BOYDELL'S

PICTURESQUE SCENERY

OF

NORWAY.
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PICTURESQUE SCENERY

OF

NORWAY;

WITH THE

PRINCIPAL TOWNS FROM THE NAZE, BY THE ROUTE OF CHRISTIANIA,

TO THE

MAGNIFICENT PASS OF THE SWINESUND;

FROM

ORIGINAL DRAWINGS

MADE ON THE SPOT, AND ENGRAVED BY

JOHN WILLIAM EDY.

WITH

REMARKS AND OBSERVATIONS

MADE IN A TOUR THROUGH THE COUNTRY, AND REVISED AND CORRECTED BY

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ST. PETERSBURGH.

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PICTURESQUE SCENERY
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Before I present the reader with the particular Views I was enabled to take of the several interesting spots of this astonishing region, here exhibited to his contemplation, it will be proper to give him a general notion of the coast, and in some measure of the territory which has been hitherto so little explored by our countrymen, and for which we shall vainly search in our numerous itineraries and books of general geography.

In order to this, as my time and attention were principally, if not entirely engrossed by the laborious task I had undertaken, of forming graphic and accurate pictures of scenes so singularly striking as those which here at every turn present themselves to the admiring sight, I shall avail myself of the necessary information I have been able to obtain, either orally, or from written accounts of the natives and others, which have not yet appeared in an English dress.

At the head of these I must place the famous entomologist, John Christian Fabricius, a native of the duchy of Slesvick. In natural history he became a favourite disciple of the celebrated Linnaeus. Under him he attained to such proficiency that he was appointed professor of the science of General Economy at Copenhagen, which chair he filled for several years with honour to himself and signal advantage to his hearers. In the year 1775 he was called to the joint professorship of General Economy and Natural History in the University of Kiel, where, when I visited those parts, he was continuing to give lectures. He is the author of various works on subjects of economy and of natural history.

His most famous production is that in which he endeavours to deduce from those organs by which insects take their food, a classification of this compartment of animal existences, more elegantly scientific, and more convenient, than that of his master Linnaeus.
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It was in the year 1778, that he performed the journey, of which an abridged account, from his own journal, was communicated to me. Though performed so many years since, it has hitherto remained unknown to the English public. And, as nothing has, in the mean time, appeared among us to supersede or anticipate the observations it contains, I shall present the reader with copious extracts from it; persuaded as I am, that in so doing I shall contribute more to the dissemination of useful knowledge in this department of literature, than by detailing trivial occurrences, and indulging in speculations which might with as much propriety be made in travelling from London to York, or retailing common-place adventures and ludicrous stories, which though, disguised under other names, are in reality often borrowed from the stall-books of the town.

"Helsingöer, by us called Elsinour, is a trading town, situate on the shore of the Sound, at the very point where that strait is the narrowest. Its buildings are convenient and handsome, though not spacious. It contains not more than between three and four hundred inhabitants. These subsist chiefly by trafficking in the commodities wanted by the ships in the Sound, and which are obliged to touch at this port; of which the number is between seven and eight thousand annually. The Sound-duties are paid at Helsingöer. Were the harbour more commodious, many ships would probably find their account in passing part of the inclement season or wintering here altogether. But it is too confined, and has not a sufficient depth of water; the generality of vessels, therefore, prefer rather to proceed to Copenhagen and to Norway. Vessels drawing eight feet of water find difficulty in entering the port of Helsingöer; and the roadstead is dangerous in winter, by reason of the currents, the storms to which it is subject, and the floating fields of ice. This town is considerably benefited and enlivened by the expenditure of the consuls of foreign nations who reside in it. The hospitality and friendly assiduities of Mr. Fenwick, the British Consul, are the theme of every traveller who visits these parts. Helsingöer is, for the Danish side, the station of the ferry across the Sound.

"From Helsingöer to Helsingburg the passage does not much exceed two English miles.\(^1\) The wind happened to be contrary; however, by the assistance of the oars, the boatmen made the Swedish side in somewhat less than an hour. On the passage is enjoyed the noble prospect of Helsingöer, Cronenburg Castle, and Helsingburg on the Swedish side, with the isle of Hween, and often upwards of a hundred ships with all their sails full spread. The water is exceedingly shallow on the Swedish side, so that it is necessary for vessels to keep rather close in with the shore of Denmark.

\(^1\) One Norway mile is equal to about six English miles.
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"Helsingburg, though but a sorry place, appears with some advantage in the general prospect. The country rises immediately in a grand ascent at the back of it. The strata consist of a loose fissile gritstone, light, and of an ash colour. At one extremity of the town is seen an ancient brick tower, serving now merely as a retreat for owls.

"In front of the town stands a decayed platform, from which we have an interesting prospect of the Sound. At Helsingburg, as at every other considerable town in the Swedish dominions, are works for the distillery of brandy from grain, carried on at the expense and for the profit of the crown.

"From Helsingburg, continuing our route through Hatland, we arrive at Gothenburg.

"Gothenburg, in point of magnitude and opulence the second city in the Swedish dominions, is situate on a small bay in the North-sea, just at the influx of the river Gotha-elf. It is built in the Dutch fashion, its streets running in right lines, planted with rows of trees, and divided by canals. The sides of the canals and the river are lined with stone. Over the river are several strong and handsome bridges of the same material. Gothenburg, having this advantage, that ships outward bound, on sailing from it, fall into the ocean at once, without being obliged to pass the Sound, has become the seat of the whole East India trade of Sweden. All the iron of Warmeland comes down the Gotha-elf, and is exported, chiefly to England. The herring fishery is also a primary source of subsistence and wealth to the people of Gothenburg. Large adventures are made in the Greenland whale-fishery. Besides, the exportation of deals, which are wafted down the Gotha-elf in floats, is very productive, and brings in great sums of money from the foreigner. The trade in salt, for the fisheries and for domestic uses throughout the country, is likewise considerable. The port of Gotha-elf is however too shallow to admit any but small coasting vessels. Such as are of larger dimensions anchor at Masthoget; and the East Indiamen, which are of still larger bulk, approach no nearer than Elfsburg, from whence their cargoes are conveyed in galleots or lighters up to the town. The only manufactory of any note in Gothenburg is a sugar work.

"The mode of conveyance from Gothenburg, in four-wheeled carriages which are changed at every post-house, is extremely inconvenient. In addition to this, finding that every successive carriage was narrower than the last; in so much that in the one we were furnished with at Bahuys, it was scarce possible for two persons to sit together with any degree of comfort; we at last bought a strong chaise of an innkeeper, in which, with much jolting, but without any serious accident, we were conveyed safe to Drontheim.
At Swinesund we passed the boundary between Sweden and Norway. Somewhat more than a mile beyond that, on the Norway side, we came to Fredericshall.

Fredericshall is a pleasant town, of which the principal trade consists in the exportation of timber. It stands about ten German miles from the mouth of the Sound, which bears the name of Swinesund. The timber is floated down from the interior of the country, on the river that here falls into the Sound. Saw-mills, to the number of fifty or sixty, are erected on the two sides of the river. A considerable smuggling trade is also carried on between Fredericshall and Sweden, in brandy, coffee, and such other goods as are either actually prohibited, or subject to heavy duties. The lands lying round Fredericshall are in a good state of cultivation. Not a single patch of soil among the rocks but has been tilled, and raised to a state of fertility. The salmon fishery of this place is likewise very productive. The river is broad and deep, and presents several water-falls, under which the fishes are taken. The ordinary garrison consists of about 800 men. The town is entirely open: without walls, gates, or ditches. At a small distance indeed stands the castle of Fredericstein, for its defence on the Swedish side. It is situate on the rocky cliff, accessible only by the two heights of Guldenlæve and Oderberg, which join the town, and are themselves protected by suitable fortifications. Before this fortress perished Charles the Xllth. of Sweden. The place where he fell is still shewn between the principal fort and the Castle of Guldenlæve. The marble column which formerly stood to indicate the very spot, is said to have been removed at the instance of the Court of Stockholm. It is now acknowledged by the Swedes themselves, that Charles met his death, not from any batteries of the place, but from the treachery of a French Major who stood near him.

The quantity of saw-dust constantly thrown into the river has so choked up the harbour of Fredericshall, that vessels are now under the necessity of discharging their cargoes at some distance below the town. The accumulations of saw-dust thus deposited in the bed of the river appear to have even injured the salmon-fishery: the salmon-trout, in particular, having almost totally disappeared from this bay.

The only manufactory established at Fredericshall is a sugar work. The gardens belonging to Mr. Tank, are one of the finest ornaments of the place. His fruit-trees having been greatly injured by the caterpillars, he was advised to prevent the same ravages for the ensuing year, by destroying the eggs of the butterflies in harvest. This gentleman has a building for the preparation of manure from dung, by which its essential virtue is preserved from being washed.
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away by the rains, or exhaled by the heat of the sun. The platform is large, long, framed of timber, and covered with bricks. Upon this the dung is heaped, mixed with leaves, and suffered to accumulate for two years successively without removal. The manure thus obtained is found to be excellent for a sandy soil. The proprietor complained, that his hay had heated and rotted on every attempt to stack it out of doors in the English fashion, and that he had consequently been obliged to content himself with storing it under cover.

June 18, renewing our journey through a country abounding remarkably in bees and bee-hives, we arrived at Fredericstadt.

Fredericstadt is but a poor town, situate on the river Glomme. It is however the barrier of Norway. Six companies of infantry now constitute its garrison. Deal timber in considerable quantities are exported from the river; but all the sawmills belong either to the house of Anker in Christiania, or to counsellor Holte at Copenhagen. The labrus saillus (a species of the wrasse), the gadus virens (one of the species of the genus codfish), and the gadus barbatus (the whiting pout), are the kinds of fish here taken in greatest abundance.

From this place, pursuing our route through an agreeable plain, we come to Kolbergbrug. A brick and tile work is the most remarkable object here. The material is a blueish clay which it is usual to collect in heaps during the autumn. By the action of the winter frosts it crumbles into a state more convenient for manufacturing. The clay intended for bricks is then laid to be trampled upon by the cattle. That designed for tiles is first ground in a small mill turned by horses, then sliced and farther prepared with eight or ten crooked knives. The tiles are then shaped and exposed to the fire. The kiln is large enough to contain at once 16,000 bricks, and 32,000 tiles. The bricks are light, red, and ferruginous. The demand for them is not very great.

A progress of ten miles farther brought us to Moss, a small trading town standing on a fine bay, at the influx of a little river into the sea. Its harbour is safe and capacious, so that ships of considerable burden can advance up to the bridge. Timber is floated down the stream; which, separating at the town into different branches, turns a number of mills. Iron and deals are its staple commodities. Near the mouth of the river are thirty sawmills of a very simple construction. The whole machinery consists of a single saw, a chain, and a cramp-iron for fastening the saw to the log. It is deemed most advantageous to have only one saw to each machine. The planks are exported to France and England. Each saw pays a duty of from thirty to forty rix-dollars annually to the king. The iron foundery belongs to the house of Anker in Christiania, and is one of the best in Norway. The ore is a ferruginous,
blackish stone, containing a considerable mixture of quartz, and is subject to
become red in the fire. The consumption of this ore at the foundry in the
year is calculated at three or four thousand tons. The places for smelting the
ore are inclosed by a low wall built of scoria; and the largest quantity they
hold at one time is three hundred tons. The ore, when smelted, is conveyed
to the pounding-mill, to be pounded with great hammers worked by the action
of water. The same axis that moves the hammers, moves also an apparatus by
which the vessel holding the ore, is at the same time hoisted to the upper part
of the furnace. By this contrivance, the labour of conveying the pounded ore
from the mill to the furnace, is in a great measure spared. The upper furnace
is large and of a very solid masonry. It lasts about ten months; seldom, if
ever, the whole year through. During the ten months in which it is constantly
heated, it furnishes every twenty-four hours, about a ton and a half of iron.
In the preparation of this quantity upwards of a hundred tons of charcoal are
consumed. The cannon foundry is so near to the upper furnace, that the
metal in fusion is conveyed by sluices from the one to the other. The moulds
in which the cannon are cast, are composed of a succession of layers of tenaci-
ous earth, fortified and held together by bars and hoops of iron. The cannon
were formerly cast with a core in the middle, which, though it facilitated the
operation of boring, yet made the piece liable to injury by rents and swells.
They are now cast perfectly solid. A considerable variety of other instru-
ments and utensils in cast metal are likewise forged here. The convenience
of the river affords, by its copious supply of water, signal accommoda-
tions to this manufacture. The charcoal is in part prepared in the vicinity of the
foundry; in part brought hither by the neighbouring peasants. To make the
charcoal, stakes of fir are set up obliquely, one above another, so as to form a pile
in the figure of a truncated cone; they are then covered with green branches
of fir and a mixture of charcoal dust; which done, the apex of the cone is set
on fire. One such pile is a long time in combustion, and yields from one thousand
to one thousand five hundred tons of charcoal. The master of the charcoal
work receives for every ten tons of charcoal sixteen Danish shillings. The
price to the peasants for the supply brought by them is seven Danish marks
for every ten tons. The ordinary complement of workmen at this foundry, is
one hundred and fifty. The iron is sent upon order to Copenhagen and other
towns in Denmark. The aspect of the circumjacent country is pleasant; being
agreeably diversified by wood, water, rocks and cultivated fields.

On our way from Moss to Tromvigen we observed crops of hay, flax, and
other produce of the earth, bespeaking a considerably improved state of agri-
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The road onward to Horton leads along a bay, in which, though the wind was high, we observed numberless aquatic fowls swimming on the surface with great velocity. The sight was interesting on account of the liveliness and diversity of the plumage, and of the perpetual changes in the configurations effected by the contrarieties and expansions of their circumference.

"On the 20th of June we came to Tonsberg, one of the oldest towns in Norway. It has within its precincts no fewer than eight churches, which are now, however, more than sufficient for its population. Some small commerce is here still carried on in timber, and a retail trade with the peasants of the adjacent country. On the summit of a rock which overlooks the town, are yet to be seen the ruins of a castle which was demolished in the reign of Christian II.

"At Walloe, between four and five miles distant from Tonsberg, we had the opportunity to examine the only saltworks in Norway. The water from which the salt of Walloe is obtained is conveyed through pipes, by means of pumps, to the distance of five hundred and forty feet from the shore. It is forced up to the height of fifty-three feet; from which it falls in different streams, and is dispersed throughout the building below. The pumps are six in number; the smallest being twelve inches in diameter; the largest fifteen inches. The buildings throughout which the water pumped up is distributed, consist of pans at the bottom, fascines or bundles of branches and twigs in the middle, and spouts at the top. The pans, six in number, are ample and of solid construction. Each of these has a pump appropriated to it; and all the pumps are worked by horses. The mechanism of the pumps consists severally in a single wheel, with a movement fitted to a small bell, which notifies, even at a distance, when the horses stop. A dentated wheel, which was formerly used, has been laid aside, as increasing the labour to a two-fold degree. It will however probably be readopted, because, since the use of it was discontinued, the supply of water has been frequently deficient in the best season of the year. A proposal has been made to introduce the use of windmills; but perhaps it has been thought that the expense of this expedient would be too great. The fascines are either of sloe thorn or of juniper bushes; but the former are preferred. Trial has also been made of deal battons in an oblique position. It is necessary to change the fascines only once in sixteen years. Within that space of time they get encrusted with a greyish earthy substance, which entirely prevents the transudation of the water. The evaporation of the water proceeds more slowly in damp, foggy weather. A mixture of English rock-salt, costing seven rix-dollars for every 2300lbs. is added to the sea-water in the pans to

...
facilitate and to accelerate the crystallization. In the space of sixty-two hours, with the consumption of $5\frac{1}{2}$ cords of wood, it is usual to obtain from 35 to 38 tons of crystallized salt. The primitive water, after passing into the last of the six pans, is conveyed thence into the reservoir, out of which it is conducted by pipes to the sheds in which it is boiled. These are seven in number; the first six whereof have each a kettle or boiler; and the seventh contains four. The boilers are of iron, supported by wooden posts and bars, to which they are fastened by iron cramps. The boilers are heated by square furnaces, furnished with a conical tunnel for the passage of the smoke. The water remaining after the first crystallization is removed into a different boiler, where it is to undergo a subsequent crystallization. An infusion of rock salt enriches this primitive water; and a second quantity of salt is obtained. The salt in crystals is then conveyed to stoves that are heated by pipes which convey away the smoke out of the shed. After a certain time of exposure before these stoves, the salt is carted to the magazines, where it is stored for sale.

These salt-pans afford subsistence to not fewer than 453 men, and occasion an annual circulation to the full amount of 20,000 rix-dollars. They are, it is true, attended with one material inconvenience, which is, that they lie too near the sea to admit of a ready distribution of the salt for consumption. Hence twelve or thirteen thousand tons of salt are always upon hand in the magazines. This salt, not answering well for the fisheries, and being extremely liable to dissolve on being exposed to moisture, is not greatly valued in Norway. But independently of this, it is of a very serviceable quality, shooting into large pyramidal crystals; and for purposes where a potent acrid salt is not wanted, it may be very conveniently used as a substitute for either English or Lunenburg salt. The capital originally granted by the King for the institution and support of these works was 107,000 rix-dollars. It has, however, on some account or other, suffered a considerable diminution. The annual produce is 25,000 tons of salt at two rix-dollars a ton. It finds its principal vent in Jutland and the towns of the north, which, in pursuance of a royal edict, ought to take as their proportion 7000 tons. The total sale, in the year 1777, was 17,000 tons; whereas, if they found an adequate number of buyers, these pans might supply every year, 40,000 tons of crystallized salt.

On the 22d we reached Larwig, a place of considerable strength, situate along the margin of a spacious bay, at the foot of lofty and precipitous mountains. It consists of about three or four hundred houses, and appertains to Count Larwig, who has his residence here. In this town are a great many saw-mills, and a considerable number of iron founderies belonging to the Count, the most
productive in all Norway. The founderies furnish about a thousand tons of bar iron, and three hundred tons of cast iron annually; the whole of which goes to Denmark and Holstein, excepting a small quantity that is sent to England. The ore differs in the degree of its richness. Some part of it is crystallized: the rest is partly in silver-coloured spangles, with a mixture of black scheelite. The rich and poor ores, those which flux easily and those which are more refractory, are all mingled together in the fusion. They yield upon an average 24 or 25 per cent. The ore has this defect, that it will not run freely in fusion; but being near to the sea, it is carried to the foundery at little expense. The calcining furnaces are capacious, circular, and edged with a low inclosure of scoria. Three large furnaces are employed to smelt the roasted, washed, and pounded ore. There being here no apyrous stones, those of that quality are imported at considerable expense from England, for the construction of the furnaces. Among the ores of this place is a calcareous stone, containing iron in the proportion of about ten per cent. which possesses the advantage of rendering the other ores more fusible, and causing them to yield iron in a larger proportion. The bellows are singularly constructed of wood; and reckoned the best in the whole country: being made by a family at Larwig, which is said alone to possess the secret of their construction. The hammers are made upon the plan of Renman, explained in the XXth Part of the Memoirs of the Royal Academy of Sweden. Anvils of cast iron have begun to be employed here, instead of steel ones, which were found too expensive. Anchors are manufactured here of cast iron, and nails of bar iron. A foundery for cannon has within a few years been established at Larwig; the boring is performed horizontally. The scoriae are pounded, washed, and made to yield a second proportion of iron. Considerable forests are appropriated to the supply of wood and charcoal for these ironworks: and due care is taken that they shall not be too rapidly consumed. The port of Larwig admits vessels of pretty large burden, but is not sufficiently sheltered from the south gales. The sea worms make great havoc on all timber that is exposed to their action, not only here, but all along the coast of Norway. Perhaps pitch, extracted from peat, would be found the most effectual preservative to ships and woodstacks from their depredations.

"The 24th of June we entered Eichsfors, where are founderies of iron, belonging to Commissary General Rash, and yielding about 300 tons of iron annually. There is also a foundery for steel, the only one in the country, excepting that at Kongsberg. Bar iron is the principal manufacture, and it is transported, by the way of Drammen, to Copenhagen and other parts of
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Denmark, in vast quantities: the manufacture being scarce sufficient to supply the demand for it. On the other hand, the amount of the steel made here does not greatly exceed ten tons annually. It is much inferior to the Swedish steel.

"From Eichfors to Rasteen, a distance of nine or ten miles, we passed in a boat along the lake Eckern; enjoying a noble prospect of water, rocks, and fields in good cultivation.

"On the 25th we arrived at Kongsberg, an agreeable town, and the most remarkable for its mines of any in Norway. It stands on an extensive plain, and is intersected by the river Lowe. Its buildings have nothing striking in their appearance, and the streets are unpaved. The government commission for the superintendance of the Norwegian mines has here its seat. The total amount of the population of this town may be computed at about 10,000, chiefly consisting of miners, artizans, and shop-keepers. The country round is sandy, and the soil so sterile, that nothing short of the most patient and obstinate industry could extort from it such crops as the inhabitants force it to yield. The river which intersects the town has several abrupt falls in that part of its course. The silver mines of this place are still of great importance, although the expense of working them have of late exceeded the profit. They were first discovered in the year 1623, in the following manner: a couple of peasants, Jacob and Christopher Grosvaldt by name, attending their cattle on those steep mountains which separate Telemark from Numedal, had frequently found this silver ore in some lapidous fragments fallen from the mountains, with which, by way of pastime, they used to pelt one another. On one of these occasions, by an accidental collision, their ears were suddenly struck with a sort of jingling sound from their missile in this playful warfare. On examining the fragment, they found it to contain a metallic substance, which they at first imagined to be lead. Accordingly on carrying it home, they attempted to melt it into bullets, buttons, and the like. Their fusion, however, not rightly succeeding, they sold their store to a goldsmith of Tonsberg, who was in the habit of vending his goods about the country. He, not knowing how better to avail himself of the discovery, informed the Government of the whole affair: which, being laid before the king, orders were issued for a further survey of those parts. This was attended with such success, that near a church which then stood there, besides the rich veins of stone, a lump of pure massy silver, a pound in weight, was taken up. Hereupon Christian IV. gave his name to the first pit, and miners were immediately sent for from Germany to explore it farther. These composed the primitive inhabitants of the new built mine-town of Kongsberg, and in process of time intermingling with the Norwegians, were the progenitors of
the many thousands at present living there: though each nation to this day performs divine service in its own language; all however stand under the direction and control of the College of mines.

"The Kongsberg mines produce native silver in the largest masses, and silver ore in the greatest abundance of any mines in Europe: they give employment to four thousand miners, and annually yield silver to the value of three hundred thousand crowns. The roasting furnaces, and works for washing the pounded ore, are large, and constructed after the Hungarian fashion. The richest with the poorest ores, when roasted, pounded, and washed, are smelted together, with an addition of limestone for a flux. Lead is not superadded until the metal is just on the point of running into fusion. The furnaces are blown by small bellows, moved by water. A wooden spout, in a horizontal position, conveys the water into another spout, of which the position is perpendicular. Through this trunk the water falls into a tub, upon a stone that fills the vessel to one third of its depth. The water, after falling with vehemence upon this stone, runs out at an aperture in the vessel: while the air, parted from the water by the vehemence of its fall, rushes through a pipe that opens into the furnace, and acts with the effect of a bellows upon its heat and flame. These mines being uncommonly free from damp and all humidity, the miners are not particularly unhealthy. The diseases most frequent are apoplexy and consumption.

"The mines that go under the several names of Prince Charles, Oldenburghaus, Gotteshafte in der noth [God's help in distress], and Ellegrube, are all in one mountain, which extends in a direction from north to south. The silver is found only in certain cross-veins. The rock is exploded with gunpowder, and the veins are opened with a pick and a hammer. The rock is so hard and solid that there is no need of timbers for its support on excavation. The miners work some by the schicht of six hours, others agreeably to stipulations of a different nature. The lead employed to purify the silver is procured at a considerable expense from England. The miners receive one moiety of their pay in money, the other moiety in barley, malt, and rye, supplied at certain moderate unvarying prices from the King's stores.

"The working of the silver mine at Kongsberg is unconnected with that of the other mines of Norway, which belong not to the Crown, but to private individuals. A school for the instruction of miners was instituted here in the year 1757. Dr. Becker, physician to the mines, received upon the occasion a small addition of salary, for which he was required to give lectures on mineralogy and chemistry; which practice has been continued by his successors. A con-
considerable collection of mineral specimens had also been made: but in the year 1766 the buildings of the school, the collection of specimens, together with the library, were all, by an unfortunate accident, destroyed by fire. The total produce of these mines in silver, from 1623 to the end of the year 1792, was 25,131,026 rix-dollars. Their present average is calculated at about £50,000, or £54,000, annually.

"Leaving Kongsberg the 28th of June, we continued our journey through a pleasant and populous valley, to the town of Eger, on the river Drammen. In a tract of no great extent are no less than forty-four sawmills, which furnish annually 535,000 deals for exportation. The mines and the transport of merchandise, particularly of grain from Drammen to Kongsberg, afford employment and means of subsistence to many of the inhabitants of this valley. They maintain a number of horses for the uses of carriage; and the greater part of the vale is therefore appropriated for pasturage. At this time the country was to a wide extent on fire. A peasant had kindled the dry heath and moss on his own possession; and the fire had spread to the adjacent forests; nor was there reason to expect that it would be extinguished till there should be a good fall of rain.

"At a quarter of a mile distance from Eger, is a sawmill, on a height above a waterfall, to which the balks are conveyed by a singular contrivance: a wheel moved by water is made to turn a huge cylinder of wood. To this cylinder is fixed a rope adapted to wind up on one side, while it is unwound on the other: each end of the rope being attached to a wooden cylinder, about two feet in diameter, strengthened at either extremity by hoops of iron. The whole height, from top to bottom is floored with deals, for the purpose of facilitating the motion of the cylinders. Rollers are likewise placed so as to prevent the abrasion of the ropes. By the alternate ascent and descent of the cylinders, the balks are hoisted up to the sawmill. On the work had been expended somewhat more than a thousand rix-dollars.

"In the river here is a considerable salmon-fishery. The salmon are caught beneath a cataract, a few miles from Eger. To ascend the water-fall they make a leap, but generally fall back into the pool below, where they are taken in weels of ozier suspended to entrap them in their fall. This salmon-fishery yielded formerly twelve hundred rix-dollars a year; but many more snares are now laid to intercept the salmon before they can come thus far up the river; so that its produce is not at present more than to the value of seven or eight hundred rix-dollars annually. The salmons here caught are almost all conveyed to Kongsberg."
At Hassel, on the 29th. Here is a considerable iron-work belonging to the widow Newmann, which affords near thirty-eight tons of iron in the year, most of which is sold in its crude state. It is light and brittle: stoves are made of it, and sent by the way of Drammen, to be disposed of in Denmark and Holstein. The ores here employed are partly a rich but refractory ore from the immediate neighbourhood, and in part a poorer ore, copiously interspersed with calcareous spar, from the district of Arendahl. These two ores answer very well when they are mixed together, as the fusibility which the one derives from the calcareous spar, assists in overcoming the stubbornness of the other. The stones for the basis of the furnace are procured from England, at an expense of a hundred rix-dollars each time the furnace is to be reconstructed.

The cobalt mine at Fossum was discovered about the year 1776, upon the summit of a rocky mountain near Skuterud, a small village a few miles from Fossum, where the works are established, on account of the numerous waterfalls which are requisite for turning the mills. Shortly afterwards, within a gun-shot’s distance from the mine, a vein of extremely beautiful quartz was discovered: a discovery the more fortunate, as quartz is indispensably necessary, as a flux to the cobalt-ore for obtaining the powder-blue. The ore, when calcined, triturated and refined, yields the blue-powder in such general use.

This fabric gives employment to 56 men, and the mine to 320. In 1783 1400 or 1500 weight was obtained, which, in proportion to its fineness, sold from £2. 10s. to £12. the cwt. and yielded £10,000. The expenses in that year amounted to £12,000, because the several buildings and machines necessary for carrying on the works were still constructing. Since that time the disbursements amount to no more than £4000; and near twice the quantity is made. Accordingly the net profit to the Crown falls scarcely short of £16,000 per annum.

The discovery of this mine must be considered as a vast acquisition to Denmark; since, besides giving sustenance to so many people, it prevents the necessity of importing powder blue from abroad.

Skuterud, the village at the foot of the mountain, on the summit whereof are the mines of cobalt, is about six miles from Fossum. I say mines, because there are properly two, the north and the south mine, each having four pits or gangues. The deepest is not more than fourteen fathom, because the ore is still in great plenty near the surface. It is found in veins, and is blown up with gunpowder. Hard by lies the exquisite mine of quartz, which as I observed above, supplies that mineral, which is so necessary and excellent a flux to the cobalt works, because twelve parts of quartz are mixed with one of cobalt,
in order to produce the Prussian blue. This quartz is in whiteness not inferior to alabaster, and contains large veins of marienglass, or Russian talk, which in some countries is used in windows as a substitute for glass.

"The prospect from the summit of this mountain amply repays the trouble of ascending it, commanding a hilly country, and at some distance a spacious plain, clothed in many parts with rich forests, irrigated by several streams, and presenting the broad surface of a lake, which divides itself into three great branches, called Tyrißord, Holeßord, and Helsßord; the banks of which are beautifully covered with fields of corn and meadow lands, and chequered with wood.

"New erections were then in progress at Fossum, for the preparation of the iron and cobalt-ores for general use. The floating of the timber being rendered inconvenient by a cataract at a particular part of the river, recourse has been had to a contrivance, by means of a small lateral canal, which conveys the balks from a short distance above the fall, to another point entirely beyond it, and thus the trees are preserved from that damage which could not otherwise be avoided. Bricks have been likewise made at Fossum for the use of the forges: these bricks are of what in England we call pipe-clay; are solid, hard and white, without a speck of red in their composition.

"The mountain at Skuterud everywhere presents indications of the presence of cobalt. The gangue of the veins of cobalt is of hard grey quartz, with a mixture of mica: the ore is not rich, but it is very plentiful. A sulphureous ore of copper is found in the same places. Where the vein is too hard for the hammer, the miners blast it with gunpowder. There is no need of carpentry for the support of the galleries: nor does any water rise but what may be easily laved with buckets. A canal has however been formed to carry off the water.

"Returning by night to Eger, from the inspection of these mines, we saw on our way the forests wastefully on fire in various places.

"The road from Eger to Drammen, a length between six and seven miles, leads along the bank of the river Dramme, through a vale which, at a small distance on the same side of the river, is bounded by steep rocks crowned with firs. The rocks had absolutely the appearance of having been scorched by the intense heat of the preceding days. Every bush and shrub was burnt up and withered: the strawberries were quite ripe in the season, when, but for this excessive heat, they could scarce have been in flower.

"Drammen is a trading town, situate about two miles from the mouth of the river of the same name. Its houses stand almost all close on the margin of the river. Its principal exports are deals, battons, and iron; the deals shipped mostly for England, the battons for Holland, the iron for Denmark and Holstein.
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The way from Drammen to Hellebeck passes over a lofty mountain, which, from the beauty of the prospect seen from it, has obtained the name of Paradis­berg, or Mount Paradise. The interior strata of it consists of a hard white marble somewhat scaly: it is of this marble that the Frederick’s church at Copenhagen is built. The quarries have, however, been but little worked since. At the greatest depth of the principal quarry is a pyramid of marble, erected in com­memoration of the visit Frederick V. made to this place, when on his progress through Norway.

In these districts the price of a milch cow is from seven to nine rix-dollars, or £1. 8s. to £1. 16s.; and in winter, when fodder is scarce and dear, one may be purchased for 16s. Bullocks and horses are frequently seen on the road in droves for the markets of Christiania. The bullocks sell for £2. to £2. 8s. per head; and the horses, which are from thirteen to fourteen hands high, and remarkably active and spirited, from £4. to £8. a piece.

This part of Norway is greatly infested with wolves and bears. The latter are the most mischievous, not only killing the cattle, but destroying the corn. Only when sorely pressed by hunger, and that in very rare instances, have they been known to attack the human species.

The shepherds are commonly followed by large dogs of the Newfoundland breed, armed with collars of iron spikes, as a defence against the wolves, who frequently attack them, always endeavouring to seize them by the throat. The bears, on the contrary, usually fly from them.

M. Esmark, member of the Norwegian Council of Mines at Kongsberg, has, in a late tour in Norway, made several interesting experiments, calculated to ascertain the boundary line of vegetation, and of the unmelting of the snow. Of the mountains which he ascended for this purpose, the highest is Schneck­chutten, which, according to the observations he was enabled to make, rises rather more than 8000 Rhenish feet above the level of the sea. It is covered with eternal snow; and, at a place where the snow had tumbled down, twenty-five layers of it might be distinguished, each of them having a rind of ice. The uppermost layer, which is of an undulating shape, was, in the hollows formed by the snow-waves, weaker, and of an amethyst colour: which appearance has likewise been observed in the Alps. Where the rays of the sun fall in an oblique direction towards the north and north-east, the bounding line of the snow is as low as 3000 feet above the surface of the sea; whereas, towards the south and west, where the heat of the sun is more intense, it is only at the height of 7000 feet above the level of the sea that the snow is found never to thaw. The highest summits that Mr. Esmark climbed, consisted of a stone
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composed of quartz ore interspersed with micaceous particles, excepting Mount Tromfieldet, between Tönstel and Foldalen, the summit of which consists of a hitherto non-descript kind of stone, which is a mixture of feldspath and schillerspath, at an elevation of nearly 4500 feet above the level of the ocean. This kind of stone is so powerfully magnetical, that it changed the direction of the needle at the distance of four feet. It takes a very fine polish; and, with respect to colour, somewhat resembles the Labrador stone. The boundary of vegetation varies in different places, as do likewise the several species of trees and plants, as they are capable of sustaining a greater or less degree of cold. At the height of 1000 feet, some of the superior sorts of fruit trees thrive and are productive. The pitch-pine \([\text{pinus picea Linn.}]\) bears a greater degree of cold in Norway than the fir \([\text{pinus abies Linn.}]\), the latter thriving only at the height of 3000 feet, while the former is found at an elevation of 3000 feet above the level of the sea: the birch also thrives at that height. At a height greater than this Mr. Esmark met with no other vegetable productions, except the \(\text{betula nana}\), some salices, and the juniper bush, which, however do not thrive at a greater elevation than 3200 feet above the level of the sea. Barley and oats will indeed grow at the height of from 1500 to 1800 feet, but only in sheltered valleys. At an elevation of from 1200 to 1800 feet, the night frost frequently does great injury to the young crops.

"CHRISTIANIA, the capital of Norway, antiently called Opsloe or Ansloe, is situate at the mouth of a bay that runs far inland, through an extensive and fertile plain. A small river crosses the town, and falls into the bay. Christiania is a handsome city; its streets regular and spacious; its houses mostly built of stone; its castle stands on a small peninsula, and presents its front to the sea. On the opposite side of the bay are the remains of the old city, consisting of the ruins of the cathedral and a few other buildings. It appears to have been deserted on account of the superior advantages which the present situation afforded for commerce and the transport of provisions. The principal trade of Christiania is in timber, of which the greater part goes to England, the rest to France and to Denmark. Christiania is the seat of a bishop. Here is also an intendant, with other officers of government, a military school, and a strong garrison. Its population may amount to between 8000 and 10,000. The arm of the sea on which it stands extends many leagues inland, and is navigable up to the town, even for ships of war. At Alstadt, contiguous to the hospital is an alum manufactory; immediately behind which is a hill, the strata whereof being black aluminous schistus, afford the material for this manufacture. In proportion as the schistus is greasy to the touch, glittering, black, tender
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and brittle, so much the richer is it in alum. No petrefactions nor impressions
of bodies, either vegetable or animal, are found contained in these strata. The
schistus whereof they consist is easily wrought with the hammer, or by a very
slight blast of gunpowder. The process of manufacture is this: it is first laid
in oblong heaps on a pile of wood a foot and a half high; the wood is then set
on fire, and the combustion extends through all parts of the heaped schistus.
During this process of calcining the schistus, fresh layers of that material are
continually superadded to the former heaps, which, while they keep the action
of the fire more intense upon those beneath them, are themselves partly calcined.
This operation being done, the schistus is cast into a basin of water, at the depth
of about fifteen inches under ground. The water proceeds from a hill in the
vicinity, and is collected in a reservoir adjacent to the manufactory; whence,
by means of pumps and canals, it is conducted to various other places. Here
the schistus is left to soak four and twenty hours; at the end of which time
the water is drawn off through an orifice in the bottom of the basin, and
poured upon another quantity of schistus newly calcined. This operation is
repeated till the water is impregnated to twenty-four or twenty-six degrees with
the essential quality of the schistus. The lixiviated schistus is again and again
calcined, till it is believed to be exhausted of its sulphurated aluminous matter.
The lixivium is clarified in reservoirs in the ground, and then put into boilers
for ebullition. The boilers are of lead, coated with iron: they are not wide,
but of sufficient depth. Lead is preferred, because the sulphuric acid would
dissolve iron if the boilers were of that metal only; and would thus yield
sulphate of iron, instead of sulphate of alum. These leaden boilers are, how­
ever, gradually melted down in the course of manufacture; never lasting more
than three or four months each. The boiler is quite filled, and the lixivium is
subjected to a very strong ebullition. The fire being afterwards extinguished,
the boilers are emptied: but this not till an earthy deposit is perceived to have
settled on the bottom of the boiler, to such a thickness as to interrupt and impede
the ebullition. The furnace is small, square, and constructed of bricks; with
an aperture in front, and a flue behind, to give passage to the smoke. It might
perhaps be of advantage in this establishment to suspend evaporating basons
over the boilers: certainly wood might be spared by adopting such a contrivance.
Wood is the fuel used; and three cords of it are consumed every
twenty-four hours under each boiler. An attempt has been made to heat the
boilers with the schistus in the act of calcining: but this was found not to succeed.
The earthy sediment is at first red, and afterwards turns yellow. Small quan­
tities of it are prepared for use as a red paint. From the boilers, the lixivium
is poured into a large wooden receptacle, in which it is left to subside and deposit another sediment. It is thence conducted into other reservoirs, in which it crystallizes. In the course of five or six days its crystals are deposited on the bottom and sides of the reservoir. The mother-water is then drawn off, and the crystals are washed in a fresh supply. The mother-water, as it still contains a good deal of alum, is boiled a second time. The crystals, after being thus washed in fresh water, acquire the name of saffian. They are then dissolved in pure water, and submitted to another evaporation; after which the new lixivium is poured into capacious barrels, strongly hooped with iron; and in these is left fifteen days, or three weeks, for crystallization; at which period the water is poured off, the barrel broke up, and the alum taken out for sale. The alum thus prepared is hard, clear, white, and octohedral, with truncated angles, of a harsh, astringent, disagreeable taste. About 500 tons of it are here made annually.

"The schools of Christiania are in high repute; the professors are numerous; and here is unquestionably one of the best seminaries for education in all Norway.

"Proceeding onwards for three days we come to Edswoll, where are seen the iron-works belonging to Mr. Slangenbusch, which furnish about forty-five tons of not very good iron in the year. The only remarkable object here, is the erection of a smelting furnace over a wind furnace, with a strong grating of iron bars between the two. The smelting furnace is sufficiently capacious to hold sixty tons of ore. It is constructed of common stones, and lined with scoriæ of iron. Its shape is cylindrical; its height eleven feet; its diameter twelve inches. In filling it, alternate layers of the iron ore and charcoal dust are put in.

"Near Edswoll is also an inconsiderable gold mine, which is worked at an expense of 1500 rix-dollars per annum; but hitherto not with the requisite spirit for rendering it productive to the extent of which it is capable. The mountain in which this gold mine exists, is by no means lofty, and rises with a very gentle elevation. It stands in a narrow vale, between two ranges of huge and precipitous rocks. Like all the mountains of Norway, it runs in a direction from north to south. Its strata are of quartz, with a mixture of mica-ceous and argillo-ferruginous particles. The veins take the same direction as the mountain. Of these, the two principal extend one on each side of a rivulet that flows through the valley: that which is farthest to the west, reaching to the foot of the mountain, and is opened in a horizontal line. The veins are of considerable breadth. The gangues are of a hard quartz, mixed with a large
proportion of ferruginous matter, and with some grains of gold. The deepest of the open veins is liable to be deluged by water from the rocks, in which predicament a machine turned by a wheel is employed to empty it. The western vein is high up the mountain; but has not yet been explored to any great depth. The gangue, however, promises amply to repay the labour of research. The miners work twelve hours, and rest as many. Their daily wages are fixed at eighteen Danish shillings, equal to about one shilling sterling. The quantity of ore annually smelted, pulverized and levigated, may amount to nearly 300 tons. The ore, after having undergone this process is sent to Kongsberg to be further fabricated.

"From Edswoll, sailing up the Wormen the length of about thirty English miles, we come to Minua. The Wormer is an exceedingly fine river, expanding its ample surface like a lake. The country, in these parts, exhibits very little appearance of tillage. The wealth of the inhabitants appears to consist wholly in their cattle and timber. Hops grow here and there, and thrive well. The birch trees in many parts, had apparently been stripped of their exterior bark; and yet it was observable that they had received no material injury from this depredation. Upon making inquiries on this subject, the information obtained was, that the bark would, within three or four years, be naturally replaced by other bark of fresh growth. The bark, thus stripped from the birches, is used instead of thatch or shingles, as a covering for the roofs of the houses.

"The Norwegians of these parts are particularly skilful in the art of carving in wood. In their works of this sort they employ the wood of the birch, because its brown and yellow veins give an excellent effect to the figures of the carving.

"Although the King of Denmark is an absolute monarch, says a literary lady, in a letter from Norway, yet the Norwegians appear to enjoy all the blessings of freedom. Norway may be termed a sister kingdom; but the people have no Viceroy to lord it over them, and fatten his dependants with the fruit of their labour.

"In the whole country are only two persons who bear the title of Counts, having estates, and exacting some kind of feudal services from their tenantry. All the rest of the country is divided into small farms, which severally belong to the cultivators. It is true, that some few, appertaining to the Church, are let, but always on a lease for life, generally renewed at the option of the eldest son, who, together with this advantage, has a right to a double portion of the property. But the value of the farm is estimated; and, after his portion is
assigned to him, he must be answerable for the residue to the remaining parts of the family.

"During ten years every farmer is bound to attend the drill annually about twelve days, in order to learn the military exercise; but it is always at a small distance from his dwelling; and therefore he is in no danger of being led by this absence into any new habits of life.

"About six thousand regulars are also garrisoned at Christiania and Fredericksball, which are, equally with the militia, kept for the defence of their native country; so that when the Prince Royal passed into Sweden in 1788, having no right to command, he could only request them to escort him on that expedition.

"These corps are mostly composed of the sons of the cottagers, who, being labourers on the farms, are allowed a few acres to cultivate for themselves. These men voluntarily enlist; but it is only for a limited term (six years), at the expiration of which they have the liberty of retiring. The pay when this was wrote was no more than two-pence a day, with an allowance of bread. Low as this may seem, it was however, still, considering the cheapness of the country, more than six-pence in England.

