I am, Sir, &c. P. Neill.

(Addressed to) *The Rev. Mr Savile, Duke Street, Edinburgh.*

To this letter I soon after received the following answer :

“ Sir, *Edinburgh, 23d October 1806.*

“ I received your letter, and will now answer it in a very few sentences. I am indeed the author of the paper signed *Vindicator*, and am certainly not ashamed of my performance, though the contrary I understand has been alleged by some of the Shetlanders. The authorities upon which I proceeded are indubitable. They are the most respectable persons in Shetland. Among others, I have a manuscript, transmitted to me by the Reverend Mr Sands, from which I derived much advantage. I have read with pleasure, what you have written, in regard to Shetland, in the Scots Magazine. Your sentiments coincide very much with mine, and I hope that what you have written will prove beneficial. You must, however, forgive me, for not making any formal remarks on the pamphlet you sent, signed “ A Friend to Zetland,” which I return with thanks. I have no wish to reply to malignant, ill-written nonsense. I would advise the sagacious “ Friend to Zetland,” before he attempt publishing again,

again, to learn to spell, to write grammar, to shew common sense, and have good manners. I am, Sir, &c. *David Savile.*

(Addressed to) *Mr P. Neill, Old Fish-Market Close, Edinburgh.*

In this letter, Mr Savile has supposed that I wished him to write a formal answer to a London pamphlet signed "A Friend to Zetland;" but I merely intended to offer him an opportunity of replying to the assertions of *Tbule* in a pamphlet published in Edinburgh. On explaining this circumstance to the Reverend Gentleman, he declared, that he considered that the publishing of his name would be a sufficient answer, especially to an anonymous attack, and authorised me to print the above letter. For the justness of the criticisms on the *London* pamphlet, the author of the letter is of course solely responsible. Mr Savile, at the same time, sent me for perusal, nine different manuscripts, (being the documents referred to in his letter), with liberty to avail myself of any information they might contain. I regret that this offer came entirely too late, as the earlier possession of these papers would have enabled me to have spoken with confidence, in some instances where I have used the language of hesitation. I may be permitted to add, that, as far as I am able to judge, they justify and support every material statement in Mr Savile's pamphlet.

EDINBURGH, }
25th October 1806. }

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POSTSCRIPT.

 POSTSCRIPT.

Notice of Thule's SECOND Pamphlet.

SINCE the publication of *Thule's* "Statement," &c. to which some Answers will be found in the preceding pages, he has again forced himself upon the public notice; both in the *newspapers*, and by means of a *second* pamphlet.

In the newspapers, indeed, a previous letter appeared, signed *Serious*, calling upon Thule to explain. To this epistle of *Mr Serious*, Thule replied with much apparent warmth. But having suspected a collusion between this *Mr Serious* and *Thule* himself, I had the curiosity to make inquiry; and I accordingly found that Thule's messenger had *paid* the printer's fees for the insertion of *both* letters,—leaving directions, I presume, that the letter of *Mr Serious* should appear on one day of publication, and the answer by Thule on the next. These concerted letters deserve no notice: the purport of them, as far as they were intelligible, seemed partly to be, to screen Thule from the imputation of being ignorant of the subjunctive mood of the English verb *to be*, and partly, if possible, to intimidate P. N., and hinder him from publishing.

The *second* pamphlet was intitled, "Thule's Reply to Mr P. Neill's and Messrs Constable and Company's attempted defenses of their conduct."—It shall here receive some notice, though it is certainly very doubtful if it deserve any.

Thule is surpris'd, (p. 3.) that, in the Scots Magazine for July last, P. N. should have confined himself to a vindication of Mr Mouat of Garth, (who, from some coincident circumstances, had been erroneously considered as the author of the "Strictures," &c.), and should not have written a single sentence in reply to the "heavy charges directed against himself." The answer is evident: I was anxious only to make reparation to the injured *third party*, (for it was certainly a kind of injury to be held forth as the author of the writings signed *Thule*), while I but little regarded aspersions cast upon myself by such an antagonist. Further, the Magazine had been declared shut against the controversy, and I certainly felt no desire to have it opened, in order to continue so fruitless a warfare. It is remarkable that
Thule

Thule himself (p. 10.) earnestly urges the propriety of some such vindication of Mr M. He is so obliging, even, as to suggest the very words which should have been employed. They are these, (p. 10.) “ Mr M. is not the author of the paper signed Thule ; therefore the charge of prevarication, in appearance substantiated, by contrasting a passage supposed to be his, with a passage of Thule, is utterly groundless.” Now, this, I conceive, is the very *substance* and *import* of my letter in the July Magazine, (inserted above, p. 125.), the true meaning of which seems not to have occurred to the mind of Thule,—who could not surely expect that I should, by intuition, hit upon the identical expressions agreeable to him !