"The distribution of landed property into small farms, produces a degree of equality which I have seldom seen elsewhere; and the rich being all merchants, who are obliged to divide their personal fortune amongst their children, the boys always receiving twice as much as the girls, property has not a chance of accumulating till overgrown wealth destroys the balance of liberty.

"The mayor of each town or district, and the judges in the country, exercise an authority almost patriarchal. They can do much good, but little harm; as every individual has the right of appeal from their decisions: and as they may at all times be forced to give a reason for their conduct herein, it is generally regulated by prudence. And since they go out of office in rotation, they have not time to learn to be tyrants, as was well observed by a person on the spot.

"The farmers, not fearing to be turned out of their farms, should they displease a man in power, and having no vote to be commanded at an election for an imaginary representation, are a manly race; for not being obliged to submit to any debasing tenure, in order to live or advance themselves in the world, they uniformly act with a becoming spirit of independence. This freedom enjoyed by the people, may perhaps render them somewhat litigious, and subject them to the impositions of cunning practitioners in the law; but the authority of office is bounded, and the emoluments of it are not such as to destroy its utility.

"It recently happened, that a man who had abused his power, was cashiered on the representation of the people to the bailiff of the district. In Norway are
four of them, who might with propriety be styled sheriffs; and from their sentence an appeal, by either party, may be made to Copenhagen.

Near most of the towns are commons, on which the cows of all the inhabitants indiscriminately are allowed to graze. The poor, to whom a cow is necessary, are almost supported by it. Besides, to render living more easy, they all go out to fish in their own boats; and fish is their principal food.

The lower class of people in the towns are generally sailors: and the industrious have usually little ventures of their own, that serve to render the winter season comfortable.

On the road to Leuchten we pass through the Hedemarchen, the least mountainous and the most fertile tract of ground in all Norway. From the rising grounds the eye is gratified with one of the most interesting prospects imaginable, of extensive plains, partitioned into meadows and corn-fields, interspersed here and there with woods and running streams. The bread commonly used in this country is kneaded into thin hard cakes, of a mixture of oat-meal and barley-flour. These cakes are no thicker than paper, and are baked on plates of iron.

Near Branderud a number of persons were employed in making a high road. This they did by first laying balks, or trunks of fir trees beside each other longitudinally, then placing others transversely over these, and lastly covering the whole with sand.

On calling for the reckoning at the inns, instead of having a bill of charges for lodging and entertainment, presented in form, the traveller is not a little surprised at being answered by the innkeeper, that it depends entirely on his good pleasure what remuneration he shall receive. This at first appears to arise from the ingenuous simplicity of manners actuating the country people, and from their native hospitality. But, no such thing. It is no other than a vile trick to induce the generous guest, on seeing it left to his own honour to fix the charges, to pay more than he would probably have done to defray the items made out by the landlord. 'What is your fee?' said General Lloyd, when in the Russian service, to a physician that had been called to visit him at Cronstadt; 'Whatever you please, Sir,' returned the doctor. 'That is,' said the General, 'you expect more, than you have the impudence to demand.'

Among other particulars that attracted the notice of Mr. Fabricius, was the practice of suspending the cradles of their babes and infants by straps of leather to one extremity of an elastic board, the other being fastened to the wall: which, as he judiciously observes, gives a considerably easier motion to the

* See Mrs. Mary Wollstonecraft's Letters during a short Residence in Sweden, Norway, and Denmark, 1796.
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cradle than if it were rocked on the ground. This method, however, would not have seemed strange to the learned Professor, if he had made the tour of Ingria, Livonia, and Esthonia, or even Finland, in his progress, in which countries it is the universal custom, and where the traveller often sees the cot or cradle with the infant in it suspended out of doors to the elastic bough of a tree.

"The salers, or places allotted to pasturage, are of so peculiar an economy as seems to merit a distinct description. They are, in numerous instances, very remote from the ordinary dwellings of the persons to whom they belong. Buildings of a very simple structure have therefore been erected upon them, in which the cattle, together with those who tend them, are indiscriminately harboured. On the first falls of snow in winter, the farmers send their goats, cows, and oxen, to the salers, under the care of female servants, whose business it is to look after them, and prepare butter and cheese from the milk. Each of these women has the care of from sixteen to twenty cows; and during their stay at the salers, they see no other human face than that of their master's wife, who comes regularly once a week to bring them bread, and to fetch away the butter and cheese which they have got ready for them.

"At Næklebye the people are justly reputed to have a vehement propensity to politics. They eagerly inquired concerning the affairs of Prussia, Austria, Russia, and Turkey; but appeared to take a still livelier interest in the contest between Great Britain and her confederated enemies; and all, in their sentiments, were decidedly and warmly partial to Great Britain. By gratifying this their political curiosity, we were several times readily supplied with horses, which we should not otherwise have been able to procure immediately for any money."

The alternate vicissitude of extreme heat and intense cold in travelling these northern districts is apt to produce pains and soreness in the eyes. Between Agre and Barssett Mr. Fabricius experienced this inconvenience to a degree really distressing. He continued to be afflicted by it till he came to Ræraas, where he succeeded in curing himself by the use of saccharum saturni diluted with cold water.

"At Folden a small village on the river Glommen, is to be seen a copper-work of no considerable magnitude. The ore is brought from Ræraas, to be here smelted and prepared for use on account of the contiguity of the river and the abundance of wood and charcoal in this place. Between 2000 and 3000 tons of copper are here annually prepared.

"The small-pox was still making dreadful havoc in this district. The people in general continued in the baleful practice of shutting up those who were
ill of it in very close apartments, loading them with warm coverings, and plying them with drinks excessively hot. Some few had, however, become sensible to the benefit of inoculation; and the parish pastors, with a zeal highly laudable, were earnest and constant in their exhortations to the people under their charge to adopt this safe and salutary dispensation of Heaven.

"Reeraas is one of the most considerable towns in the north of Norway. It stands on a narrow plain, encircled with mountains, some of which are so very lofty, that even in the midst of summer they are capped with snow. The houses of the town are of timber, and in general very small. The entire population may amount to about 5000 souls.

"Of all Norway, this district rises the highest above the level of the sea: and, what is remarkable, several of the rivers originating here, descend through different provinces in opposite directions to the ocean. The climate is excessively cold; and even in summer a night rarely passes without a fall of snow, or at least of hoar-frost. No sort of grain ripens here. Even potatoes never grow larger than the size of a walnut; so stinted is the time for their thriving. They cannot be planted before Midsummer; and they must be dug up from the ground in the month of August. Pot-herbs are exceedingly scarce. The grounds about the town furnish nothing but hay, for the winter subsistence of the cattle, which are sent in summer to the sleds. The corn is all brought from Drontheim, the carriage costing 1½ rix-dollars per ton. Rye costs at Reeraas 4½ rix-dollars a ton; barley 3½; oats 2½. In times of extreme scarcity, recourse is had to the use of a very bad species of bread made from the bark of trees. It stills the cravings of hunger, but yields little real nourishment, and gives rise to severe complaints of the stomach, and causes obstructions in the bowels. In those parts which border upon Sweden, corn is still more scarce and dear; and even in the most favourable years, the people are there obliged to use bark-meal in their bread. This ingredient, however, is admitted only in small proportions with meal from grain: and it is, of course, proportionately less hurtful to the stomach. The bark which they put to this use, is that of young pines. They detach it from the tree, and scrape off the hard exterior superficies, leaving nothing but an inner bark not thicker than the blade of a knife. This they expose some time to dry in the air, and then take it to the mill. It has a saccharine taste, but occasions obstructions in the chyliary ducts, accompanied with loss of appetite. Mr. Fabricius is of opinion, that the lichens, which the inhabitants of Iceland, after steeping them in hot water, use in a jelly with milk, would afford a much better supply of food to the poor Norwegians in extreme necessity, than that which they find in the use of their bark meal. The
directors of the mines at Röeraas have been sparing of neither pains nor expense
to establish ample magazines, well stored with grain, at this place; but only
the workmen in their employ derive any benefit from them. To their work-
men they sell out the grain in retail at the same price at which they themselves
bought it: and it is left to the option of the workmen to receive their wages
either in corn or in money, as may best suit their own convenience. No forests
are now seen growing in the immediate vicinity of Röeraas. It should, how-
ever, appear, from the roots still remaining, that this tract of country has been
in former times covered with pines and firs. The lakes near Röeraas abound
in fishes of various species: salmons, trouts, pearches, graylings, &c.

"Röeraas was on the 12th of July, 1678, besieged by the Swedes, who com-
mitted great devastation over all this territory. As a defence against any
future incursions of the Swedes, the government has armed the miners, and
formed a body of infantry under the appellation of skielanfers, skate-runners, or
soldiers that run upon snow-shoes, or skates. These skates or snow-shoes are
made of deal, and partly covered with a piece of rein-deer skin, having the
hair upon it. They are three or four ells in length; and the skate for the
left foot is longer than that for the right. These skaters compose the light
troops of the country, and run, or rather slide, whether on plains or up and
down hills, with incredible celerity, without ever raising a foot, to which they
give impetuosity by the action of their body.

"At no great distance from Röeraas reside families of genuine Laplanders, or,
as they are there called, Finns. They lead a nomadic kind of life, living in tents;
not stopping in any one place longer than they can there procure nourishment
for their cattle. They oblige their wives to act in the subordinate capacity of
servants. The whole of their wealth consists in their rein-deer. Their con-
dition of life is extremely miserable, and yet they are strongly attached to it.
Some of them send their children to be baptized and educated in the Christian
religion at Röeraas.

"Röeraas being situated not far from the confines of Sweden, its inhabitants
carry on a petty contraband trade with the Swedes; to whom they deliver
coffee, brandy, and other articles, which in Sweden are either under absolute
prohibition, or loaded with exorbitant taxes; receiving in return wrought iron
and copper, peltries, castoreum, and several other commodities. The copper
mine at Röeraas is of the utmost importance. It was discovered in the year
1644, by a Laplander following some rein-deer. His portrait is still to be seen
in the principal church of the town. The mine for a long time furnished an-
nually 500 ton of copper. Its whole produce from 1664 to 1778 amounted to
more than twenty-two millions of rix-dollars in value. The shares in the stock
of the company were in 1778 at 200 rix-dollars each. At present, 1811, this
mine yields annually to the value of £67,500. At Engan, the residence of the
Director of the Mines, an agreeable opportunity occurred for observing the
contrivance of spreading dung beneath the floor of the cattle stalls, to mitigate
the excessive cold by which the beasts were liable to be affected in winter.

It is remarkable, that on the heights encompassing the valley of Thydah­
len, at the distance of somewhat more than thirty miles from Røraas, some
vestiges of tillage are at present visible. These are regarded by the inhabitants
as evident proofs that the climate of Norway was antiently milder than it is at
present; for those heights are now so cold as to be entirely uninhabitable.
They suppose that, ever since the depopulation of the country by a raging pes­
tilence, in the fourteenth century, the country has been continually becoming
colder, and has thus prevented many parts from being re-peopled, which were
before abundantly inhabited.

The copper ore of Røraas is a pyrites. It is piled in huge heaps, which
are left to burn for eight or ten weeks successively. The smelting works stand
in a low situation contiguous to the heaps. The calcined ore is conveyed by a
particular passage from the heaps into the foundry. The foundry contains
eight smelting furnaces and two refining furnaces, all ranged in one row. The
ore is smelted in six of the furnaces appropriated to that purpose: in the other
two it is refined to black copper. The copper is not above two hours consecu­
tively in the refining furnace. The mines lie in a direction between north and
east, and at a mile distance from the town of Røraas. The most considerable
of them bears the name of Storwoodsgrube. The rock is schistus interspersed
with mica, quartz, black scheorl, and granite. The vein of ore runs in a direc­
tion from north to south.

From Røraas, proceeding to Hoff, the face of the country is again enli­
vened by several fields in tillage. It is only on the acclivities of the mountains,
on the sides exposed to the meridian heat of the sun, that corn is sown about
Hoff. And, even with this advantage, the grain does not in every season
attain to full maturity.

On the road from Hoff to Greid, July 15, the country people are seen driv­
ing horses laden with copper to Drontheim. At night they take off the loads,
tie small bells to the necks of the horses, and then allow them to seek pasture
without restraint among the rocks or in the woods. The drivers themselves,
making their beds of the horse furniture; lie down to sleep under the trees. On
their return from Drontheim, the horses are loaded with corn and other commo-
dities for consumption at Røeras. The pay of the carrier for himself and his horse is 1½ rix-dollar each trip.

"About seven miles from Hoff is the mine of Dragauhutte, where about sixty ton of black copper is annually prepared. The ore is partly brought from Røeras, partly supplied from some poor and slender veins of copper which are worked near the spot. The ore of these veins is found to contain a mixture of sulphate of iron. The rocky strata of all the mountains in this territory consist of schistus and mica, with here and there a vein of quartz.

"At some distance are seen the mountains of Leibo, famous in history for having been the scene where almost the whole of the Swedish army perished of cold on their retreat in the war between Denmark and Sweden.

"At length we come to Drontham; where being neither inns nor ready furnished lodgings to let, the traveller at first finds some difficulty in procuring necessary accommodations. Drontham having about the year 1770 been burnt to the ground, it was as yet but rising from its ashes. The new houses are built of wood; but they are roomy and handsome. The streets are spacious and straight, though not well paved. It has three churches; whereof one, the cathedral, is a master-piece of Gothic architecture. This city, being almost entirely surrounded with water, and having a rampart where that advantage is wanting, is tolerably well protected from any hostile attack. It is also additionally fortified by the two fortresses of Christiansstein and Munkholm: the former standing on an eminence beside the city; the other on an insulated rock in the middle of the harbour. North of the harbour are shallows, which afford it a sufficient security against any attack by sea. Munkholm Castle is used as a prison for state criminals. The harbour, as well as the bay into which it opens, are deep and commodious, affording excellent anchorage and shelter to ships from winds that rage from any quarter.

"All the copper from the mines of Røeras and Mehldahlen is exported by the way of Drontham. This amounts, communibus annis, to 600 tons; the total value whereof in specie may be about 240,000 rix-dollars. Most of the copper is purchased by the Dutch. Timber and salt-fish are likewise exported in no small quantities from Drontham. The timber is conveyed principally to the north of England. The fishery is a branch of industry, from which this town derives large profits. Drontham possesses not much shipping of its own; both the exports and imports being mostly carried in English and Dutch vessels.

"The bishop of the diocese, his chancellor, and the staff officers of four regiments, reside in Drontham; and no other town in all Norway has so many and such opulent institutions for charitable purposes.
Drontheim is likewise the seat of a Royal Society, which has done much for the advancement of science, more especially by investigating the natural history of the country. The founder of this society was Bishop Gunner, a man of extraordinary genius, great knowledge, and active zeal in scientific pursuits. The memoirs and transactions of this learned body are published in successive volumes. It has a good library, and a cabinet, containing specimens of the various objects of natural history. These were chiefly collected by the late Bishop Gunner, who bequeathed them to the Society. The cabinet is badly arranged; and some very valuable curiosities have been suffered to perish by neglect. The Herbal contains numerous specimens; but they too are in great disorder, and ill preserved. It comprizes all the rare plants of the North, which have been described by Gunner. The mineral specimens are principally copper-ores from the mines of Røraas and Mehl Dahl; together with silver and iron ores from Kongsberg. The collection of Conchology is valuable, both as to the number and variety of the shells. Among the insect tribes is nothing very remarkable, unless we reckon as such a considerable diversity of small cray-fish preserved in spirits. These crabs are here so prolific, that it is not possible to take up a bucket of sea-water without finding some of them in it. Among the models is a small threshing machine, somewhat resembling a fulling-mill.

An excellent sort of cheese is prepared in these and other parts of Norway, in the following manner. The milk is skimmed and curdled; then kept boiling half an hour over the fire; and while boiling constantly stirred. By this process the caseous part coagulates and subsides to the bottom. The whey is then carefully poured off. The curds are next taken out quite hot, put into moulds or caskets, and in these kept for two days under a press; at the end of which time they are removed, and laid on boards to dry in a place moderately warm, and freely accessible to air. After a few days, when they begin to ferment, the heat is increased in order to harden the crust. The cheeses being thus kept till autumn, are then wrapped in straw, inclosed in barrels, and deposited in the cellars for exportation. At Røraas the practice is to put the cheeses always in the same caskets, and never to cleanse them: by which means the cheese acquires that exquisite peculiarity of flavour for which it is so much valued by connoisseurs. This Old Cheese of the North, when good, is of a brown colour; brittle, yet easily cut into thin slices, has a strong smell, and is very agreeable to the palate. It is wholesome, favourable to digestion, and in the estimation of the country-people, a specific remedy for particular complaints. A kind of cheese, called Wijste Smoer Ost, is likewise prepared here from whey; and another sort named Kuage Ost, is made of butter-milk.
At Drontheim is also a sugar work, on an extensive scale, and in a thriving state of manufacture and trade. In Angel's Orphan-house, sixty orphans, from eight to sixteen years of age, are brought up and educated in reading, writing, and the principles of religion. Mr. Angel was likewise the founder of an hospital for old women, in which sixteen are entertained at an allowance of 48 rix-dollars annually for each of them. The hospital is a stone edifice, and was built at an expense of 16,000 rix-dollars.

Milk is here curdled by pouring a small portion of it quite hot upon the leaves of the plant _pinguinula vulgaris_; it thereby becomes curdled and viscid, and disagreeable to the taste; but acquires at the same time the quality of coagulating other milk. It is preserved for use, and occasionally employed for that purpose whenever cheese is to be made. It bears the name of _tate_. Instead of vinegar, the inhabitants of Drontheim make use of sour whey, to which they give the appellation _syra_. The water of Drontheim is not very agreeable as a beverage.

Leaving Drontheim the 22d of July, in a boat with four oars, the wind being unfavourable, we did not reach Oerland till the evening of the next day.

Oerland is a peninsula of no inconsiderable extent; its soil is partly peat earth and partly a common vegetable mould, with a mixture of sand, and is tolerably fertile. On this peninsula stands the largest village perhaps in Norway. To it belong sixteen farms, all lying almost contiguous. The peninsula is destitute of wood, but yields abundance of turf for fuel. The peats, when cut, are set up vertically, four or five together. After being in this position properly dried, they are collected into pyramidal heaps of considerable bulk. In these heaps they remain till the commencement of winter, when they are conveyed home on sledges.

This whole peninsula has been evidently formed by alluvia; and the inhabitants affirm, that its extent is by the same means every day enlarged. It is a curious fact, of which conspicuous instances were here observed, that the plants of the North are almost all viviparous; that is, the seed unfolds its energies in the very bosom of the corolla, out of which new buds arise. By such means, nature triumphs in these regions over the disadvantages of an ungenial climate and a barren soil, and in a manner doubles the number of those few summer days which are propitious to vegetation.

The sea ports on these northern coasts are never frozen up; so that ships both come and go the winter through: but in autumn the sea is extremely tempestuous; and the rockiness of the coast renders its navigation at all times considerably difficult.
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It is the universal practice here to construct the granaries and the storehouses for butter, cheese, bread, and other provisions, apart from the dwellings, generally in the middle of the court-yard. They are made to stand on eight posts, forming a pyramid, and supporting a fabric of boards broader than the base, over which another pyramid is then erected. The second pyramid sustains the roof. The deal flooring between the two pyramids is at such a distance above the ground, that the rats and mice cannot climb up to it. Care is taken never to place any thing near the erection which might serve those vermin as a ladder; for, should they once get in, it would prove an arduous task, if not impossible, to get them out again.

Among other plants in this peninsula Mr. Fabricius observed the *hippophae rhamnoides*, which, if any thing could, he thinks, from its remarkable hardiness, might be very fitly used to form quickset hedges in these parts. It is in appearance a fine shrub, is never assailed by insects, and seems uniformly to thrive the best in places which are most exposed to the wind. The whole morass on this peninsula, as I observed before, appeared from many circumstances to have been formed by a retreat of the waters of the sea. The people even affirmed, that several rocks, which some thirty or forty years ago, were entirely submerged, now remained partly dry, even in the highest spring tides.

The bay contains abundance of salmon, great numbers of which are taken annually by a very simple contrivance. A net is extended out from the shore to a certain distance in the sea; a second net is attached to the farther extremity of the former, so as to float from it at right angles: as soon as the salmon, which always advance in a direction against the wind, are perceived to have been stopped by the first net, the floating net is drawn round, and their escape is prevented: this is the whole contrivance.

A quantity of oats and barley are produced here in commixture: this composition is not used for making bread, but only a sort of pottage or gruel, which is eaten by servants and by the poor. Oerland has an increasing population.

The roofs of the houses in the peninsula are in general covered with birch-bark, overlaid with turfs. The present practice indeed is to cover them rather with clay, which they paint either red or brown; this method being found the least expensive and the most durable.

The only occupation by which these islanders can derive any wealth from other quarters, is fishing. They take large quantities of cod, torsk and ling, from which they extract oil to a considerable amount, and barrel a good deal of dried and salted fish for exportation. The cattle likewise during the winter are fed in part with a mash of fish and lichens boiled together.
It is but justice here to make honourable mention of a worthy old peasant, named Noels Juffersen Eide. This respectable veteran was many years ago, honoured with a gold medal and a silver cup from the society at Copenhagen instituted for the Improvement of Rural Economy. From the condition of a day labourer, without property, he has risen by his own industry to the possession of an estate from which he reaps greatly above a hundred tons of grain in the year. He is in a manner the creator of the fertility of his own acres. This man began by renting and improving one small piece of waste ground. To this he has ever since been making additions, which bespeak both boldness of enterprise and singular perseverance in labour and toil. By the construction of a mole, he has recovered a plot of ground from the sea: he clothes the bare rocks with productive soil fetched from the peat-marshes; he has drained an extensive tract of stagnant water, so as to leave of the water only so much as is wanted for the uses of his farm.

The herring-fishery on these shores is a concern of considerable importance. The method in which it is conducted, is, by first passing a large net, called a nod, round some rocks, within the circuit whereof a sufficient shoal of herrings is perceived. The herrings thus inclosed are taken out with smaller nets at leisure. Several thousand tons may thus be sometimes captured at once. In the season the belly of the herring is usually of a reddish hue, and its excrements are of the same colour. These appearances are ascribed to the small cray-fish which the herrings are known to devour with great voracity. That the herrings may have time to discharge their entrails of this excrement, they are generally left during some days in the inclosure of the nod before they are taken out of the sea. Great numbers of the whiting-pout, or gadus barbatus, are often taken on the same coasts: this species are found to be much infested with lernææ, or fish-lice.

Among many others on this shore is an isle called Otterholm. Here it is observable that the inhabitants smoke the leaves of the angelica archangelica as a substitute for tobacco. They are likewise accustomed to use as a strong drink, an infusion of the leaves of that plant in brandy. In the passage among these isles nothing is more common than to see the sea-dogs from time to time raising their black snouts above the surface of the water. This marine animal is much hated by the fishermen, because it scares away the fishes in the capture of which they are employed. Its hide and fat are impenetrable to bullets. On the rocks at a distance from the shore it is said to be so little afraid of man, that any number of the species may be easily destroyed by knocking them on the head with clubs.
Juniper twigs and berries are commonly burnt in the best apartments of the houses of this country, to purify them from the smell of the victuals after meals, as also on account of the fragrant odour which they diffuse while burning. There is, however, a poignant acidity in the smoke of them, which sometimes proves offensive to the eyes. Several of the fuci or seaweeds are, in mixture with sodden fish, given as fodder to the cattle. One among them, the fucus comedibilis, has the property of fattening cows very fast, at the same time that it gives an exquisite flavour to their milk.

The eider-duck is a native of these rocks. The people of the country prepare nests for these fowls among the rocks, and seize for the rent of them the down which the mother-duck plucks from her own breast to give warmth to her eggs and her young. A man living on one of the rocks the farthest from the land will collect in a year from fifty to a hundred pounds of eider-down, each pound being worth ten rix-dollars. It is enacted by law, that any person killing an eider-duck shall be subject to a fine of ten rix-dollars; and yet numbers are every year destroyed, both by shooting them with the gun, and by carrying away their eggs.

Here is a great variety of aquatic fowl; the flesh of some, particularly the duck, is very plump and eatable; while that of others, from the fishy taste which it acquires by the animal's feeding upon unctuous and unsavoury fish, is not very fit for the table, unless it be first par-boiled in vinegar. Others again of these birds are pickled by the farmers, and are thought extremely palatable; by this means a saving is made of other meat, which may be sent to the markets in town. But the principal advantage they yield is from their feathers, particularly the edder-fuglens, lundens, and alakens, which are frequent every where on these coasts; though the finest and most valuable are got in the nordland districts. They are brought together and annually sent off to the merchants at Bergen.

Frederic Martens observes, in his travels through Spitsbergen, that all sea-birds in violent storms turn their heads against the wind, to prevent its spreading their feathers, but that it may rather close them together to keep the body warm. And Luke Debes, who resided here many years, says, it is not to be described with what difficulty and danger the people look for the birds in the steep and craggy rocks, many of which are more than two hundred fathoms in perpendicular height. Some of them seem fitted by nature for this kind of bird catching, and are called bird-men. Two methods are employed by them in this hazardous occupation. They either climb up these huge perpendicular rocks, or are let down from the top by a strong and thick rope. In the former method, when they climb up, they have a large pole, eleven or twelve ells in
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length, with an iron hook at the end; those who are underneath in the boat, or standing on a cliff, below, fasten this hook to the waistband of the man's breeches who climbs, and has a rope round his waist; by which means they help him up to the highest hold, or projection, that he can reach and fix his feet upon; which done, they hoist another up to the same place; and when they are both up, they give them each their bird pole in their hands, and a long rope, which they tie round each other's waist at either end. Then the one climbs up as high as he can; and where the difficulty is great, the other, by putting his pole under his breech pushes him up, till he gets to a good hold, or standing-place. The uppermost of the two then helps the other up to him with the rope; and so on, till they get to the place where the birds build, and there search about after them as they may. There being in these rocks many dangerous places which they have yet to climb, whilst they are bound together with the strong rope, one always seeks a convenient place where he may stand sure, and be able to hold himself fast, whilst the other is climbing about. If the latter should happen to slip, he is held up by the other, who stands firm, and helps him up again; and when he has got safe by those dangerous places he fixes himself in the same manner, that he may assist the other to come safe to him; after which they clamber about in quest of birds to all accessible stations. Accidents however sometimes happen; for if the one does not stand firm, or is not strong enough to support the other when he slips, they both fall and are infallibly killed; and in this manner scarce a year passes in which some are not destroyed.

"Having ascended the rocks in the manner already related, in those places not greatly frequented by the birds, they are so tame that the bird-men take them up with their hands, as they do not readily leave their young; but where they are shy, the men either throw a net over them in the chinks of the rock; or upon their starting, or flying home, throw their poles with a net to intercept their flight, and so entangle them in it. By this method they catch vast numbers of the lumviser, alliker, and lunder. In the mean time below in the sea a boat is lying, into which they throw their dead fowl, and thus quickly fill the vessel. When the weather is tolerably fair, and there is plenty of game, the bird-men will remain eight days consecutively in the rocks; for here and there are holes in which they can safely rest; and provision is let down to them by lines, and their companions go every day to them with little boats to fetch what they catch.

"Many rocks are so frightful and dangerous as to baffle all attempts to climb them. These therefore they explore, by gradually getting down from above;
which is the second method of searching for birds, and is practised thus: they take a strong rock-line, or rope, eighty or a hundred fathom long, and about three inches in thickness; one end of this the bird-man fastens about his waist in place of a belt, and then draws it betwixt his legs, so that he can sit on it; and thus he is let down, with his bird-pole in his hand. Six men at top hold the rope, letting it sink by degrees, having previously laid a plank on the edge of the rock, for it to slide on, and to prevent its being fretted by the sharp angles of the stones. Another line is fastened round the man's waist, which he pulls as a signal, when he would be drawn up, or let lower, or held still, that he may remain on the place he is come to. All this while the man is in great danger from the loosening of the stones by the action of the rope, and thus bringing them on his head; and which he has no means of keeping off: for which reason he generally has on a sailor's blue furred cap, which being thick and well lined, in some measure saves the blow the stones may give, if they are not too large; otherwise it often costs him his life. Thus these poor people frequently expose themselves to the most imminent perils, merely to gain a subsistence for their families; trusting, as they have great need to do, in God's mercy and protection; to which the greater part of them seriously recommend themselves before they set about this breakneck work. Some indeed pretend there is no great danger in it; excepting that when they have not learnt the practice, or are not sufficiently accustomed to it, the twisting of the rope twirls them about till they grow giddy, and can make no effort to save themselves. It is in reality a great inconvenience, and requires much dexterity; yet such as have acquired the art, make a diversion of it; for they can easily sway themselves to the gyrations of the line; know the proper moment for setting their feet against the rock, and will throw themselves several fathom out, and then bring themselves in again to whatever place they chuse; and when the birds alight, they have the skill to keep firm on the line in the air, and to hold the pole in their hands, till with it they can catch numbers flying out and coming in; as also where there are holes in the rocks, and where the rocks project overhead like a penthouse, in which places the birds are known to congregate. Here they will continue (and this is the greatest art) to throw themselves out, and quickly to fling themselves in again, under the cover, to the birds, and there to fix their feet. When one of them gets into these holes he loosens himself from the rope, which he fastens to a stone, to prevent its falling out of his reach, and then climbs about, and catches the birds either with his hands or with the pole, in the same manner as above described. When he has killed as many as he thinks may suffice, he ties them together, and fastening them to
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the small line, by a pull he gives signal for those above to draw them up. In this manner he works all day; and when he wants to go up, he gives a signal for that purpose, or else works himself up, with his belt full of birds.

"In case there happen not to be a sufficient number of people to hold the large rope, the bird-man then fixes a stake in the ground, to which he fastens his rope, and so slides down without any extraneous help, to work in the aforesaid manner. Rocks there are, so situate, that they may be descended into from the fields; then a companion is taken, and they proceed in the foregoing manner, ransacking the holes, and taking each as many birds as his belt will hold, or as he can carry in a bundle on his back; and so they convey them home. In some parts are likewise vast precipitous cliffs, standing within shore, and yet upwards of a hundred fathom in perpendicular height above the water, which are also extremely difficult to get at. Down these cliffs they help one another in the manner above mentioned, taking a strong rope with them, which having fastened at various stages in the cliff, wherever they can, they leave it all the summer; by this they will run up and down, and take the birds at pleasure. It is not in the power of words to describe how frightful and perilous this bird-catching appears to the beholders, particularly on considering the amazing height and the excessive proclivity of these rocks, and their tremendous projection over the sea. Without ocular demonstration, it would be deemed impossible for any human creature to get into the cavities of them, and even more impossible to climb their sides; and yet they are scaled by this adventurous race. They go sometimes where they can but just pitch the end of their toes, or lay hold with their fingers; they nevertheless proceed undismayed, though there may be a depth of a hundred fathom, or more, to the sea below. Add to this, they often pass a rope from summit to summit, along which they work themselves in baskets, or by other contrivances of art. Dear earnt bread! obtained at such imminent jeopardies of their lives, and in which many, even after long practice, still fall a lamentable sacrifice.

"These birds being brought home, part of them are eaten fresh, and part (if they are obtained in large quantities) is hung up to dry for the winter season. The feathers are collected together and disposed of as merchandize to great advantage. Every part of this country is not the resort of the birds; they frequent chiefly those islands that lie towards the ocean, and are girt with high rocks or cliffs; as at Norder-Oerne, Myggenaas, Vaagoe, Skuoe, Dimerne, and Suderoe: and in dark and cloudy weather they generally get most, for then the birds stay in the rocks. In fine, clear, hot sunshiny days, they are mostly out at sea: and toward the time of their migration they hover about the sea, and sit on the
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cliffs that run along the shore; at which time the people go in boats and capture them with their poles and nets. Thus far Mr. Luke Debes, formerly superintendent of Ferroe, and an excellent naturalist.

" After another sail we came to Christiansand. This is a trading town, of moderate size, situate partly on a projecting point of land, and partly on three small isles, forming a bay of some considerable extent, and almost circular. The houses of this town are ranged in an irregular circle round the rocks. The town itself was founded by Christian VI. in the year 1734. It contains about three thousand inhabitants. It has a good harbour, affording ingress and egress to ships with any wind. Between the three isles is ample room even for the largest fleets: the anchorage is excellent; and vessels can come close up to any part of the town. The fishery principally employs the industry and commerce of the inhabitants of Christiansand. That industry and trade were long left exclusively to the English Company settled in this town; but they are now exercised freely by the townsmen in general. The town itself possesses considerable fisheries; and it is also the common mart for all the fish taken in the neighbourhood. Christiansand has also an extensive trade in timber. The timber, however, which it exports, is of inferior quality, and goes for the greater part to Ireland.

" From Christiansand to Bye is a sail of about twenty miles. The navigation is so extremely dangerous, that from time to time many vessels are lost. Bye is a small village, inhabited entirely by fishermen. The parts adjacent, though rocky, are tolerably fertile, and exhibit both meadows and corn fields. The great abundance of sea-weeds on the coast encouraged the inhabitants not many years since to try the manufacture of kelp, as in Scotland; but they have not hitherto been remarkably successful in the attempt. The equipment of a fishing-boat is not to be done at a less expense than fifty or sixty rix-dollars.

" About Bye, Ildere and Walderhog, the sea-weed is in several places used as manure to the arable land; and is found to keep the land fertile during a course of constant tillage. Wheat, oats, and barley, are the grains grown upon it; and to all appearance they thrive luxuriantly. The inhabitants of Walderhog, however, complain bitterly of the practice of burning sea-weed, alleging that it drives away the fish; and it is even pretended that some remonstrances have been made to government against the permission of it.

" The sepulchre of king Walder stands near the inn at the last mentioned place: it is large, circular, and formed of a prodigious number of stones, which appear to have been taken out of the sea. The base is now covered with earth and overgrown with sod. Many of the stones have been removed in the
expectation of finding treasure buried under them. A spacious vaulted grotto is another object of curiosity near this village. It is, at the entrance, of considerate width and elevation. The roof becomes continually lower as it recedes. One of the sides is granite, the other lime-stone. At the far end appears an orifice of considerable dimensions, which is said to form a communication between this and another grotto still more spacious. The grotto is perfectly dry within. It has, perhaps, formerly been the haunt of pirates; it now affords shelter to wild animals during the inclemency of the winter. Adjacent to this grotto is an extensive peat-morass, of which a great part was tilled and sown with wheat and barley. It appeared to have anciently been a forest of pines and birches.

"August 4. At Wolden are seen certain sheds and huts, which exhibit the remains of an establishment attempted to be set up here, in pursuance of a project formed by a Dr. Erichsen, for manufacturing salt-petre from sea-weed and putrid fish. This gentleman had borrowed large sums of money on the strength of his project; but when he came to carry it into effect, not a particle of salt-petre was he able to produce. On the sea shore in this neighbourhood is observable a stratum of that which is by Linnaeus denominated talky earth.

"At Læken, the next remarkable place we come to, the inhabitants seem in a manner strangers to that subdivision of labour which prevails in other parts. Every man here acts as his own taylor, shoe-maker, smith, miller and carpenter. The corn is in general bad. Large heaps of peat or turf, for fuel, are seen on all hands; as likewise accumulations of the same turf and peat earth intended for use as a compost. The people of Læken are also in the habit of collecting the leaves of certain trees, with which they fodder the cattle in winter."

At Dalvigen Mr. Fabricius expresses the great satisfaction he received in conversing with Mr. Krog, the parish minister, a man of worth and learning, whose endeavours had principally contributed to introduce the practice of inoculation for the small-pox into Norway. It is not unworthy of notice, that amongst other prejudices entertained against inoculation, the Norwegians are simple enough to believe, that the fishery has been less successful on account of the introduction of that method into their country. The most endemical disorder on this coast is pleurisy. Cancer is also more common here than in some other places.

"Aug. 14. Bergen is the largest town in Norway, and the principal in point of trade. Immediately behind it rise lofty mountains, scarcely accessible on horseback. These mountains are constantly overhung with clouds, which descend upon the town in frequent rains. They have a proverbial saying, in
which Bergen is designated as the Chamber-pot of Norway. The atmosphere here is so pluvious, that the inhabitants never stir out of doors without an umbrella. The town is spacious and of handsome construction, with straight streets, rendered however irregular and sharp-cornered by the frequent occurrence of rocks. Its inhabitants are computed at about twenty thousand. Trade is the sole resource for the subsistence and wealth of all these people. Bergen is the staple for all the fish and fish-oil taken on this coast. The carrying trade of this port for these articles is, however, chiefly in the hands of the English, the Dutch, and the Swedes.

"Bergen owes the origin of its commerce to the merchants of the Hanseatic league; on the quays fifty-eight warehouses are still to be seen, erected here by those merchants, for the more convenient exportation of their fish. They had here also a particular court, the decisions whereof tended to exclude the native inhabitants from all share in the trade: they were however entirely expelled, chiefly by the vigorous exertions of a bailiff Walkendorf. Bergen exports also tar and timber. Models of a threshing mill and a drill plough are here shewn as mechanical curiosities.

"The hospitals and public schools are deserving of the highest encomium. Amongst the pupils of the Harmonic academy are some eminent instances of early genius in music, and in the arts of design.

"Bergen possesses a most laudable institution for the encouragement of the useful arts."

From Bergen Mr. Fabricius and his fellow-traveller sailed for Copenhagen on the 20th of August. Weary of the sea voyage, they went on shore at Fladstrand on the 29th, and proceeded thence by land. After passing through Jutland, on the 4th of September they arrived at Kiel.

Notwithstanding the curious details relative to Iceland, which former travellers have published, the present King of Denmark deemed it necessary to obtain new information respecting this remote and secluded portion of the world. His Majesty therefore instructed the Academy of Sciences of Copenhagen to select proper persons to go and collect such information as they could obtain, relative either to the singular phenomena which might present themselves to their view, or those concerning which mankind have hitherto entertained only vague and incompetent notions.
The choice of this learned body having fallen on Messrs. Olassen and Povelsen, they, on their part, spared neither pains nor inquiries to bring home a faithful account, both civil and natural, of the state of Iceland, which has been edited under the superintendence of the Society already mentioned, and published under the title of "A Voyage to Iceland, undertaken by Order of His Majesty the King of Denmark; containing Observations on the Manners and Customs of its Inhabitants; a Description of the Lakes, Rivers, Glacieres, Hot Springs and Volcanoes: of the divers Kinds of Earth, Stones, Fossils and Petrifactions; of the Animals, Fish, Insects, &c. together with an Atlas," in five volumes.

On this occasion the division of the island, such as prevails at the present moment, for the political administration, is here adopted. It is in this order we are presented with a circumstantial account of every district, the form and nature of the mountains, the hills, the vallies, the glaciers, the indications of antient and modern volcanoes, the rivers and rivulets, the stagnant waters and the mineral springs.

In addition to this geographical summary, we find many judicious remarks on the temperature of the climate and the revolution of the seasons; the nature of the soil, the different species of earth, stones, minerals, fossils and petrifactions; in short, all that can be desired relative to husbandry, meadows, and the breeding of domestic animals. Neither has any thing been neglected concerning the economy of the natives, their manners, or the ways of living in such a singular country.

It appears that Iceland is situated in the North Sea, between the 63d and 67th degrees of latitude, is exactly one hundred and thirty common leagues in length and about seventy in breadth. The distance from the Feroe or Faro islands, is seventy leagues, reckoning twenty to a degree, and but thirty-five from Greenland, which, on that side is rendered inaccessible by ice and rocks.

The island itself is represented as being generally composed of mountains and precipitous rocks; but we are informed, that it also abounds with very beautiful plains and valleys, which afford excellent pasturage for the numerous flocks which are to be seen there. On the other hand, the mountains, which are for the most part sterile and uncultivated, present their summits perpetually covered with snow and ice. Many of these exhibit volcanoes, the most famous of which is that of Hecla.

This mountain has thrown out currents of lava at different epochas, and actually ejected such an amazing quantity of pumice stones in 1766, that the sea on the south side was covered with them to the extent of twenty leagues.

The mountains which appear generally encrusted with ice, are denominated
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JOECKULS. From these, during the summer season, proceed torrents, that not only chill the air, but produce a fetid smell. The maritime parts of this island appear to be better inhabited than the interior, on account of the prodigious quantity of fish which the sea continually throws upon the coast, as well as for the purposes of commerce.

Ponderous masses of marble are found in various parts, as well as crystals, denominated after the name of the island.

The cavities in the mountains contain large masses of sulphur, and the same substance is also discovered on the plains, covered over with a layer of sand and clay.

This island produces few or no trees; it abounds however with briars and juniper bushes; but these being not sufficient for the supply of the inhabitants, they have recourse to drift wood, and even to fish bones steeped in the oil of cod’s liver, for fuel. From the circumstance that large and fibrous roots are frequently dug up in numerous places, it would appear that forests here were formerly not unknown.

Garlick, sorrel, and the cochlearia are very common in this island, and have been serviceable to the health of the inhabitants, amidst the fogs, mists and humid exhalations of the climate. Angelica is likewise produced in great plenty; and this plant attains an uncommon degree of luxuriance: but the most extraordinary as well as the most precious vegetable which nature bestows on this region, is a species of moss, exactly resembling that plant termed by the French la pulmonaire; which, on being mixed with milk, is converted into a farinaceous substance. In some families it is made into broth, and is esteemed extremely wholesome by those who pretend to a skill in the animal economy. Neither pulse nor fruit are produced here, the climate being too cold for either. The same reason obtains with respect to grain of all kinds.

No wild beasts are seen here, excepting now and then that a bear is floated hither from Greenland, and a kind of fox, the skin of which is valuable on account of its fur. The breed of horses is exceedingly diminutive, but agile and vigorous; and when brought from the mountains at five years old, turn out very serviceable. Sheep are produced in abundance; every farm possessing its flock. In certain districts they are allowed to remain out the whole year round; but the lambs are kept constantly housed, since they are unable to endure the intense cold: the fleeces are of an excellent quality. The cows, which are also numerous, are at the same time small; we are assured however that they give abundance of milk.

The game consists solely of partridges, snipes and woodcocks: the first of
these are white, well flavoured, and as large as those found on the continent. 
Eagles, vultures, spar-hawks, falcons and owls, are all to be met with here. 
The Iceland falcons, when tamed, have always been celebrated for the pursuit 
of game.

The eider-duck, well known for its down; the swan, the goose, the diver, 
and in general every species of either fresh or salt water fowl, common to 
northern climates, abound here.

Fish of all kinds, such as the herring, the mackarel, the skate, the cray, the 
plaice and the sole are caught: but it is the cod in particular that is most valued 
by the inhabitants, as producing the most profit. The lakes teem with large 
trout, the rivers with salmon, and in the adjoining seas whales are taken during 
the summer season.

The Icelanders are of the ordinary stature, and of a robust temperament. 
They live soberly and frugally; are alert, well proportioned, and nearly all 
have flaxen or light-coloured hair. After fifty years of age, they become subject to a variety of maladies and infirmities, and the generality of them die in consequence of diseases of the lungs, the scurvy, and obstructions in the liver. The shortness of their lives is attributed, 1. To their extreme labour during one portion of the year. 2. To their sedentary manner of living during another. 3. To their exposure to the inclemency of the elements in the fishing season; especially respecting those who live near the sea-coast. And, 4. To the dampness that reigns in the valleys, with reference to those who reside in the interior.

Throughout the summer, the usual diet of the Icelanders is the jowl of the cod; the rest of the fish being salted for exportation; and during the winter season they feed upon the heads of their sheep, which they likewise salt. The part reserved for their own consumption is, we are told, pickled in a species of vinegar, made with sour whey; and this, in addition to milk, constitutes their chief sustenance, bread being extremely scarce and dear: that brought from Copenhagen is a kind of biscuit composed of rye. They boil their fish most commonly in salt water, and use neither salt nor spice; butter being the sole ingredient ever employed by them.

The Atlas which accompanies the five volumes whence we have extracted the above particulars, besides maps, contains designs of the most interesting objects described in the body of the work. In addition to this, we find an ample chart of Iceland, containing a correct outline of all the gulfs, bays, rivers, and stations; most of the fishes with which the circumjacent seas abound are also accurately delineated, &c. The birds of prey are arranged and classed according to their respective genera.
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I shall conclude these preliminaries, with the description of a volcanic island recently formed in the vicinity of Iceland, by Captain von Löwenhorn, in the Danish service.

"In the spring of 1783, a volcanic island was formed in the vicinity of Iceland, which, according to the accounts of the navigators who that year visited the country, attracted no small notice. The discoverer of it, who arrived just at the time of the first eruption, when smoke and flames ascended out of the sea, relates that no island or any land could be seen, from which these flames could originate. No wonder then that he fell into the utmost consternation, when, as he expresses himself, he saw the waves on fire.—Captain and crew, therefore, conceiving the notion that the day of judgment was at hand, took to their prayer books and psalters, devoutly to prepare themselves for their approaching dissolution. But as no trumpet sounded, as the sun remained undarkened, and the firmament unshaken, they proceeded to reflect farther what might be the catastrophe of this portentous event, and at last hit upon the thought, that Iceland had been swallowed up by an earthquake, and that this was the last expiring gasp and convulsive throes of Hecla, the well known burning mountain on that island. Wholly possessed with this idea, they were on the point of tacking about and returning to Denmark with the news of the dreadful disaster; but luckily they had not proceeded far before they got sight of the coast of Iceland.

"The site of the volcanic eruption lies only 7½ nautical miles (15 to a degree) from the south-west point of Iceland; and they had not discovered any land: but being now convinced of their mistake respecting the submersion of Iceland, the ship reached its destined port and completed her voyage. Ships that arrived afterwards saw a small island from which the volcanic eruption proceeded; and, as may well be imagined, saw it always under a different form. The same year smoke and flames were perceived issuing on the shores next adjacent to Iceland.

"Numerous instances being on record of similar volcanic eruptions in the sea becoming islands, this phenomenon attracted the attention of the Danish government; and the following year orders were given to all ships bound to Iceland, to examine the newly formed island: but so entirely had it vanished, that none of them either saw, or could discover the slightest trace of it.—However, towards the end of the year, a very unfortunate accident happened, which
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beyond all doubt was occasioned by some rocks under water, the relics of the departed island.

"A Danish ship of war, of 64 guns, called the Insödfretten, was expected back from the East Indies; and intelligence had been received of her having already sailed from the Cape of Good Hope; but from that time nothing farther was heard of her until the year 1785, when the ships returning from Iceland reported that some parts of that ship, and the long-boat, had been thrown upon the coast of Iceland. From accounts that could be collected, and a comparison of circumstances, to me it appears certain, that the Insödfretten foundered on this rock, which now no longer rises above the surface of the sea. It is impossible for such a long-boat to come out of a ship, except it be done by the hands of men, even though the ship should be shattered all to pieces. Now, not only was this long-boat driven on shore whole, and in good condition; but, moreover, a box of wax-candles was found in it, yet not a living soul. At the distance of about a quarter of a mile from the boat several parts of the same ship were discovered, known to be so by the mark upon them. These fragments, of different dimensions and form, would not have been thrown on shore so near to one another, if the shipwreck had happened at a greater distance: the waves of the sea, the currents, &c. must undoubtedly, in that case, have scattered them farther asunder. Moreover, the fragments had been wafted to the land by the wind, which blows in a direction from the rock. Besides, no other traces of this misfortune had been noticed along the coast of Iceland.

"From these circumstances I drew the conclusion, that the Insödfretten, after leaving the Cape of Good Hope on her return home, had a dangerous and adverse passage; for it is known, that in our northern seas in that year east winds generally prevailed. Very many ships, especially the ships of war, prefer going north round England, to sailing through the channel; and probably the ship may have been in want of something; as for example, fresh water and the like.—The captain was at any rate well acquainted in Iceland; for I myself had, some years before, been there with him as lieutenant of a ship under his command; he may then have been in search of some of the harbours of Iceland, when he had the misfortune, in the open sea, unexpectedly to strike on this hidden rock. In this desperate situation, the crew probably had recourse to the long-boat, as the only means of saving at least a few of them; but while they were hoisting it overboard, it is likely that the ship foundered, and every soul on board perished, as no intelligence was ever received concerning them.

"During my expedition to Iceland in the year 1786, it became an object of my particular attention, to make inquiries touching this volcanic island,
although no one then suspected that the above mentioned ship of war had been wrecked at that place; for this is only a conclusion that I have drawn from what I learned during my investigation of the subject.

"On my arrival in Iceland, where, on account of the observations for the maps, and of other affairs committed to my care, I found myself under the necessity of remaining with my ship a considerable time in Holmens-hafen, and had at my disposal a small ship lying in that harbour; I ordered Lieutenant, now Captain Grove, to proceed on a cruise about the place where the volcanic island had been seen. He continued there several days, and while under sail frequently heaved the sounding lead, but could find no bottom, with a line of a hundred or more fathoms, and had given up all hopes of making the desired discovery. When he was on the point of returning, he, contrary to all expectation, observed the waves breaking on a rock, whose top was nearly on a level with the surface of the water; and now, no longer doubting that he had found what he had been in search of, he noticed its direction and distance from the nearest coast of Iceland.

"When the object of my expedition was accomplished, and I, at the close of summer, was preparing to commence my voyage homewards, I determined, before my departure, to visit this remarkable spot myself, and to correct or confirm its true geographical situation, as far as it can be ascertained by observations made at sea. I accordingly took my point of departure from some small islands or rocks which lie in front of Cape Reikianós, the most south-west promontory of Iceland, and of which the outermost, named the Grenadier's Cap, is 34 miles distant from the promontory, in the direction from south-west to west. The weather proving favourable, I was able to make a meridian observation for determining the latitude, as likewise observations of the longitude by means of time-keepers. Although the time-keepers I had with me were none of the best; yet, as I had sailed on the same day from an Icelandic harbour, where I had observed the longitude, the relative error could not be very considerable: I therefore determined the situation of the rock, called the Grenadier's Cap, to be in 63° 43' 40" N. lat. and 25° 35' 40" longitude west from Paris. This likewise tolerably well coincides with the observations of the French navigators, Verdon, de la Crenne, Borda, and Pingré. See "Voyage fait par Ordre du Roi, en 1771, 1772." This the more, as I have good reasons for believing that, from want of a sufficient knowledge of the coast of Iceland, they made the latitude of Cape Reikianós three minutes too far north; since they stated it to be 63° 55'. And as, from the most accurate observations, I found that the rock lies in a direction from south to west, according to the true meridian, and just
four miles from the above mentioned Grenadier's Cap, it follows, that the situation of this most dangerous rock is in 63° 52' 45" of N. latitude, and 26° 2' 50" west longitude from Paris.

"While I was continuing my course, in order to get a view of the rock, and Captain Grove, who was on board with me, concluded from his former observations that we must be near it, as the coast of Iceland had totally vanished from our sight, and the outermost of the above named visible rocks which lie south-west from Iceland was, notwithstanding the clearness of the weather, scarcely any longer perceptible; he said: 'Is it advisable to sail so directly towards it?'—'Yes, my friend,' was my answer; 'for, on which ever side we turn, we shall have as great a chance of striking upon it, as of escaping the danger: it is like looking for a needle in a load of hay.' As we were thus conversing about it, the people on the watch called out. The attention and eyes of all were directed towards it, and we saw right ahead of us the waves breaking against a rock. We instantly tacked about, and at the same time hove the lead, which had been kept in readiness. We found the depth to be 26 fathoms; immediately after, 40 fathoms; and shortly after, we could not find the bottom with a line a hundred fathoms long. Tallow was, as usual, applied to the plumbmet, that we might be enabled to judge of the nature of the ground from the particles adhering to it. We brought up small pieces of stone, either wholly consisting of lava, or were at least of the volcanic kind. The rock is not large, and appears from our soundings, surrounded by a steep abyss. Its top is level with the surface of the sea, or only a little beneath it; hence it cannot be perceived till very near it, or only when the waves break against it.

"The origin of the volcanic island, which was seen at that place in the year 1788, may be explained in the following manner:—The rock that still remains formed the crater, from which an eruption at that time happened; the great quantity of lava that was ejected accumulated at the bottom of the sea round the crater, till it rose to a considerable height above the surface of the water. But as this volcano is situated in the wide expanse of the ocean, where the largest and most violent waves arise, and tower one above another, it is probable that their force very soon destroyed a structure that yet possessed so little solidity and strength; especially as round about there is an ingulfing abyss, into which it might easily be precipitated. It is to be remembered likewise, that, in the same year a considerable quantity of pumice, and the like volcanic productions, whose specific gravity is less than that of water, was driven on shore in Iceland, and by navigators found swimming in the ocean.

"Had the eruption happened in a less tempestuous sea, and the profundity
around it been less steep and unfathomable, the ejected mass would have been consolidated by its own weight, and in time have become an island; of which we have seen several instances in the Archipelago, in the East Indies, and in other parts of the ocean. Had this volcanic eruption taken place on the main land, or on an island, a mountain would have been formed by it. A volcano does not necessarily originate from a mountain; volcanos have been known to burst forth from the plain; but a necessary consequence is, that the ejected volcanic materials which are heaped up upon the land, at last become a mountain. Now, as here the mighty billows of the ocean could easily wash away the loose accumulations round the crater, it is by no means absurd to suppose, that, as the sea raged over its mouth, the fire was at last overpowered, and the volcano extinguished by the water gushing down the aperture.

"The crater formed of rock, remained standing. It is an undoubted fact that a rock existed here even prior to the eruption of the volcano; and later observations evince that it still subsists. An obscure tradition had long been current among the mariners who were wont to sail to Iceland, that hereabout lay a blind rock, which they called Blind Fugel-skjör (Bird rock). This name I have retained in the chart, though many navigators deny its existence, because they may have often sailed past without observing it.—But in this case, and under such circumstances, the assertion of one man, that he has seen it, is deserving of more credit than the reports of a hundred others, who deny its existence because they have not seen it. This confirms me in my opinion, that the crater was in the same state long before the late eruption.

"To conclude; it will not be deemed an observation altogether superfluous, to corroborate this opinion, that in almost the same direction from the south-west point of Iceland, as has been remarked above, lie five small islands or rocks, the outermost of which is 34 miles distant from the promontory Reikianós. Between these islands is deep water; and ships sailing to or from the west side of Iceland commonly pass that way, provided they are sufficiently acquainted with the particular bearings of the land and the rocks. The latter, by the Danish mariners, are called Vogel-klippen (Bird-rocks), on account of the prodigious numbers of sea-fowl resorting on them; but the natives of the country give them the appellation of Eld-eyare, (fire islands). May we not thence infer, that in ancient times they had volcanic eruptions? and indeed the volcano seen in 1783 may likewise have raged long anterior to that period."

8
DESCRIPTION

OF THE

PICTURESQUE SCENERY

OF

NORWAY.
No. 1.

A VIEW, DESCRIPTIVE OF THE SCENERY ON THE COAST OF NORWAY,
NEAR CAPE LINDESNES (THE NAZE), IN THE DISTRICT OF MANDALS.

The awful sublimity of the coast fills the imagination with ideas of desolation and horror; the rocks dreadfully shattered by the impetuous billows of the great Northern Ocean, which here rolls its vast watery mountains on the craggy shores, dashing and foaming over the sheers and desolate rocky islands, until it meets a proud defiance from the majestic frowning bulwarks of granite which form the barrier of the country.

The sheers are stupendous natural columns of stone, which by thousands encompass the coast; and though varying in their extent, form and distance, all perpendicularly rise through water from one to three hundred fathoms deep. Of these in numerous instances the summits are only marked by the spray dashing over their heads, or occasionally in the hollow of an immense wave, presenting a black and shapeless mass to the affrighted view. It has been calculated that there are near a million of these gigantic shapes around the coast.

This View was taken at sea about a mile from the shore.

The North Sea, which follows the coasts of Norway for three hundred leagues, by many narrow channels forms a multitude of larger and smaller islands, some of them being from three to six or nine leagues in length, and not destitute of vegetation; but most of them are so small that they are inhabited only by some fishermen and pilots, who keep a few heads of cattle, which they send out for pasture to other the nearest little islands, rocks and sheers. By such a rocky rampart, which possibly may consist of myriads of those stone columns, founded in the bottom of the sea, the capitals whereof scarce rise higher than some fathoms above the waves, almost the whole western coast of Norway is defended; from whence arise many and various advantages. Among these the first is, security against any naval force of an enemy, whose ships, without the aid of a pilot from the country itself, would not dare to venture within the sheers: or, even, were they to succeed thus far, they would then be in danger from the least storm, which hereabouts gives no warning; insomuch, that in an instant, unless they have the good fortune of securing themselves in a safe harbour, they may be dashed to pieces in the creeks, which are all inclosed with steep enormous rocks.
A VIEW OF HELIESUND HARBOUR.

This harbour is capacious and safe; bottomed with good holding ground, and capable of containing two hundred ships of the largest burthen. It is environed with rocky islands sufficiently elevated for affording them shelter, and has two entrances; by one or the other of which ships can get in and out, from whatever point the wind may blow. The principal islands are decorated with pines and firs; whereas those of inferior magnitude are generally nothing more than barren desolate rocks, frequented only by a vast variety of sea fowl. The waters also abound in divers kinds of fish; and seals are frequently taken on the shores.

The principal or west entrance from the Skager Rack, has a dangerous rock in the mid-passage, which must be cautiously avoided.

The Norway shore is in very few places level, or of a gradual ascent; but generally steep, angular and impendent: so that close to the rocks, the sea is a hundred, two hundred, nay, three hundred fathoms deep. On the long and uneven sand banks, which are generally termed storeg, or by others haubroe, the bottom is much more sloping. These protuberances run north and south along the coast of Norway, like the sheers, though not within them. In some places they are not more than four or six leagues, in others twelve or sixteen from the main land; whence it may be inferred that the bays are formed by them.
No. III.

A VIEW OF THE SCENERY WHICH THE ISLANDS OF HELLISOÈ AND HELIESUND PRESENT,
FORMING THE INNER HARBOUR.

The peculiar features which distinguish this View are not only bold and striking, but at the same time pleasing, and convey an idea of the rocks in the islands near the main land, particularly those in the centre of the picture, situated in Hellisoè; their smooth round and bald heads, precipices and fragments, are generally picturesque, and form delightful objects for the pencil. The entrance of this harbour is about fifty yards wide, but contracts within so as to suffer only one ship at a time to go through.

The fore-ground is part of the Island of Heliesund, which in itself is a most charming spot, furnished with a variety of objects, and commanding a beautiful view of the great harbour, and adjacent islands.
No. IV.

A VIEW OF PART OF THE SOUTH-EAST CHANNEL FOR SHIPS,

BETWEEN THE ISLANDS HELIESUND AND HELLISOE.

This highly romantic and sublime scene, is inclosed on both sides by the stupendous rocks of the two islands, separated by the narrowest part of the south entrance to the harbour.

The mountains are here much higher and more broken, with many large fragments in perilous situations on their sides and prominent angles, threatening destruction to all below. The interstices sparingly afford nourishment and shelter to a stunted shrub or small tree.

On the foreground are a few wooden houses inhabited by pilots and fishermen, having a small patch of ground adjoining for flux. We likewise see a few juniper bushes, some jutting rocks and broken fragments.
No. V.

ROCKS IN HELIESUND.

This boldness of scenery is particularly characteristic, and presents one of the many striking features of Heliesund.

The rocks are formed of grey granite inclining to purple, with a mixture of *terra ponderosa*, micaceous and other spars, and containing some nodules of ferruginous ore. These rocks are covered in distinct patches with a variety of mosses; and their general aspect conveys an idea of the tremendous effects of volcanic eruptions, or other convulsions of nature, in ages far remote.

At intervals the eye ranges over the bays and islands, solacing itself with the view of the fisherman's hut, about which his numerous little progeny are playing beneath the woodbine shade, or decorating themselves with the wild flowers of the meadow; while their parents are busily engaged in the necessary occupations of making or repairing the nets, equipping the boats, or employed in the various branches of their little rural economy.

Norway appears to be the region which, beyond all others, fishes of innumerable species have chosen for their favourite haunt. To enter into a particular description of them, as it forms no part of my plan, must be left to the naturalist, who would find a large volume scarcely sufficient to that purpose. If the reader, however, is desirous of seeing some further account of these numerous tribes, he is referred to Bishop Pontoppidan's Natural History of Norway.
A BOLD ROMANTIC SCENE IN HELIESUND.

ABOUT the centre of the island, is a confined valley difficult of access; the principal feature standing obliquely prominent over a small plain; its sides are decorated with small shrubs, woodbines, cranberries, junipers, strawberries, weeds and mosses. In the holes and breaks are nests constructed by the shore birds. The cavernous security of this place points it out as a lurking retreat for ferocious beasts. Though it is pleasing to the eye, the descent into it is trod with instinctive caution.

In hard winters, bears have been known to walk over the ice to the islands; and, being left there by a sudden thaw, have committed great devastation; but fortunately those evils seldom occur, and these savage intruders have always paid the forfeit of such temerity with their lives.
No. VII.

VIEW OF ONE OF THE PASSAGES IN HELIESUND, BETWEEN THE ROCKS.

In these ways the traveller is considerably annoyed by large blocks of stone, so as not unfrequently to be obliged to proceed on his hands and knees, or cling to the sides of the rocks; often encountering a huge slab of smooth stone, where one false step would plunge him into a watery grave, or leave his mangled limbs a repast for the birds of prey which are continually hovering over head, among which the eagle is distinguished, and all prey appears to be his alone.

On the cliffs are to be seen the Eider fowl. In shape and size it is between the duck and goose; the male on the upper part is black mixed with dark green, below the eye it is white and light green, the breast black, under the wings and belly a light gray, the bill and feet of the goose kind; the eggs are green and large. In the winter they take to the ocean. To form the nest the duck plucks the down from her breast to keep her young ones warm; the natives take the down and eggs twice; and now the dam having plucked herself almost bare, the male supplies the nest the third time, with his valuable white plumage. When the young leave the nest, the people gather the down a third time, thereby obtaining two sets of eggs and three parcels of down from each pair of birds, without hurting them.
No. VIII.

VIEW FROM A VALLEY ON THE SOUTH SIDE OF HELIESUND.

This small undulating spot is enclosed with rocks on three of its sides; having gentle rills of water meandering through it, where the snipe and woodcock breed.

A disruption of the rocks has nearly closed the entrance. Similar casualties in some parts of Norway have buried in an instant houses and families. The dilation of the strata by frosts loosens the stones; which in their fall carry every thing with them, and form a vast heap of rubbish at the bottom. At the extremity of the valley is a landing-place constructed of timber, and at a little distance are rocky islands, beyond which the main land is seen. In front is a majestic rock of granite seated on an inclined plane, apparently ready to glide into the ocean. This spot being well sheltered from the bleak winds, is the chosen retreat of a colony of wild bees; their nests are suspended from the branch of the pine, or hawthorn, in the form of a pine apple, and of a lead colour. The bees are small, and their honey uncommonly good. They collect their sweets from a few flowers, the wild thyme and other odoriferous herbs and plants, from the river's bank to the mountain's top, with great care and industry.
No. IX.

A REMARKABLE VIEW IN THE ISLE OF HELLISÖE.

On the opposite side of a basin or small harbour enclosed with mountains of stone, are a group of singular forms said to be shoots of crystal. They are angular, and rise perpendicularly above the surface of deep water, more than two hundred feet, having a few shrubs in the cavities, and their heads nearly covered with moss.

On the left lie the fragments of a ship wrecked upon the coast, in which was a sailor above his waist in water; fatigue, cold, and hunger had bereft him of his senses. The humane and charitable natives ran to his relief, and happily enabled him to return to his native home and family.

On the highest point of the island are the marks to direct seamen in the Skager. These are two large towers or cones of stones, with flat tops painted white.

Here is also a burial-place for shipwrecked mariners, where they are decently interred, and the pastor of the district scatters a spoonful of consecrated earth on the corpse while reading the service. A circle of stones, or a small wooden cross (on which the name is inscribed if known), points out the spot where his sad relics lie.

Several terrific passes run among the rocks, with large fragments wedged between them, which the passenger sees fearfully suspended over his head.
A VIEW OF THE TOWN OF CHRISTIANSAND,
TAKEN FROM AN ELEVATED SITUATION NEAR TORRISDALS RIVER.

This seaport town gives name to one of the four grand divisions of Norway, and is said to have derived its appellation from the abundance of sand in and about it, which is rarely to be met with in Norway. It is defended by two Castles; the principal streets are at right angles, covered with sand three or four inches deep. The episcopal church is a fair edifice in form of a cross, built of stone whitewashed, with a tower and clock; the roof is of glazed brown pantiles. It is very neatly fitted up within, and provided with chambers, pews, organ, font, &c. &c. The edifice is surrounded by a neat cemetery, containing some handsome monuments; beneath a spreading yew is one to Hans Henrik Tybring, late Bishop of Christiansand, who died February, 13th, 1798. Many reputable merchants, traders, and ship-builders reside here. Their houses are large quadrangular buildings of timber, having ample and spacious apartments accommodated with court-yards; within well furnished and decorated. Being wood, they are generally painted lead colour or dark red; the window frames and chimneys are painted uniformly white. They have watchmen who proclaim the wind blowing, and the hour.

The ships in the harbour of Fleceroe are seen from this spot on the right in the distance. This town was destroyed by fire in 1734. On the left is Torrisdals river, and from the adjacent mountain is seen that terrible precipice which terminates the chain of the Norwegian Alps.
VIEW IN TORREDAL RIVER.

This view represents a mountain of crumbling materials. Parts of it have been arrested in their fall by the projecting parts, which were charged with innumerable fragments poured upon them from above. From the sides of the neighbouring hills, also, stupendous pieces of rock had been detached, and carried trees and other obstacles before them until they finally vanished in the river Torredal. The source of this picturesque and majestic river is in the Hardangerfield mountains, coasting their base in a serpentine direction over cataracts and through lakes. A vast number of rivers and streams fall into the Torredal, which ultimately joins the ocean at the east end of the town of Christiansand.

This river, in common with other rivers in this part of Norway, is not subject to the influence of tides. The water may indeed at times rise and fall, but this happens only in the event of an approaching change of weather. With southerly and westerly winds the water rises, and it falls when the wind is north or east.

The river of Torredal is celebrated for excellent salmon; the salmon-fishery is not, however, so productive now, as it was in former times. In the middle of the sixteenth century, about one hundred lasts were annually exported from Mandal only, and a large quantity was salted by the inhabitants for their own consumption. Of late years only 12 or 14,000 salmon have been annually caught in the district of Mandal, of which 6 or 7000 were exported to the eastern parts of the country. The salmon-fishery is, nevertheless, still of considerable importance, many cargoes of smoked salmon being annually exported to Copenhagen, and to the eastern parts of Norway. The salmon at present fetches four-pence a pound.

The salmon leaves the ocean and the deep friths, and proceeds up the rivers for the purpose of spawning, at a pretty regular time, generally in the latter part of March or the beginning of April, when the ice disappears. No signs announce the immediate or approaching arrival of this fish, which appears to be regulated by the season of the year, a difference of eight days, sooner or later, seldom taking place. The salmon has been observed to be very cautious in its motions, and immediately seeks the upper part of the river, if it is in any manner disturbed; a leader always regulates the movements of the salmon in its passage up and down the rivers. Its shape is different in different rivers; thus the salmon entering Christiansand frith from the sea, and proceeding to Torredal river, may be distinguished from the salmon which seeks Topdal river. Indeed the salmon knows how to find the river to which it belongs; and the salmon of Torredal is fat, whereas that of Topdal is lean.

The salmon is caught in various ways, but chiefly by means of nets. It is matter of wonder, that this fish is still to be found in abundance, considering the measures which human ingenuity and cupidity have devised for its destruction, from the limits of the ocean to the sources of the rivers. It is much to be lamented, that very little, if any, attention is paid to the regulations promulgated concerning the salmon-fishery; the laws on this subject being most artfully eluded, and at times even openly set at defiance.
VIEW IN TORREDAL RIVER.

The smoked salmon of Norway does not possess that fine flavour which is peculiar to the salmon caught at Randers, in Jutland. This is not, however, owing to the natural qualities of the Norwegian salmon, which is as large and as fat as in Jutland; it is solely to be ascribed to the superior mode of curing and preserving this fish, practised by the natives of the latter country.

In former times the first salmon was, according to custom, presented to the minister of the parish. The Norwegian fisherman does not, however, now comprise any such acknowledgment among the articles of his faith. But this apparent want of attention to the clergyman is not, perhaps, wholly chargeable to the fisherman’s account.
No. XII.

VIEW OF THE SAW-MILLS AT TVED.

This place affords a most exquisite illustration of that striking feature in the physical character of Norway, which suggests to the mind the most soothing and delightful contemplations, at the very moment when it is seized with horror at the stupendous and awful appearances of nature, or most sensibly affected by the penurious condition of the inhabitants. The beauty and fertility of the valley of Tved, enclosed by majestic mountains, crowned with forests, the neatness of the houses, the activity of the saw-mills, and the picturesque cascade formed by the river Topdal, present so many images of peace, comfort, and happiness, in sudden opposition to views of tumult, neediness, and misery, that the mind and the heart implicitly yield to an influence which nature exerts in no other European country, with the exception of Switzerland. For the coast of this part of Norway is particularly marked by nakedness, sterility, and an almost total absence of vegetation; and the inland parts in an eminent degree partake of the same features of barrenness. No cloister appears to have been established here, a circumstance quite decisive of the nature of the country, which is generally unproductive, and unpleasant; for the founders of monasteries always selected the most charming and fertile situations. One of those petty monarchs, among whom the country was anciently divided, styled Naze-kings, indeed resided in this part of the country, at a place called Sigevold; but these personages did not fix their residence with any regard to beauty and excellence of situation; they chose those spots whence they could most conveniently carry on piracy, and, in consequence, generally resided on headlands or nazes, whence they drew their regal appellation.

These Naze-kings originally sprung from a people called Vikinger, who settled in the fine harbours, with which the coast abounds, and by degrees spread over the country. To judge from the cairns to be found everywhere in this part of the country, many illustrious characters appear to have existed in ancient times. The Naze-kings being attacked by King Harold Haarfager in the year 874, many of them repaired to Iceland. In 948 the southern part of Norway, as far as the Naze, embraced the doctrines of Christianity, and a distinguished tribe, called Agder, were in 997 forced to adopt the Christian religion. About the year 1028 the population appears to have been very great; but it was most severely checked by those dreadful plagues with which the northern parts of Europe were visited in the years 1350, 73, 91, and 92. At least two-thirds of the inhabitants were then carried off.

Emigration also appears to have had a sensible influence on population. The flower of the native youth, probably from a dread of naval and military conscription, or from a desire of seeking in other parts of the world that fortune which they despair of finding at home, generally, as soon as they are confirmed, emigrate to England and Holland. Nor is their purpose to be shaken even by the menaces or entreaties of their parents. Some of them return wealthy, others only with an English jacket; but the greater part remain abroad, being either prevented by necessity from regaining their native land, or, which is perhaps most frequently the case, voluntarily renouncing a country, where the scantiness of nature and the constitution of society place insurmountable obstacles to their rise in life.
VIEW OF THE SAW-MILLS AT TVED.

It appears by the census taken in the beginning of the year 1787, that both the bailiwicks of Lister and Mandal, which contain an area of 88 Norwegian square miles, at 18,000 ells the mile, or 528 English square miles, at 2000 yards the mile, had only 30,327 inhabitants, and of course little more than 57 souls on the square mile. Since that period population may no doubt have been somewhat increased, as it has been remarked, that in most parishes the number of births exceeds that of deaths; but of latter years the war with England must have given very serious checks to population in a country, where a large proportion of the inhabitants subsist by the sea, and whose peaceful habits of industry have, in consequence, been either altogether, or in a great measure interrupted. The number of sea-faring men now engaged in commerce and fishing must be greatly diminished, so many being employed in the defence of the country, or shut up in English prisons, alike unable to promote the interests of population. The latter description of persons, it should be observed too, constituting in the nature of things, the most vigorous and youthful part of the community, it is but reasonable to conclude, that this, as well as all other maritime districts of Norway, must in regard to population, sustain an injury which it will require some years of peace to repair.
No. XIII.

VIEW OF THE VALE OF LANDVIG.

This is another of those delightful and fertile spots which, from their rarity in this part of Norway, are deservedly honoured with the appellation of the Land of Canaan. The farm of Mr. Fasting, a very hospitable and worthy man, affords a pleasing and interesting confirmation of the opinion, that, notwithstanding the rigour of the climate and the penury of the soil, much may be done for the improvement of the agriculture of Norway. All kinds of corn grew here in abundance, and the eye was gladdened with the rare sight of a garden plentifully stocked with vegetables, fruits and flowers.

The agriculture of Norway, though one of the chief resources of the peasantry, is but in an indifferent state; nor is it much to be wondered at, if we consider the obstacles which nature and man present to agricultural pursuits.

The soil is generally stony and sandy, and cannot be prepared for seed before the middle of April, sometimes indeed not until May; and the corn is scarcely ripened, and in many instances yet green, when the approach of winter destroys the fairest hopes of the husbandman. A greater portion of rain also falls during the spring and autumn than at any other season of the year.

Agriculture appears, nevertheless, to have been pursued by the earliest inhabitants; for, although they lived on fish and salt meat during winter, when they were unable to engage in piracy (in those times a very honourable calling), they must have used grain in the preparation of drinkables; they being as much attached to strong beer, as the Norwegian peasant of the present day is fond of gin. Agriculture must therefore have been pursued at an early period, though not to any extent. King Oluf Haraldsen prohibited the exportation of grain, malt and flour, during a time of scarcity; and in the 12th and 13th centuries famine was occasioned by the failure of the crops.

But in spite of the necessity existing for the production of grain in Norway herself, and in spite of the difficulties attending its importation in case of a maritime war, the inhabitants have never appeared to be fully impressed with the expediency of cultivating every spot at all susceptible of tillage. The Norwegian entertains but little veneration for the plough, and does not aspire to the honour of becoming, in the words of Swift, "so far a creator, by making two blades of grass grow where only one grew before." In the most favoured situations agriculture is attended with toil and anxiety, and must necessarily be still more so in a country tinted by nature, as Norway is. Hence, this pursuit is undervalued or altogether neglected by a people who, in common with other mountaineers, may possess their share of indolence and improvidence. Ancient custom, the contracted views of the peasant, and selfish interference on the part of others, may also operate to the disregard of an occupation which forms the basis of human happiness. Burns, in allusion to his original condition of an Ayrshire ploughman, exclaimed with pride and rapture, "I was bred to the plough, and am independent." A Norwegian peasant would exclaim with as much spirit and enthusiasm, "I was bred to the axe, and am independent."

In fact, the forest is but too generally the chief good of the Norwegian peasant;
it bounds all his desires, and supplies all his wants. In this view of his condition he is moreover fully confirmed by the trading inhabitants. They quicken his industry in destroying, supply him with all the necessaries, conveniences, and even luxuries of life, and dissipate any anxiety he might feel for the real welfare of himself and family, by the cheering and sure hope, that forty years hence a new forest will be ready for the axe. Reasoning like this is in some measure cogent, and may be given and received with equal pleasure by those who would avoid the necessity of earning their bread in the sweat of their brow.

But if it be considered, as has been proved to demonstration, that a piece of woodland does not yield the advantages which arable land of the same extent would, a heavy responsibility must attach to that indifference with which the capabilities of the soil are viewed by the higher as well as the lower orders of society. I am certainly aware, that in some parts of Norway, improved systems of agriculture have been introduced by men of opulence; but their efforts have not as yet been productive of particular benefit beyond the range of their individual operations. It may even be questioned with propriety, whether their pursuits in agriculture, however successful in appearance, have been attended with real benefit to themselves, because they seem rather to have been ambitious of proving what could be extorted from the soil by sparing no expense, than desirous of eliciting from the ground as much as would not only cover the disbursements incurred in its cultivation, but also afford the proprietor due encouragement.

In the present state of the world, and in the relative situations of Denmark and Norway, as they must be affected by the war with England, too much anxiety cannot be expressed for the proper employment of every improvable spot in Norway. A failure of the harvest in Denmark must be attended with distressing, and may be productive of fatal consequences to, Norway. It is however to be hoped, that the agriculture of Norway will make a sudden and a great spring, since, (in addition to the encouragement held out by particular, and not extensive, societies for the promotion of the economical concerns of the country,) it is now an object of singular care to the Society for the Welfare of Norway, established in 1809. This institution, which may be termed unique, has excited a degree of interest which does infinite honour to the patriotism and talents of Norway; and the establishment being of a representative nature, much good may justly be anticipated from the cordial efforts of a body, who must naturally take a very lively interest in the welfare of the country.
No. XIV.

VIEW OF LANDVIG LAKE.

With the exception of a singular barren rock in the lake, the scenery of Landvig is rather agreeable than romantic. The lake is well stored with fish, and the country abounds with excellent oak and fir timber, with which the inhabitants construct vessels. Mr. Fasting builds ships on the banks of the lake, and launches them over the ice by means of machinery till they have passed the bar, and arrived where there is a sufficient depth of water. Here the vessels wait for the thaw to set them afloat.

An undulating range of rocky hills, moderately elevated, forms a beautiful screen which shelters the valley from the North winds. The neighbouring mountains contain iron ore and chalk; and an attempt was once made, but in vain, to discover silver, in a mountain which has since borne the appellation of the Silver Mountain. The Dragon Mountain derives its name from the circumstance of a dragon having, according to ancient tradition, watched there over a treasure. The dragon is said to have been shot by the Reverend Anders Madsen Been, who lived in 1631, and was minister of the parish for the space of fifty years.

The salmon-fishery is very considerable, especially near two cataracts. The rock contiguous to the largest waterfall exhibits the names of Kings Christian IV. and Frederick III. who, together with their ministers, witnessed from that spot the manner of catching salmon. The latter monarch is understood to have been twice here, although the concerns of Norway did not receive from him the attention bestowed upon them by his immortal father, who undertook nearly fifty journeys into that country, and, there can be no doubt, gave birth to those enthusiastic, romantic, and religious feelings of love, devotion and veneration, still cherished among the peasantry towards the bare name of King. This fact, so honourable, cheering and consoling to human nature, and more particularly creditable to the people in question, affords the most exquisite illustration of the public virtues of Christian IV. who has been justly styled the idol of Danish story, the glory of the Danish name, and the delight of human kind. The Kings of Europe called him their father; Elizabeth of England was his friend, and Algernon Sidney would have been his best subject. Christian IV. was the last limited king in Denmark; and contented himself with rendering his citizens as happy, as firm in power, as splendid in glory, and as eminent in virtue, as they could be made according to the political maxims of Cicero. For the personal aggrandizements of Christian IV., and many important objects of public benefit, were but too successfully counteracted by the disguised and even open resistance offered by an overbearing, selfish, and besotted aristocracy; but the removal of that evil, however desirable, was not perhaps to be then accomplished except by measures which, instead of remedying the grievances under which particular classes of the community laboured, might perhaps ultimately have become equally oppressive to all; and Christian IV. was too honest a man to attempt any such experiments.

The unlimited confidence placed by the Norwegian in the king is, however, productive of a disposition which has been much censured, but probably only by safe and flourishing politicians or cautious placemen. It is a fundamental principle with
the Norwegian, that the king can do no wrong; but he is not equally liberal in extending the benefit of that principle to the king’s officers, who are frequently objects of his jealousy and suspicion. In a discussion of this subject by a thorough paced Danish courtier, it is therefore strongly recommended, that no attention should be paid to a peasant, whenever he prefers any complaint against a person in authority, because civility to a peasant renders him only more suspicious, and prone to mischief; for he will then infallibly conclude, that the person in office is afraid of him, and he will use high words about going to Copenhagen for redress, in which he is generally seconded by the whole parish. “Nothing is more dangerous,” says the writer, whom I have consulted with great pleasure on other points, “than to do immediate justice to a peasant, because innumerable examples prove, that if his complaints against placemen and his equals are once founded in justice, they are twenty times without cause.” The same writer also observes, that a republican spirit now and then manifests itself among the inhabitants of the coast, owing to their frequent intercourse with England. How far this assertion is founded in fact, I shall not now stop to inquire, as I intend, in another place, to examine the effects produced on the Norwegians in moral and intellectual respects by their intercourse with England. But admitting a change of political sentiments to be one of the results, it must give every Englishman, and every friend to national independence and civil liberty, sincere pleasure to note the observations made by the same writer on the inhabitants of this part of Norway. “Gross transgressions,” he says, “are not common here. Now and then theft may be committed, or a girl may be guilty of improper conduct during an illicit pregnancy; but the peasant finds it necessary and fair, that he should be punished according to law for whatever offences he may commit, punishment being the only corrective that can be administered. Neglect of punishment will, on the other hand, produce a mean opinion of government and persons in authority, which is altogether incompatible with the existence of a state.”

It is impossible sufficiently to praise the soundness of this doctrine; but it is at the same time impossible to refrain from wishing, that it had been more generally acted upon. The nations of Europe might then have escaped those awful, calamitous and disgraceful scenes, by which mankind has suffered, does suffer, and may long continue to suffer. At least thousands of continental courtiers would probably have been relieved from much prospective and retrospective anxiety; and the energies of the human race might have been directed to nobler achievements than those which obtrude themselves on this enlightened age.

* Topographical Journal of Norway, No. X. Article: A description of the bailiwicks of Lister and Mandal, by T. Holm, Councillor of State and Governor of a District, page 40.
This is one of the most beautiful lakes in Norway. It contains a number of floating islands, which perpetually shift their stations with strong winds. They appear like a raft composed of trees of different sizes, and lying in every direction, firmly entangled together by their branches and roots as well as some long rank grass. The age of these islands is unknown, and it is impossible to advance any decided opinion relative to their formation. Pontoppidan, in his Natural History of Norway, chap. III., sect. 12, and page 92, indeed tells us that "in some of the lakes are also floating islands or parcels of land about 30 or 40 ells in length with trees growing on them, which having been separated from the main land, are driven about as the wind sets, and when close to the shore are shoved off with a pole. They are said to grow, as it were, by the accession of reeds, grass, weeds, and the like substances. Both the Plinys, especially the younger, mention the like curiosities in Italy, which Kircher has also thought worth notice, in his Mundus Subterraneus, lib. v. cap. 2, particularly the floating islands on the Lake di Bagno, or Solfatara, four miles from Tivoli; and in my opinion, they are not different from those which I have several times seen in this country, particularly in 1749, on my return from Christiania, when the rains had swelled the river near Nordsund to such a degree, that it overflowed a considerable tract on both sides of the valley, rising above the tops of the middle trees, and carrying away great quantities of earth and wood, some of which floated along side of my boat."

But without intending to attach any discredit to the above account, it cannot admit of a doubt, that much of what is said in histories on the subject of floating islands, is either false, or founded on exaggeration. I am inclined to think, that a floating island is generally no more than the concretion of the lighter and more viscous matter floating on the surface of water in cakes, and with the roots of plants, forming congeries of different sizes, which not being fixed to the shore in any part, are blown about by the winds, and float on the surface. The existence of the floating islands in Lake Sinli must, however, be considered as a very apt illustration of what Seneca, the Plinys, Pomponius and Herodotus have advanced upon the subject.

The inhabitants of this and other parts contiguous to the sea, differ widely, in many respects, from those of the upland; they are less hardy, and live better, at least when they have it in their power. Milk-diet is not so common among them, but their corn is better, and the sea constantly supplies them with excellent fish. They wear better and more clothes, their jackets being often made of good cloth. They are tolerably clean in their linen, especially on Sundays; and their beds, and other furniture evince a degree of neatness not to be found among the inhabitants of the mountainous parts of the country, whom they also surpass in manners. Women and single men are rather showy in their attire, especially when they meet at church or in other places. Sometimes indeed, the older branches of families must suffer for the extravagance of the younger ones in respect of dress. At weddings they furnish better eatables and drinkables than the inhabitants of the upland, and, upon the whole, treat their guests rather in the manner of tradespeople. Their conversation turns upon seafaring people, their own observations while abroad, fisheries, agriculture, and even on the conduct of their superiors.

The condition of the common people on the coast is tolerable, when the price of grain is not exorbitant. They are allowed themselves to purchase grain on board
the Danish vessels, but ready money being always required, they are generally obliged to procure grain from the merchants, and in return allow them to mark timber, to be felled for their benefit. Those peasants therefore who possess no woods are frequently embarrassed for grain, which does not generally constitute an article of trade among the merchants of this part of Norway. The condition of the peasantry is moreover greatly deteriorated by the practices of unlicensed hawkers.

But of all the evils under which the common people suffer, the total absence, or at least, a most precarious administration of relief in cases of illness, is particularly to be regretted. In fact, the thinness of population scattered over an extensive tract of country, puts it altogether out of human power, especially on an emergency, to afford medical aid of a proper kind. The natural consequences of this may be readily imagined. Old women and itinerant quacks are chiefly entrusted with the lives of the common people, and generally possess their confidence in a degree which is seldom, if ever, obtained by the skill, learning, humanity or activity of a regularly bred physician. The most common diseases are dysentery, colds, putrid fever, and more particularly Radesyge, or sivens. In ancient times frequent mention is made of leprosy, which proceeded from thickness of blood, occasioned by an inmoderate use of fish and salt meat. According to description, leprosy bore a resemblance to the Elenphantiasis of the Egyptians, which appears to be like the sivens. The sivens is said to have been introduced into Norway by foreign seamen, and to originate in lues veneris. Being propagated through generations, and combined with scabies maligus et ulceræ scabrosæ, it is difficult to be cured, and still more difficult to be extirpated, more particularly while the common people persist in an inordinate use of salt victual accompanied with immoderate libations of gin. The progress of the sivens is likewise greatly promoted by the filthiness of the inhabitants in their linen, clothes and dwellings, and by their culpability in concealing the disease, which might easily admit of a cure, if proper remedies were instantly adopted: the sivens is by some asserted to be peculiar to Norway; but be that as it may, it is a most dreadful disorder, and demands all the care and vigilance which can possibly be exercised. Government has lately directed Professor Horn of Tonsberg to apply his sole attention to the extermination of the sivens, and his exertions have been attended with great success.