Thule appears ever ready to hunt after and to magnify the most trivial incidents: *Nugis addere pondus*. Thus, the unimportant and accidental circumstance of my letter of apology appearing in the *first page* of the Magazine, is exhibited as proof-positive of my having acted under the “ directions of Messrs Constable and Co.” But the truth is, that I happened to get this supposed post of honour in the Magazine, merely because my communication was *too late* to occupy a less prominent station ; for, however paradoxical it may appear to Thule, it is certain, that the *first four* pages of the Scots Magazine (and probably of many other Magazines) are last printed : perhaps this will not appear wonderful to other readers, when they reflect, that, in the title-pages connected with these four, is contained a meteorological diary down to the 26th day of the month, which consequently cannot be completed till that day in each month. I believe that, in this case, it happened that the Editor’s defence of himself in the *last* page, was printed before the MS. of my note, which appeared in the *first* page, came to his hand. Thule, however, is not here satisfied with drawing, as on former occasions, erroneous “ deductions from premises,” but expressly and repeatedly asserts, that “ Messrs Constable and Co. directed P. N. to invent some paliation of his conduct ;” and even adds, that “ P. N. will not deny that these directions were given him.” I do pointedly deny that these directions, or any directions whatever, were given me.—I am persuaded that Messrs C. and Co. did not even know the contents of my note till after its publication.

In p. 6. it is alleged that “ P. N. went from Mr M. to the printing-house, to ridicule and misrepresent the conversations which had passed between them.” This is a most unfair and unwarranted assertion.

Thule, very insidiously, puts the most unfavourable construction upon what arose from innocent and almost unavoidable mistake. A few sentences will explain the whole.

As soon as I heard that Mr M. was come to town from Shetland in summer 1805, I waited upon him at his lodgings ; and I recollect particularly, that he gave me some information respecting

specting the droves of small whales which had recently before been forced ashore by his tenants in Unst : he also pointed out (I believe) some slight inaccuracies in my Magazine remarks, but told me that a private MS. communication would soon be made to me on that subject. I assured him, that whatever he should shew to be erroneous, I should cheerfully correct in a supplementary paper in the Magazine. No circumstance in Mr M.'s conduct, nor any expression which dropped from him in different conversations, ever led me to suspect that *he* was *not* to be considered as the author of such promised MS. communication, or at least as responsible for it. In the course of the autumn I received a letter, in Mr M.'s handwriting, pointing out various alleged mistakes ; and this was the only MS. communication I ever received on the subject. Meanwhile, *other* papers (I have been informed) were left at the shop of Messrs C. and Co., by Mr M. personally. I never saw these papers ; but, when I did express a wish to see them, I was told that my application was too late, for that they had been sent back to Mr M. These *other* papers, it has now appeared, were the writings of Thule. But, in these circumstances, I conceive that I can scarcely be blamed for ascribing them to Mr M, or for holding him responsible for them, till I saw evidence to the contrary. Mr M., besides, was already understood to be the author of a controversial pamphlet on the state of Shetland, which, although somewhat more temperate in language than the pamphlets of Thule, certainly discovers a good deal of the same spirit. Thus led to believe Mr M. to be the author of the paper signed *Thule*,—if I had been correct in that belief, I am confident that Mr M. himself will admit that my remarks could scarcely be deemed too severe. Had Mr M. avoided acting as the agent of Thule, or had Thule not veiled himself under a fictitious name, the mistake could not have occurred.

P. N. did *not* “go from Mr M.'s to the printing-house to “ridicule and misrepresent the conversations which had passed ;” several months intervened before P. N. printed any thing, and he had, in this interval, been led, though with reluctance, to entertain doubts of Mr M.'s candour in those conversations. The delay, indeed, was partly occasioned by Mr M. Thule has said, that Mr M. furnished me with “some books and “papers.” These (if I recollect right) consisted merely of two controversial pamphlets lately published in defence of the Shetland system, viz. “A letter to the Highland Society, 1802,” and an “Answer to Vindicator, 1804.” I repeatedly applied to Mr M. for a perusal of the original essay written by the Secretary of the Society for Propagating Christian Knowledge, which had given rise to the controversy ; and for the pamphlet of Vindicator, the Answer to which Mr M. had put in my hand. Whether Mr M. had them not in his possession, or did not wish
me

me to see them, I know not; but I remember well, that he assured me that I had no occasion to read those pamphlets, fair extracts having been given in the respective *answers* to them. I shall not probably be blamed for not resting completely satisfied with this information, nor for sticking a little in favour of the salutary, though un-Zetlandic maxim, *Audi alteram partem*.