That able and learned physician Dr. I. Moeller, of Porsgrund, in Norway, gives the following account of the Radesyge, in answer to some queries of Professor Hensler, of Kiel:

"I have never had an opportunity of seeing or examining the disease called Spédalshed (leprosy), which only occurs in the province of Bergen, but I have read a manuscript account of it by Dr. Buechner. There are, in fact, two diseases, the Radesyge, and Spédalshed, which seem to differ only in degree. For our Radesyge is seldom so severe that it can be considered as a species of lepra, but it rather approaches to the lepra gracorum, lepra herpetica, or impetigo acutum, than to the lepra arahum.

"As the old word rode, means malignant, we have many affections which occur in all countries, and are here called Radesyge. In general, indeed, all diseases of the skin, which are somewhat obstinate, all ill-conditioned sores and eruptions, get this title. But what has rendered our Radesyge so celebrated is, in my opinion, that it is always complicated with scurvy, or is in reality a species of scurvy, for the production of which our climate is very favourable, and because it is therefore always difficult to cure."
VIEW ON LAKE SINLI.

The banks of Lake Sinli present an assemblage of romantic, beautiful and interesting scenery. Cloud-capt mountains and pyramidal rocks on a large scale partially fringed with wood, detached clusters of trees, natural vistas and verdant fields, furnish the contemplative eye with a perpetual succession of varied entertainment. Here a mind prepossessed with poetical representations of pastoral life, will also find ample scope for indulgence. The peasant of this, as well as of most parts of Norway in the height of summer, retires with some of his family to pasturages called *Saeterhavne*, situated up in the country, and in many cases at a considerable distance from his habitation. Here he passes some weeks in pursuits characteristic of Nomadian innocence and simplicity. A fastidious judge of pastoral life may not indeed at all times recognize *Colin* in every young man who is making hay, or *Rosalinda* in every lass who is churning butter or watching her little flock in some sequestered place while singing a plaintive air; but he will certainly return from a Norwegian *Saeterhavn* disposed to exclaim with Gray:

> "The thought less world to majesty may bow,
> Exalt the brave, and idolize success;
> But more to innocence their safety owe
> Than power or genius e'er conspired to bless."

The people of Sweden throughout all ranks, even to the very dregs of society, pique themselves on being styled the French of the North; but without any intention of drawing an invidious comparison, the people of Norway may assume the title of the Swiss of the North. In love of country and of freedom, in impatience of oppression, in a lofty sense of the rights of humanity, in courteousness and hospitality to strangers, in hardness of body combined with the most determined valour, in kindness of heart, in resources of mind and in rectitude of conduct, the mass of the Norwegian people may be equalled but cannot be surpassed by the countrymen of *William Tell*. Indeed the moral and physical affinities between the two nations and their respective countries are equally prominent; and a stranger will contemplate both with the same surprise and delight with which he will view the rainbow in the form of a perfect circle from a hill in Norway or from one in Switzerland.

But although nature assumes the same grand, awful and sublime attitudes in Norway as she does in Switzerland, she is infinitely less liberal in scattering plenty over the land. What has been already said of the precarious and scanty production of grain, is equally applicable to the pastures of Norway. Their excellence depends much on situation, and rainy or dry summers. It may, however, be generally assumed, that the pastures in the interior of the country excel those near the sea. But the size and general state of Norwegian cattle does not bespeak much luxuriance of pasturage.

The native horse of Norway is of small size, generally, and always low. Of this animal Mr. John Lawrence gives the following very correct account:*

* *History and Delineation of the Horse in all his varieties, part III. page 54.*
VIEW ON LAKE SINLI.

"The Norway horse is of some consequence, in relation to the horses of this country, in certain varieties of which there is a considerable admixture of Norsh, or Norway blood: in fact, the dun colour in our common road hackneys, is chiefly derived from that source. This cross has taken place in a method opposite to the general one, since the custom has been to import Norway mares, not stallions. These have been chiefly imported to the coasts of Suffolk and Norfolk, in former days, for I have not heard of the practice within the last thirty years; and very probably the duns and sorrels or chesnuts of those districts, have been derived from the Norway cross. The produce of these mares, and proper English stallions, make hardy and good trotting hacks, of which I can speak from experience.

"Many valuable qualities are with justice ascribed to the Norway horses. They are round made, but with clean heads and limbs; their best pace is the trot, which indeed is the characteristic pace of the Northern, as the gallop is of the Southern horse. They are so surefooted in their own rough country, as to be equal to mules in that rare quality. It is said, when they go down the steep cliffs, strewed with stones, as it were steps, they throw themselves upon their haunches, like our shaft horses in a waggon, and supporting themselves with one forefoot, they try each stone with the other, in order to find whether it be fast, and to be depended on.*

In these break-neck situations, the rider must trust to the discretion and practice of his beast, whether a Norway horse or a mule, for should he, from timidity or rash intermeddling, confuse the aim, or affect the equilibrium of the animal, there could be little other chance than that both would describe the figure, one over the other, down the precipice. These horses are said to be among the most courageous, and to fight with bears and wolves, which they conquer and sometimes destroy, by drumming the sculls with their fore feet: but in these contests, which frequently happen in a wild country, it is found that the horse is always conquered by the bear, much the stronger animal, whenever the horse happens to strike with his hinder feet; being in that unguarded position, the bear soon leaps upon his back, and the horse running away, is at last torn down by his savage rider. Frederick IV. ordered an experiment of this to be made in his presence. A bear was let loose upon one of these horses, which instantly dispatched his enemy in the manner above described."

The black-cattle is generally of a very diminutive size; an English calf will outweigh many a Norwegian ox. In autumn the beef is tolerably fat, rather well-flavoured; and Norwegian epicures who have had opportunities of comparison, assert it to be superior even to English beef. To an English taste it will, however, appear to be something between beef and veal, and most certainly not tempt their palate except in autumn.

The native sheep, which they call Sører, are of a poor kind: they are twice shorn in the course of the year, in autumn and in spring. Attempts have, however, been made to improve the native breed by crossing it with English sheep. Merino sheep have also been introduced by Count Moltke and some other land owners in Norway.

* These statements are founded on facts which the writer of these descriptions has had frequent opportunities of observing. Among other native authorities upon the subject, Mr. P. Holm may be consulted in his description of Lister and Mandel, page 95, No. 9, of the Topographical Journal of Norway.
VIEW OF RORVAND NEAR ARENDAL.

This lake appears to be connected with Lake Sinli; it is situated amidst rocks of tremendous forms, is of moderate width, and sprinkled with several islands and peninsulas. It is the receptacle of the waters from several considerable mountains, which, on the Northern sides, are covered with snow almost during the whole of the year. They are exceedingly rugged, and abound in dreadful precipices and corresponding abysses, through which innumerable streams pursue their courses to the river Nid.

These mountains abound in iron ore of singular richness. Iron forms the most important of Norwegian metals, and is generally well adapted for every kind of application. The pre-eminent excellencies of the ore are most particularly discernible in its progress through the forge; it being very rarely necessary to add any unproductive matter, which can only promote the smelting of the ore without enlarging its substance. The iron mines of Norway, compared with those of other countries, occasion but a small expence; the strata of the ores being most generally of an extent corresponding with their intrinsic excellence. The mountains are at the same time covered with vast forests to supply the iron works with the requisite fuel, and make ample amends for the absence of pitcoal, which is not found in the primeval mountains of Norway. In regard to machinery, the Norwegian iron works also possess pre-eminent advantages; the abundance and the height of water-falls fully effect in the simplest and most economical manner all those purposes which, in other countries, require the most complicated and expensive machinery.

Thus nature herself has pointed out this branch of industry as a principal means of promoting the welfare of the country, and that in a manner most conducive to the real happiness and honour of the people. The iron manufacture, while it calls the physical powers of the lower orders into action, at the same time affords ample scope for the display of their intellectual faculties. That innate turn for mechanics which characterizes the Norwegian peasantry must in consequence be expanded, and, to use a thought of Addison's, a beautiful statue may be disinterred from many a block, which only required some skilful hand to remove the rubbish. On a view therefore of what may, and ought to be done for that large proportion of fellow-creatures, who may apparently be doomed to the drudgery of daily labour, the iron manufacture of Norway must be regarded as a national blessing.

The conduct and superintendance of the iron manufacture likewise require something beyond the mere possession of capital, or the aid of good fortune. Profound and varied knowledge, seconded by the suggestions of an elegant taste, must be instrumental to that degree of success, by which this branch of industry may eventually be raised to that estimation at home, and distinction abroad, which it deserves to obtain.

As an article of trade, iron must be ranked very high, since it is one of the first necessaries of life, and, in consequence, readily to be disposed of. Iron is subject to no perishment from time; and most of the raw materials requisite for its manufacture being produced in the country itself, too high importance can scarcely be attached
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to the beneficial effects which that branch of industry must necessarily produce on
the commercial interests of the nation.

Various objections have, however, been made to the iron manufacture. It is said
to occasion the destruction of the woods, to impose very oppressive burdens on the
peasantry, who are compelled to furnish charcoal, and perform a variety of work at
stated prices in virtue of privileges granted by law to the iron works. The iron
manufacture is also charged with increasing the want of provisions, under which
the nation labours, by accumulating, in particular situations, a vast number of people,
from whose labours agriculture derives but little assistance.

In regard to the destruction of the forests, it should be observed, that no wood
fit for any more valuable purpose, is converted into charcoal. The manufacture of
charcoal, in reality, tends to the benefit of the woods; they are by that means cleared
from useless, ill-shaped trees and parasitical plants, which occupy the space and
draw the nourishment required by the nobler and more promising part of the forest.
Hence the finest woods are frequently observed to be in the vicinity of iron-works.
In particular instances the charge of destroying the woods may perhaps be sup­
ported; but if generally applied to the iron works, it must evidently fall to the
ground.

With respect to oppressive burdens imposed on the peasantry for the benefit of
the iron works; it is certainly true, that very considerable privileges were granted
to the iron works in the earliest period of their establishment—privileges which, if
now asserted, would unquestionably prove very oppressive to the peasantry. But
though the letter of the law remains, the spirit has long ago fled, of which the
proprietors of the iron works and the peasantry have been mutually satisfied.

As for the third charge, it is too ridiculous and absurd to call for any refutation.
If a country were to contain no more inhabitants than the produce of the soil could
support, an amazing reduction must immediately take place in some of the freest,
happiest and most energetic nations, that ever advanced the welfare and honour of
human kind. With immediate reference to Norway, the lowest drudge in an iron
mine could less be spared than the person who held the argument, concerning
which I have some hesitation whether it ought at all to have been noticed.

The grounds upon which every encouragement should be afforded to the iron
manufacture being thus stated, it is proper to notice the discouragements under
which it has laboured, and does labour.

An almost total want of mineralogical seminaries must be considered as the first
cause, why the iron works of Norway have not, generally, been conducted so much
to the honour and advantage of the country as they easily might be. Experience is
the chief, if not the sole guide of the Norwegian miner; to theory he has hitherto
been almost an entire stranger.

Another cause must be sought in the difficulties attending the establishment of
iron works, and in the little prospect which the founder formerly had of deriving
himself any substantial benefit from his endeavours. But this as well as the pre­
ceding cause may easily be removed by a dissemination of proper knowledge, and an
application of those scientific improvements to which mankind has now more or less
ready access.
Another, and perhaps the most material cause which has checked the extension of iron works in Norway, is to be found in the disinclination of Government to entertain propositions from enterprising individuals who feel desirous of establishing iron works, but whose private resources may not enable them to embark in undertakings of that magnitude without some public aid. Applicants of this description appear to labour under great doubts and fears as to final success, even though their schemes may in the outset have received the most flattering encouragement. In Denmark, grants of public assistance are not made on light grounds, and must necessarily be preceded by strict investigations, relative to the pretensions of the applicant in point of wealth, talents or connections; the nature of the situation proposed for the establishment, and innumerable other particulars, which require a large fund of scientific and local knowledge, and a very patient spirit of inquiry. But by some fatality these investigations have frequently been entrusted to men, who happened to know nothing at all about the matters submitted to their consideration, and who had, in consequence, to take upon trust the grounds of their decision from persons who were, perhaps, equally unfit, and probably less disposed to give the subject due attention. The Court of Denmark, or rather many dependents of that Court, having a very strong interest in the iron manufacture of Norway, it is neither uncharitable nor unfair to presume, that the calls of patriotism may have been overpowered by the dictates of loyalty, and that popular reasoning may have yielded to official arguments. The advice of some Royal Councillor of Mountains (however unable or unwilling to give advice) may have been held perfectly conclusive, and proved fatal to schemes which might, perhaps, have curtailed the proceeds of the iron works belonging to his Danish Majesty; and what was more to be dreaded, satisfied the Government and the people, that there was but too much truth in the following very uncourtly language:

"The Court of Denmark is not yet cured of the folly of entering into commercial speculations on its own account. From the year 1763 to 1792, 78,000 rix-dollars* per annum have been lost on the royal mines alone."†

But however unfortunate the court of Denmark may have been in its own commercial transactions, it never could have noticed the fact, that previous to the war with England, the value of iron annually produced in Norway amounted to upwards of a million and a half of rix-dollars, or about £300,000, sterling, without feeling impressed with a desire of extending a branch of industry, which in a commercial point of view alone, must have had signal influence on the prosperity of the country. If the Danish government has therefore, at any time, evinced an indisposition to encourage a diffusion of iron works in Norway, such indisposition may probably be traced to that distrust which has been produced in the rulers of Denmark by the very extreme liberality they have upon all occasions shown in encouraging the trading and manufacturing interests of the country. But while every praise is due to that liberality, it should, at the same time not be forgotten, that the countenance of Government has in but too many cases been afforded in such a

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* In those times about £16,000.
manner, as to be equally disgraceful to itself and injurious to the people. No government has ever been more egregiously imposed upon by foreign adventurers, who dexterously stepped in between that diffidence of its own powers, which I scarcely know whether to call a virtue or a vice in the Danish people, and that predilection for exotic merit, from which but too many Danish statesmen have not been wholly exempt. Jews and broken mechanics from England pretended to render Denmark independent of those supplies which she had been accustomed to draw from the former country; they fretted their busy hour upon the stage, and were heard of no more, except when the losses which they had occasioned to Denmark became topics of discourse. Frenchmen, Germans, Swedes, etc. proposed similar projects, obtained the same encouragement, and closed their respective careers with equal satisfaction to the government and people of Denmark. Had Holberg lived within the last fifty years, he might have rendered the most essential service to his country, by exhibiting on the stage the various characters, from the highest to the lowest, who kindly came even from distant countries to polish the minds and the shoes of his countrymen. What loyal and patriotic Dane can read the following extract, without feeling his blood boil and his heart throb with indignation? "The discovery of pitcoal in Norway would undoubtedly be of the utmost importance. The lord of nature did not create our mountains in vain; but mountebanks have cheated our government, and it has lost a relish for any attempts to improve the condition of Norway. During the first years of my residence at the university, Tydell, a Swede, travelled, I remember, on account of Government, to discover coals in Norway. He found them, it is true, but Newcastle coals which he had himself put into the ground."*

The Danish government is not therefore to be blamed, if it receives with extreme caution and jealousy such proposals as foreigners, generally, may still submit with a view to benefit Denmark. It ought long ago to have been perceived that self-interest could only be their chief motive. But it is much to be lamented that a suspicion of a similar incentive should in these times be applied to such propositions for the good of the country as natives may think entitled to support from the general stock of the nation. In touching upon this subject, a most spirited Norwegian writer observes: "It may be objected, that the suggestions of selfishness are but in very few cases overpowered by a love of honour and of the country. But to place a sense of honour in a rank subordinate to the lust of gain, discovers but a slight knowledge of human nature. The establishment of illustrious monuments to commemorate a spirit of patriotic devotion and a desire of being useful, affords far superior enjoyments to the soul which pants for honest fame, than the largest profits can bestow."† It is impossible to join in these sentiments without bearing testimony to the unshaken loyalty, unabated patriotism and most patient endurance, uniformly displayed by the Danish and Norwegian nations in the cause of their king and country, and which but for the nature of the times, might have left the most ardent of their well-wishers little to desire.

† Patriotic Ideas by Jacob Aall, Knight of the Danbro, and Owner of Naess Iron works near Arendal, page 63.
This view is taken from an eminence before the town, which has a most picturesque situation. A screen of high rocks protects the place against the fury of easterly and northerly winds. A few streets have been made on the north side of the town, as commodiously as the uneven rocks permitted. On the south side the rocks are nearly perpendicular, having a small and unequal base, notwithstanding which a row of the largest and the best houses in the place bears very gratifying testimony to the skill and perseverance manifested in their erection. In front of these houses is a wharf, or street, erected on piles, sufficiently commodious for purposes of trade. In the evening this quay is the favourite promenade of the inhabitants.

A considerable degree of activity prevails in this town, owing to its advantageous situation for trade, and the vicinity of the richest iron mines in Norway. Wealth, the genial attendant on commerce, appears to be very generally distributed among the inhabitants; and a well-wisher to Britain will find much in this town to gratify his best feelings. In saying this, I cannot help advert ing to a judgment pronounced on the commercial part of the Norwegian people by an American, whom I once chanced to meet in Norway. "I will give you their character in a moment, sir," said this person, with the characteristic keenness and coarseness of his countrymen: "Mammon is their god; Buonaparte is the next object worthy of their adoration; the King of Denmark is at present their most convenient master; on the Danes they look down with pity and contempt; the English they detest, and would wish to see England blown up or sunk, if another wood market equally as profitable could be found. As for their hospitality, so much boasted of, I would advise every stranger to adopt the expedient of announcing himself as a timber-dealer, whatever he may in reality be. In that character he may, for obvious reasons, attract their notice. In short, they combine all the bad qualities which characterize the beasts and birds of prey in the country. They possess the ferocity of the bear, the voracity of the wolf, the cunning of the fox, and the Norway-eagle's ken is not near so piercing, when she espies some unsuspecting prey, as the quicksight edness of a Norwegian merchant. To repose confidence in him is to point out your weakest side. Candour, however, obliges me to make some allowance to men just emerging from barbarism, and they shall have the benefit of that, in whatever part of the world I may be called upon for my opinion of them."

I afterwards discovered, that the candour of that nice observer might with advantage have been stretched a little farther, and noticed the fact of a ship of his having been condemned in Norway. His indiscriminate invectives against a whole class of the community would then have received from me that modification of which, prima facie, they stood so much in need, and which I trust will not be withheld by the candid and disinterested portion of his hearers or readers, if he should enrich American literature with his travels in Norway.

Most assuredly a person who has been ill used, or thinks himself ill used in a country, is of all others least qualified to pass opinions on that country. Even under the most favourable circumstances, a traveller, who has moral observation for his object, is liable to error, and has great difficulties to overcome. The American
alluded to, in his observations on the manners, habits, and institutions of Norway, cannot be supposed to have emancipated his mind from the extensive and powerful dominion of association, to have extinguished the agreeable and deceitful feelings of national vanity, and to have cultivated that patient humility, which builds general inferences only upon the repetition of individual facts. The harbour of Christian­sand, for instance, with the Danish public and private armed vessels, and other concomitant objects, could never suggest those ideas, or give rise to those feelings which the port of Philadelphia would. On the contrary, it is rather to be apprehended that the scene of his disquietude, and perhaps ruin, forming part of a whole, would diffuse its sombre tints to every other object in the slightest degree connected with it. Besides, an observer of his description, and in his circumstances, laboured under other very serious impediments. His opportunities for observation had neither been frequent, nor of an extended kind. But even an easy circulation among the various societies of a people, will avail a stranger but little in his endeavours to gain a knowledge of their prevalent opinions and propensities, or to comprehend (what is commonly called) the genius of people, unless he possesses a familiar acquaintance with their language, and resides for a considerable time among them. Of these advantages our American had none. Some heaven-born travellers there may be, who entirely trust to their quickness in observation, to that intuitive glance, which requires only a part to judge of a whole, and who would disdain to acquire knowledge by ordinary means. Yet I cannot help agreeing with Fielding, that a man will not write or speak the worse for knowing something of his subject; and the achievements of but too many travellers amply demonstrate, that a judgment of foreign nations, founded on rapid observation, is almost certainly a mere tissue of ludicrous and disgraceful mistakes. How few travellers think it necessary to exclaim with Sterne: “But I have scarce set foot in your dominions.”

In no country, perhaps, is a traveller more liable to error in his views and estimates of human nature than in Norway, because not only the inhabitants of a province, but frequently those of a single parish, differ from each other in disposition, character, customs, manners, and appearance. Too great caution cannot therefore be employed in appreciating the national character of the Norwegians, the more so, if the observer should chance to be prepossessed with the following remark: “It is not possible for a writer of this country to speak ill of the Norwegians; for of all strangers, the people of Norway love and admire the British the most.” This is not only in direct opposition to the remark of the American gentleman previously alluded to (to which, however, very little credit ought to be attached), but it is as hostile to the opinions of others, who had every inclination to view the Norwegians in the most favourable light with regard to Britain. An attempt to reconcile judgments of so contrary a nature might probably appear an invidious, and would, perhaps, become an ungrateful, task. My object will therefore be simply to state what I myself saw and heard; and I shall do this perfectly unconcerned, whether my observations may favour or disfavour those notions concerning Norway, which travellers have formed, in many cases, perhaps, chiefly according to the different modes in which their personal interests may have been consulted.

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Few towns in Norway are seen in every direction to such advantage as Arendal. The harbour is a perfect Cove of Cork on a smaller scale, and is generally well filled with shipping. The situation of the town is exceedingly picturesque; and too much cannot be said in praise of the grandeur and beauty of the surrounding scenery. Exhauustible sources of amazement and delight burst forth in every quarter. In point of artificial beauty Arendal has, however, in common with other places in Norway, little to recommend itself. Its pretensions to taste, elegance, and comfort, are indeed of a very moderate kind.

But though the inhabitants, especially the commercial portion of them, cannot be said to do much homage to what is merely gracious, courteous, and ornamental, they may, I believe very generally, advance well-founded if not pre-eminent claims to commendation on points of essential consequence to the well-being of society. They do not, in the first place, appear to have fallen into that laxity of practice and indifference of opinion in matters of religion, which the desplicable philosophy of the time has but too successfully introduced into other Norwegian towns. To the inhabitants of Arendal it would certainly be highly unjust to apply any share of the compliments paid by Mary Wollstonecraft in the following triumphant passages:

"On the subject of religion they are likewise becoming tolerant, at least, and perhaps have advanced a step further in free-thinking. One writer has ventured to deny the divinity of Jesus Christ, and to question the necessity or utility of the christian system, without being considered universally as a monster, which would have been the case a few years ago."

Any investigation which has moral observation for its object, is naturally very liable to error, and has great difficulties to overcome before it can arrive at excellence. This conviction, in addition to a knowledge of the pretensions which the inhabitants of the eastern parts of Norway set up to a monopoly of all the virtue in the country, forbids me to pronounce any decided opinion on the moral worth of the inhabitants of Arendal.

But I should return with the supercilious and captious criticism of a Frenchman, the attentions which I had the honour of receiving from the inhabitants of Arendal, if I did not, as far as relates to them, most heartily subscribe to what has been said on high critical authority in this country. "The Norwegian is hospitable in the extreme, and prevents the needy in their wants." A stranger may in this place hope for assistance, although he should be able to offer no recompense in the way of business; and he may expect entertainment, even though it be out of his power to converse on those standing topics in Norwegian society—die square balks, 3 inch 12 feet planks, and so much freight per standard hundred of deals.

The hospitality of opulent people at Arendal is divested of much of the parade.

* Letters written during a short residence in Sweden, Norway, and Denmark, by Mary Wollstonecraft, p. 84.

and ostentation frequently displayed by their equals in other places. At the first
taste, an Englishman may not perhaps approve of all their culinary compositions;
and a Frenchman would probably follow the example of an author of his country,
who in the elation of his heart said, that French cookery pleased all foreigners, but
foreign cookery never satisfied a Frenchman. Yet both would, I have no doubt,
ultimately depart with very favourable impressions of Norwegian cookery. The
flesh of domestic animals is certainly very indifferent except in autumn, but the
soups are always excellent. The Norwegians also produce from mealy substances
mixed with wine or milk, a variety of palatable dishes. Domestic fowls do not
appear to be plentiful, but game they possess in great variety and abundance at all
times of the year. The sea and rivers supply copious stores of fish. In the
manufacture of pastry, the Norwegian fair evince a degree of skill and taste which
would not disgrace a Parisian pastry-cook. They are entitled to as much praise
for the elegance of the table-linen. Knives, dishes, plates, and most other articles
of table-furniture are generally of English manufacture. With the wines in
Norway no Frenchman could find fault.

The hour of dinner on festive occasions, is generally at four o'clock. Dinner is
always preceded by drams, smoked salmon, salt herrings, bread and butter or
cheese. Ladies and gentlemen arrange themselves at table with no very particular
attention to the claims of rank. Dinner generally takes up three and even four
hours, in the course of which the cloth is never withdrawn; the luxury of a maho-
gany dining-table being as yet but little known in Norway. The ladies remain at table
during the whole of the time, and the Norwegian gentlemen appear to pique them-
selves much on their superiority over the English in this respect, whose anxiety to
see the ladies depart soon after the removal of the cloth, is but too generally per-
ceptible. On this head the Norwegians would, however, seem to be entitled to very
little credit, if there is any justice in the following remarks of an English gentleman
whom I met in Norway. "The presence of the ladies," said he, "during the whole
of dinner-time, does not generally appear to operate as a restraint on the habits
and conversation of the male part of the company, or at least on their devotional
exercises at the shrine of Bacchus. The truth perhaps is, that the ideas enter-
ted by the Norwegians of women, are not wholly uncontaminated by Turkish, and
other notions iminical to the sex, and in these they are probably confirmed by the
ladies themselves, who seldom appear to be anxious to blend the study of what is
pleasing with what is useful. Better housewives than the Norwegian women
are perhaps to be found nowhere; and in regard of beauty, their pretensions rank
very high; but they certainly require to be taught that, "to expand the human
face to its full perfection, it seems necessary that the mind should co-operate by
pleasiveness of content or consciousness of superiority." The stranger may indeed
estee himself truly happy, who has been able to converse with a Norwegian lady
for five minutes without entering on the subjects of fashions, balls, &c. However,
who can refuse to agree with such an observer of men and manners as Dr. Moore,
and from his opinion that 'knowledge is not necessary to render a woman exceed-

* A Journey to the Western Islands of Scotland, by Dr. Samuel Johnson, p. 143.
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"ingly agreeable in society, the Norwegian ladies may certainly derive considerable benefit." Not having had the good fortune to enjoy an extended intercourse with the ladies of Norway, I cannot aspire to the honour of becoming their champion. LEDYARD has, however, undertaken that arduous office by anticipation, and the Norwegian ladies may confidently rest on his protection. Let me, likewise, a transient stranger, add a humble tribute to their musical powers, which they wondrously understand to exert, especially on national subjects. Of this I have had numerous opportunities of forming a judgment; but more particularly in the instance of the following song, translated by Lady Borneman, one of the daughters of Mrs. Parsons, the authoress, and now married to the Judge Advocate General of Denmark.

To Norway, valour's native sphere,
We drink with boundless pleasure;
O'er wine we dream of freedom near,
In fancy grasp the treasure.
Yet shall we at some period wake,
And bend compasstive nobly break;
To Norway, valour's native sphere,
We drink with boundless pleasure.

One glass at friendship's shrine is due,
One to Norwegian beauty:
Some nymph, my friend, may claim for you
Pius in this welcome duty.
Shame on the slave who spurns his chains,
And women, wine, and song disdain.
To Norway, valour's native sphere,
We drink with boundless pleasure.

Now, Norway, we thy mountains boast,
Snow, rocks, and countless wonders,
While Dovre echoes from the coast,
And thrice rapt plaudits thunders:
Yes, three times three the Alps around,
Shall health to Norway's sons resound;
To Norway, valour's native sphere,
We drink with boundless pleasure.

The political tenor of this song might almost induce a belief, that the Norwegians, presuming perhaps a little on the remoteness of the seat of government, conceived themselves to be free from the influence of the Sovereign, and beyond the reach of national justice. Such a construction would not, however, be applicable to their actions, whatever it may be to their words, for they certainly combine with an enthusiastic love of liberty, the most devoted loyalty and regard towards the Sovereign, both as a king and a man.

The Norwegians do not join to a love of liberty, that love of literature which characterized the Scots in the rudest but most independent form of society. They have acquired the manual, without the liberal arts; the conveniences and even elegancies of life they possess; but to ornamental knowledge, they are almost

* View of Society and Manners in France, Switzerland, and Germany, by John Moore, M.D.
vol. i. p. 23.
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entire strangers. In the words of one of their own countrymen, "they are a people hitherto more distinguished for courage and energy of spirit, than for culture and learning."* This may serve as some apology for the reception which the noblest translation that has ever appeared in any foreign language, of some of the most interesting productions of Shakspere, experienced at Arendal. Of four copies of Focasson’s translation of Hamlet and Julius Caesar, sent up from Copenhagen, only one was disposed of after a considerable lapse of time. Such was the fate of a performance which, without any reference to the merits of the originals, affords the most exquisite illustrations of the strength, beauty, and compass of the Danish language, and leaves a Dane little room for envy of an Englishman’s being the countryman of Shakspere. It may easily be conjectured, therefore, what encouragement other adventurers in literature have a right to expect from the Norwegians.

A new era is however on the point of opening on science and literature in Norway, and has, much to the honour of the country, been hailed with a degree of sympathy and enthusiasm, which surpasses the most sanguine expectations of those who wished for such an event, and triumphantly puts an end to all such speculations as the enemies of the measure may have indulged, relative to the disinclination and inability of the Norwegians to furnish themselves that basis, on which such an establishment ought to rest. Up to the 17th of January, 1812, the contributions for the support of the Norwegian University amounted to 612,656 rix dollars, Danish currency, and 3980 rix dollars in specie. The annual subscriptions at the same period were 7770 rix dollars Danish currency, 698 barrels,† and 3 skieppen of barley, and 217 barrels and 6½ skieppen of oats.‡

The foundation of a seminary of learning, in such a region, and in times like these, presents to the mind so many interesting and delightful images, not only in immediate reference to the nation principally concerned, but also in regard to the benefits likely to accrue from such an event, to the universal cause of light, truth, and liberty, that I cannot resist the opportunity of giving, in this place, an outline of the establishment of the Norwegian University.

The want of a University in Norway, has for a considerable length of time been deemed a national grievance; and its removal has been steadily, indefatigably, and at times even loudly called for, not only by the Norwegians themselves, but by several Danes, who recommended and defended the establishment of a University in Norway, with as much zeal and energy, as the most high-spirited patriot in the country itself could have done. But their efforts proved uniformly abortive, for they were directed against fearful odds. They had to contend with the disinclination of feeble, timid princes, who either thought the subject beneath their notice, or dreaded to give it any consideration—the machinations of drivelling courtiers, whose diseased understandings beheld nothing in the establishment of a Norwegian University, but the political defection of the country—and finally, the grave and erudite objections of fat-witted Professors in the University of Copenhagen, who conscientiously deemed

* Speech of Professor Treskov, at the festival held at Copenhagen on the 11th of December, 1811, to celebrate the Institution of the Norwegian University, p. 23.
† An English quarter holds 2 Danish barrels and 1 skiepp.
‡ See Budstikken, an official paper published at Christiania, No. 11, 12, 15, and 14, p. 50, 63, and 65.
it their duty to protect the interests of that ancient establishment, for the sake of the handsome incomes which they enjoyed in it. To such a combination of insensibility and unblushing force, of transcendant talent for cabal and of authoritative sophistry, the Norwegians had nothing to oppose but the absolute wants of the country, and a presumption of right to enjoy a fair share of the national stock; or at all events liberty to provide themselves with the means of attaining those degrees of intellectual power, upon which the nation collectively and individually so much depended, in a country formed by nature as Norway is. To considerations of such a kind, every attention was certainly paid, at various times, by honest and enlightened statesmen, but their liberal views met with but too successful counteraction from "personages, who governed by vote—from the creatures of intrigue, or at best, the creatures of form and precedent—from the fickle beings, who will only suffer men to serve the country according to their pedigrees—contemners of merit and personal acquirements—and scoffers at the divinity of talents." The applications of the Norwegians for a University in consequence failed. But all their previous failures may be considered as so many sources of abundant delight, so many useful lessons to teach them the value of the prize, which they have won at last, and as so many additional motives for following up in prosperity, the generous plan which they never abandoned in the dreariest hour of adversity. To a well-wisher of Denmark, the establishment of the Norwegian University must likewise appear to be fraught with important benefits; for whether it be considered as a boon spontaneously granted, or as a privilege reluctantly ceded, the Norwegians must of necessity allow, that with every degree of credit due to their own perseverance, and the justice of their claim, the accomplishment of an object so near and dear to their hearts, could not have been effected, had it not been seconded by the good sense and right feelings of Frederick the Sixth.

His Danish Majesty issued an order on the 2d of September, 1811, for the establishment of a complete University in Norway, to be organized in such a manner, as to embrace not only the higher branches of science, but also those kinds of instruction which more immediately affects the common purposes of life.

Nineteen Professors and two Lecturers are to be appointed, and the town of Kongsberg was originally selected for the establishment of the University. Christiania has however since been fixed upon; and the estate of Bull's Tojen has been purchased by the King of Denmark for 160,000 rix dollars, and presented to the University in a style of munificence which reflects great lustre on an age but too inimical to the Muses. Besides the University, twenty residences will be built for the Professors, of whom four are to enter upon their functions in the month of May 1813. Their appointments, it is understood, will be very beneficial; but it is to be hoped that their interest will never be set in opposition to their duty.

His Danish Majesty has been pleased to grant to the University:

1. The Colbiörnsenian Library belonging to His Majesty, and all duplicates of books in the Great Library at Copenhagen.

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II. Duplicates of specimens of natural curiosities in the Museum of the University of Copenhagen, as well as duplicates of natural curiosities belonging to other public Institutions, and the collection of minerals, now in the possession of the Mineralogical Seminary at Kongsberg.

III. The amount of the annual impost laid on livings in Norway under the appellation of Study-tax, and which has hitherto been enjoyed by the University of Copenhagen.

IV. The amount of legacies that have been bequeathed for the support of Norwegian students in the University of Copenhagen.

V. His Majesty has also signified his permission and consent, that the Norwegian University may, according to circumstances, and as shall appear proper on further consideration, receive contributions from the Academy at Sorø, the property of the late Bernt Anker, which is now administered for public benefit, the Legacy of Angell, and the landed property belonging to the State and Church in Norway.

His Majesty's decision relative to the formation of a University in Norway, appears to have excited a degree of satisfaction in that country, which does equal honour to the giver and the receiver. Nor was this satisfaction confined to Norway; the rest of the Danish dominions embraced the opportunity of testifying their approbation of a measure, which in the present state of the world, cannot be too highly commended. At the suggestion of the Royal Society for the welfare of Norway, the section of that society, established at Copenhagen, unanimously resolved, at a general meeting, that a festival should take place in the city, on the 11th December, to celebrate an event which would, on the same day, call forth the thanksgiving and felicitations of the Norwegian people in all parts of the country.

Professor TRESCHOW, as the head of the section of the Society for the Welfare of Norway, established at Copenhagen, offered to open the festival with a speech; and in order to make the necessary arrangements for the occasion, a committee was appointed, consisting of Professors SVEDRUP and CASTBERG, Messrs. PRAM and THAARUP, and Chamberlain BUTLOW. The King was invited to honour the festival with his presence, and His Majesty was pleased to accept the invitation in terms expressive of his most cordial satisfaction. Their Highnesses Prince CHRISTIAN FREDERICK, and FREDERICK FERDINAND, were also invited in person, and printed circulars were addressed to the ministers and great officers of state, all the Professors in the University, the members of all scientific societies, the managers of all royal civil and military institutions, the heads of schools, and in general all men of science, as far as the great room in the Artillery Academy would admit. Tickets of admission were also distributed to all the Norwegians studying at the University, to travelling Members of the Society for the welfare of Norway, and as many Danish students as could find room. On the day previous to the festival, Her Majesty the Queen, signified her intention of attending, together with the Royal Princesses. The great room in the Artillery Academy exhibited a variety of decorations. The entrance to the Academy displayed a transparency representing a Norwegian mountain with the &reg;gis of Minerva and its attributes. The following inscription appeared illuminated in the rock: Fredericus Sextus posuit 11th.

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Septemb. CIJDCCCXI. At seven in the evening, the festivity commenced on the arrival of their Majesties and the rest of the Royal family. A cantata was immediately struck up, in which the whole musical strength of the theatre was employed. Professor Treschov then made a speech, such as might be expected upon such an occasion from a Norwegian, who ranks with the first philosophers of his age. I extract with, singular pleasure, the following most striking passage.*

"Your Majesty will be most graciously pleased to allow me to cite an example taken from the history of an enemy, for whom I cannot, I presume, be supposed to entertain any partiality. Of all universities the English have still retained their ancient customs and forms in a state which has undergone the slightest alterations. The useful sciences, as they are called, are not at all, or but in a trifling degree cultivated there; whereas the dead languages, philosophy, and mathematics, almost exclusively occupy the whole time of the students, not indeed with any particular regard to practical life, but merely with a view to general and more refined improvement of mind. The English Universities have certainly been reproached for neglecting those sciences, and for retaining those ancient habits and prejudices, which still cling to the Gothic structures and glorious monuments of Oxford and Cambridge like ancient rust. But it is nevertheless equally as well known, that these very establishments have sent forth those celebrated men, who have by their eloquence, integrity, and profound views as statesmen, contributed most materially to advance the prosperity of the British Empire, and placed the most powerful barriers against a destructive torrent of riches, luxury, and a pernicious trading spirit. This torrent may probably ultimately overwhelm the beautiful works, which owe their existence to the English Universities, together with the spirit and energy with which they were raised, but their destruction has at all events occupied the space of centuries. Those academical studies to which I have referred formed the juvenile pursuits of the illustrious characters alluded to, and they returned to them with the most ardent desire, after having gone through all the struggles of life. They became possessed of the most valuable experience relative to the human heart, and the course of the times, and were thus enabled to extend the boundaries of those sciences, from which they had drawn so important benefits. And this advantage they conceived to be the only fruits of their exertions worthy of being inherited by their posterity. Such were the sentiments of Bacon, Clarendon, W. Temple, Burke, Fox; besides Grenville, Chatham, and innumerable others, who rather preferred to enjoy in a quiet old age their own discoveries, than to communicate them by means of writings, to strangers."

Professor Treschov having concluded his speech, Dr. Horneman, Professor in Divinity and Rector Magnificus of the University of Copenhagen, came forward, and in an elegant oration offered the Norwegian University the felicitations of the University of Copenhagen. He was followed by Professor Baggeisen, in the name of the University of Kiel. The Premier of Denmark, Count Schimmelmann, as President of the Danish Society of Sciences, then pronounced an oration. His Excellency was succeeded by His Highness Prince Christian Frederick, as President of the Norwegian Society of Sciences at Drøntheim, and of the Academy of Arts.

* Prof. Treschov's Speech, pag. 39.
at Copenhagen. His Highness's speech is the shortest; but the noble and beautiful sentiments which it breathed, and the elegant manner in which they were conveyed, produced such an impression on the assembly, as would have satisfied the fondest expectations of an habitual orator. It was His Highness's maiden speech, and a more interesting occasion for such an effort could scarcely have been found. Baron Schubart, Danish Intendant-General of Commerce in Italy, as Vice-President of Academia Italiana di Scienze ed Arti at Pisa, next appeared, and he was followed by Dr. Munter, Bishop of Zealand, in the name of the Society of Sciences lately established in the Ioniac isle of Corfu. Professor Truschov then renounced the forum to thank the different learned societies, which had offered their congratulations to the Norwegian University. He likewise repeated the thanks of the country to His Majesty the King. The finale of the cantata was then again performed, and the festivity closed with shouts of God save the King, the father of Norway! God save the Queen, the mother of Norway! which were three times repeated. The boundless enthusiasm which accompanied those marks of applause, fully demonstrated the joy with which all present had noticed the lively interest which their Majesties took in this most truly national festivity. Their Majesties were sensibly affected, and expressed their feelings in the most gracious terms to Professor Truschov.

Most Norwegian families and students who reside at Copenhagen had illuminated their windows. The principal College, as well as Walkendorf's and Ehlersen's Colleges were also illuminated. A great number of the members of the Section of the Society for the Welfare of Norway established at Copenhagen, and others, sat down to a supper. The different Orators on the occasion had been invited; and His Highness Prince Christian honoured the company with his presence. The healths of their Majesties and the rest of the Royal family having been drunk, His Highness Prince Christian proposed the following toast: "the University of Norway! Public spirit called it forth! Frederick gave it to us! May the Lord of All bless and protect it!"—"Eternal prosperity and happiness to Old Norway!" and then, "The Royal Society for the Welfare of Norway, together with its August President, the beloved brother of our precious Queen, His Serene Highness Prince Frederick of Hesse." Professor Truschov then proposed the health of Denmark; after which the company drank the memory of "that never-to-be-forgotten Prince Christian August."

Songs composed for the festival by Messrs. Pram, Buggesen, Olesenlæger, Bonnevie, Sømmer and Horrebow were sung on the occasion.

In Norway the festival was everywhere observed with an enthusiasm perfectly in unison with the exalted liberality with which all classes of the community have contributed to the support of the University. In both respects the town of Arendal appears to have eminently, I might perhaps without impropriety say pre-eminently, distinguished itself. The following sums have been subscribed there:

* Afterwards Charles August, the late Crown Prince of Sweden.
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Mr. Jacob Aall, jun. owner of Naess iron-works, 20000
Mr. Morten Kallevig, merchant at Arendal, 10000
Mr. Christopher Forst, sen. ditto. 5000
Mrs. Magdalena Maria Smith, owner of Froeland iron-works, 5000
Messrs. Anders and Hans Dedekam, merchants at Arendal, 5000
Mrs. Louisa P. Thomasson, 5000
Mr. Peter Herlofsen, merchant at Arendal, 5000
Mr. Ole Falk Ebbell, 3000
Mr. Alexander Chr. Møller, surgeon at Arendal, 2500
Mr. Jacob G. Ebbell, merchant ditto, 2000
Mr. J. Collett Dedekam, ditto. ditto, 1000
Mr. Sivert N. Smith, manager of Froeland’s iron-works, 1000
Mr. Johannes D. Furst, merchant at Arendal, 800
Mr. Peder Dedekam ditto ditto, 500
Mr. D. Weidemann, ditto ditto, 500
Minor subscriptions at 400, 200 and 100, 1200

In all 67200

or about a ninth part of the money subscribed by the country at large for the benefit of the Norwegian University.

Public spirit, in fact, seems to have fixed upon Arendal for its favourite abode in Norway. Some years ago the inhabitants of this place, though under very delicate circumstances, embraced an opportunity of shewing their gratitude and esteem for a man, most eminently entitled to public gratitude and esteem; although it may perhaps be said that he derived less honour from any meed of applause which could be proffered, than he conferred on those by whom it was bestowed.

Søren Nabben, a pilot in the island of Mardoe, at the entrance of Arendal harbour, was standing at the Look-out on a stormy day in November 1793, when a large ship, evidently in the greatest distress, made for the land. The vessel, (which proved to be the Griken, a King’s storeship, commanded by Captain Løvensøn, who had been on an embassy to the Emperor of Morocco) had upwards of an hundred men on board. She soon found herself amidst breakers on all sides, and encompassed by the most imminent dangers. The pilots of Mardoe, however, despaired of affording her any relief, and shrank back from the violence of the gale and the fury of the sea. Søren Nabben alone stood unmoved amidst the jarring elements. "My boy," exclaimed he to his son, who was standing by, "come, we must do our duty, we are both pilots. I know you will follow your father." They leaped into their boat and pushed off. Another pilot named Niels, then requested to go with them, and Søren Nabben took him into the boat. The ship repeatedly fired guns of distress, and every moment appeared decisive of her fate. But Søren Nabben’s skill was not inferior to his undaunted boldness, and he succeeded in reaching the ship. The usual remedy in such desperate cases was immediately applied; a rope was flung from the ship, Niels tied it round his body, jumped into the sea, and was thus taken on board. Søren Nabben and his son in the boat then led the way, and soon,
VIEW OF ARENDAL FROM TROMOE.

together with the ship, reached the port of Arendal in safety. Søren Nabben returned to his family without appearing before the commander of the ship, which, together with so many fellow-creatures, he had saved. Accustomed to the most artless and simple habits of life, he was naturally an utter stranger to the wonderful efficacy of empressements, and of course remained unnoticed. Conscious merit, like Søren Nabben's, perhaps waited to be sought; it was therefore, according to common practice, allowed to wait. Be that however as it may, the transaction was reported to the Government by Captain Lövenørn (whose high character forbids any other supposition than that he was kept in the dark relative to the merit of Søren Nabben) and Niels received a golden medal, as a proof of the satisfaction which his heroic deed had afforded his Majesty. Captain Lövenørn himself presented Niels with the medal in presence of many pilots at Arendal, among whom was Søren Nabben. The gallant Captain, in a manner equally honourable to his judgment and his feelings, did every thing in his power to acknowledge the efforts of Søren Nabben; he pointed him out to the other pilots as a pattern worthy of imitation; he expressed his public and individual obligations to him in the handsomest terms, and added presents of his own gift to his thanks. Søren Nabben could not, however, but labour under a "sense of injured merit;" as a Norwegian, he attached too great importance to a mark of Royal favour to be perfectly indifferent, whether it fell to his lot or not. Yet he expressed his feelings as became a man, whom Providence had singled out to be the instrument of preserving so many of its creatures: he turned to the fortunate pilot, and said: "Niels! between you and me there can be no question, who deserves the medal: you are, however, the fortunate man, and I give you joy. Believe me, I am sincere, and I shall prove it by risking my life in behalf of my fellow creatures for the future, as cheerfully as I have hitherto done."

To the infinite honour of the inhabitants of Arendal, they voted a large silver-cup with a plain inscription to Søren Nabben. It was solemnly presented to him by the head of the pilots, at a dinner given by the inhabitants to testify the gratitude due from the town of Arendal for the services it had derived from his dauntless intrepidity.
THE rocks to the east of Arendal command a view of a portion of the river Nid, which takes its rise in Upper Telemark, and falls into the ocean south-west of Arendal. Immense quantities of timber, perpetually come down this river to supply the saw-mills and dock-yards, of which there is a considerable number at Arendal.

Ship-building is carried on here upon a scale which must be very beneficial to the country at large, and with a degree of spirit, judgment and skill, highly honourable to the merchants and mechanics of all descriptions and classes engaged in this most important branch of industry. The natives of Arendal, in fact, appear to be endowed with a peculiar talent for ship-building, in the application of which very little aid is derived from art and education. The most eminent ship-builder at Arendal is known to be wholly incapable of making the draft of a vessel, yet the want of mathematical knowledge is not to be perceived in the ships built by him.

In noticing the subject of Danish ship-building, it is impossible to pass by in silence the curious, most useful, and inimitable system of naval architecture invented by a Dane, the late Mr. Hohlenberg, a captain in the Danish navy. Of the merits of this extraordinary system it is sufficient to say, that it has been adopted by England, and, of course, received that high sanction, which, had the illustrious inventor now been in existence, would have afforded ample compensation for the hostility, disapprobation, and even persecution, which the daring efforts of his mighty genius provoked in his own country.

The rotundity of the stern forms the distinguishing, and most prominent feature in the Danish system of naval architecture. A 74 gun-ship, built on Mr. Hohlenberg's plan, will be able to point 16 guns right aft, and of course possesses great advantages over ships of the usual construction, in case of being attacked when the vessel cannot be worked. Hence the utility of the Danish system is abundantly manifest in regard to defence and offence. With respect to sailing, Mr. Hohlenberg's plan has likewise been found to be attended with very eminent advantages. The CHRISTIAN DEN SVEnde, the NORGE, the PRINSESSE CAROLINE, line-of-battle ships, and the NAJADEN, FREDERIKSSTEEN, ROTA, PERLEN, VENUS and NYMPHEN frigates, built on Mr. Hohlenberg's plan, are universally admitted to be among the best sailors in the British service.

Captain Hohlenberg rendered himself most eminently worthy of the thanks and support of his country, not merely on account of his system of naval architecture; he introduced into the royal dock-yards a degree of industry, and a spirit of emulation, till then utterly unknown in the Danish service. His efforts to repair the losses sustained in the battle off Copenhagen, and to make good the ordinary decays of the Danish Navy, appear to have been of the most expeditious and splendid description. He seems, in fact, to have been the very man, both in a theoretical and a practical sense, to whom the country could have looked with the most perfect confidence for the maintenance of its favourite branch of defence. But the very qualities, which so strongly recommended the possessor to universal esteem and admiration, as frequently happens, most effectually tended to accelerate his downfall from that towering eminence, to which he had not been led by the
RIVER NID NEAR ARENDAL.

gentle hand of favour, but to which he had forced his way by genius, labour and merit. Among the most useful studies which had engaged his attention, and among the most valuable acquisitions, by which he was distinguished, this illustrious man had not the good fortune, it has been alleged, to reckon the Art of pleasing. In the courtly phraseology of sycophants and drivellers, he was pronounced to be quite intractable, and not unlike the Roman, who said of his countrymen:

"I had rather be their servant my way,
Than sway with them in theirs."

He, in consequence, found it expedient to relinquish the important situation of Constructor of the Danish Navy, and went to the West Indies, where he died soon after his arrival.

Yielding, however, as Mr. Hohlenberg did to the machinations of his enemies; he had the pride and satisfaction to possess the approbation of his present Danish Majesty, then Prince Royal. Mr. Hohlenberg also counted among his most strenuous supporters Admiral Steen Bille, Commodores Løvensørn, Sølling, Sneedorff, Rosenvinge, Captain Høyer, and Mr. Smith, the Secretary to the Danish Admiralty; all of them men distinguished by scientific, literary and professional accomplishments of the very first order. Mr. Hohlenberg's exertions were moreover duly commended by a very large majority of his countrypeople, who were capable of appreciating the genius by which his efforts were suggested, and willing to acknowledge the public spirit by which they were guided. The lofty patriotism and unbending disinterestedness of this most invaluable character, among various honourable instances were most strikingly exemplified by his steady refusal of the tempting offers frequently repeated by Russia to induce him to enter her service. He may be said to have lived on the purest principles for his country only; and when he could no longer serve her, fate, as if in compassion to the sufferings of so great and good a man, put a speedy period to a life, which had been invariably devoted to an illustration of Thomson’s admonition:

"Then be this truth the star by which we steer,
Above ourselves our country should be dear."

To Sir Joseph Yorke belongs the honour of having introduced Mr. Hohlenberg’s system into England. The gallant Admiral held for some time the command of the Christian the Seventh, the largest ship built by Mr. Hohlenberg, and naturally had the best opportunities of judging of the excellencies or defects of the Danish system. That the result of the Admiral’s observations has proved highly creditable to that system, is abundantly manifest from its adoption. An 84 gunship, named the Cambridge, is now in a very forward state in the King’s Yard at Deptford, and two other vessels on smaller scales have been laid down. The favourable notice thus conferred on Mr. Hohlenberg’s invention by a country so competent to decide on such a subject, forms a pleasing addition to the public honours paid in England to the merits of illustrious Danes: at Hampton Court, to the royal virtues of Christian the Fourth; at Greenwich, to the scientific attainments of Tycho Brahe; at Oxford, to the literary accomplishments of Holberg; and at Woolwich, to the military talents of Møllman. The tribute which England has paid to Hohlenberg may be considered by Denmark as not the least interesting legacy bequeathed by her worthies, and as a most grateful oblation to the manes of an individual, now as much lamented at home as he is honoured abroad.
No. XXI.

ROCK NEAR LUNDE.

The country from Arendal to Lunde is very rugged and mountainous, presenting continued scenes of horror and barrenness. The traveller is, in consequence, the more agreeably surprized on viewing the delightful valley, in which Naess iron-works are situated. In point of picturesque beauty, the valley of Naess forms a perfect landscape; all that nature could do in the distribution of wood, hill, dale and water, has been done here with a most lavish hand. The traveller's attention is not, however, solely confined to impressions arising from a contemplation of the awful and pleasing efforts of nature; his interest is, at the same time, most powerfully awakened to considerations affecting the welfare of all the inhabitants of this country. This sequestered spot, which is particularly distinguished for giving birth to useful schemes, for the advancement of the prosperity of this country, affords the most gratifying proofs of the practicability of designs, which, if carried into execution with some portion of the spirit and talent of the owner of Naess iron-works, would communicate increase of happiness and honour to every part of Norway. Indeed the valley of Naess is most eminently entitled to the attention of the traveller, whether he be a native or a stranger. It is the residence of Mr. Jacob Aall, jun., a gentleman with whose name the most gratifying recollections and the most interesting anticipations are intimately associated in the mind of every one who has any knowledge of the events that have lately occurred, and are likely to take place in Norway. The iron-works at Naess hold the first rank in the country; and the successful experiments made here in agriculture, horticulture, and various other branches of art and science, impart a degree of interest to the valley of Naess, which, perhaps, no other spot in Norway possesses. On entering the mansion of Mr. Aall, the traveller can scarcely refrain from giving way to those emotions which Johnson felt in the enjoyment of the hospitality and elegance of Raassay and Dunvegan; for a transition from the gloom of woods, or the barrenness of stony tracts to seats of plenty, gaiety, magnificence and refined intellectual enjoyments, though it may not prove so strikingly agreeable as in the wilds of the Hebrides, must certainly be allowed to form one of the pius desideria of a traveller in Norway.

The mansion at Naess, which is built on principles of elegant simplicity, contains a fine collection of paintings, chiefly by Danish masters, executed in a style, which seems to question the justice of the following remark: "It would be loss of time to speak of the fine arts in Denmark: they hardly exist." That a man of distinguished literary merit and opulence should possess an extensive library, may naturally be expected. Every European traveller will scarcely look in vain for the best productions of his country. It may not be improper to observe here, that an Englishman will frequently derive pleasure from observing the homage rendered in Norway to the effusions of the only free press in Europe. It is quite a comfortable reflection to think, that such works as the Edinburgh Review, and other productions to which the British press only can give birth, still force their way through all the barriers opposed to a diffusion of wholesome principles. A chambre syndicale, of which poor Smollet so bitterly complained, when his books were taken away from him on his arrival in France, has not, however, as yet been established in Norway.

TOWN OF ÖSTER RIISÖER.

The scenery in the vicinity of Lunde presents nothing particularly striking until you arrive at West-Roe, situated on the N.W. bank of Sønnefjord Firth, which contains a large, and various smaller islands of most picturesque appearance. Sailing down the firth you land at a small cove, whence the road leads through corn-fields and over some heath to Öster Riisøer.

This town is situated under stupendous rocks, which, if not supported by means of huge iron bars, would in many places involve it in ruins. The summit of one of the rocks on the highest ridge was constantly kept white by the pilots, to serve as a beacon to ships, previous to the war with England. This spot presents a most sublime view of the sea, firth, town and islands. The entrance to the harbour is guarded by a fort; yet nature has more effectually provided for the defence of the place than art has done; a vast number of rocks, partly visible and partly not, being scattered about in all directions.

Mary Wollstonecraft has given a lively and a very exact description of this town; but to judge from her remarks on the inhabitants, they would scarcely appear worthy of being classed with respectable Hottentots. Some of the good folks of Öster Riisøer took, however, great delight and some degree of pride in shewing me the house in which the rhapsodical writer alluded to resided. The severity of her remarks did not appear to have affected her remembrance, which they cherished with something like sympathy and regard. The defender of the Rights of Women possessed, I was informed, in no small degree, the kind regards of the ladies at Öster Riisøer, although the women of Norway, no more than the men, are under no great obligations for the delicacy and correctness of her sketches of them. But Mary Wollstonecraft wrote under the impressions of various bitter disappointments; and she may perhaps be forgiven for not blazoning forth the virtues and talents of pirates, corrupt judges, paltry traders and pettifogging attorneys. In as far, however, as her remarks may lead to conclusions of the national character, she is greatly to be blamed.

"The feast of reason and the flow of soul" form but seldom parts of those entertainments to which transient strangers, especially if engaged in commercial pursuits, are admitted in Norway; and he who should find an estimate of the national character on the attainments and habits of that portion of the inhabitants which is more particularly open to the inspection of foreigners and strangers, would indeed be guilty of a most egregious mistake. Nine-tenths of the trading body have no right to be considered as part of the Norwegian nation. An assertion so grave should, however, be supported by some proof; I shall therefore quote the authority of Professor Wilse, a Norwegian clergyman, who had the honour and welfare of the nation too much at heart to make any statements lightly or inconsiderately. He observes: * "The flower of the nation is to be found in the interior and mountainous parts of the country, at a distance from the towns. In and about the latter, as well

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as in those parts of the country which border on Sweden, the nation has much
degenerated. There is indeed so great a difference between the inhabitants of these
parts and those in the upland, that they do not appear to belong to the same people.
Among the former villainy, idleness, and profligacy have spread to an alarming
extent. With regard to bodily qualities, the Norwegians are healthy, strong and
stout, but more so in the upland than in the vicinity of the seaport towns. Here,
from an increased use of strong drinks, among other articles of traffic and a more
careless education, many adults appear as if they were not full grown. The French
revolution, the continental system, the doctrines of the German Illuminati, and
an English education, as the Norwegians are pleased to term it, have not contrib­
uted to render Professor Wilse's observations less strikingly applicable at the
present day than they were twenty-two years ago.
No. XXIII.

VIEW NEAR ÖSTER RIISÖER.

It is not in the power of language to portray the horrific forms of many rocks in the vicinity of this town. To these the remark of Suhm is peculiarly applicable, when he says, "The coast of Norway bears an exact resemblance to the fragments of a world in ruins, or to the elements of one about to be created."

Vegetation is rarely observed here; but even these barren tracts now begin to feel the genial influence of that institution, which will ever form a most interesting epoch in the history of this country. Auxiliary societies have been established in these parts of the country, to second the views of the parent Society for the Welfare of Norway. Among the various objects which more immediately demand the attention of these societies, Horticulture, which has hitherto either been altogether overlooked, or but slightly regarded, appears to have excited very great interest. The Managers of the Society for the District of Nedenes, in the Report of their Transactions, dated Arendal, June 16, 1811, proceed to state; "The horticulture of this district is in the most miserable state. There are but few gardens, and those of a wretched kind. The Managers, therefore, purpose to exhibit on their own estates models of gardens well arranged, and suited to the wants of the peasantry. They likewise intend to establish plantations, from which fruit-trees may be had at a reasonable expense, in order to be replanted in the district. A gardener, whom the Managers themselves mean to keep, will at the same time be at the service of the district, either gratis, or for some trifling consideration."

With a view to promote the encouragement of Horticulture, and other objects of national import, subscriptions have been opened in the district of Nedenes, to raise the necessary funds; and the following sums had been put down at the date of the Report:

<table>
<thead>
<tr>
<th>Name</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Jacob Aal, Jun.</td>
<td>500</td>
</tr>
<tr>
<td>Joseph D. Borthig, of Öster Riisøer</td>
<td>500</td>
</tr>
<tr>
<td>Morthen Kallevig, of Arendal</td>
<td>500</td>
</tr>
<tr>
<td>Ole Falk Ebbell, ditto</td>
<td>300</td>
</tr>
<tr>
<td>Peter Herlofsen, ditto</td>
<td>400</td>
</tr>
<tr>
<td>Dr. Möller, ditto</td>
<td>200</td>
</tr>
</tbody>
</table>

Further subscriptions were expected. Loans will be granted to the peasantry for a term of three years, in the course of which the capital will bear no interest. During the three years following two per cent. interest per annum are to be paid; and after that time six per cent. annually, of which two per cent. will be applied towards paying off the capital.

The auxiliary society for the parishes of Gierrestad and Sümeløv, besides the grant of loans, has offered a variety of premiums for the encouragement of horticulture.

Unity of principle will, of course, produce uniformity of action; and time will soon shew whether the diffusion of public spirit may not effectually soften those
VIEW NEAR ÖSTER RIIŠÖER.

chilling influences on the improvement of Norway, which have hitherto been but too readily, and in many instances wrongfully ascribed to the rigours of the climate and the penury of the soil.

Mr. Schöning states in his Travels that, among other exquisite fruit, he found apricots and melons at Drontheim, which is situated in 63° 26' 10". He also found in Romsdal, and other northern parts of Norway, excellent orchards, as well as kitchen and flower-gardens. Wild apple trees were very common in Romsdal.

From the northernmost parts of the diocese of Bergen whole cargoes of apples, pears, cherries and other fruit are annually sent to Bergen, and advantageously disposed of. One kind of apples in that part of Norway bears a striking resemblance to English pippins.

About 60 years ago, vegetables were imported into Norway in great quantities from Holland. The necessity for this species of importation, as far as related to the Norwegian metropolis and its vicinity was, however, in the course of time precluded by the zeal and industry of Johan Carl Gablein, a German gardener, in whose honour a beautiful flower, *dianthus chinensis*, bears the name of Carl Gablein's favourite flower. Would that every German in the service of Denmark had obtained immortality at a rate so easy to the country! Honest Carl Gablein's example has not, however, been zealously imitated, for importations of vegetables from England are still made by the lazy, luxurious seaport towns of Norway.

A curious specimen of hortulan enthusiasm, highly illustrative of the adventurous spirit of the Norwegian character, I cannot resist the pleasure of noticing. It is thus recorded by Mr. Frederick Thaarup,* one of the few among modern writers on statistical subjects, who deserve to be praised for being at once laborious, impartial and intrepid.

"H. N. Brünsted, of low parentage, and brought up in poverty, devoted his youth to horticulture. He afterwards filled the situation of a gardener; and by means of prudence and economy, laid by every year some portion of his wages, and at the same time by his virtuous conduct acquired friends, who would be able to support him, when he should think it possible to accomplish his disinterested views. In 1784 he visited Flensburg, and other places in order to form connexions with people, from whom he might procure fruit-trees and garden-seeds. In the year 1785 he went to England, whence he returned in autumn, having increased his stock of knowledge in his favourite science, and obtained garden seeds to the value of 80 rix-dollars. He fixed upon the parish of Bamle, in Lower Telemark, as the scene of his operations. On his arrival here he began to persuade the inhabitants to lay out gardens, at the same time explaining the utility of them, and the disinterestedness of his views. His wishes were, however, checked by those prejudices, which constantly oppose every thing that is new; he therefore resolved to become an itinerant schoolmaster, that he might by daily intercourse gain the confidence of the inhabitants. In the daytime he taught children reading, and in the evening gave old people instruction in gardening. He pointed out to them the beneficial effects which gardening would produce on domestic economy, and offered, without the slightest remuneration, to lay out and sow gardens in the course of the spring. He at the same time engaged in writing, on stamped paper, to do every thing for nothing, and to pay all such taxes

* Statistical View of the Danish Monarchy, page 185.
as might, in the imaginations of the inhabitants, be imposed on the new branch of industry which he advised them to pursue. On the arrival of spring, he laid out kitchen gardens for all the owners of land, with the exception of three, in that part of the country where he acted as schoolmaster; and taught them to sow, weed and take care of them. He did all without any remuneration; and the crops turned out so well, that the inhabitants not only obtained a sufficiency of vegetables for that year, and seeds for the next, but even sold to their neighbours. In the year following Mr. Brünstad was requested to lay out upwards of an hundred gardens, which he did with incredible alacrity, but always evinced superior zeal for the benefit of poor people, who applied to him for assistance. He procured seeds from Skene, Brevig, and Flensburg, to a considerable amount, and presented the same to any person who chose to make a request to that effect. Fruit-trees of the best kind he likewise purchased, and taught the art of grafting their branches into the trunks of wild trees to children of peasants, at the same time encouraging them to hope, that they might live to taste the fruit. But the sphere of his operations being extensive, he found that, however anxious he might be to benefit all who stood in need of his assistance and advice, it would be out of his power to follow the bent of his desires; he therefore employed a poor cottager, whom he taught gardening, and paid board wages out of his own pocket. This person Mr. Brünstad sent to such parts as he was himself unable to visit. From the beginning of his arrival Mr. B. defrayed all expenses of maintenance and conveyance from place to place, and, in consequence, found that he had disbursed a sum rather considerable to a person in his circumstances. Having finished his labours in the spring of 1787, he therefore prepared to leave that part of Norway, for some other place, where he hoped to meet with people of superior discernment and of a more grateful disposition, by whom he might be enabled to pursue his patriotic endeavours with increase of vigour. Several persons of liberal sentiments then drew up a paper, in which those who had derived essential benefit from the efforts of Mr. Brünstad, were called upon, to grant him some trifling reward; but the appeal produced little effect. The kind wishes of those few individuals made, however, such an impression on the generous heart of Mr. Brünstad, that, after having been absent six weeks only, for the purpose of procuring fresh supplies of seeds and fruit-trees, he resumed his pursuits, and laid out upwards of an hundred gardens along the coast near Krageröe. That part of Norway, in consequence, received a high degree of improvement; and numbers of peasants were supplied with vegetables and fruits, not only for their own use, but for sale to strangers. The patriotic Society of Aggershus, in February, 1788, therefore, without solicitation, awarded to Mr. Brünstad a premium of 50 dollars (then about £10.), to which Mr. B. Anker added a like sum.

Mr. Thaarup closes the relation, by observing: "Such actions as Mr. Brünstad's ought to be proclaimed to the world. I wish, that some one of our poets would compose a popular song to his honour." It is not in my power to state, whether any poet has celebrated the distinguished merits of Brünstad, which might be said to furnish a parallel to Spartan virtue, if the use of such comparisons did not now generally provoke ridicule and contempt; but on a consideration of circumstances and situations, it is not unlikely, that humble prose has conferred a very gratifying reward on Brünstad's worth. His services had, probably, no small
share in the conception of a most beautiful Norwegian tale, entitled "The Orchard." I shall not, however, press the conjecture any farther; but I must be permitted to express my satisfaction, in having had an opportunity of raising my feeble voice in praise of that kind of virtue, which should at all times be most acceptable, and must be peculiarly so at the present moment, when, thanks to heaven, we may rationally indulge the hope, that the happiness of a nation will again be estimated by the fulness of its garners and the multitudes of its sheep and oxen; and that rulers will be forced to renounce their schemes of ambition or their unfeeling splendour, at the detail of silent fields, empty harbours, and starving peasants.

* National Tales, for the Peasantry of Norway, by the Rev. Immanuel Christian Grave, Rector of Sande, in Lower Telemark; published by the Royal Society for the Welfare of Norway, Christiania, 1811, page 182.
No. XXIV.

VIEW OF PORTER.

The coast between Öster Rissier and Porter is hideous in the extreme. Wherever the eye turns, nothing is to be observed but dreariness or danger. While the shore exhibits an uninterrupted series of naked, frowning rocks, innumerable breakers and fragments of vessels impress the mind with the most awful reflections on a sea-faring life. Here the language of an able and correct writer is most strikingly applicable. "The coasts of Norway are accounted the most dangerous of any in Europe to run with in the night, or in a storm; on which, if you chance to be driven, there is no escaping, the shore being all along high rocks, at the very foot of which one may find 200 fathoms water." *

Safety may, however, be said to go hand in hand with danger on the coast of Norway. This is most beautifully exemplified by the romantic situation of Porter, which in common with Norwegian harbours, in general, presents to the mind the most lively and striking images of security. Though not capacious, the harbour of Porter has sufficient depth of water for the largest ships to ride safely at anchor; the port being nearly surrounded by rocks, and of course well sheltered from storms. An enthusiastic admirer of nature, in her awful and solemn attitudes, might retire from this place, and declare that he had been on enchanted ground.

Norway abounds in scenery calculated to excite the most opposite emotions in the human breast. While her coast inspires terror, the interior of the country unfolds a great variety of rural scenes of most exquisite beauty. Little benefit has, however, hitherto been drawn from the picturesque treasures of this country; they have been under-rated by natives, and scarcely valued by foreigners. An attempt was certainly made between twenty and thirty years ago by Professors Lorentzen and Pauelsen, two most excellent painters, to awaken the attention of their own country and the world at large to the grand, sublime, and beautiful scenery of Norway. A considerable number of their paintings were engraved by Professor Haas and Mr. Grosch; but the undertaking, except in the case of one or two views, did not meet with that degree of success which would have justified perseverance or encouraged hope.

* An Account of Denmark, as it was in the year 1692, by the Right Honourable Robert Lord Viscount Molyneux, sixth edition, Glasgow, 1772, page 8.
No. XXV.

VIEW NEAR KRAGERØE.

At the west end of this town an arm of the sea forms a bay, in which are many picturesque islands. The adjacent country bears the appearance of richness and beauty; farms, cottages, cultivated fields and hills, crowned with forests, combine to produce the most gladning and striking effects, while distant mountains mingling with the clouds, terminate the view.

Norway, it has already been remarked, has, on the first approach, the most forbidding aspect. The soil everywhere is of rocky substance, covered in low places with earth of more or less depth. Some valleys are of such extent, that they become fertile plains; for instance Hedemarken; others are so very narrow, that they can only be called defiles. The valleys, far up in the mountains, for instance, Østfold and others, are not fit for the production of grain, the cold being too intense, but they yield abundance of grass. Guldbbrandsdale forms one of the most populous and best cultivated parts of Norway; and the extensive plains of Toten, and the counties of Lauvrvig and Jarlsberg, possess great fertility and beauty. The greater the distance from the sea, the greater is the elevation of the mountains, the highest of which are constantly covered with snow. When it rains in summer, snow may at the same time be perceived to fall on the summits of the mountains. The snow-clad mountains of Norway gleam in the air to a distance of 108 miles. Innumerable rivers take their rise in the mountains, swelling as they descend with rain and dissolved snow, and being joined by vast numbers of rivulets pursue their course through the valleys. The rivers afford the greatest benefits in regard to the conveyance of timber and the accomplishment of purposes connected with mechanism. They likewise form some of the noblest waterfalls in nature.

The climate of Norway varies greatly, and is not solely influenced by the distance from the Pole. Frost and snow are less frequent than rain, fogs, and storms, on the whole of the western coast of Norway. The reverse is the case in the mountains. In the eastern valleys and on the southern coast of Norway the cold is of the purest and most wholesome kind. A severe winter is the Norwegian’s delight, and is highly conducive to his prosperity; a great deal of labour being then done, which could not be accomplished if the sea were mild. Beneficial as the physical properties of Norway are, they frequently produce disastrous effects. In the spring, when the thaw sets in, the snow gathers into balls, and, in its course carries with it houses and every other impediment. The earth likewise, at times, gives way, and the rivers, as is the case in other mountainous countries, overflow, thus causing great devastation.

The rigours of the Norwegian climate chiefly consist in the frost being more intense and lasting, than in southern countries. The cold being, however, seldom accompanied by high winds, is less piercing than an inferior degree of cold in Denmark. According to observations made by Professor Wilse, during a series of thirteen years, by means of Reaumur’s thermometer, the degrees of cold in the day-time appear to have been, on an average: in January, $5\frac{1}{2}$ below 0; February, 3$\frac{1}{2}$, and March, 1$\frac{1}{2}$ below 0; in April, 4$\frac{1}{2}$; May, 9$\frac{1}{2}$; June, 15$\frac{1}{2}$; July, 16$\frac{1}{2}$; August, 13$\frac{1}{2}$; September, 9$\frac{1}{2}$; October, 5$\frac{1}{2}$ above 0; November, 2$\frac{1}{2}$, and December 3 below 0. In the
VIEW NEAR KRAGERÖE.

Summer the heat is greatest between the 15th of June and 20th of July, being then frequently at 25 degrees above 0. The nights in midsummer are too short entirely to dispel the heat of the days. In winter the cold is most piercing when the air is filled with small icy particles, which may be observed to glitter in the sun with northerly and easterly winds, or in calms. During a lapse of 18 years the cold in Norway appears to have been most severe on the 1st of January, 1782, in the morning, when the quicksilver fell 26½ degrees below 0 on Reaumur's thermometer. At Eger, Professor Ström found the cold to be 30 degrees; and at Kongsberg the thermometer stood at 32. The greatest portion of snow falls in December and in the middle of January; in April and October the heaviest rains descend. August is likewise a rainy month. The greatest drought takes place between the 15th of June and 15th of July. The month of March comes next in succession to summer for the greatest number of clear days. The highest winds arise in the months of April, May and October. The beginning of June is likewise occasionally turbulent. Calms are most frequent during the whole of the month of January, from the 10th of June, to the 11th of July, and in the middle of August. During the last period calms are singularly beneficial to the oats, which constitute the most common kind of grain in Norway, and are very liable to drop off when ripe. The greatest injury done to the soil of Norway arises from night-frosts; for while the cold still remains in the air and earth, it is very beneficial and promising of an abundant harvest that the snow covers the ground. But from a dread of night-frosts, it is not advisable to sow open beds in gardens before the 12th of May. Those crops which are not ripe by the latter part of August are, at times, injured by night-frosts, which, at this period, the Norwegians, in common with the Swedes, term iron-nights. The sound of thunder is very loud in Norway, owing to the reverberation from the mountains. Hail falls rarely, and is but small grain'd; some which fell in July, 1781, of the size of pidgeons' eggs, appeared miraculous.

On an average of sixteen years, the Norwegians set the plough at work on the 1st of May; the cattle was turned on grass on the 15th of May. On the 27th of the same month the plough was put by. On the 14th of July they began to cut grass, and had finished making hay by the 19th of August. On the same day they began cutting oats; on the 23d of September the corn harvest was at an end; the cattle was taken in on the 25th of October, and on the 12th of November sledges were used for the first time. With regard to changes in nature, during the period above stated, the thermometer rose above the freezing point on the 21st of March; the snow disappeared from the fields on the 10th of April, but from the forests not until the 15th of May. The ponds were clear of ice on the 22d of April. The wagtall appeared on the 12th of April; but the first swallow not until the 13th of May. Gooseberry bushes budded on the 25th of April; and primula veris bloomed on the 6th of May. The hawthorn put forth leaves on the 7th of May; the asp on the 20th. In the autumn potatoe leaves froze on the 28th of September. The hawthorn dropt leaves on the 7th of October: but the cherry tree not till the 14th of November. The thermometer fell on the 30th of October in the day-time below the freezing point; snow fell on the 4th of November, and the ponds were covered with ice on the 5th.
Passing through the narrow pass of Porter, you enter a spacious inlet of the sea, from which there is a distant prospect of Krageröe, situated on the main land within a cluster of islands, and immediately under a high and perpendicular rock of considerable extent, the top of which is covered with a large forest of fir, and forms a grand feature from the harbour.

What has been said relative to the amazing variety perceptible in the physical properties of Norway, is equally applicable to her moral qualities. Let, however, a Norwegian writer,* speak on this subject. "The Norwegian nation differs much from other nations, nay even from the Danish, although both have now been under one government for many centuries; and although many Danes above the rank of peasants, especially public functionaries, are intermingled with the Norwegians. Foreigners, who know nothing of the nation, imagine to find a rude people, living among rocks in a rigorous climate, detached from the cultivated and polished parts of Europe. Their ideas of the Norwegians resemble those which they may entertain of Russian boors, who are indebted to others for any culture they may possess; but for the rest, draw no distinction between the Norwegians and their rocks. A knowledge of the pure and natural character of this nation, will, however, lead to different conclusions. The Norwegian, in point of natural endowments and animation, is superior to a Dane, and still more so to a Dutchman. He does not possess the volatility of a Frenchman, but rather approximates to an Englishman, without, however, being subject to his spleen. The cheerfulness of a Norwegian is accompanied by frankness; to servile fear even the peasant is a stranger. The Norwegian boor rises contented from a meal which a Danish peasant would set before his cattle only, and, with alacrity, leaves a place of rest with which a Zealand rustic, however mean his condition might be, would not be satisfied. The coarse jacket of the Norwegian covers a noble heart; nor does he envy the possessor of the splendid gifts of fortune. He speaks freely but considerately, and knows how to venerate himself as man. Although he has in the course of his labours to contend with great difficulties of climate, he is never tempted to leave his penurious soil with a view to settle in the exuberant regions of America or Russia. He is deliberate, and startles at the bare idea of blind obedience. Courage, generosity, fidelity and hospitality, are peculiar to the Norwegian. Any corruption of manners and morals, which may be perceived among the common people of Norway, is to be ascribed to the sea-port towns, and to foreigners. Before the year 1717, the commonality of Norway were strangers to the venereal disease; and not until the year 1763 did they know of putrid fevers, which were imported by the Norwegian army, which had been campaigning in Holstein, and have since at different times raged with all the violence of a plague. The common people of Norway place an implicit belief in nothing so much as in \textit{fato turcico}, or an irresistible fate. In regard to any diseases with which they may be afflicted, they conceive every thing to be arranged or ordained, and deem it a most presumptuous offence against God and Providence to have recourse to medica-

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ments. The Norwegian nation is eminently qualified for every art and science; and numerous peasants of fine genius are to be met with in all parts of the country. The common people have, in particular, an excellent turn for mechanics, and manufacture clocks and hand-organs to great perfection, thus resembling the mountaineers of Neuchatel in Switzerland. Most Norwegian peasants use their pocket-knives in carving wood,* and have done so from time immemorial. The Norwegians also possess great natural talents for poetry, especially on such subjects as raise the soul above ordinary occurrences.

In addition to the remarks of Professor Wilse, it may not be improper to offer the following testimony to the Norwegian character. "There is something extremely pleasing in the Norwegian style of character. The Norwegian expresses firmness and elevation in all that he says or does. In comparison with the Danes, he has always been a free man, and you read his history in his looks. He is not apt, to be sure, to forgive his enemies, but he does not deserve any, for he is hospitable in the extreme, and prevents the needy in their wants.†

* The above is a confirmation of Dr. Johnson's statement: "The boor of Norway is said to make all his own utensils." Journey to the Western Islands, page 175.
Isle of Gomöe,

Is situated in a cluster of islands near Krageröe, and serves as a place of retreat to an opulent inhabitant of that town, who has erected a small neat cottage here. The island, though of small extent, is very fertile and capable of maintaining a number of cows. Fruit-trees and flowers grew in a garden well sheltered from bleak winds by the adjacent rocky islands. One of these islands was burnt by the negligent manner in which the owner cleared away the woods. The method of clearing ground by fire is constantly practised in Norway, the ashes being esteemed an excellent manure; but whether the practice is beneficial upon the whole, may perhaps admit of a question.

The Norwegians do not, it must be owned, husband the resources drawn from the forests with that care which ought to be exercised. In regard to the management of the forests, the interests of the sea-port towns seem to be chiefly consulted. Now, many other very important branches of public economy depend equally as much on the forests; but every thing in this country seems to yield to the mercantile part of the community.

To the forests, the sea-port towns in the southern and eastern parts of Norway are chiefly indebted for their prosperity and riches. The wood exported principally consists of fir and pine; it is highly esteemed in this country for a variety of purposes, which would find but an indifferent substitute in the timber of any other country. What the quantity of timber annually exported from Norway may be, it is perhaps impossible to state with any degree of precision. In times like these, no traveller would be able to obtain much satisfactory information concerning the resources of any nation in the slightest degree within the sphere of the continental system. Questions of a public nature could scarcely be uttered without subjecting the inquirer to imputations and surmises, to which no innocent traveller, however ardent his spirit of research might be, would choose to become obnoxious, though he might be put in possession of sundry "grandes pensées."

A traveller of the present day must, in fact, be content with what is offered him; and, with honest Sancho Pança, bid God bless the giver, nor look the gift horse in the mouth. Sure I am, at least, that such conduct would be peculiarly suitable, in endeavouring to obtain any information relative to Norwegian balks, planks, laths, battens, uffers, oars, handspikes, rafters, etc. Happy might the inquirer esteem himself, if he did not find occasion to acknowledge the truth of the following language held by Professor Wise: "We are in a great measure devoid of that readiness and frankness, which tend to facilitate the pursuits of authors in other countries. Many people among us, in general, become suspicious, especially if questioned relative to funds and sources of income. You may then read in their countenances such replies as the following: 'What business is that of yours? Have you nothing else to do? Why do you want to know? What do you get by it?'

This manner of treating strangers is peculiarly irksome and painful to Englishmen, who, of all foreign nations, certainly enter Norway with the most decided prepossessions in its favour.
No. XXVIII.

ROCK NEAR KRAGERŒ.

This rock is in the island which is seen immediately over the church in the view of Kragerœ opposite the town. Its front faces the sea in a recess much resorted to by seals and birds of prey. Off this part of the coast the sea abounds with a great variety of excellent fish, and especially a very superior kind of mackerel, which takes its name from the Virgin’s Isle. During the season this fish was formerly, not much to the honour of the Norwegians, caught by Swedish fishermen, who came in hundreds of boats, and supplied the towns of Kragerœ, Riosoer, Langesund, Larvig, and other places.

Still the fisheries of Norway, previous to the war with England, came next in succession to the mines and woods, as a source of national wealth. The fisheries on the ocean produced enormous quantities of cod-fish of various kind, which was prepared in different ways for home consumption or exportation, chiefly to the Catholic countries of Europe. The liver of the cod was boiled into train-oil, and the spawn salted down. The latter was sent to France, being used there as a bait for a fish called sardines. Immense swarms of herrings, coming from the northward and, it would appear, from the Frozen Ocean, and being constantly pursued by whales, seals and other fishes of prey, were caught off the coasts of Norway. Great quantities of this fish were pickled with Spanish salt, and packed in tight barrels of fir for exportation. At present the consumption of herrings, as well as of cod-fish, is limited to the home-market. Fresh herrings are much used, and when dried or smoked, are sent off in large quantities to the upland, and the mines. A smaller kind of herring, named anchovy, is likewise caught in great abundance, and readily disposed of. Train-oil may be extracted from the head and entrails of the herrings, by which process Sweden has already gained, and Norway may obtain great advantages.

Of the fisheries in fresh water, that of salmon is most important. The largest and best salmon are caught in the river of Mandal, as has already been stated.

The coasts of Norway abound in lobsters, of which great quantities were, prior to the war, exported to England in Norwegian vessels, or sold at home to the English, who came to fetch them.

Oysters are found on the western coast of Norway.

According to Mr. Thaarup, the exportations of fish from Norway might be stated in the year 1780, as under:

<table>
<thead>
<tr>
<th></th>
<th>Rix-dollars</th>
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<tbody>
<tr>
<td>From Bergen</td>
<td>958000</td>
</tr>
<tr>
<td>Christiansund</td>
<td>78000</td>
</tr>
<tr>
<td>Tronhjem</td>
<td>75000</td>
</tr>
<tr>
<td>Molde</td>
<td>22000</td>
</tr>
<tr>
<td>Stavanger</td>
<td>10000</td>
</tr>
<tr>
<td>Finnmark</td>
<td>40000</td>
</tr>
<tr>
<td>South of Norway</td>
<td>20000</td>
</tr>
<tr>
<td>Sun total</td>
<td>1203000</td>
</tr>
</tbody>
</table>

Rix-dollars, or at that time upwards of £220,000.

That this amount may have been much larger, and that it was greatly augmented in common with the proceeds of every other branch of Danish traffic, can scarcely admit of a doubt, but to what extent it is impossible to say.
No. XXIX.

W A L L E R.

The roads in this part of the country are nearly impassable; water-carriage is therefore the most common mode of conveyance. The passage runs between islands and tremendous rocks, which nearly meet in some of the passes. In two hours the journey from Krageröe to Waller may be accomplished. The ferry-house of Waller is conveniently situated, in a country which bore every appearance of superior cultivation. The fields were covered with various kinds of corn, and a considerable quantity of flax.

Much attention is paid in Norway to the culture of commercial plants. Of flax and hemp the country, however, still requires importations. In the manufacture of linens, the Norwegian peasantry are very industrious and skilful, and in some parts annually dispose of considerable quantities.

Hops are cultivated nearly in all parts of Norway, in the south as well as in the north. The districts of Guldbrandsdale, Hedemark, and Hardanger in particular, contain a great number of hop gardens, from which a considerable part of the country is supplied. Von Aphelen, in his translation of Bomaré's Natural History, states, that on the shores of Folden, a long firth about 120 miles to the northward of Drammen, most farms were provided with hop-gardens.

Tobacco has been much cultivated, especially in latter times, in the vicinity of Frederickshald and in other places.

Cummin, caraway (in Norwegian, karve) grows wild everywhere in great abundance. In some meadow scarcely anything but caraway is to be seen. In the districts of Ringerige and Hedemark, as well as in other places, a peasant is at times able to sell from 10 to 20 barrels annually. Great quantities of caraway are exported, particularly from Christiania.

Manna grass (*festuca fluitans*, LINN.) grows wild in great abundance, but the use of it is unknown.

Herbs for feeding cattle, according to the practice of rural economists in latter times, are not found in Norway. A small quantity of clover, produced in the vicinity of Christiania is scarcely worth mentioning.

But wild plants suited to the feeding of cattle and other branches of economy are, on the other hand, in great abundance; for instance,

Nettles, *urtica dioica*, used by poor people instead of cabbage. Some make very good and strong linen of nettles.

Orobus tuberosus is chewed by some like tobacco. Its root, which is knotty, is gathered and strung on pieces of thread. It is sold by the ell.

Pteris aquilina, an excellent herb for feeding cattle; when burnt to ashes it produces soap. Many other plants of the kind might be mentioned.
ROAD OVER A MOUNTAIN NEAR WALLER.