Thule's illiberal and ill-natured insinuations about the origin of my acquaintance with Mr M., are scarcely worthy of attention; but since he descends to particulars (which are all erroneous) I may be excused for taking notice of them.

He alleges, That Mr M. finding me in the company of Sir Alexander Seton and his friends, at Unst, was thus induced to invite me to his house, and that I could not otherwise have "intruded" there. But the truth is, that, upon our arrival in Unst, in an open boat, in an evening in the close of September, though I was invited by Mr M. to his house, I waved his invitation, lest the number of guests might have anywise incommoded his family, and rather chose to travel to the distance of several miles, in a dark and cold night, along a rocky shore, to the house of one of Mr M.'s tenants. I appeal to the reader whether this conduct savoured much of *intrusion*. Had I come alone to the island, I doubtless would, as a stranger, and though quite unknown, have received, and probably accepted, Mr M.'s invitation, (at least I have no reason to think that Mr M. is less hospitable, or less attentive to strangers, than his brethren in the other islands are). I add with confidence, that I am certain that Mr M., as a gentleman, *could not*, and therefore that he *did not*, authorise Thule to state that I *intruded* into his house.

I may be permitted to remark in the next place, that it appears abundantly ridiculous for an *anonymous pamphleteer* to accuse *me*, who have given my name to the public, of being a "dubious character", as Thule has done, p. 6. It is the object, no doubt, of Thule's aspersions, to render me such; but for this end, they are as inadequate, as is the possession of some hundred acres of peat-moss in Shetland to constitute a gentleman.

Thule's philological criticisms are pointed partly against me, and partly against the editor of the magazine. Thule has, no doubt, detected one or two trivial slips; but he has, at the same time, given ample proofs of his utter unsuitness for wielding the weapons of criticism.—Take an example: "How came the editors" (he asks) "to write *acquaintance* WITH him, for *acquaintance* OF him? Again, at what period of the progress of language, were all distinctions between adverbs and adjectives confounded? *We have called him* (they say) *a Zetland landlord*; *we certainly had reason to think him SO.*"—Why will Thule (I ask in return) thus insist on obtruding his own ignorance on the notice of

of the public? Nothing but the sheereft self-conceit and pedantry could have led a *critic*,—at the very moment of criticifing,—when all his wits were about him,—thus egregioufly to commit himfelf. For furely I need not remind the reader, that the editors' phrafe “acquaintance *with* him” is pure and claffical Englifh; but that “acquaintance *of* him” is neither Englifh nor Scotch: it is indeed peculiarly Thule's own, and may, to fecure the honour to whom it is due, be termed the “*Thulian idiom*.” With regard to the other criticifm, Thule not only fhews that he does not know the difference between an *adjective* and a *pronoun*, but he finds fault with a form of expreffion fupported by the great names of Addifon, Swift, and Pope;—“compared to whom” (illuftrious Shades forgive me!) this Zetland critic is lefs than the “being of a “*fummer's day*.” (Johnson *in verbo* “*so*,” art. 13.)

Thule accuses me of writing IRISH *bulls*; yet in the very fame pamphlet, after having tried in vain to involve me in a dilemma, he triumphantly declares, that he has caught me at laft, for that I can have no “*third alternative!*” (2d pamphlet, p. 3.) Thule will probably feel *neceffitated* (to ufe a Scotticifm of his own) to admit that this is a SHETLAND *bull*, which may, any day, ftand in competition with the IRISH *bulls* of the Scots Magazine.

In my former reply, I had obferved that Thule defcends to minutia, and even “*twits me with my Scotticifms*.” This was good and Sterling Englifh: but Thule has thought fit to *correct* me, both in his firft pamphlet, (p. 16.) and in the newspapers, and to make it “*twits me for my Scotticifms*,”—which, again, is neither Englifh nor Scotch, and muft therefore be confidered as another example of the “*Thulian idiom*.”

Let this blundering fchool-boy of a critic, therefore, (to retort, in his own indignant language), “hang his head a-while,” draw his grammar from his fatchel, and go parfe his leffon.

—“*Te*,” Thule,

“*Discipulorum inter jubeo plorare cathedras*.”

HORAT.



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