Many of the roads over the mountains in Norway chill the soul of a stranger in the most awful degree. Perhaps they are not to be equalled in any other part of the world; they are generally choked up with large fragments of rocks, loose stones, and broken trees. The descent from the mountains is generally most difficult, and frequently attended with the most imminent dangers. Disasters, however, seldom occur, owing to the wonderful caution and sagacity displayed by the Norwegian horse, of which mention has already been made.

Public travelling in Norway is conducted on a plan highly injurious in a variety of respects to the most valuable part of the nation, the peasantry. In a moral view, it is productive of the most pernicious consequences, as will appear from the statement of the Reverend Andrew Kirchhoff, Rector of Thunoe: He says: "The conveyance of travellers is almost invariably the first source of corruption among the peasantry, old as well as young, who find their base in the post-houses. The peasant himself seldom attends his horse, which is to convey the traveller; he sends a servant boy, or more probably his own son, and at times his daughter. On arriving at the post-house the horse is tied to the wall, and frequently remains there for three or four hours. The person, who is to drive, grows weary of waiting, and company not being wanted in such places, he embraces any opportunity of diversion. He flies to gaming and drinking, and in order to support the expense, becomes guilty of fraud, petty theft, and robbery. If, however, he has no opportunity of profiting by those means, he plays the tyrant with the poor horse, that he may get more drink-money from the traveller. Thus the post-houses form schools, in which youth contract habits that are seldom forgotten."

In regard to the pernicious effects produced on agriculture by the present mode of conducting public travelling, the sentiments of the Rev. Mr. Kirchhoff are perfectly in unison with those of the Rev. S. Hount, Rector of Berg, a most excellent and intrepid writer on Norwegian subjects. He observes: "One of the most essential impediments to the advancement of agriculture in those parishes through which the great highways run, is undeniably to be found in the circumstance of the peasant being so very often called upon to convey travellers. He, thereby, not only loses a great deal of time, but his horses are worked to such a degree, that they become unfit for doing the labour required in agricultural pursuits that are to be conducted with vigour. Agriculture is, therefore, in a much worse state along the high roads, than in those tranquil parts of the country where the peasant is undisturbed, and able to devote the whole of his time to the cultivation of the ground, and the calm pursuits of domestic life."

The Royal Society for the Welfare of Norway has, in consequence, taken the proposals of Messrs. Kirchhoff and Hount into consideration, and it may be expected that a speedy and effectual substitute will be found for a custom pregnant with such fatal results.

† Ibid. page 165.
BREKKE,

Encompassed by rocks and woods, is situated in a fertile valley, watered by a small clear stream, which is navigable for boats only. Being placed in a delightful sporting country, at a little distance from the town of Longound, Brekke forms a favourite resort to parties of pleasure. The inn, in point of accommodation, far surpasses Norwegian inns in general, and is distinguished as combining the recommendations of great civility, good cheer, and moderate charges. On one of the neighbouring hills stands a conical beacon or telegraph, by the Norwegians called a varde, and used by them chiefly for announcing an enemy's approach. For the purpose of transmitting other intelligence of a public nature to the capital, telegraphs also have of late years been established along the most important parts of the coast of Norway. A varde is composed of a number of fir-trees placed together, somewhat like hop-poles in the English hop-grounds when they are not in use. They are each erected on some conspicuous eminence, and in cases of need are set on fire in succession, until the alarm is communicated to the capital, and in a short time spread over the whole country. In the centre of the valley stands a large isolated rock of the colour of red granite, on the top of which a few hardy shrubs announce to the inhabitants the earliest approach of spring. Numerous sea, land, and coast birds, are seen continually hovering about. The few little farm-houses and their gardens are prettily and securely enclosed with fences of wood placed in the ground diagonally, as is the general practice in Norway. They have many fields of corn, hay, and flax, producing in good seasons abundant crops; their cattle are well fed, and in good condition. Brekke is a place of no trade, and its principal support is derived from travellers, and persons occupied in felling timber and deals in the adjacent woods, and in conveying them to Longsound, a small seaport between Krageroc and Bervig in the Scager Rack, from whence are procured supplies of cheese, groceries, tobacco, wines, spirits, and many useful and necessary articles imported there from Holland, England, and other countries. Longsound is the residence of several ship-owners; its principal exports are timber and deals.

The little valley of Brekke vies with many others in Norway in picturesque beauty. The hills and rocks are on a small scale; the clear and silent little stream is seen meandering around their bases until its confluence with the Bay of Having Fiod; its banks are adorned with a variety of shrubs and small flowers; the fields enriched with bright waving corn, contrasted by the dark clusters of firs and hoary granite rocks, give to this place an inviting appearance, that might well attract a more numerous population. On the present visit the favourable opinion of this little interesting place was heightened by recollection of the perilous journey from Waller. That route had been chosen by the guide as the shortest to Brekke, over a country which would have terrified any one unaccustomed to Norway; it certainly exceeded every thing I had yet met with, being generally covered with large fragments of rock, loose stones, and among them many smooth slabs, over which the horses slide in a peculiar manner, sitting down behind, suddenly stopping and carefully advancing one foot, to ascertain if the next stone be immovable. These difficulties continued for about ten miles, the journey being partly performed during a dark night in a gloomy forest, the terrors of which were rather enhanced by the presence of an ill-looking athletic guide, and by the reflection that there was probably no other human being within a distance of several miles. In justice to this poor faithful fellow, and to all others of his profession who came under my notice, I am glad to bear testimony to their honesty, care, and willingness to oblige; neither do I recollect having seen or heard of an instance of that treachery, which, in other countries, too frequently characterises this class of men, who, when tempted by poverty and vicious habits, to acts of plunder, hardly scruple to commit murder, in the delusive hope of concealing their crimes.
At a short distance from Brekke is Bamble, which gives name to a district. The church is a small edifice, whitewashed and covered on the top with brown glazed tiles. It is a hoved kirker, meaning in Norsk a superior, having annexed to it several smaller or subordinate kirkers. It is supposed to be one of the most ancient churches in Norway, an opinion which its general appearance and early architecture amply confirms. The old pierced iron vane on the steeple is nearly destroyed by corrosion, and hangs half off its original position. Adjoining the church is a neat parsonage-house; the burial-ground is well secured by a stone wall, with entrance gates and iron traps, to protect the remains there deposited from the nocturnal intrusion of bears and wolves. The edifice stands on an interesting spot, not far from the high road to Brevig, surrounded by rocks and solemn groves, which a fanciful mind would call druidical, and which seem beautifully formed by nature, to produce feelings of contemplation and devotion. In truth, as this is a church of which it may be said that its high purpose is zealously kept in view, it forms an object of no mean interest, and a source of no small gratification in this part of Norway; for it cannot be disguised, that what has been already advanced in reference to the baneful influence exercised by the seaport towns, over the moral and physical habits of the other branches of the community, is but too applicable in a religious sense also; many of the churches in the maritime districts literally deserted, and what renders the circumstance peculiarly deplorable, is that it may in no small degree be attributed to the clergy, many of whom appear wholly unable to detach themselves from pursuits, in no manner compatible with the nature of their high functions. It is singularly painful to rank among those pursuits the noble art of making money, and the still nobler science of expending it for the exclusive benefit of the possessor, with the reservation perhaps of some portion for public purposes of at best a frivolous kind. Thus the clergy of the seaport towns will be found to comprise some of the most enterprising ship-owners, manufacturers, booksellers, and managers of theatrical and musical entertainments. A joyless fellow, as he has been called, of the name of Hans Hauge, may therefore not without reason be supposed to have derived no inconsiderable aid in the propagation of methodism, from the characters and pursuits of clergymen, who preferred the good things, and the fleeting honours of this life, to more substantial and glorious considerations. Fortunately, however, for their temporal welfare, Hans Hauge having been proved beyond doubt to be an impostor, was treated accordingly; and it is to be hoped that his deluded followers will return to the churches, to be instructed and guided by men, whose conduct shall afford no parallel to this notorious case. While I indulge this hope, I cannot however refrain from expressing the wish, that the sentence of the law on the individual in question had been accompanied by those restraints under which their clergymen labour, in regard to secular avocations. Beyond the pestilential sphere of the seaport towns, the Norwegian clergy will be found to possess the strongest claims to honourable notice.
TOWN OF BREVIG.

As I do not presume to offer any details respecting the origin of the Norwegian towns which occur in this work, details which, under correction, I believe are chiefly to be obtained in a confused way from tradition, I beg my readers to form their own conclusions on the subject. Much may be said on the natural advantages of such sites for offence and defence, as presenting the first motives for their selection. Norway, from time immemorial, has had to boast of her warriors, to whom a secure retreat and a strong hold were most desirable. We may also trace some of these establishments to the peaceable dispositions of their early inhabitants; for instance, an individual was observed to thrive on a particular spot; another soon became his neighbour; he also prospered, and these examples soon attracted a third and fourth; their joint families growing up, pursued their steps, and intermarrying with the interior inhabitants, in course of time a numerous population arose, and agreeing well together, became attached to the parental spot. Thus a colony was formed, which when sufficiently large to be considered a town, was designated as such by the reigning monarch, who introduced certain laws and regulations, seldom neglecting to claim a participation of its revenues, which was patiently and invariably conceded, often indeed without enquiring who was the original owner, chiefain, or resident on the spot. To confirm this remark, there are numerous examples in both antient and modern history; and it is possible that this little sea-port town of Brevig, with many more, cannot boast of a founder more noble or higher in rank than a humble fisherman. The town is partly situated on the point of a narrow inlet of the Fjord. The settlers would be naturally aware of the importance of such a site, as it enabled them to prevent access by water from the two towns, Porsground and Shone. Brevig is now the residence of many wealthy inhabitants; it consists of two divisions, one on the continent, the other on an island, and connected by a draw-bridge. Harbours in Norway having two or more entrances are particularly advantageous, and are always preferred by the mariner, as affording free ingress and regress in all weathers. When the wind in certain quarters is violent, ships find it impossible to get through the strait for Porsground, and are glad to take shelter in this harbour, until a change takes place. On my arrival at this town I was distressed to see nearly one half of it smoking in ruins, from a destructive fire which happened the preceding day. The distress of the inhabitants was pitiable in the extreme, as, in addition to their misfortune, the remaining part of the town was found incompetent to afford them shelter and common conveniences, although to their honour all persons threw open their houses. I with some difficulty procured a lodging for one night, on the express condition of quitting the town on the following day, although it rained incessantly. In passing along the streets, it was a most painful sight to behold the poor children clinging to their parents, crying for food and shelter, by the sides of the stacks of chimney's, the sad remains of their former habitation; with a heavy heart I ascended the hill, commiserating their untimely fate. Fires in Norway seldom rage to such an extent as in this instance: though destitute of engines, the people are very prompt and expert in extinguishing fire, by means of a strong iron hook, affixed to the top of a long pole, on the sides of which are rings with ropes. This instrument being applied to the house, is forcibly drawn by means of the ropes in many hands, and by their repeated efforts the building is soon brought to the ground. Thus a conflagration, even in tempestuous weather, is generally prevented. It is to be recollected, the houses are chiefly built of timber, and few are without such an instrument hanging under the eaves, as a necessary appendage. My attention was soon called to the unusual appearance of some dark red rocks, perforated as if worms had bored passages in regular directions through them, about half an inch in diameter, and nearly parallel. The waters of the Fjord washed many of their bases; their heads in numerous instances towered three or four hundred feet above the level of the sea. Others were scattered in large fragments around; in general, they were destitute of
TOWN OF BREVIG

every kind of moss or shrub, and possessed no character to distinguish them of the family of the granite rocks around. It may be conjectured that they are volcanic productions.

The trade of Brevig is not considerable, although there are many shipowners, who collect their cargoes of timber in other places adjacent. The appearance of the town from the Fiord is bold and striking; the large church being whitewashed, is considered an excellent sea-mark by mariners who visit the safe inner harbour behind it, or avoid the pass toward Porkgrund. Ferry-boats are always in readiness to convey passengers and goods across the narrow strait either to the westward, or eastward over the Fiord to Helgeroe, a distance of about six miles, at a small expense. This latter passage, although extremely dangerous in winter, is cheerfully undertaken by women, if the men are employed elsewhere; and they safely return with the boat, be the night ever so dark or inclement. The principal inducement, I am sorry to say, is the brandy-bottle, so frequently circulated by the traveller during the voyage; this baneful custom is the never-failing bribe, to induce both man and woman to brave every danger. Thus these poor creatures exist in a continued state of stupid half-inebriation, regardless of the common necessaries of life, food, and raiment. Thus every noble feeling, even that of self-preservation, is subdued, and the natural anxieties of filial or parental attachment, are totally lost in an habitual and brutish insensibility.
TOWN OF BREVI.

This interesting view is from an eminence looking eastward over the inner harbour at Brevig. The drawbridge connects this part of the town with another portion, which extends considerably to the right. They are both governed by the same laws, and participate in the same commercial and civil advantages. A large handsome stone church, with a lofty tower and spire, built on a commanding eminence, constitutes an interesting feature, as seen from the town or Fiord. Its exterior being of a pure white, it forms, with its large clock, a conspicuous object at a distance, and is of great importance as a landmark to mariners.

The greater part of the exports, consisting of white timber, spars and ufas, are sent to Holland. This trade is chiefly engrossed by three merchants. The harbour, which in figure nearly forms the Roman letter D, is studded with houses around its margins; numbers of them are intercepted by the cliffs from the present view, which is taken from an elevated spot, near the road to Porsgrund. This point was chosen as commanding a great range of picturesque scenery, including the Fiord, with its islands, the distance towards Helgeroe, and the most prominent points of land intervening to the right and left, and terminating with the Skager Rack. An idea is thus given of the extensive passage by the Frith, to and from the Catgat, and the Sogne.

To the right of the picture, and over a magazine for arms and accoutrements, built on four stone supports, is seen the entrance to Skene Fiord. The main branch on the left terminates a little higher in the interior, without presenting any place of considerable note. Fishing appears to be the second consideration at this town; and the indefatigable exertions of the men engaged in it are amply rewarded. They have a method which I have not elsewhere observed, of catching eels by night, somewhat similar to that practised by nocturnal bird-catchers in England. The parties proceed in boats to the cliffs, under which the fish harbour in deep water; the light of torches allures them to the surface, when by means of nets, great numbers are taken with ease; they are readily purchased by the returning Dutchmen, and are taken alive to Holland, where they are sought by the fishermen as bait for the turbot, in lieu of the lamprey, which however is most esteemed. Dutch vessels of all descriptions are to be seen in the harbour even in winter. And hence a constant supply of every article of necessity or luxury from Holland, is afforded to the resident inhabitants, as well as to coasting vessels, and to travellers. In former times the people here must have been highly interested in descrying from so lofty an eminence their victorious fleets, returning triumphantly up this beautiful Frith, which doubtless led to many secure and impregnable retreats, then unknown to the rest of the world. Here their ships, in the short intervals of repose, were kept in condition, ready for service, clinging like limpets to the sides of the stupendous rocks, whose hoary summits out-topped their masts, the water reflecting like a polished mirror, every surrounding object, without even a ripple on its silvery surface. I did not observe that the inhabitants of this place used a distinguishing style of dress, like the people of the interior, where the peasants of one parish wear for instance a white coat or jacket, edged with black, while their neighbours in the next parish appear in black, edged with yellow, others in black or brown, edged with red, and so on. They are stout, hardy men, rise early, eat moderately, and as far as I could ascertain, are friendly with each other. They are regular in attendance at their church, the path to which had a pretty appearance on a fine Sunday. The motley dresses, particularly those worn by some of their females, were singularly showy. Here, as at Oster Krosser, and other places in the west of Norway, the females have, among their Sunday decorations, caps made of gilt paper, which might remind one of those worn in London on a May-day, but not with the grace of the Norwegian fair. The horses, and their furniture in particular, are much better here than farther to the westward; the hire of them is nearly alike, except in the immediate stages to or from a town.
For two horses and a guide from this place to Porsground, (distant about ten English miles) the charge is one shilling sterling; at Christianand it was two rix-dollars for the same distance; and from Sone to the last-mentioned place, only one shilling and nine-pence, and two-pence to the man. The price is increased at every town, on the way to Christiania. The guide, either man or woman, and oftentimes a male or female friend, keep pace with the horse, and at the close of the journey generally take the traveller to some particular house, for which they have a preference, and this recommendation, if accepted, usually ensures to him food and lodging. If their services are approved, a small gratuity is thankfully received, but it is not solicited. When discharged and paid they mount their horses and return home. Among this people, the spirit of rambling, either on agricultural or other higher pursuits, is such, that on the approach of a traveller to a farm or post-house, down goes the spade or other instrument in use, and a search begins for the horses in the woods, which generally occupies two or three hours, in little better than idleness. An accurate observer of the habits of the Norwegians, remarks, "it were much to be wished that a species of industry had first struck root in the valleys of Norway, being so perfectly suited to the inventive talents and habits of the Norwegians; their long winter nights yield them much time for domestic occupations, and the materials required for many manual employments may be at hand, or may be more easily procured than materials used in large manufactories."

Before the Royal Society in Christiania was established, many great and distinguished Norwegians, having constantly at heart their country's prosperity, spared neither trouble nor expense to procure models of most foreign improvements, with an accurate description of their uses. Having seen many of them in Norway, I firmly hope that their enlightened possessors will eventually adopt a mode most agreeable to themselves, of shewing and explaining their several uses and improvements, to the ingenious part of the community, as near the residence of poor people as possible, or at a convenient place allotted for that laudable purpose, with free access to all ranks. By such means the latent spark of national genius would soon be successfully elicited in Norway.
Much of the country between Brevig and Porsgroud is diversified with hills, dales, or woods, occasionally interspersed with small lakes, and bays connected with the Frith. Observing those perforated volcanic cinders, or stones, with many others, so nearly resembling ancient ruins of brickwork, as to deceive a nice observer, I wished much to ascertain exactly their extent and magnitude, but was prevented by the incessant rain, which rendered the mossy surface of the ground impassable. In these woods were several flocks of wild turkeys, the black cock of the wood, of which a brief description may, I hope, be acceptable.

In general it is about the size of the English hen-turkey; the full-grown male is considerably larger, weighing twelve or fourteen pounds: the head is large, and in form like that of the pheasant; there is a bright red circle around the eyes; the neck is green, and the body very dark, with small white spots, not unlike those of the guinea-hen; the legs are large and strong, feathered down to the feet. These birds inhabit the woods only, flying together in families of eight, ten, or twelve, subject to the absolute direction of the old male bird. It is indispensably necessary for the sportsman to kill this bird first; and when that is accomplished, the others are easily felled in succession, as they show no inclination to quit the place where their parent or leader lost his life. If on the contrary he escape, a long and distant flight, with his obedient family, precludes every possibility of pursuit. A high mountain, covered with woods and terminating on this side by an abrupt declivity, obliges the traveller to use much caution in descending; he has to proceed down a narrow way, guarded by the rock on one side, and a hand-rail on the other, where the least neglect or carelessness would inevitably precipitate him several hundred yards, with the forfeiture of his life.

A good road leads from its base, across an extensive plain, flanked with hills and corn-fields, and watered by a small river, meandering among the bushes, to Porsgroud. The town is most beautifully situated, in a highly fertile and picturesque part of Norway, embosomed with hills, divided by a navigable river of clear fresh water into two parts, called east and west Porsgroud, communicating with each other by a safe ferry. There is a church in each division. The great church, as seen on the left side of the picture, is a well-built edifice of stone. The carpenter's work in the interior was executed by a Norwegian; the roof, tower, and lofty spire, are supposed to equal if not surpass any specimens of the kind extant, not excepting even the famous ceiling in the theatre at Oxford. The interior decorations and accommodations are well adapted to all requisite purposes. In the vaults beneath are railed inclosures, selected as family sepulchres, and respectively inscribed with names; they are about the size of a small room, in the centre of which is a small bier, supporting handsome black coffins, much decorated with large japanned wooden beads, hung in festoons around them; within are the remains of the deceased, and on some of their tops are smaller coffins, containing those of their children. The basement windows of the church admit much light, and the interstices between the deal railing encompassing each apartment, are sufficiently ample for inspection. This place of sepulture has altogether a becoming, solemn, yet unostentatious appearance; it is perfectly clean and neat, and by far the best of the kind I ever saw. Most others are subterranean dungeons; but this sanctuary is above ground. I wish all new churches and chapels were constructed on a similar plan. The pastors in the interior of Norway readily spend the intervals of sacred duty in giving advice in all litigations, while their wives administer medicines among the poor parishioners, deriving their knowledge from medical books, given to them to consult; “There are sometimes three clergymen to a church, where the parish is large, and has many chapels.” This sufficiently proves that Norway has ample sources of spiritual consolation.
TOWN OF PORSGROUND.

These towns are well-peopled; the inhabitants are tall of stature, well-made, brisk, active, and ingenious. The hair and eyes of a Norwegian are of a lighter colour than those observable in most other nations; a dark complexion is uncommon here.

The towns contain many large houses owned by wealthy inhabitants; there is also a degree of neatness in them, very creditable to their good housewives. The usual trade, that in timber, is carried on here to a considerable extent, and carcasses are rapidly collected from the inexhaustible forests in the vicinity. The Sheensford, seen beyond the mouth of this river, extends to Brevig; it is of very considerable breadth, and embellished with islands. Here the ships discharge their ballast; and receive their cargoes. The mountains in the back-ground are on a grand scale, covered with forests of fir; on one of them is a varde. The ship which is introduced is supposed to be sailing from Sheen, to which the high road seen below proceeds. A quick ascent from this road, commencing at the bar, leads up a mountain of great elevation, from the summit of which a prodigious view presents itself. Such is the purity of the atmosphere, at this elevation, that the beholder sees distinctly, with the naked eye, mountains an hundred miles distant, perhaps the Hardangerfield range; the whole intervening space is studded by innumerable others, on a smaller scale, with their attendant lakes, vallies, rivers, cascades, and towns.

This view, for extent and beauty, far exceeds that from the Paradise Hill, near Dram. The view of Porsground is taken from the bottom of the hill above described.
No. XXXVI.

TOWN OF SKEEN.

The number of beautiful scenes which occur in the way from Porsground to Skeen, distant about nine English miles, affords to the traveller great entertainment, which is enhanced by an excellent road. One exception must be remarked, in a steep, rough, and dangerous descent down a street into Skeen, surpassing in abruptness most other entrances to Norwegian towns; its inclination appears to be from 30 to 40 degrees; at certain distances, many large stones are placed, to check the velocity of wheel-carriages, which, in their descent, traverse from side to side with great caution, like a boat sailing against the wind; by these evolutions they are frequently overturned. From the top of this acclivity the town and adjacent country are surveyed, as on a map. Skeen consists of about 400 houses, a new church, many saw and corn-mills, large warehouses, and timber-yards, iron and other wharfs, &c. &c. This view is taken from the top of a range of rocks, about a mile below the rough street mentioned above, and nearly opposite the residence of the governor of the town, distinguishable by an obelisk in the garden adjoining. Over it is seen part of the principal branch of the unnavigable river, which brings the superfluous waters from the mountains, and a chain of lakes in Tellenmarken, terminating behind the gardens with a romantic fall into the Skeen Fiord. Within a mile of the town, this bay also is unnavigable for ships, in consequence of the islands, rocks, and falls, with which it is obstructed. Boats manage pretty well through the shallow water, particularly the pram, of light construction, with a long elevated prow, carrying two or three persons. At every rise or fall, the mill-wheels in perpetual motion give the place a very lively appearance. A wooden bridge of four arches is projected over the basin, from a middle point of rocky land in the town, affording easy access to a western road and to some saw-mills in the lower town, below which, in deep water, and in a convenient place, the few ships receive their cargoes. The church is built in the form of a Greek cross, of brick or pale yellow bricks, covered with tiles. The white edifice seen over the centre arch of the bridge is the assembly-house and concert-rooms; on the plain above, are some good houses and villas; to the right is seen part of Fossum. The forests and high mountains in the back-ground give a sublime aspect to the scene, affording in timber and iron ores an abundant source of wealth. Corn, barley, oats, flax, and hemp, are seen on the cultivated lands; and the gardens are stocked with vegetables and herbs for culinary purposes, as well as with strawberries and some fruit-trees. There being no prohibitory laws in Norway respecting game, the peasants bring a good supply from the woods and mountains, also of ducks, and fresh-water fish from the lakes, which they offer at small prices from door to door. The rivers about the town also increase the supply of fresh fish, and boats are often at the wharfs with cargoes of many species of sea-fish. Salmon, crabs, lobsters, &c. &c., are always to be had when in season. Skeen may fairly be denominated a desirable place of residence, replete with the necessary conveniences and comforts of life. Eagles and other birds of prey are seen hovering over the mountains and valleys, where often to the farmer's cost they thin his flocks, in conjunction with the greater depredators, the bear, the wolf, and the fox. Wherever the dog is seen always armed with his spiked collar, it may fairly be presumed that their nocturnal visits are frequent. There are large black venomous serpents in the mountainous parts; one of them bit my large Danish dog on the cheek, near Porsground, and the virulence of the poison injected was such as to cause a stupor, the part swelling to an enormous size in an hour. It subsided as fast, at the inn in town, after a peasant had applied a specific, either known to him only, or used by the mountaineers in similar cases. The dog was perfectly well the next day, and as alert as ever. The granite rocks generally through Norway prevail here; many of them are rich with iron stone, as the works at Fossum amply testify. The inclination of their strata is uniformly about 45
OWN OF SKEE

degrees. They are of a grey, red, or purple tint, and among them are to be found
terra ponderosa, micaceous, and other spices; abundant remains of the dreadful
effects of dire tempests, or volcanic eruptions, in remote ages. On the rocks
are many beautiful mosses, and in the valleys or small hills, wild strawberries,
juniper, and cranberry bushes, decorated with a few wild flowers, which last, with
the odoriferous herbs, generally maintain a small colony of bees, whose chosen
retreat is in the small fir, or in the hawthorn bush; there they construct their hive,
or nest, in form and size like a net cheese; it is composed of innumerable laminae
of a lead-coloured material, an inch and half in thickness, which, when separated,
floats in the air, like ashes of burnt paper. In the cavity is carefully deposited the
honey in combs, of the sweetest and best quality; the whole is suspended by a
thread from a branch, in the thickest part of the foliage, about four feet from the
ground. The bees are small and lively. The few flowers, the wild thyme, and other
sweet herbs and plants, are carefully examined, and their sweets collected by these
little industrious creatures. In the woods are also flies, serpents, gnats, toads, frogs,
rats, mice, and ants, with many other reptiles. The hosts of birds, with the exception
of a few that are well known, require a minute description, far beyond the limits or
design of this work. The same may be said of the fishes, though each very singular
or curious specimen will be noticed more or less as it presents itself. The swallow,
swift, and martin, are here during the months of July and August, about the close of
which period they migrate southward. Magpies, which are very numerous, are
stationary, being protected as the common appendage to the dwelling of the poor man,
who, in winter, benevolently hangs out a sheaf of corn from his scanty stock, for their
support.

TOWN OF SKEEN.
No. XXXVII.

DISTANT VIEW OF SKEEN.

Rich in mines of iron, stone, woods, and waters, Skeen may vie with most parts of Norway. The scenery, for many miles around, consists of vast mountains, woods, and lakes. The present view was taken below the town, over which is seen the smoke, from the iron-works at Fossum, with its picturesque mountain rich in iron ore. Some of the water about Skeen comes from near Lauven Soe, at the foot of the Hardangerfield Mountains, through Mios Vand, and a chain of lakes in Telemarkens. Two of the latter, being of considerable length and extent, are called Hvide Soe, and Nord Soe. They fertilize a vast tract of country, and by their numerous falls give motion to many saw and corn mills. After the confluence of the Hytte, the river distributes its superfusious waters by many channels into the Fiord at this town, from which it glides down through Porsgrund and Brevig, to the grand estuary, the Skager Rack. The Fossum iron establishment is of great extent, and considerable importance to this part of Norway, possessing all the necessary works, for fusion and extraction of metal, from the different ores found in its metalliferous mountains, particularly the large one seen in the distance. Stoves, and a variety of iron vessels are cast and manufactured here, both for domestic use, and for exportation; the iron is not esteemed equal to that from Arendal or Laurvig. The boat introduced is of the description named prams, in general use throughout Norway; at this town they are constructed very slight, with few ground timbers, and no axboards; the head is considerably higher, and projects more out of the water than that of the pram made at other places. The hunters, with their rifle guns and game, are seen reposeing and regaling themselves with the mehlem pipe, under a stratified piece of rock, on the bank of a stream, which drives the saw and flour mills in the town. The huntsmen set out early in the morning into the wood, and there sit down with almost inconceivable patience, sheltered by a bush, to wait for the game. No better marksmen can be found; with a rifle ball, they invariably hit their game in the eye, or head, thus preserving the skins entire. Few persons are able to endure cold, hunger, fatigue, or adversity, in any shape, with a degree of magnanimity and composure, as the natives of Norway. After being out a whole day on a hunt, exposed to the bleakest winds, and most penetrating cold, and that without the least thing to satisfy the calls of nature, the hunter comes home, warms himself, takes a glass of brandy, if he has it, a bit of brown unleavened bread, smokes his pipe of tobacco, and then retires to rest, as calm as if in the midst of plenty.
A ROMANTIC BRIDGE NEAR SKEEN.

This structure is formed of timber, projecting from one rock to another opposite, crossing a rapid branch of the waters, described in No. 37. The present view was taken above the fall, and not far from the site of the last. Here the eye looking over the fall, sees only the rapids below. At the time of the melting of the snow, and after heavy rains in the mountains, the stream becomes prodigiously swollen, passing under the bridge with tremendous rapidity and noise, tearing the rocks and carrying every thing before it into the Sken Fiord, as seen through the bridge.

A tremendous motion under the traveller's feet prompts him involuntarily to cling to the sides in passing, or in looking on the boiling cauldron below. The bridge is about eighty feet in length, by ten wide; its elevation above the water is about fifty feet. On the outsides from end to end, a little below the parapet, (which is little more than breast high) are projecting points, or eaves, covered with red pantiles, to prevent the horses and travellers from looking perpendicularly down on the gulf.

The framing consists of mast timber securely bolted together, and well inserted and fastened to the rocks on each side; the footway is composed of the small round firs, laid as usual, side by side, at right angles with the parapets. It is much frequented by persons going to and from the town, and to the ships at the anchoring place in the Fiord on the right. In August, when this view was taken, the water was low, and many singular rocks with torn sides presented themselves, decorated with a few trees and shrubs. The approach to this bridge is well guarded with stone walls. The mountains on the opposite side of the Fiord are lofty, and their sides well covered with firs, pines, and birch-trees; the plains and vallies on their tops are studded with well-cultivated farms. On one of the hills is seen a summer-house, from the vicinity of which the View No. 36 was taken. Under it, by the water-side, is seen a farm-house and a fisherman's hut; in the proper season, the salmon are seen leaping this fall to visit the rivers and lakes above, from which they seldom return, and indeed rarely avoid being speared, or taken in snares placed in and about their haunts. It is equally curious to observe them when on their return to the sea; being well aware of the fatal consequences of venturing by a perpendicular fall, they carefully seek its sides for a smaller descent, over which, by a violent effort, they endeavour to shoot themselves beyond the agitated water at the bottom.

The man with the fishing-rod is endeavouring to catch small fishes that are alarmed at the leap down.
No. XXXIX.

A SCENE IN LONGSOUND FIRTH.

This is one of those stupendous features of Norway, mostly to be found in districts a few miles from the sea-coast. Navigation is rendered exceedingly dangerous by the sudden or sudden currents of wind which rush with great impetuosity between the mountains, causing many distressing accidents, and sometimes the premature death of intrepid adventurers among the rocks, and in the forests of these uninhabited regions. Occasionally profound silence prevails; not even a leaf is agitated; not a human being or an animal is to be discovered. At those periods, the objects reflected by the lake beneath have a magical effect; the extraordinary gleams of light, the great depth and purity of the water, the transient prismatic colouring, the mists or clouds, and other singular effects, tempt you to believe the whole to be a new creation. In many of these regions, it is common to see millions of fine timber trees, situated on inaccessible places, destined to die a lingering death, or perhaps be eaten up by a destructive moss, which completely envelopes every branch from its trunk to its top; this moss consists of livid green and purple threads, as fine as if spun by spiders, having at a distance the appearance of a white veil spread over the whole. The above observations apply to forests in the environs of isolated lakes in the interior, which have no communicating river or outlet to the sea-coast capable of transporting timber, and where of course the trees must infallibly perish on the spot, it being wholly impossible to remove them over-land in this rugged country, by any machine hitherto invented. Many of these solemn mountains are inaccessible to a human being. In holes on their perpendicular sides, are the nests of the eagle and other birds of prey. Others, by their cavernous security, afford lurking places to ferocious beasts, and the approach is trod with instinctive caution; sometimes these animals commit great devastation in the surrounding country; but fortunately their visits are rare, and these savage intruders have always paid the forfeit of such temerity with their lives. On the first intelligence, the Norwegian, regardless of danger, goes to meet his foe in his ambush with the rifle-gun and knife. A few huts, at a distance from each other, are to be met with under the rocks, where the stray fisherman moors his solitary boat. The dispersion of fogs has a fine effect in the morning; but it is hideous and frightful when seen by moonlight in November: these vapours then rise from the waters to half the height of the mountains, with a gentle undulating motion and pearly whiteness; the enormous heads of the black rocks, which are seen peeping above them, present to the credulous observer's fancy huge monsters of dreadful and questionable forms.
No. XL.

HELGERAAC.

This place derives its popularity from the convenience of its ferry, boats being always in readiness for conveying passengers and goods across the bay and Skien Fiord to Brevig, Longsound, Frederiksvaem, and the places adjacent. The fare to Brevig is three shillings each person, the boats mostly in use are large peter-boats, of twelve or fourteen tons burthen, with a sprit-sail, governed by two men and a boy. Although this bay is very spacious, it is seldom visited by ships, notwithstanding its immediate access to the Skager Rack, as seen in the distance of the picture. Here are many sandy beaches, (a rarity in Norway) projecting into the bay, from the main land and the islands, denoting shallow water, and unsafe anchorage. On a fine summer evening, it is pleasant to observe hundreds of seals, amusing themselves in the water, on the sands, or upon the rocks, where they have all the appearance of large birds; if the beholder approach within a hundred yards of them, they plunge into the water, and disappear in company with those which swim with their heads above the surface. In consequence of the shallow water, and the occasional surf, two landing-places, or bridges, have been constructed of piers, or wooden cases, filled with stones, having leading planks laid on their tops, sufficiently broad to admit carriages over them to the boats; on one of them is a warehouse. The large house on the shore is an inn, where various refreshments may be had; before the door appear the remains of an ancient cross; the high road leads to Laurvig; the distant hills which overlook it divide part of the bay of Laurvig from this bay; the more distant hills on the right separate the Skien Fiord, forming two sides of this harbour, to its opening towards Brevig; its waters are salt, and so clear in calm weather as to render it difficult, at a small distance from the shore, to distinguish the rock from its reflected image. This is a place of much resort, for the sea and coast fowls. In the small inlets are the echinus, starfish, and small crabs; the bay affords the lamprey, salmon, flounders, cuttlefish, sawfish, anchovy, muscles, cockles, and sometimes the golden shark. The village consists of about forty houses, inhabited by fishermen and ferrymen; it has no trade, and contains no artisan except the boatbuilder. It is situated in a very agreeable and pleasant part of Norway, embosomed in gentle hills, which are decorated by groves and patches of cultivated lands. This view was taken a little way up one of the small hills north of the village, in a path leading to the forest and some lakes, from which the huntsman with his game is supposed to be returning, while the milk-maid is going home from her cows in the valley.
LAKE LENONGEN,

Situated a few miles from Helgeraac, is more remarkable for its picturesque beauties than for its extent. This view was taken in a narrow pass at the farther extremity among the mountains, under the lofty and secure protection of which, a number of small islands and rocks are beautifully associated. The solemn and venerable grandeur of those large masses, many of them covered with gloomy forests from the water's edge to their summits; the bare and precipitous sides of others, which, like huge pyramids of stone, are seen rising out of water whose surface may be compared to the highest polished mirror, interspersed with the smaller decorative islands covered with evergreen trees and shrubs, form a strikingly varied, yet harmonious whole.

The waters in the passes, and under the perpendicular rocks, are in general inconceivably deep; the fisherman's line frequently descends one hundred fathoms in those abysses, to entangle groundfish. A sombre hue prevails in the deep water, which has a brackish taste. Some marine vegetation attaches itself to the rocks and the bottom of the boats. It is without currents, a circumstance which indicates one of these subterranean communications with other lakes, not unfrequent in the inland waters of Norway. On the little verdant spots, attended by a man, woman, or children, may be seen a cow or two, picking up the scanty blades of grass. When the pasturage is exhausted in one spot, the cattle are removed in a boat to finish their repast at another.

In the evening, by the same conveyance, the whole party are safely conducted to their habitation; thus their cows are fed and preserved from being lost in the forest or devoured by wild beasts. In some instances the herdsmen provide themselves on the way with a Dutch cheese or a little meal, if their voyage or peregrinations are to a distance. By the side of a rivulet stood a small hut or cottage, with a few nets hanging to dry: the female part of its poor but honest inhabitants were cheerfully employed in nursing and spinning. One of the women soon attracted my attention, by taking from a large wooden chest something of the form of an Egyptian mummy, about eighteen inches long, and fastened on its back to a board fashioned on purpose, projecting about six inches below its feet, for the convenience of placing it erect against the wall, in a corner. However, I was soon undeceived as to the antiquity of the object before me; as it proved to be a living little lord of the creation. During sleep in the day, or in the absence of its parents, the child is deposited in the chest, to protect it from savage intruders, which are continually on the alert, howling around, or lying in ambush in the deep moses, which wholly cover the land of this district. The natural beauties of the place must be numerous, but to hunt them out in its secret and unexplored recesses might be attended with imminent danger. From the scantiness of its population, or perhaps from the inactivity of the inhabitants, this region, although abundantly rich in minerals and timber, is much neglected. The traveller walks on a bed of moss soft as down, thinking it a paradise, until he is aroused by the screams of birds of prey, or the howling of the wolf, of which the fine echoes give ten distinct reverberations.
LAKE LENONGEN.

Imposing mountains, in long succession, whose northern sides are covered with snow, form the environs of this lake, which they nearly surround. They are most of them excessively steep, and have so many tremendous precipices, deep holes, and fissures, that, with common conveniences, it is almost impossible to ascend or descend them. In some of the fissures the surface of the ice or snow can but indistinctly be seen, although toward the end of winter it is from thirty to forty feet thick on their margins, and so hard on the surface as not to receive the impression of the shoe. In some places it has waves, like a glacier; in others, crevices resembling a ploughed field, or plains not unlike a nursery ground, as it appears to be planted with young trees, which, in fact, are the tops of tall pines, projecting above the snow. In places where a forest terminates on the edge of a precipice laden with snow, the protruding branches appear as if they were beautifully delineated, on a vast sheet of white paper. In the month of March the snow begins to melt, and hundreds of waterfalls and rainbows, in every direction, are to be seen. During this season, the Norwegian is active at home, weaving, making or mending his clothes, shoes, boots, boats, and every other article wanted during the summer.

When the spring grass appears, the flocks and herds are seen in the valleys, and the remains of the farmer's benevolent sheaf are taken down from the granary door. A few general ideas of the climate of Norway, collected from a series of meteorological observations, by the Rev. Mr. Wilse, at Syderborg, are introduced in the description of Plate 25. Although the bare mention of a Norwegian winter makes foreigners shudder, the native peak of that season, howsoever inclement, is a golden source of delight. As soon as the snow are frozen hard on the surface, the sledge is kept in perpetual motion, and every inhabitant seems to have quitted the land, for the pleasures of the rivers and lakes. The women vie with each other in the splendid or fantastical decorations of their horses and apparatus, generally adorning the harness with small bells, and a profusion of ribbons, coloured tape, &c. They proceed with prodigious swiftness, forming a cavelade animated by general bustle and merriment. This is the only opportunity afforded to the grotesque upland peasant for visiting distant towns, where he disposes of his stock of bear and other skins, game, fish, natural curiosities and ingenious carvings on wood, in form of walking-sticks, tobacco-pipes, snuff-boxes, &c. &c. On his return he purchases wine, liquors, tobacco, tools, nails, hats, shoes, needles, and other necessaries, for domestic use. In great cities like Bergen, Drammen, and Christiana, it is curious to observe the different characters in the motley crowd, and particularly the rusticated mountaineers, who, being so much secluded from commerce with the world, are in a state of pure nature. The great influx of people presents the appearance of an annual fair, and such indeed the assemblage may be considered. Many benefits accrue from them to the shopkeeper, and it is said that more articles are vended at this season than during the rest of the year.
LAKE TANUM,

Is in the immediate vicinity of Lenongen, with which, in some of its meanderings, it is probably connected; the waters of each are alike in taste and complexion. Being situated farther in the recesses of the forest, this lake and its environs are little frequented by man. It has all the appearance of being the favourite retreat of savage beasts, and the resort of almost every species of wild fowl, of which the greater portion are aquatic. Their motley numbers and configurations in the air, and on the surface of the lake, are highly entertaining; the shore-birds confine themselves to their own haunts. In the air, the eagle soars king over all; the kite, hawk, and cormorant, are next in succession; of the peaceful tribe may be named the wild turkey and pigeon, eyder, snipe, woodcock, and numerous others. Although I was unable, after the most diligent research, to discover the nests of the woodcock and snipe, I cannot but believe that they are natives of the regions of Norway or Sweden. As these forests appear to be infested with bears, wolves, serpents, and other noxious and dangerous animals, the traveller who visits them should use all the customary cautions of the Norwegians, or his mangled limbs may be the sad memento of his temerity. These tragic scenes, it is true, but seldom occur, yet there are doubtless many hair-breadth escapes; two instances may here be recorded. A party of gentlemen from Christiana, one of whom was the late Mr. Collett of Ulivold, went into the forest in search of game. After much toil an individual of the party became fatigued, and imprudently reclined himself on the grass by the side of a fountain, partly overhung by a small rock, while his friends continued to amuse themselves with shooting near the place:—on a sudden one of them descried, on the rock, a large bear looking down attentively at their companion. After having thus leisurely surveyed him, the animal quietly retired into the forest, and relieved the observers from an anxiety more easily conceived than described. On another occasion, some playful boys were amusing themselves by attempting to leap over a dry ditch near their dwelling: one of them leaped short, and alighted on the body of a bear who was reposing in the bottom. The animal, so suddenly and unusually alarmed, sprung from his resting-place regardless of the boys, and effected his escape with all possible speed. A question naturally arises here, if this relation of a single fact may be received as characteristic of the natural disposition of the Norwegian bear:—the natives assert that history does not furnish an instance, in which the most ferocious of these animals ever attacked or did harm to children. The former relation also proves how little they are disposed to attack man, without some previous provocation.

The background of this assemblage of islands, rocks, and mountains, presents a delightful view; and all apprehension of its ferocious inhabitants is banished by the serene picturesque effect of the whole. The dead tree on the foreground, is a victim of that species of destructive moss which has been mentioned in the description of Plate 39, and which is too frequent in Norwegian forests.
TOWN OF LAURVIG,

Is beautifully situated around the head of a spacious and beautiful bay, at the feet of lofty mountains. The hills on each side of the water, and the rocky islands in it, are more pyramidal than others in Norway; their summits are crowned, and their sides diversified with trees and little groves, rocks, verdure, and some sand. The trees are mostly firs, of different species, larch, birch, some small oaks, and on one of the hills, (a singular and much-valued feature in this place) is a luxuriant grove of tall beech-trees. From the sandy shore under the hills, the white church is seen on a commanding eminence, surrounded by a cluster of houses; it is an ornament to the town and a landmark to ships. In this harbour they are considered as well sheltered from the most dangerous winds, and in safe anchorage; their security is enhanced by the impracticability of any surprise from an enemy, as few would have the temerity to attempt a pass between the numerous rocks and islands which guard the entrance. Beyond it may be seen the Skager Rack, and at times large fleets of ships passing. The water is salt and very clear. This place, like other seaports in the west, has no appearance of regular tides; a south wind will increase its water, but they regularly subside with it. On the right, at the further extremity of the bay beyond the rocks, is the strong castle of Fredricksværne, having well-constructed batteries, mounted with heavy cannon; a considerable number of troops are constantly kept within this garrison, commanded by a governor and regular officers. On the sandy beach of Laurvig is an excellent hotel; and here also are situated some of the best houses in the town; before them there is an agreeable promenade to the bridge over the river Lauven, on the banks of which are numerous saw-mills, and the stupendous iron-works belonging to Weddel Jarlberg, Count Laurvig. Of these works, a description is given in the Introduction, page 8 and 9.

Above the town is a very beautiful and picturesque lake, the banks of which afford the most rural and agreeable walks in this district. The town and environs are visited by most of the inhabitants of the neighbouring towns, whose gratification is enhanced by viewing the hospitable and noble mansion, gardens, &c. of the Count, and their amusements are varied by the pleasant water excursions, and agreeable rides to Holmstrand, Tonsberg, Fredricksværne, &c. &c. The River Lauven brings the waters from the Tillefield and Hardangerfield mountains, into this bay below the town. It traverses the borders of Tellemarken and Numedals, through rivers and lakes navigable for transporting timber 200 miles towards its source.

The town is a place of considerable trade in iron and wood; from the vast number of hands employed at the furnaces and forges of the extensive iron-works, and of others in the timber-yards, it appears to have a crowded and busy population. Fresh and salted provisions are cheap, and there is an excellent supply of fresh and salt-water fish. The Jutlander is constantly seen in the harbour, laden with corn, butter, cheese, and pork.
No. XLV.

TOWN OF HOLSTRAND.

The road from Laurvig enters this town at the foot of a vast range of perpendicular rocks, which abruptly terminates here. It is a place of no great extent, although of some trade. It is situated partly on the declivity of a hill, and on the shore of the Dram Fiord, and has the convenience of many wharfs, and floating stages, for shipping goods. The mooring place is well sheltered from the bleak northern winds; at the further extremity of the town a large windmill is erected, over which, in the distance, the Paradise Mountains near Dram, and a portion of the Fiord, are to be seen. The old carriage-way to Stromeoe and Bragernes, two towns, commonly called Dram or Dramen, was along the sands by the sea-side, and immediately under a prodigious range of precipitous rocks, not unlike a wall, one hundred fathoms in altitude, and many miles in length, of a deep red colour, and crumbling material. The vast blocks and fragments of stone, strewn by thousands on the shore, indicate the fatal accidents to which travellers were liable, who formerly were compelled to use this road. To obviate future dangers, a new one has lately been made from Holmstrand over this table mountain to Dramen; and the old perilous way is now frequented only by coast-birds and fishermen, who are often seen angling for small fishes, crabs, &c., among the fragments which have fallen into the water from above. To examine the aspect and forms of this immense bulwark, the safest and best mode is to coast it in a boat, thus avoiding the consequences of its terrible disruptions. On the first view, the mind is relieved from any wish to retrace the footsteps on the old path, by observing the enormous blocks, resting on the slightest support, ready on the first vibration of air, to follow their companions; some parts are ornamented with a few stunted shrubs and mosses. The mountains seen on the right separate this Fiord from that of Christiania. They are almost wholly covered with forests: their timber, when cut, is only adapted to secondary purposes, being inferior in quality to that produced by the forests in the district of Christiania, which has retained its pre-eminence over all other deals cut in Norway. This pre-eminence may, in a great measure, account for the wealth and great influx of inhabitants in and about Christiania, and also for the removal of the ancient seat of government to it, from Drontheim. On riding through a Norwegian forest, the traveller might expect to hear the sound of the axe and the saw-mill in every direction, but a solemn and awful silence prevails; on viewing these inexhaustible stores, he is led to believe that they have never been molested, or even thinned, and he is surrounded by myriads of tall trees, resembling rusticated pillars, placed at convenient distances, to support a superb and gloomy canopy.
DRAM BAY.

This view was taken on board a ship lying at anchor in the Christiania Fiord, opposite and looking directly into Dram Bay. The rocks on the left are the termination of the Jarlsberg district; those on the right are the extreme points of a vast range of mountains covered with forests, extending on one side to Dram, and on the other to Christiania. The large islands in front, near the shores of Holmstrand, are Loveseoe, Langoe, and Borneoe. They are inhabited by a few families, who principally occupy themselves in fishing and piloting ships. The extensive range of mountains which forms the back-ground is mentioned in the account of Holmstrand, the wind-mill of which town appears under it on the left hand. The prospect from on ship-board, when sailing in fine weather up this Fiord to Dram, meandering between the main-land and its numerous islands, is extremely pleasing and picturesque; the many vessels and numerous fishermen employed in their daily avocations, passing and repassing, enrich and enliven the scene. This Fiord and the Dram river are a favourite resort for salmon, considerable numbers of which are annually taken, particularly at their leaps. Almost every other species of fish, either inhabiting or periodically frequenting the waters of the Norwegian coasts, may be found here. The boats introduced are specimens of those used: in one of them a boy is drawing up a singular fish, remarkable for its chameleon-like beauty, and the variety of its changeable colouring. The old man is fishing for ground-fish according to the mode practised in Norway, which is as follows. A line wound round the hand, descends over the fore-finger perpendicularly to the bottom of the sea, having affixed to it the trap, or bait and hook. The continuance of this dangerous custom is much to be lamented, as the unfortunate men employed almost invariably exhibit a mutilated hand. This misfortune is the usual result, if a large and more powerful fish than was expected, after greedily devouring the bait and hook, endeavours by a sudden and violent effort to disengage itself; the shock is instantly felt above, and before the line can be disengaged from the hand, the person is pulled into the sea or loses one or more fingers, and the fish escapes.

About one hundred and fifty ships annually sail round the rocks on the right, up to Dram, where they receive goods brought from Kongsberg, Hassel, and the environs, in great quantity and variety. The produce of the silver mines at Kongsberg is coined into specie dollars on the spot, and forwarded monthly, by land, through Sweden to Copenhagen. Near Fossam is the famous cobalt mine, and at Hassel is one of quartz, where they make the Prussian blue. There also is a considerable iron-work. These commodities, together with the produce of the marble quarries on Mount Paradise, and of the forests, to the amount of 335,000 deals, contribute to the lading of the 150 ships from Dram. The mountains in this district being of great elevation are, during a long period of the year, covered with snow, and in many of their hollows on the northern sides this covering may be called eternal. The neighbouring forests are infested with wolves and bears, to the great annoyance of the peasantry, who being excellent marstmen derive some remuneration from their skins. These, if good, will fetch £2 a piece on the spot; considerable numbers are exported, many of them 14 feet in length, with long hair of the first quality.
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ULIVOLD, THE SEAT OF JOHN COLLETT, Esq.

This princely mansion is situated on a most admirable and well-chosen eminence, about two miles distant from Christiania, commanding the most enchanting prospects of that city, its magnificent environs, the Fjord, harbour, Egeberg, and the whole country in every direction for miles around. The house is quadrangular; three of its sides contain the principal apartments, which are lofty and well-furnished, including a library, billiard-table, &c. &c. On the other side are the offices and servants' rooms. The inner quadrangle affords ample space for carriages. On the side towards Christiania are spacious pleasure-grounds, shrubberies, gravel walks, decorative temples, grottos, baths, obelisks, statues, a model of a ship, flowers and shrubs, with many other decorations peculiar to Norway, or introduced by the taste of its late hospitable possessor. By the side of the road, on a small conical hill, is an imitation of a Norwegian cottage; in a small grove is a circular apparatus, for the game of shooting the ring, as performed in Germany; and farther in the deep recess is an obelisk to the memory of a departed brother.

In agriculture, every modern European improvement has been put in practice and liberally promoted, for draining morasses, and enriching the soil. The farm, which formerly presented a surface of schistus niger, or black slate, is cleared, and with great expense and labour now covered with good vegetative mould, so that luxuriant crops are to be seen in every direction. The threshing machine, the drill-plough, and most of the agricultural implements of highest repute in England and other countries, have been introduced. There are also ample instructions posted up, prescribing the time and order for putting seeds into the ground, in their respective succession, for nine years. The building seen to the left of the house, having two roofs and a turret, is a very spacious cow-house, constructed in a peculiar manner; it is the cleanest and most convenient for the animals that I ever saw. It has two ranges of stalls, one on each side, divided from end to end of the building, by a well-boarded deal floor 40 feet wide, kept as clean and neat as any drawing-room. From the ceiling are suspended, in a line down the middle, large plate glass octangular hall-lanterns with brass frames. On either hand appear the heads of the numerous cows, one in each stall, taking their provender from a small manger. It is pleasing to observe the well-taught regularity observed by the herd on entering the building: within the great doors are two passages leading to the stalls; each beast well knowing its place, files off to the right or left, as it may be situated in the building: mistakes sometimes occur, and on such occasions the lawful possessor invariably turns out the intruder. These stalls are admirably constructed, having drains and pipes to convey away immediately all refuse to two reservoirs at some distance, where it is carefully preserved, particularly the fluid part, which is most esteemed for manure. The whole structure is an admirable specimen of cleanliness, neatness, and economy. To shew how much it is distinguished for the two former of these qualities, I have only to add, that being devoid of the slightest odour, it is frequently used as a ball-room by all the beauty and fashion of Christiania. How different are our own buildings of this kind, abounding in mire and filth, where the animals are kept amidst putrid effluvia, detrimental to their health, their heads turned where their tails ought to be, and the valuable manure negligently wasted.

This view was taken from a road leading from Christiania to Bogstad. The hills in the distance are situated a little beyond the city, near Egeberg.
No. XLVIII.

VIEW FROM HOLMAN.

The spot where this view was taken is called Holman, situated on the road from Christiania to Bogstad, in a vast valley, flanked by a noble amphitheatre of woody mountains, one of which has on its summit a spacious lake. In the picture, looking over some cultivated land, is seen the farm-house, which gives name to the place. From it the vale gradually descends to the margin of Christiania Fiord. Here a small island or isthmus presents itself, on which the summer residences of the Governor and Commandant are seen. The houses are ample and convenient, particularly that of the former, who has also employed much skill and labour in laying out the gardens, and in planting all that would grow on so sterile a soil, its base being the schistus niger, or black slate, which is seen on the walks. At the end of one avenue is an obelisk, inscribed to the memory of a departed friend, a species of decoration which is very general in the gardens of the nobility and gentry of Norway and Denmark: the view includes a vast extent of the Fiord, stretching on the right side nearly to the town of Drobak, a course which the ships take on their voyage to and from Christiania, situated on this shore to the left, above the Crown Islands. The hills on the left, in the extreme distance, are at the bottom of a beautiful and extensive bay, near Aas, which is navigable for ships, and where some cargoes are collected. The hills on each side are covered with trees to the water's edge; this is also the case on the middle land, but its interior is more occupied by farms and cultivated grounds. The hills and rocks are of no great altitude on the shores of the Fiord, except near Christiania and Drobak. The scenery about Holman, in feature and colouring, much resembles that of Claude le Lorrain's finest Italian pictures. After so brief a description of this beautiful region, it may be added that General Beder Anker selected it as the site of a splendid mansion, which his refined taste, and excellent judgment, have made the seat of the muses. The house with its portico has the air of a Roman villa: within the spacious rooms are seen many fine Italian pictures and prints; among the latter, I observed a choice set of Hogarth's works. Books, philosophical and musical instruments, with other aids to science, complete the range of intellectual resources in this elegant retreat. The gardens are tastefully laid out in the English style; the shrubberies are planted with specimens of every species of tree and shrub indigenous to Norway. Near the lake is erected an exact model of an antient Norwegian dwelling; on the sides of its large room are inscribed several hundred names, (each with its date and address) of former visitors to Bogstad; among them are the names of kings, princes, dukes, lords, ladies, and of many scientific and eminent persons of both sexes, written in pencil, with their own hands. On adding my own, I perceived that of Mary Wollstonecraft not very distant. This mansion is situated in the bosom of the amphitheatre of hills, at the head of the valley mentioned above, and is distant 12 English miles from Christiania. The lofty mountainous scenery around, being covered with the evergreen firs, presents the most romantic and beautiful views imaginable.
No. XLIX.

CITY OF CHRISTIANIA.

This view was taken from a position recommended by the late honourable Bernard Anker, on the side of a mountain called Egeberg, from whence the city of Christiania, and its noble background of mountains, are seen to the greatest advantage, on which account the spot is the pride of the inhabitants, and the admiration of foreigners. At the bottom of the hill, on the right, are some remains of the old city of Opole, which was burnt in the year 1624. The buildings on the left are Opole Kirke, and a lunatic hospital. A new road winds on to the right, between some good houses and the ancient palace belonging to the bishops of this see, a high gothic building, with red tiles, seen on the right margin of the picture. This edifice was the residence of the kings and princes of Denmark, in their visits to the city. Across the bay, on the gentle declivity of the hills, is situated the new city, denominated Christiania. Its principal object on the left is the ancient garrison, called Aggerhus, with its fortifications and walls, projected on a rocky peninsula, at the extremity of the city: to the right are observed the red warehouses, wharfs, and ships in the harbour, up to the custom-house; in succession are seen the hospitable quadrangular mansion, and garden of the Ankers; the cathedral church, the museum, hospitals, schools, prison, &c. &c. Situated on a middle hill, is seen the ancient church called Agger, and at a greater elevation, near the margin, is Ulivold, the seat of John Collett, Esq. Numerous villas are interspersed among the high grounds, as far as Bogstad, which is situated at the feet of the distant hills, nearly over the great church. In the vale below Aggers is the botanic garden, and not far distant from it is the site of the new Royal University, now erecting, with residences for nineteen professors, and two lecturers. Parallel with the town is a long slip of land, from the bridge to below the custom-house, having the river on one side, and the bay on the other; on it are the extensive timber and deal-yards, covered rope-yards, places for careening ships, great cranes for putting in their masts, &c. &c. The ships proceed to and from sea, under the walls of the garrison, in the deep water. The other part of this spacious bay, between Christiania and Opole, is navigable for boats only, being choked up with the saw-dust perpetually descending into it from the numerous saw-mills up the river, although a machine is continually at work to remove it.

The new road from the city, on the foreground, winds up over Egeberg, and leads on to Moss, Frederickstad, Swinesund, and Sweden. The approach to Christiania, on this side, is over the summit of the mountain, where, on emerging from a forest, the traveller obtains his first view of the city, spread out before him in its whole extent, and producing, with its beautiful and magnificent scenery, a grand and most picturesque effect. The prospect is pronounced by tourists to be unequalled in Europe. The supreme governor of Norway resides in this town, and the high court of justice is held here. Christiania is also the seat of the primatic bishop, who, with three others, exercises the ecclesiastical jurisdiction of all Norway. The garrison, under the superintendence of a commandant, has its hospital and school. There is another hospital for the town. The trade is often very considerable, and there is an abundant supply of all sorts of game, provisions, and foreign delicacies. The inhabitants are hospitable and friendly; scarcely a traveller enters it, without receiving invitations from the opulent, to their public tables.
HARBOUR OF CHRISTIANIA.

On the first sight of the vast basin at Christiania, the mind is prepossessed with an idea that it is capable of containing 500 sail of ships, when, in fact, the navigable and mooring part is comparatively of very limited extent, immediately under the wharfs and walls of the garrison, where alone there is deep water, as remarked in describing the preceding view. The building on the right of the picture is a pavilion at the bottom of the late honourable Chamberlain Anker's garden, the blinds of which are removed on gala occasions, to afford a view to the company, and allow them to be seen from the harbour. These gardens are spacious, and replete with lofty trees, flowers, and shrubs, broad gravel walks, decorative and convenient buildings, containing hot and cold baths, fountains, green-houses, bot-houses, with elevated screens to protect the tender plants and flowers from the north winds. The mansion is quadrangular, and encloses a spacious court-yard for carriages. The front towards the garden extends from one side of it to the other, and commands a full view of it from the windows of its drawing-rooms. The apartments are spacious, and most elegantly furnished; Italian, and other pictures, collected by the proprietor when in Italy, England, and elsewhere, decorate the walls; brilliant cut-glass chandeliers depend from the ceilings; cabinets and curiosities, among which is a model of a ship made entirely of glass, a rare collection of minerals, fossils, and shells of Norwegian production, a library, billiard-table, &c. present a varied circle of amusement to the visitants.

The building in a line with the garden-wall is the custom-house, and near it is a place covered, for landing or shipping dry goods. A range of warehouses extends from the castle wall. Two of the Crown Islands, behind the ships at their moorings, drying their sails and receiving their cargoes, lead the eye to the great crane used for the masting of ships, &c. A rope-manufactory, and a few more warehouses, of which two only are in view, complete the harbour on the left, to the commencement of the extensive timber-yards, which form the foreground.

On the 4th of May, 1819, a most destructive fire raged on this spot, which destroyed some warehouses and other buildings, with the extensive rope-walks and 600,000 deals. The origin of the calamity has not been ascertained. A very vague idea only can be formed of the imports and exports of Christiania, without consulting the custom-house books, an enquiry which would be justly deemed impertinent, and prudently denied, particularly to a foreigner. Suffice it to say, there has been a fluctuation annually within a few years, of from 200 to 500 ships. Of this number, the house of Anker alone have had seventy ships traversing the ocean to various countries. Perhaps a liberty is taken in asserting my confirmed belief, that not any nobleman ever had the welfare of his country more at heart than the late honourable Bernard Anker; he munificently patronised every undertaking for promoting its interests with his purse, and by the practical and scientific resources of his mind. He was a chamberlain to the king of Denmark, a member of our Royal Society, and of most other institutions of the same class in Europe. His high honours sat easy on him, and he cheerfully imparted his great intellectual stores in the most liberal manner to all. He received part of his education at Elton school in England. He was, in his own country, commonly called the friend of Englishmen, none of whom, when in distress or in want of advice, ever regretted the application, or, I hope, ever forgot the obligation. His table was magnificent, convivial, and always open to the stranger; and surrounded generally by friends and nobles, he shone like the king and father of his country. He has also conveyed the most munificent bequests to posterity, in founding and endowing scientific institutions and charities, which are justly the boast of Norway, an everlasting blessing to the country, a noble monument to the memory of this great man.
GREAT CHURCH AT CHRISTIANIA.

This cathedral church is situated nearly in the centre of the city, forming one side of the great square. Its form is that of the Greek cross. On the south transept, over the upper windows, is inscribed the date, 1624, in which year the old town of Oppløk was burnt. The style throughout the edifice is Saxon gothic. The high roof is covered with a dark glazed pantile. There was originally an elegant spire, which is supposed to have been accidentally struck down by the guns of the garrison, during the attempt made to drive Charles XII. and his army from the possession of the city. Soon after that period, the present cap was added to the great western tower, and the project of replacing the spire appears to have been abandoned. On the side fronting the observer is an ancient clock, and below it a sun-dial. On another side, over the great door, are the king's arms, his three crowns, C, &c.* On the outside of the church are several covered staircases, for the convenient access of particular families, to their pews or rooms, which are surrounded with glass sashes within. There is an extensive burial-ground on the right, within a strong pallisado, bordered by a row of trees. The whole was encompassed with a stone wall, having gothic entrances, decorated with the king's arms or C. It was deemed expedient to have another burial-ground, at a little distance from the town, when the part of the old wall, seen on the left of the picture, was taken down, and the void space to the pales was added to the square. The church, within, is spacious and convenient, having a good altar, pulpit, stained-glass windows, organ, baptismal font, pews, &c., with a throne for the king and another for the bishop. Some flags and other trophies are suspended from its walls, particularly two, one yellow, the other red. The monuments, tablets, and other appropriate mementos of noble families, are too numerous to mention. Among the names of the defunct are those of Mr. Collett of Ulivold, and of some ladies who were natives of England. Their remains rest in company with the venerated relics of one, who, as a merchant, ranked high, still higher as a man. The sepulchre is beloved with many a silent tear, where he and his lady sleep in the secure hope of receiving the blessings reserved as a reward for a life of virtue. To a Norwegian, this apostrophe needs no explanation: it is for the information of my countrymen, that I record the name of this illustrious individual, Bernard Anker. He died in Copenhagen, and his corpse being removed by sea, was interred at Christiania with those impressive and solemn obsequies, which testify the public feeling of a great national loss.

The division of Christiania, between the cathedral and the garrison of Aggerhus, is regularly built, having spacious streets at right angles, with fountains at the intersections. Those which project towards the castle are completely commanded by its guns. When the intrepid Charles XII. had occupied this city, he was often seen from the batteries unattended in the streets, reconnoitring the castle, of which he never obtained possession. Many shots were aimed at him that are now to be seen fast in the walls of several houses, where they are carefully preserved in their positions, and gilt on the parts still visible, as a memento of the fact.

* Christian 5th.
The suburbs of Opstoe nearly join those of Christiania; the high road from Egeberg, winding through them both, and passing round the head of the bay, and along the deal-yards, leads over this bridge into the east quarter of Christiania. It is the only way for carriages from the south of Norway, and for travellers from Sweden, Denmark, &c. &c. Unfortunately it does not enter the most prepossessing part of the city, the aspect of which, however, gradually improves, as you approach the great church.

The bridge is handsomely and firmly built of stone, having three arches, supported by strong abutments. The centre piers are well guarded by firm erections of wood, to protect them from being injured by the vast quantity of timber floating down to the yards. The flooring projects much on the sides, under which are kept the public ladders and crooks used in cases of fire. Above is a firm double rail, painted white. Below the bridge, on the left, the extensive deal-yards commence, and on the right side the buildings of the city. The source of the river is about Hans Fjord, and near a small lake; there are several falls in its course, which give motion to many saw-mills. On its silvery surface are borne innumerable rafts and barges, laden with the best timber which Norway produces. The deals are assorted, and stacked in the yards below the bridge, and when properly seasoned, they are conveyed thence in barges, to the ships seen in the harbour below. The point where this view was taken is situated a little way above the Bridge, at a place called Greenland. By the sides are a few prams, and in the middle is a barge laden with several sorts of merchandise.

On the shores some women are seen washing in the river, and beating the water out of the clothes with a mallet, a method commonly practised by them instead of rubbing. The house, on the left hand, is a tolerable specimen of the secondary dwellings in the country, having a gallery around it, over which projects the roof, supported by upright posts. The structure rests, at its four angles, on pillars of stone, three or four feet above the surface of the earth, to keep out vermin. In the inclement winters the inhabitants close the apertures of the gallery, between the uprights, with boards, or more generally with branches of fir-trees, as an additional security against the cold northern blasts; and at these seasons the houses present a singular feature in the landscape. A considerable traffic is carried on by the numerous shopkeepers, in the streets leading from this part of Christiania to the country, consequently, the number of persons traversing this, the only bridge, must amount to thousands daily, especially when it is recollected that the town contains a population of 10,000, exclusive of country dealers and visitors.
The Castle of Aggerhus, from its magnitude, its lofty spiral clock tower, and its elevated situation, assumes an air of grandeur which imparts no small degree of importance to the city of Christiania. The principal, or best apartments, are in the part of the building seen beyond the clock tower. It has three fronts, one of which faces the spectator; the principal front commands the bay, and the third the city. As the chief parts of the exterior are always kept white, the castle is visible down the Fjord, and in other directions at a vast distance. It is constructed of stone, and is situated on a grey rock, encompassed with strong and regular fortifications, the ramparts of which are well mounted with heavy cannon. The store-houses contain all kinds of ammunition, &c. requisite for a siege, and for the supply of all the minor garrisons, the militia, and the surrounding country, in case of surprise or invasion. It is under the superintendence of a commandant, who resides there. Within the garrison walls is an area of considerable extent, laid out in spacious walks shaded by avenues of tall trees. The principal entrance is on the side next the town. There are always a considerable number of troops kept in this castle, who regularly perform garrison and town duty. The ranges of the guns around the ramparts, opposite the entrance of the harbour, completely command every ship passing in and out. The walks within are much frequented as a promenade on Sundays by the towns-people and others, being on those days open to the public like our parks, except that they are confined to pedestrians.

The castle appears to have been erected at an epoch anterior to, or coeval with the foundation of the town of Opsloe on the opposite side of the bay, and to have been destined for its protection and defence. As that town was destroyed by a great fire in 1624, and as at that time the side of the basin skirting its shore was probably becoming shallow, from saw-dust and other causes, which presented impediments to the shipping, it was wisely determined to build the new city on the opposite side, near the garrison, where there was deep water and a convenient place for warehouses and wharfs. The erection of the new town appears to have been begun in the same year in which the conflagration happened, the date on the cathedral being 1624. The name of Christiania was adopted in preference to that of Opsloe or Ansloe, and the ancient harbour being entirely neglected, was gradually choked up with saw-dust, which the oars of the ferry-boats stir up in a putrid state, every time they pass and repass from one town to the other.

Many memorable transactions have occurred respecting this garrison; and its walls, as history testifies, have been the scene of various splendid events. There are numerous dates to be seen on different parts of it, inscribed when additions were made, or repairs completed; as 1310, 1563, 1660, 1714, 1716. Charles XII. made the last unsuccessful attempt on it, when he and his army were starved out, and obliged to retire without accomplishing his favourite object, the reduction of Norway.
No. LIV.

VIEW FROM EGEBERG.

This view was taken on the declivity of the farthest point of Egeberg, where its sides descend precipitously into the Fjord nearly opposite the castle. To form a faint idea of the expanse of the country and the waters about Christiania, it is necessary to place this and the following view, No. 55, together, which comprehend the whole scene, as beheld from this spot, presenting the appearance of an extensive and beautiful lake. It was deemed expedient to divide it on two plates, calculated to match exactly, in order to show the parts on a larger scale, and at the same time adhere to the rule originally adopted, of having no folding plates in this work. On a line from the castle, to the left, are two of the Crown islands; they are covered with short burnt grass, which gives them a brown aspect, and are inhabited by two or three fishermen, with their families.

On the long island, or isthmus, a little above them, are the summer residences of the governor of Christiania, and the commandant of the castle of Aggerhus. A few other islands are seen in succession down the Fjord. The ship seen under sail indicates, by its position, the deep channel leading into the port, which lies between the garrison and Egeberg; the water seen over its masts, extending from the main land to the point of the governor's island, is shallow, and used by boats only. The great points of attraction in this view are the three mountains of similar form, seen in the distance, terminating abruptly with precipices near the high road, leading from Christiania to Dram and Consberg, which, after coasting the shore, leads up the side and over the top of one of them. All ships passing to or from Christiania, are most advantageously seen from the foreground of the picture.

In the woods of this mountain Egeberg, the cadets from the military school exercise themselves in manoeuvring and shooting with the rifle-gun. One of their excursions took place when I was occupied with this view. Having descried me, half-a-dozen of them silently approached within gun-shot, and lay in ambush on their stomachs and backs, concealed by the bushes and trees, attentively observing my motions; a rustling among the leaves drew my attention, and I saw the muzzles of their guns levelled at me, which caused some merriment, and afforded me an opportunity of seeing many of their extraordinary feats in military tactics, and of their skill with the rifle-gun in bush-fighting. The Norwegians certainly excel all others in the use of this little piece; even a peasant's boy will hit a bird flying, in the eye or head, with a ball from a gun of the rudest materials, a vile barrel, a Dutch lock, set in a deal stock, fashioned with his knife, and charged moreover with bad powder. If he by chance miss his aim, he is rebuked severely and repeatedly, for wasting the powder and shot, until he is master of some secret sniping principles, known only to the adepts themselves.
No. LV.

VIEW FROM EGEBERG.

The present view was taken on the same spot as the last, which, when placed on the right of this, comprehends the general appearance of the whole Fiord with its islands, as seen from the top of Egeberg, a mountain in the immediate vicinity of Christiania. 

Two of the crown islands are continued from the right, and the third is on a line with them, more to the left. The ships sailing up the regular channel between them, are pursuing their course round the point into the harbour. The passage between the islands, when certain winds prevail, is attended with many difficulties, and requires great skill in pilotage, as indeed does every part of the Fiord. It has no tides; and great perils are to be apprehended from sunken rocks, bad anchorage, and sudden gusts of winds, issuing from between the mountains and islands. If the ships miss a pass between the latter, or do not attain their next anchoring place, they invariably return before night to that which they left in the morning. This necessary precaution, at times, renders the navigation extremely tedious to the impatient voyager; and the obstacles are such, that it is utterly impossible for an enemy to reach Christiania by water; nor can the best and most experienced pilots ever be prevailed on to attempt the passage by night. The great promontory on the left, Nas Oddin, connects with a vast congregation of woody mountains, extending down the Fiord to Grisbue, Drobak, &c., and on its east side, forming the extensive bay of Biorning, the entrance to which is seen behind the weatherbeaten tree on the foreground. The hills, in the extreme distance, are in the west of Norway. By placing on a table Nos. 56, 55, 54, 49, 50, and 53 successively, by the side of each other, beginning with 56 on the left, a tolerably panoramic exhibition may be formed of the situation of Christiania, in the midst of its superb environs; and I presume that the scene will then be allowed very far to excel the much-admired lake of Geneva, with all its beauties.

From the heights of Egeberg only, the bay, harbour, and circumjacent country appear in all their glorious splendor. The Fiord is decorated with islands, and animated with ships and boats; accessories which Geneva cannot boast, and which are here presented at one view, in a most interesting and enchanting living picture, not inferior to the finest Italian scenery. The placid serenity of the water's silvery surface, its wild-fowl skimming the midway air, and the gentle murmurs of the trees overhead, incline the imagination to believe that the repose is eternal; but alas, it is transient and precarious! and seasons occur when the awful and tremendous visitations of Boera and his fatal attendants tear up and lay waste all that is exposed to their fury. Then the picture is horrible in the extreme; the very mountains seem in motion, and appear to be assembling, and again forming in the lake beneath, which is agitated like a foaming and boiling cauldron. Not a ship, boat, or bird is in view; the trees are bent to the earth, their fragments flying in the air; the small water-falls and rills are no more seen on the sides of the mountains, being torn from them, and dissipated before they can reach the bottom. If the hapless ship cannot in time retreat behind a rock, she is inevitably wrecked, and all on board perish, as anchors then become useless. The natives, well aware of these sudden visitations, have wisely and humanely placed on the sides of the perpendicular rocks, iron rings, to which the mariner confidently moors, sheltered by a tower of strength over his mast head, although in imminent peril from the large fragments which occasionally fall from above.
ALUM MINE AT EGEBERG.

A high mountain called Egeberg is situated on the opposite side of the bay or harbour of Christiania at Opsloe, by the church of which winds the great high road, leading immediately up the ascent. A little way on the right of the road is the alum mine belonging to John Collett, Esq. of Uivold, from which place he can, by the assistance of a glass, observe the operations of the workmen here employed. It has the appearance of a stone-quarry, as the materials are wholly collected from its sides, and the exterior is much stained with a ferruginous colour. The whole hill is composed of a black aluminous schistus, \( \text{(schistus niger)} \). This species of slate is in colour a deep bluish black, hard, heavy, and moderately shining on the surface, capable of receiving a polish, and impervious to water; characters written on it are white; it does not strike fire with steel, or at all suffer by acids. It calcines to a red or pale brown colour, which will not stand a pigment. The plates or laminae in the quarries have a considerable dip to the south. They are easily dug by the quarry men, who are indifferent about their sizes or forms, as small pieces are more convenient for calcination. I did not see any collected for school slates, nor did I observe upon them any impressions of fern, plants, insects, or fishes; which are not unusual in the schistus of Somersetshire, Wales, Yorkshire, the Canton of Glarus in Switzerland, Lapland, &c. &c. It is easily removed from its native bed by the workmen, with a pick-axe and spade, and is then put into small carts, and drawn by one horse to the extensive manufactory erected at the bottom of this hill. This establishment is well adapted to the chemical operations which the slate is to undergo, having the necessary apparatus, furnaces for calcining, cauldrons for boiling, and pits for crystallizing. The alum here produced is allowed to be of a good quality, and vast quantities are annually shipped for exportation in small vessels, from the wharf on the premises.* A little way up the road, above the mine, and nearly on a line with the house at its side, is the spot from whence the view of Christiania, No. 49, was taken. As you ascend, the hill gradually becomes steeper, and in a serpentine direction you creep up its side to the top, from which it may be a mile and half through the forest to the spot where the view No. 55 was taken. To the sides of this hill, the natives of Christiania exultingly lead all travellers, who with themselves are never weary of viewing and pointing out the individual beauties of the scene, and of repeating the anecdotes connected with it. On one little fertile spot may be seen, in the mind’s eye, the half-starved army of Charles XII. robbing and greedily devouring the scanty produce of the cranberry and juniper-bushes; on another the triumphant entry of a favourite king, or the return of a great patron to the country, who are ever greeted with warm hearts. Provisions and merchandize are continually passing in abundance to and from the city. The long-missing ship entering the harbour, the cheerful bells, and the palace and cottage, are objects which harmonize peacefully with each other.

* For more particulars see pages 16, 17, and 18, Picturesque Description of Norway.
No. LVII.

HAOE FALL.

This view was taken on board a ship in the Fiord of Christiania, a little above the town of Drobak. It shows the narrowest and most important pass of the Fiord, between the mountains in its vicinity on the way up to Christiania. It may properly be denominated the key to that city by water, and might easily be fortified with a castle, or battery of a few guns, which would prove inevitably destructive to an enemy’s fleet, or a single ship, that might have the temerity to attempt the pass. Why this important place has been overlooked, or neglected, may possibly be attributed to the confidence placed in the hazardous navigation to and beyond it, which certainly renders Christiania inaccessible to an enemy. The water is salt, and so excessively deep, that instances are known of ships that have been hurried through this strait, from their holding ground opposite Drobak, before they could get their anchors up, and which have retained them hanging from their bows at cable’s length, without touching, or being impeded by the bottom. The anchoring places, of which there are but few, are composed of a fat blue clay of no great extent, ending in many places abruptly, like a wall, through which the anchor in blowing weather sometimes draws, and when arrived at its extremity, falls perpendicularly down into deep water called bottomless. At these moments all attention is called to the safety of the ship, to prevent it from being dashed against the rocks or islands; and the anchors are suffered to hang down neglected, until they arrive at a convenient place for getting them on board. The rocks on the left-hand side are a continuation of the Drobak shore. The large conical mountain is called Haoe; it is an insulated mass of rock, covered almost wholly from the water’s edge to its summit with firs. Its altitude is considerable, and there is much difficulty in ascending to its apex; its rocks are of a red or purple hue. Between it and its gigantic neighbour, a cascade or rill of water is continually falling down its sides into the Fiord, from a lake above, which when swollen, distributes its superabundance in many murmuring channels, in an unventured and picturesque manner, as may indistinctly be seen, between the rocks and trees. This shore being bold, and abounding with precipices, the ships rub the rocks and trees with their yard-arms in passing. Although at certain times of the day these places seem a most agreeable paradise, such is the variable state of the autumnal atmosphere in Norway, that an hour may involve you in a hurricane, deluge you with rain, or immerse you in so dense a fog, as to prevent you from seeing the ground at your feet, and often in these forlorn cases you are in a forest, and obliged in pursuing your way, to depend more on your faithful little horse, than on yourself or your guide. The hills in the distance are at the sides of the Fiord, on the way up to Christiania. A little below this pass, at Fitved, stands a small custom-house, where probably they take cognizance of all ships to and from Christiania, Drobak, Osterstrand, &c. The hills behind it are of singular forms, and the Fiord in general presents at every point a variety of pleasing or astonishing objects rarely excelled in Norway.
TOWN OF DROBAK.

This small seaport is situated on the east side of the Christiania Fiord, on a flat sandy cliff, under which there is a gravel beach, with a long island or spot of land, forming within it a small harbour for boats only, and extending about half the length of the town in a parallel direction; beyond it is the road for the ships. The barren rocky island, of which part only is seen, protects the harbour from the great body of water in the Fiord to the westward. The town consists of a small church and a few houses; its trade is inconsiderable, the residents being chiefly mariners and fishermen, with the exception of Mr. Neilson, a considerable merchant, Captain Angle, and a few others. The house of the former is seen on the left of the church, and that of the latter in the town. Drobak is embosomed in hills, and is situated near the important pass in the Fiord at Hace, described in Plate 57, which is distinctly seen in the picture with part of its mountain-isle, and also the great stones in the passage.

Between one of them and the hill a ship is seen in the regular channel up the Fiord. To give an idea of the navigation of the whole Fiord, from Christiania to Fader Island, I will take leave to insert an extract from my Journal of what occurred in sailing down, Sept. 30, wind east, left Christiania, anchored at six in the evening, at Græshoe; a few saw-mills, no town, very hazy with rain. Oct. 1, mor. at 7, weighed anchor, wind S. E. hazy and rainy, passed many islands and waterfalls, anchored at five opposite Drobak, near which are two cascades, Hace and Soleberg. Oct. 2, weighed at six in the morning; hazy and rain, wind S. E. passed the peninsula of Ielon, very dense; obliged to return 12 miles, to a safe anchoring-place: four in the evening heavy rain, clear moon at night, with extraordinary white fog on the water. Oct. 3, at anchor, foul all day, two vessels lost, and all the ports to the westward filled with ships; being sheltered by the rocks, the storm not felt here. Oct. 4, anchor came up with great labour, stiff clay; blowing hard at N. E. quantities of blubber fish; passed Osterstrand, and salt-works at Tonsberg; at six entered Larkoul, thick weather and rain. 5th to the 10th, in harbour, foul wind, fog, and rain. 11th, a little favourable, horizon very black to the N. E. rainbow in the evening. 12th to the 13th, foul weather; 16th, a storm to the N. E., dragged anchor and let go another; 17th, fair wind, but too strong to get up the anchors: 18th at six, employed two hours in getting them up, left Larkoul with a fair breeze at N. E., at two opposite the Fader Island; a fine sun-set, wind variable; at night it increased to a storm; Fader light blown out; the sea appeared on fire, were obliged to return to Larkoul; the small rocks, or sheer, difficult to be seen in the intense darkness; the ship within a few yards of them before they were discovered; incessant tacking without sea-room, and on a lee shore; at day break, entered Fader Island, where on the reef lay a vessel from Bergen, wrecked in the night. The crew, and among them a freeman, or woman of distinction, a passenger, was elosing to the barren rock imploring our assistance, which it was utterly impossible to afford, situated as we were, expecting the same fate. The sea breaking over their mast-head in a horrible foaming manner from the harbour, we sent a boat out to them well-manned, by which they were all fortunately rescued from a watery grave. The vessel was totally lost, and they, although half-drowned, rejoiced most heartily with us on their miraculous preservation. This night many vessels were lost, and two driven from England to Norway without anchors, one from the Downs into Arendal, the other from Yarmouth to Stavanger. The storm continued from the 18th to the 23d, when the wind suddenly changed from N. E. to S. E., blowing equally hard. On the 23d and 24th calm, 25th much rain, N. W.; 26th and 27th, foggy; 28th to 30th, foul winds, much cold, to Nov. 3d, blowing hard with a tremendous surf; 4th, a perfect hurricane, some ice: determined on going homeward by land, through Sweden, Denmark, Holstein, Hamburg, to Cuxhaven; 21st, embarked in the packet for Yarmouth, where I arrived on the 30th, and was in London Dec. 1st. In Larkoul harbour, the wind regularly changed about 12 at night, to the opposite point of the compass, blowing with equal fury each way.
No. LIx.

SOLEBERG FALL.

On the west side of the Christiania Fiord, and nearly opposite the town of Drobak, a fall of pure water is seen issuing from the top of an adjacent mountain, whose sides are covered with tall trees. In its descent it is separated by a large rock, fringed with shrubs, into two principal and some smaller streams: the latter, in their course, are occasionally hid from the observer by intervening trees, and re-appear, with fresh beauties, until they finally repose in the Fiord beneath. The delightful murmurs of these small cascades, at the distance of half a mile, are particularly soothing to the mind of a spectator, and more especially so if he be at anchor, in a still moonlight night, when they most agreeably lull him to sleep. This fall, unlike many others in Norway, which are of colossal size, and are generally surrounded with bare rocks, and stunted juniper bushes, is embosomed in tall ever-green firs, between the trunks of which the streams in some places trickle down when occasionally expanded, giving the trees a hazy appearance, as if always growing in the water, a circumstance which adds much to the beauties of the scene. Although the Fiord is deep in this part, yet as there is good holding clay at the bottom, and as it is nearly surrounded by mountains, it is considered a safe anchoring place. The long mountain in the distance is the island of Haoe, described in Plate No. 57, forming the narrowest pass on the Fiord, and covered, as the other hills are, almost entirely with firs. The ship is the Cron Princess from Christiania, laden with timber belonging to the house of Anker; having just weighed, she is preparing for sea. The most experienced captains never sail down the Fiord, without the assistance of a pilot. On the present occasion, this person happened to be an alderman, a title here given to the oldest, or elder man of the profession, who enjoys the post, as a tenure for life, confirmed by the court of Denmark. It passes in succession among the aged pilots, by course of seniority, and confers an absolute command over the junior ones in each district or ward. The distinction invests its possessor with a petty consequence, which he seldom forgets to assert. A shooting or fishing excursion in a boat, round the island Haoe, is particularly agreeable; between the rocks and woods, in the narrow westward pass, the report of a gun will arouse, and put on the wing, thousands of birds, of all sizes and species, from the majestic eagle, or swan, down to the wren; while the shores are literally covered with the young brood, as are the barren rocks in the water, with seals, which have their safe retreats in the cavernous recesses of the rocks. The fishes are equally numerous, and among them the lobster, crab, anchovy, the beautiful blue rock-fish, the eschmuns, and starfish, revolving on the bottom, where the water is not more than eight or ten fathoms, distinctly to be seen. The Haoe Fall is on the other side of the mountain, next the Fiord. I was not able to ascertain exactly its altitude, which is probably about 80 yards. It has every indication of being a spring, or fountain, as the small cascades are called in Norway. Soleberg Fall, which is half the height of the former, appears to have the same origin.
TOWN OF AASGAARSTRAND.

This is a small seaport, commonly called Oster Strand, situated on the west shore of the Fjord of Christiania, between Holmstrand and Tonsberg, in the district of Jarsberg. It stands pleasantly on the declivity of a hill, surrounded on three sides by woody mountains. For so small a town, it has its share of good stone houses, whitewashed, with good gardens, inhabited by shipowners and timber-merchants; the other dwellings, built of wood and painted red, are the residences of pilots, mariners, fishermen and woodmen, with their families. A few ships only are freighted with timber here; they lie at anchor, under the woods, a little to the eastward of the town. At the water-side are two or three warehouses, and stages or wharfs, for the convenience of shipping goods.

The church is on a small scale. On the hill over the anchoring-place is a mansion, commanding an extensive view of the Fjord, and adjacent parts; the salt-works at Tonsberg, Drobak, the great isthmus near Mos, and the ferry-house, where a sloop (as seen by the side of the ship in the picture) is always in readiness, to convey goods and passengers across the Fjord, to the west of Norway, distant four or five miles. This passage saves, to the traveller going from Mos to the west, a circuitous route through Christiania, &c., of 120 miles. A pleasant water excursion may be undertaken from this place, down the Fjord to Tonsberg, to see the stupendous salt-works and the town, and sailing round the Fader light, return by Frederickstad, Larkoul, Mos, and Drobak. The salt-works are an immense range of white buildings by the side of the Fjord at Walloe, four or five miles from the town of Tonsberg, having two conspicuous wind-mills. This royal manufactory annually produces 25,000 tons of salt.* Tonsberg is very ancient, as the remains of its castle denote. There are some embalmed bodies, and skeletons of gigantic proportions, of early kings and heroes, which are deemed most singular curiosities. It has several churches, and a large wind-mill on the hill.

On Fader Island, in a stone building like a lime-kiln, a large fire is always kept burning from sunset to sunrise, as a beacon to direct ships. Coasting among the numerous islands, back to Frederickstad, you enter an arm of the Glommen, the largest and longest river in Norway; on an island, in a narrow part of it, is a new square fort or battery, a little above which are the roadstead and buildings, with a strong walled garrison, containing many troops, ammunition, &c., this being a barrier town. Here are also convicts, undergoing their different punishments; they are heavily ironed, and some of them are chained by the neck to wheelbarrows for life. Two miles above the town, at Hafslun, is the stupendous cataract called Sarpe Foss, the largest Sarpe in Norway; the roaring of its flood may be heard at a distance of many miles; it extends across the noble Glomen, and pours the whole of its waters over a precipice, into a foaming cauldron while as snow, shaking the earth all around, and at times presenting the most beautiful prismatic colours. At its sides are many saw-mills belonging to Chamberlain Rosencrantz. An astonishing quantity of deals are prepared here, and annually exported. Mos, Larkoul, &c. will be described in future pages of this work.

* Described at pages 7 and 8.
No. LXI.

LARKOUL.

On the east side of the Christiania Fiord, and a few miles below the town of Moss, is a small picturesque and secure harbour, named Larkoul, having a ground of excellent clay, and admirably situated, with two entrances, one north, the other south, formed by the continent on the left side, and some small islands on the other. It is much frequented by large ships, which require secure anchorage, during the prevalence of those contrary winds which so suddenly and so fatally occur to navigators in the Fjord. In the month of October I remarked a singular phenomenon here, a regular change of wind every twelve hours, to the opposite point of the compass, blowing each way with equal violence, and frequently obliging the pilots to return, after an ineffectual effort to clear the great Fader Island. This harbour was deemed so important, that the Norwegians thought it expedient to fortify it strongly during a war with the Russians. The remains of the walls, or ramparts, are now to be seen, on the continental rocks, to the right of the view, which exhibits part of the west passage. On the margin below these nearly perpendicular masses, are innumerable fragments of the incumbent rocks. Along the sandy beach are a few houses, inhabited by boat-builders and fishermen, as well as pilots, governed like their brethren in the harbours of Norway, by an alderman, whose large house is seen on the left of the view. In addition to his official occupations he employs himself in procuring and cooking fresh meat, and sells bread, vegetables, liquors, tobacco, and small stores, for the use of the ships in his harbour; he has two or three spare beds for passengers. His house has likewise the advantage of a small garden, with a fruit-trees, currant and gooseberry bushes, cabbages, and other culinary vegetables; the court-yard is stocked with ducks, hogs, and geese; there is also a small corn-field, seen under the trees between the rocks. On the gravel strand is a pleasant walk, and there are two commodious little piers, built of timber, immediately between which is seen the road, leading around the rocks, and through a flat forest to Moss. At the distance of about two miles on the way is seen the hoved kirkier, at Rigge: it is a good stone church, with a parsonage-house, standing on a small eminence in a valley; and here the inhabitants of the district, for miles around, assemble on Sundays for the purpose of devotion. Near it on the grounds of Mr. Collett, I observed, growing from a hole in a rock, a tall luxuriant fir, whose small fibrous roots almost covered the stone like network, extending many yards to the ground, from whence it derived its sustenance. These trees frequently occur in well-sheltered places, but their stability is so extremely slender, that they may easily be pushed down, with a walking stick applied to their tops, from the rocks above, and are frequently found, after storms, lying across the roads below.

It is a pleasant sail from hence to Tonsberg, Dram, Moss, or Frederickstad, from which the passage-boats pass daily to or from Christiania. One of them, a sloop, is introduced into this view, as also a pilot boat, with its characteristic mark, a broad red stripe in the middle of the main-sail, from the top to the bottom, and without a peak.
LARKOUL AND SLETTERY.

This View exhibits a beautiful little island, forming the west side of Larkoul harbour, as seen from the rocks under the fortifications described in Plates No. 61 and 65. This island, with the adjacent ones towards the Fiord, presents every appearance of being a volcanic production of early origin. It is totally different in strata, form, and colour, from the primitive grey granite rocks on the continent in its immediate vicinity, no particle of that substance being visible in this island. It is of no great extent on the other side; and is generally well clothed with trees, shrubs, and mosses of various species, to the water’s edge, around which may be seen a profusion of marine plants and flowers. The bold projecting rocks and general features of the whole, present a very picturesque combination; and considerable delight is excited in walking through the little sombre groves, and in tracing the beds of lava to their source, a conical eminence composed of vast blocks of a deep red highly calcined stone, firmly cemented in parts to each other by similar matter, bearing evident marks from its several lamina, of having been more than once in a fluid state. It resists aquafortis, and will not receive any impression from a steel instrument. Between these blocks and up to the apex, where evidently was the crater, are deep and dangerous fissures, to the sides of which grows a luxuriant long moss, which may be traced down them as far as the eye can reach. A stone dropped down is heard falling for a considerably longer interval than that which elapses when one is thrown from the top of the hill into the sea at its base, and this proves that the cavity descends below the water’s level. There is no perceptible vapour or fetid smell, nor any appearance of sulphur; the water in the island is not at all brackish; and there are no remains of insects, fishes, fossils, or shells, to be found in the stones or rocks. A vardo, or mark which serves as a beacon and national telegraph, is erected on the summit of this little cone or crater, which commands an extensive view of the Fiord and its numerous islands and rocks down to the Fader light, and up to the magnificent mountains about Holmstrand, Drobak, Mos, Haoe, and Dram, with its Fiord. Here the pilots pass a great portion of their time in looking out for ships. Between the two hills, as seen in the picture, is a small grove of firs, in the centre of which is situated the solemn little burial-place for shipwrecked mariners, described in Plate 64. There is no human habitation on the island; what I supposed to be one, proved to be an immense colony of ants; it was in a thick grove of firs, and was formed of the dead leaves or vegetation which falls off yearly; its green hue was changed to a deep saffron colour. The base of the ant-hill was nearly 40 feet in circumference, its height about 12, its form perfectly conical, and it had the appearance of a poor fisherman’s hut. Myriads of ants were on and about it, performing their different labours with alacrity; in form, size, and colour, they were similar to ours, and if we reason by the time occupied in raising the diminutive heaps of the latter, this metropolitan mountain must have been a work of five centuries. The island in the middle distance is Slettery, surrounded with shallow water, frequented only by small Dutch or coasting vessels, boats, &c. The land is flat and sandy, with a solitary clump of firs in the centre, near which is a remarkable lake of fresh water, which never fails in the driest summers; the sea-worn rocks about the entrance to these harbours, strewed with fragments of wrecks, present a frightful appearance. On the reef in the distance the sloop from Bergen, mentioned in the description of Plate 58, was lost.
A REMARKABLE STONE.

Throughout the northern nations, Norway, Sweden, Denmark, and even England, are to be seen singular stones, of uncommon size, and exhibiting indications of art; they are held in traditional reverence by the natives in their vicinity, and afford even to the learned abundant matter for research and speculation. By the vulgar they are dignified with superstitious attributes and fabulous stories; in Sweden they are even worshipped. That they were collected and used by the ancients, in the earliest ages of the world, and either placed singly, or arranged in regular order for some unknown purpose, is unquestionable, as appears from our Stone-henge, and similar circles, called druidical monuments, or temples, in various parts of Great Britain and in other northern countries. Yet, with regard to their original uses, and the period of their erection, all research is baffled, and terminates only in conjecture. Whether the single specimens, or circular ranges, are of the earliest date, is a question which I will leave to be solved by the antiquary; and by what unknown powers the stones were removed to distant parts, from their native beds, or placed in their present position, it is for the mechanist to demonstrate.

The large stone which is the subject of this view, has nearly the form of an egg; it is 26 feet long, 15 high, and 8 broad; it is perfectly isolated from the ground, and appears to have once stood erect; in its fall it was probably broken at the end, which seems to have been its base. The substance is a blue green granite, the only specimen of that species in the island; it freely strikes fire with steel, and has a compact, smooth, flinty appearance in the broken part; a sandy or gritty consistence in other parts, with a sprinkle of black spots. Its position is nearly N. and S. on a small plain, enclosed with trees, in the volcanic island, described in plate 62, not far from the marines' burial-ground, which is partly in sight. From its very secluded situation, there can be little temerity in conjecturing it to have been placed there in early times, to point out the sepulchre of some Runic chief; and perhaps some Runic characters may yet exist on its smooth face, next to the ground. At present it is little regarded by casual observers, who do not enquire if it has been wrought by hand, dropped from the moon, or ejected by a volcano. All information on the subject, (as may be expected) is so involved in the absurdity of superstition, as not to be worthy of the least notice, except as an example of the credulity and implicit faith in oral traditions, which characterize the lower classes in almost all nations. On the summit of many Norwegian mountains which have an horizontal or table-like appearance, and are perfectly bare on their tops, is frequently to be found a solitary stone of immense size, which is visible for miles around. Some of these stones have fantastic shapes, and there is scarcely one of remarkable magnitude without a name. In the woods near Mos there is one 70 feet long, 20 broad, and 20 high: this also appears broken; and having been evidently wrested round from its original base, seems to be by some unknown means placed in an opposite direction. Many smaller ones are to be seen on the rocks designated in this work. Those met with on the plains are generally associated with one or two tall ones, curved a little on the tops, which incline toward the centre of the circle or area within, a well-known instance of which may be seen in Sweden, near the road from Swinesund to Gothenburg.
BURIAL-GROUND AT LARKOUL.

About the centre of the Volcanic Island at Larkoul, on a small plain between the hills, is a little cemetery for the reception of the remains of ship-wrecked mariners, and of other strangers from distant parts, who unfortunately have been lost on the shores of these islands.

It is closely embowered in a thick grove of firs and other trees, whose large branches, like cypresses, rest their lower leaves on the ground, forming a screen all around through which it is difficult to penetrate, for the purpose of viewing the solemn and interesting area within. On entering it, the spectator beholds an arrangement of stones on the ground, representing rude circles and oblong figures; many of them have a tree, flower, or shrub, within or at the head of them; others have a small pile of stones with a little wooden cross, and in some there is a triangular figure of the same material, which is very general in Norwegian church-yards. On each of the last-mentioned ornaments are imperfect letters and parts of inscriptions, time having nearly obliterated the sad traces of these heart-rending records, which used to decorate the last homes of many brave and unfortunate human beings. On one were the words Hans Ter—— 60. On others were imperfectly deciphered the name and country of the deceased. As the interments in many cases do not admit delay, the corpse is immediately carried with decent solemnity in a boat from the place where it was found to the shore of this island, from whence it is borne on a bier, and followed to the grave by the oldest man present, (if the priest be absent) and there silently interred. As churches in Norway are generally at a considerable distance inland from those places, the custom invariably observed in regard to the rites of sepulture is as follows: on the first convenient opportunity after the interment, the pastor of the parish visits the grave and reads over it the funeral service, during which he pours from a spoon a little consecrated earth, which he brings with him from his church-yard. The unstudied demeanour of the persons when paying their solemn visitations to their sleeping friends or relatives, is highly honourable to their feelings, and a most excellent example to all who are under affliction, or who sympathize in it. Even the untutored Boor on these occasions is often arrested on his way by a secret impulse of nature, and mutely and insensibly pays them, in passing, the homage of uncovering his head. A young female, in whose heart the fine threads of love and friendship were interwoven, has been often seen shedding the silent tear, or decorating (like the maid of Corinth) the humble tomb of her faithful departed lover. In this silent little retreat, the sublimest contemplations engross the mind, and an involuntary tear drops from the eye in pity to misfortune. Very near the place is the remarkable stone described in Plate 63, and over the trees is seen the crater, with the varde or mark on its summit.
FORTIFICATIONS AT LARKOUL.

From the present remain of these fortifications, it appears that they were originally of no great extent, but very strong, and well adapted for defence, and for the protection of the neighbouring inhabitants in case of need. They are situated on the top of the continental rocks, at the summit of a precipice, having within range of their guns the whole of the harbour, with its east and west entrances. The interior is a quadrangle, of which the area is about 400 square yards: it is encompassed by a wall, composed of large stones, 20 feet thick, well cemented with mortar, appearing on the three sides next the country to have been 20 feet high; on the outside there is a broad moat or ditch, at present nearly filled with the fragments of the dilapidated walls. A strong embankment of stones and earth, cannon proof, rises on the inside, to nearly the height of the ramparts. It has only one entrance, which is toward the village, as may in its mutilated state be seen, like a gap through the wall, on the right of the picture. The angular wall on the foreground extends entirely along the verge of the precipice, exactly opposite the west entrance. Part of the harbour, and its east entrance, are seen at the low point of the rock over the three houses, beyond which is the Fiord, and the large isthmus near Mol, from the point of which the ferry-boat sails to the west of Norway, as already mentioned. I was surprised to find a place of such infinite importance in so neglected a state, choked up with rubbish, and the well filled with stones. There is no other harbour so safe on the Fiord when vessels have once entered, and a little repair of the works would render it untenable for an enemy.

In one of the angles, directly in front, is seen the entrance to a small vaulted chamber, with a remarkable perpendicular stone on its top, of which a poor aged misanthrope has taken possession. He is a cobbler by trade, and has bestowed great pains and labour on his retreat, to convert it into what he calls a dwelling, which he has inhabited many years, in solitary and miserable seclusion. On each side of a door of rough boards, an old broken glass casement, with rags stuffed between the leads, forms the window; in a corner is a heap of the dead leaves of the fir, which is used as a bed, over which an old piece of well-worn sail-cloth forms the coverlid; two large stones which fell from the roof have supplied chair and table; a small hearth, with a hole above it for a chimney, two crutches, a hatchet, and a clasp knife, make up the rest of the accommodations. The wretched tenant carries his tattered wardrobe perpetually on his back, with belts, exactly according to the antient Norwegian costume; his beard is perfectly white and long, his eyes are good, and his frame shews the remains of athletic strength; he looks very like old Drakenberg, who lived to the great age of 146.* Drakenberg was totally blind in the latter part of his life, and his age being doubted, he angrily travelled on foot, begging his way from Copenhagen to Drontheim and back again, to obtain the register of his nativity, and prove the fact. On his return, being vexed at the unbelief of his townsmen, he indignantly threw down the paper, with these emphatical words, "What do you think of me now?"

* The portrait of this patriarch is in our possession, and he may be classed as the third old Man in Europe; viz. Jenkins, 169; Parr, 152; Drakenberg, 146.
No. LXVI.

TOWN OF MOS.

This view was taken near a favorite cottage retreat, built by the late honourable B. Anker, on the isthmus called Ielon, from which the town of Mos, and his extensive iron-works are to be seen. This town, which is very neat and rather extensive, has an elegant church, some very good houses, and is as pleasantly situated as any town in Norway. It is about 60 miles south of Christiania. The bay is prodigiously fine, and very capacious, having at all times sufficient depth of water to float ships close to the wharfs, with the peculiar advantage of being never frozen in the hardest winters, from which it claims a pre-eminence over most others in Norway. A small river from a chain of lakes above, rushes over some rocks at the bridge, forming a beautiful cascade, which distributes its waters to thirty saw-mills between it and the bay; it is seen between the trees in the picture, with the bridge over it, near a mansion belonging to the Ankers, from whence the great iron-work extends to the verge of the water. The numerous saw-mills, and the ships, have attracted a busy and active population to Mos; the capacious furnace and forges furnish annually some thousands of tons of excellent iron, which being manufactured into cannon, anchors, chains, and other large works, occasions a vast consumption of charcoal, the conveyance of which may be traced by the black complexion of the roads for miles around. The water of this river is greatly esteemed for dyeing scarlet cloth. The cottage on the foreground is constructed of wood; by its side is a small murmuring rill; it has a small garden, and near it a farm surrounded with corn-fields and excellent cultivated land. The inhabitants of the town take great pleasure in conducting strangers to this place, to enjoy the beauties of its prospects, and the fine walks and rides through the woods and groves in its vicinity, which are well stocked with game. There are many natural vistas, in which it is very pleasing to observe between the bold projecting hills covered from their summits to the water's edge with dark evergreens, the ships on the bay passing in full sail. The large peninsula of Ielon is joined to Mos by a long slip or sand, only a few yards broad, which divides the bay from the Fiord below. A little labour would effect a passage for ships through it, over which might be thrown a swinging bridge, to admit carriages, and the harbour would thus be made the most complete in Norway. The trade in timber would be considerably benefited by the improvement, particularly in hard winters when other ports are frozen. It is said that the Christianians are extremely jealous of the adoption of such a measure, fearing it might eventually injure their interests, if not ruin them.
No. LXVII.

MOS ABOVE THE BRIDGE.

At an elevated spot, on the ruins of an old saw-mill, this view of the town of Mos was taken; where the waters of an extensive lake, called Van-Soe, enter it in a never-failing stream, down which vast quantities of timber are continually floating from the forests in the vicinity of the lakes above, to the booms about this place. Immediately under the bridge a quick descent occurs, forming a considerable and beautiful cascade. The water, by an ingenious arrangement of sluices or tanks formed of timber, is conducted from wheel to wheel through thirty saw-mills, the noise of which, with the roaring of the cascade, deafens the ear. The streams for the use of the furnace and forges are carefully conducted in the wooden troughs, seen on the right, and are transmitted to them after turning a grist-mill, and passing through an aqueduct over the high road. The large house was one of the temporary residences of the late Honourable B. Anker; beyond it is seen the smoke from his extensive iron-works, which occupy the whole space on that side down to the margin of the bay. Over the bridge, which is very compactly built of timber, for carriages with heavy loads, the road from Christiania joins the town of Mos. It is very amazing to look down from it, on the cascade, and on the numerous moving objects below, with the water roaring and foaming among them. There is a smaller bridge for foot-passengers, half way down, near the house of an ingenious dyer, who has discovered that these waters possess the great requisite for producing and fixing the rich and brilliant scarlet colour on cloth previously unknown in Norway. The specimens are equal to any in Europe. The principal street, commencing at the bridge, is inhabited chiefly by shopkeepers; other streets branch off to the church, and toward the side of the bay. Mos, though not a large town, contains many good houses, particularly in the two quarters above-mentioned. The situation vies with any in Norway; the soil is productive; the views in every point are interesting and pleasing; the roads are good, and of gentle ascent; provisions are abundant and reasonable; and the inhabitants are frank and hospitable.

The church is a large brick structure, with a lofty tower and spire; it is handsomely decorated within, having a grand altar between two massive pillars. The devotional ceremonies of the Lutheran religion are performed here on Sundays, in a solemn and impressive manner, to a very numerous congregation, collected from miles around. Some of the natural beauties of the most studied park scenery, in ornamental villas, woods, groves, lawns, and cultivated grounds, as far as the eye can reach. The sandy isthmus, which forms the access to it by land, is immediately beyond the houses near the church; it is elevated only a few feet above the level of the water, and is so narrow, that, during certain strong winds, the road over it is rendered almost impassable, being entirely overflowed by the surf of the sea below, or from the bay above.
HONOURABLE BERNARD ANKER'S HOUSE, AT MOS.

This house was the occasional residence of the late honourable chamberlain, Bernard Anker, when he visited the town of Mos. It is a spacious and convenient dwelling, calculated for entertaining the large parties who generally attended him from the town of Christiania, to enjoy the society, and partake of the unbounded hospitality of that great and good man. The house is built in the old style, with high roof, covered with dark-red glazed pantiles, enclosing a square court-yard. Two sides of the quadrangle are appropriated to state-rooms; the other two contain suites of apartments and lodging rooms for visitors. The principal fronts of this end are ornamented with pilasters and windows in the Palladian style, painted white. The spacious rooms have brilliant cut-glass chandeliers suspended from the ceilings; and the walls are decorated with large pictures in distemper, representing some considerable water-falls in Norway.

They are furnished in an elegant and comfortable manner, as billiard and ball-rooms, and other festal apartments, the usual appendages to great houses in Norway. From the front, on the left or west side, is seen a part of the iron-works, with the furnace, forges, extensive yards, and wharfs, and vast quantities of that metal wrought into different forms. Beyond the foundry is a large stable for the horses employed, in which is a pillar of salt for them occasionally to lick, a custom esteemed very salutary in this country. The misplaced saw-mills in front interrupts all view of the cascade from the windows, between which and the house, the high road from Christiania winds over the bridge into the town of Mos. The water for the mills is collected from above the bridge, and is conveyed in a tank through the arch to the first wheel, under which it is again carefully collected in a kind of box, and transmitted by three sluices, as seen before the great fall, to the next mill, regulated by small sluices at the half-bridge) where, after use, it is likewise preserved and continued to the next, and the others in succession, thus commanding a high descending power, not to be gained by the fall alone for so many mills. An equal distribution of water occurs on the other side of the fall, where the greater number of wheels are; the foundations of the mills are composed of rough hewn trees, laid across each other at right angles, resting their bases on the rocks, and open within. A crank is formed on the axis of the wheel to which the saw is affixed at bottom, and to a stationary swivel at the top, working perpendicularly. The timber is secured on a moveable frame in grooves midway, which the machinery pulls up to the saw at every cut during its operations, by means of a click-wheel. They are boarded on the outside, and covered with red pantiles on the roof. The saw dust falls into the water, to the great obstruction of the navigation of many rivers, and to the detriment of the fish in Norway. Perhaps the absence of salmon, in some places, may be attributed in a great measure to this improvident and injurious custom.
No. LXIX.

VAN-SOE, NEAR MOS.

This view presents the scenery to the eastward in the immediate vicinity of Mos, where the water from Van-Soe, a considerable lake, is constructed within a narrow pass between the rocks, before it enters that town at the fall, situated immediately beyond the dark rock on the left. The timber procured on the banks of the Van passes here in vast quantities, loose and in rafts gliding down the gentle stream, to the Lentz, a little way above the bridge; each piece being previously marked by its owner, is easily selected and drawn on shore, as may be seen under the bare rock, from whence it is conveyed over the rail-way to the mills below. At times this river is so choked up with it, as to present one mass of timber, instead of water. The barren rock in front appears to be entirely composed of a species of mill-stone, of a deep reddish brown colour, very hard and heavy, cemented together by a spartry matter, with glittering spangles, and angular grit. Its strata ramify in all directions; the surface is destitute of trees, and has scarcely any vegetation, except a few patches of moss. Two habitations, and a few huts only, are erected on it for shelter during storms. A rock on the right, composed of a laminated stone, with perpendicular figures, is perpetually showering down its fragments, to the great annoyance of all in its vicinity. One or two prams compose the whole fleet of this place. Men are continually perambulating the shores with long poles, to disentangle and propel the timber; they frequently ferry themselves over on a single piece; in fact, they appear perfectly amphibious, and may be seen crawling like cats over or along the sides of the smooth rocks, where any other human being would shudder at an attempt to follow them. All up this narrow pass, for three or four miles, the rocks and trees on each side present the most beautiful and romantic scenery imaginable, contracting in some places so as almost to meet each other with their tops across the little river beneath, in others rising perpendicularly above the clouds, with numerous wild-fowls visiting their sides. This was also a favorite place for swifts, swallows, and martins, and in the higher regions for eagles and hawks. A few eels appeared to be the only fishes in the river. On entering the lake, a vast expanse of water presents itself with low long islands, covered with trees, and a distant flat country, clothed in the same manner beyond it. If it were on a smaller scale, it would be called sylvan or Italian scenery, from its perfect serenity, and unity of parts. When we turn round and look back upon the mountainous and hilly vicinity of the east side of Mos, it appears to be another creation, both in form and colour. It is a pleasant walk from Mos to the top of a conical hill, a mile distant, on the apex of which is a mark, from whence the panoramic view is of amazing extent, including almost the whole country within a circle of forty miles diameter, a great portion of the Fiord, and all its islands, from near Drobak to the Fader, over Telon, with Holmstrand, Tonsberg, Jarlsberg, &c.; in the west Paradise-hill, near Dram; in the north vast forests; in the east Van-Soe; in the south the entire bay, with the town of Mos, its cascades, ships, iron-works, saw-mills, and isthmus of sand, near the bottom of the hill.
...
VIEW NEAR DILLENGEN.

In perambulating the environs of Mos, at almost every step the most agreeable views present themselves, and particularly so on the side about Dillengen, a small post-house situated in the woods to the southward of the pleasant and delightful town of Mos. From a long street, which leads over the hills to the above place, are obtained many glimpses of the lake Van Sie, which enliven the progress of the traveller until he is closely embowered in a thick forest. Having passed the house on the left, and proceeded some distance towards the lake, the wilds of the country begin to disappear, and he finally arrives at its banks, a little above which this view presents itself. The town of Mos is situated somewhat to the left of the rock, seen on that side of the picture on which was a small portion of grass cut; there is much barren rock on the east side towards the narrow passage described in the last view, as entering between the mountains seen from this place, whence the timber is conducted down to the saw-mills below the bridge at Mos. From this entrance the greater part of the extensive waters of the Lake Van Sie are seen, as far as the eye can reach. About its margin, and on the hills, are many neat farm-houses; and around them much cultivated land. In the lake are many large and small islands, which, with the surrounding country, partake the character of Italian scenery. The people conduct their husbandry with skill and profit, although on the old principles, and gain credit for their breed of horses and cattle. They collect considerable quantities of timber for exportation, and produce much charcoal for the iron-works. Their fish are delicious, and in great plenty, salmon excepted, on account of the saw-mills, or because the altitude of the fall at Mos does not afford a proper leap, or access to its fresh waters. This loss may be easily dispensed with by the Norwegian, in regard to the more gratifying sight of the numerous rafts of timber and barges continually floating down and destined to a sure market, which so wholly occupies their commercial spirit as to make them totally indifferent to Van Sie, and all its attendant beauties, except in so far as it may be rendered subservient to their laudable purposes. It is a question to be solved, whether the procuring of timber, or the burning of charcoal, be the most productive employment pursued in the vicinity of Mos, the great consumption of the latter commodity at the iron works being so considerable. The entrance to the narrow pass of the waters to Mos is seen in front, guarded by a low barren rock, or bar, which causes much trouble and inconvenience in blowing weather. In the background are two of the mountains covered with forests, forming precipitous terminations to the northward, and gradually sloping off on the opposite sides to the great lake on the right. This lake is a retreat for all sorts of wild fowl, and its banks are free from noxious animals. The little herds of cattle and sheep prowl about, picking up their provender in security and peace, while their bells tinkle, in many reverberated echoes, among the hills and rocks.
The towns of Bragernaes and Stromsoe, and the suburb of Tangen, are generally known by the more familiar name of Dram, or Dramen. Their site is in a beautiful valley on the banks of the navigable river Dram, which arises at the foot of the Fillefield mountains. After wandering through a vast country, receiving many streams, and passing over cataracts, and through several lakes, it divides these towns, in its way to the Fjord, and onward to the sea. This view was taken below the town of Bragernaes, near the high-road leading to Christiania, looking between the hills up the vale towards Eger and Kongeborg. On the right-hand side of the print are seen the town and church of Bragernaes. The bridge over the river Dram connects it with Stromsoe, whose large church is more elevated, and is situated in the centre of an extensive church-yard enclosed by a wall. At the west end of this town a small bridge connects the suburb called Tangen, having its church, and being traversed by the road to Konsberg.

These towns contain many good houses, inhabited by wealthy merchants, and prosperous traders. The population is considerable, and an extensive trade is carried on in timber, iron, copper, cobalt, Prussian blue from Fossum, skins, &c. &c. The deal trade alone employs annually on an average 150 ships, which are supplied with cargoes from 44 saw-mills at Eger. Travellers pass through on their way to the west, or to the silver-mines at Konsberg, and the post returns from thence over this bridge monthly, laden with the specie dollars, coined there for Copenhagen. Immediately from the foreground on the right is an ascent to the famous Paradise mountain; the road to Christiania winds over its lofty summit. A little way up this mountain the towns and adjacent country are seen to great advantage, as shewn in the print; and the fertilized vale, with its golden corn and silver stream, awakes the traveller’s recollection to favourite scenes in warmer climates, and he readily admits that this mountain deserves the name of Paradise hill, given to it by the Norwegians. The view from its summit is too vast and extensive to create any other emotion than astonishment.

Near the top are the famous marble quarries, a small village, and an inn. Here also resides a farrier; a useful man on this difficult road. The water at Dramen is so deep that ships can arrive in full sail at the bridge, above which the river is navigable for boats only. There are on it several small, pleasant, and inhabited islands, with houses, trees, and gardens on them. The churches and houses are generally good and spacious, but the streets are narrow. The dwellings nearest the mountains have decorated gardens.

In the environs are many villas and country seats. The country around Dram is extremely pleasing to the view, but it is dangerously infested with wolves, foxes, and bears. The dogs wear spiked collars. Among their domestic animals the people here have a remarkable species of tame blue cat. Through the stream that waters these towns the salmon proceed to the famous cataract and leap above, where the fishermen have been known to catch 1200 annually. Horses are numerous here, and of a good figure and condition, owing to the great quantities of pasture land in the valley. The place is salubrious, and provisions, including many foreign luxuries, are abundant and reasonable.
CITY OF DRONTHEIM.

This ancient and venerable city has for centuries been the Capital of Norway. It is large, and since the great fire in the year 1770, which consumed the greater part, it has arisen out of its ruins with better houses and more spacious streets. It is built on a plain surrounded by hills and water, at the head of an extensive bay. Being in such a high northern latitude, it suffers severely by cold winds and frosts in the inclement winters. The harbour is very spacious, and possesses excellent anchorage and tolerable shelter for ships; it is well defended by a strong castle, built on a rock in its centre called Munkholm, and another in the town, seen beyond the ships at anchor. The town on the land-side is also strongly fortified and defended by an impregnable fortress seen on the top of the hill beyond the city, called Christiansteen, which is always kept well garrisoned with troops, and supplied with provisions and stores, to guard against surprise and sustain a long siege, of which history records many instances during the reigns of the former kings of Norway, who resided here.

Drontheim is the see of a bishop; and the great dom kirker, or cathedral church, is an admirable specimen of Saxon Gothic architecture, with a massive tower and high pointed roof. It is very lofty and spacious, and richly decorated within. Here the ceremonies of coronation were performed and the regalia kept. In the vaults are the remains of a long race of kings, queens, princes, nobles, and bishops; and in the church are many ancient tombs and inscriptions to their memory, and also to that of many other eminent natives of Drontheim, who did honour to their age. The church is situated nearly in the centre of the town, and has a curious light dome at the east end. The next church on the left, with a square tower, is called frue kirker, i.e. lady church. By the water-side are ranges of spacious warehouses, with wharfs and landing-places between. In the street are public fountains of indifferent water. Drontheim being the great depot of the north, a considerable trade is carried on there; vast quantities of copper, brought from the mines of Rocnas and Mohldahlen, one species of which is black, are annually exported. Timber in deals, spars, and ufers, seem plentiful in the yards. Particular attention is paid to fishing, and great pains are taken in curing, and extracting oil. There is also a sugar-work; and the people are famous for making a small delicious brown cheese, well known among men of taste. Drontheim may justly boast of its royal society, museum, library, collections of minerals, fossils and shells, its learned professors, opulent inhabitants, and numerous charitable institutions, and permanent endowments for the aged and the orphan, to a greater extent than any city in that once flourishing kingdom. The most recent transaction of royalty in Drontheim was performed by Bernadotte, on the cession of Norway to Sweden. The considerable river Nea, after passing through a lake, falls into the harbour among the mountains near its source, one of which is 3132 feet in perpendicular height. An army of 7000 Swedes were frozen to death here in February 1716. At a place two miles from Drontheim, vast quantities of Eider down are collected. The great road from Christiania extends to this city.*

* Further particulars of Drontheim, in Pictoresque Scenery, pages 25, 26, 27.
No. LXXIII.


This important and strongly-garrisoned frontier town, with its few but heroic protectors, has proved of the utmost consequence, and has totally frustrated many bold and enterprising attempts of the Swedes to subjugate Norway, as may be read in the historic annals of both nations. This View was taken on a rock near the grounds of Carsters Tank, Esq., who with great skill and perseverance has, among his numerous improvements in agriculture, converted a barren rock into a comparative paradise, the admiration of all persons visiting the north. An elegant mansion, on the summit of a rock, commands views of the town, garrison, harbour, &c. between which and the water's edge has been formed a beautiful pleasure-ground, filled with luxuriant plants, flowers, trees, and shrubs, and preserved in a high state of fertility, in the following singular manner. Mr. Tank, wearied with the monotonous appearance of the barren grey rock, and being a considerable merchant trading to England, conceived the project of ballasting his returning ships with good English garden mould, which he has distributed over the unsightly mass, and planted thereon a good collection of thriving trees and shrubs, which, with great care, and good management, have fully answered his most sanguine expectations. The white house between it and the town is converted into a sugar-work. The harbour, although spacious, is at present, owing to the great quantity of saw-dust from forty to fifty miles above, choked up, and rendered only navigable by boats. The ships therefore, not being able to approach the town, receive their cargoes below. The town itself is rather inconsiderable, having shared the fate of most others in Norway, by destructive fires. On one occasion, to expel Charles XII. in 1716, it was boldly set on fire by the citizens, with Peter Colboerson at their head, who fired his own house first, and all the others followed his example. This bold act astonished and abashed the intrepid Charles, and he immediately retreated, with the loss of three generals, and 1500 men. This monarch, ever restless, and always cherishing a jealousy of Norway, finally met a premature death at this place. He fell at the castle of Guldenlove, on the heights, to the right of the garrison of Frederickstern, and near the top of the road seen in the picture, while he was leaning over the ramparts to reconnoitre. The particulars of this event are variously related by historians; suffice it briefly to say, that an obelisk was erected on the spot, which has recently been removed, and a notable piece of acting was subsequently performed there, by a British officer, who, on visiting it, threw himself on the earth, and kissed the ground, in humble adulation to the memory of a man whom all lovers of peace acknowledged to have justly merited his fate. The garrison of Frederickstern, of which he never obtained possession, is seen directly in front, situated on a perpendicular rock, having the shape of a truncated cone, with two well-guarded entrances on its summit. The country around is in a tolerable state of cultivation, and the trade in timber is considerable, employing from fifty to sixty saw-mills, and many ships. A smuggling traffic is said to be carried on with Sweden, in coffee, tobacco, brandy, &c.
LEER FOSS NEAR DRONTHEIM.

Thus small cascade, interesting to the inhabitants of Dronteim as a salmon leap, is situated at an easy distance from that place, in a pleasant part of the country, where parties assemble for the amusement of observing the curious agility of the fish. In the season of their visits, sportsmen are seen on the rocks, armed with spears and nets, to strike and entangle them, by which means many fine salmon are annually taken. These fish have also another enemy to cope with; if they miss their intended leap, the porpoise, who lies in ambush under the fall, generally catches them. The fall is divided by rocks into three parts, two of which drive several saw-mills. After rains, or melting of snow, those three cascades are united into one, and then the rocks are overflowed by the current. The great river above, of which this is only a single branch, takes its rise at a considerable distance up the country, and on it are many beautiful and romantic falls, particularly a larger one near this place, called the greater Leer Foss, which has its saw-mills also. Prodigious quantities of timber are there sawn into deals, the supply being derived from the trees felled in the extensive forests, which are floated down to the leutz above in the usual manner. At this place there are indications that the falls were in early times of a more considerable extent, and on a level with the highest rocks, which are below that of the main river. Even now, that river supplies a stream which is seen issuing from the woods, and passes in a line with the fall considerably above it, having its cascade also. The basin and bed of the rapids below appear every where to have been rendered very capacious, by the constant influx of large bodies of water. The rocks and shores about the falls are of a deep rust colour, or dusky red, not unlike old brickwork. I have observed that the same colour prevails in and about the beds of many other falls in Norway. The vegetation in the vicinity is pleasing, and the trees are tall and straight. The climate about these parts is considered as healthy as that of any part of Norway; indeed, the same remark may apply to the whole northern coast. The piercing frosts of winter form a cone of the frozen spray, presenting the appearance of a screen, with large holes; at times, this frozen mass exhibits all the prismatic colours exceedingly vivid, in circles and parts of circles. When the ice breaks in the lakes and rivers above all the falls, the pieces are carried with great velocity over them in an astonishing manner, attended with great noise and danger to the machinery of the mills and loose timber, which may happen to lie in their course, or may have been heedlessly frozen in ere it could be got on shore with the boats; unfortunate cases have occurred, in which men, timber, houses, boats, saw-mills, cattle, leutzes, and all their contents, have been precipitated in one dreadful mass, over falls, and driven down the rapids for miles between the rocks, where no assistance could possibly be afforded; and their mangled remains have been collected in the sea.
TOWN OF CHRISTIANSUND.

This agreeable town (formerly known by the name of Lille-Fossen) is situated on the east side of a small island, within the district of Nordmoer. The best houses are those situated around the shores of its spacious harbour. The large Saxon Gothic church, in the form of a cross, with a dwarf tower, and high acute angular roof, is placed on the rocks over the town. In the harbour are many rocky islands, covered with houses and yards for stacking timber, and store-houses for barrelled fish, &c. This bay, which is directly exposed to the North Sea, is the grand estuary of large rivers, which come rolling from the Doverfield mountains, far in the interior beyond Tingveld. The numerous inlets of the sea in this district afford admirable shelter for fish of all kinds, which are easily taken in the greatest abundance; and this alone constitutes the great trade of Christiansund, with people of various nations, who resort in great numbers to this coast as purchasers and carriers, particularly the Hollanders. Christiansund being on an island much exposed, and within three and a half degrees of the polar circle, its climate is generally cold and wet, but access to it from the sea is more free from sheers and rocks than any other part of this coast, and ships may safely sail in deep water, between the islands to Drontheim, having Edoe, Smalen, Froyen, with many small islets, and the great and populous island of Hitteren, with its 300 ships, between them and the northern ocean. On the opposite continent is seen a vast barren range of the Doverfield mountains, ending near Drontheim in abrupt precipices of singular form.

There is little appearance of vegetation about these barren coast rocks, except lichens, and a few stunted trees sparingly scattered about. The coast birds are very numerous, and among them is seen the great sea eagle. This monstrous and voracious bird supports himself by fishing among the desolate rocks; his wings expand about twelve feet, and his muscular powers almost exceed credibility; the toes armed with sharp talons, by which he secures his prey, yet sometimes he forfeits his life by his temerity in seizing a more powerful antagonist than himself; or he escapes with the loss of some of his talons, which are often found by the fishermen deeply inserted in the backs of large fishes. On one was found the skeleton of the bird. An unfortunate occurrence happened near this place in 1612, to Col. Sinclair, who landed with a detachment of 600 Scots troops, (subsidiary to Sweden) when the latter state attempted to subjugate Norway. A rumour being spread of their intention to pass through Guldbransdale, the bailiff, Lars Gram, hastily embodied all the peasantry who were capable of acting offensively; they armed themselves with axes, and divided into two parties; Lars Gram commanded one, the peasant Gullbrand Sygylestad the other. They ambushed on the road, where the enemy meant to pass, and made every necessary arrangement. A few days afterward the Scots arrived; the peasants suffered the van to pass, but as soon as the main body had reached a certain spot, the Norwegians attacked them with the most desperate fury. Col. Sinclair was the first man that fell; his men were either cut to pieces, or driven into the river; the van-guard, seeing the fate of their countrymen, fled, and were closely pursued. A most furious engagement took place, in which all the Scots were slain, with the exception of two, one of whom remained for life in Norway, and the other returned home to tell the dreadful tale. This event is recorded on a pillar of stone, describing the date when the Norwegian peasants so bravely maintained the safety of their country.
CITY OF BERGEN.

This view of the city of Bergen was taken on a rock, under the walls of the fortifications of the round fort, looking over the north harbour, towards a rocky mountain which presents a most conspicuous feature on the approach to the town from the sea. It is one of those table mountains, with nearly perpendicular sides, which are peculiar to this part of Norway. They are almost inaccessible, and afford shelter to birds only. Along the shores to the city are many fair houses and wharfs. This little harbour being in many parts shallow, is not much used by large vessels, except when laying up, or repairing, &c. The guns of the fort entirely command it. This view is a continuation of the country extending to the right of North Bergen, and joining that city, as seen in plate 77. The high-road from Drøntheim enters it, and facilitates a great deal of inland traffic among the mountainous peasantry, who are situated in perhaps the most rugged part of the country. The way from Bergen to Christiania traverses those vast ranges of mountains called Hardangerfield, which intersect Norway. The traveller, in passing along it, finds incessant cause of alarm in the incessant roaring of cataracts, rapid rivers with crazy bridges, howling of wild beasts, screaming of discordant birds, and other circumstances of wild desolation. There is scarcely a tree or shrub to be seen; in some places the mountains are covered with perpetual snows.

On a journey through this dreadful region, the traveller always ascending or descending barren mountains or rocks, and encountering blasts in the vallies, seated in an open carriage, on the worst road in the universe, is kept in continual fear and agitation. On arriving on the table height of one of those high mountains, a desert plain, forty miles in length, presents itself, about the centre of which a house has been erected, by order of the king, for temporary protection from savage beasts, and for the convenience of shelter to the weary or benighted traveller going over this horrible territory. From the intensity of the cold of its climate it is not permanently inhabitable. Within the house are only a few benches and hearths. The traveller is warned to provide himself with victuals, flint, steel, fuel, and provender for his horses and dogs. On his arrival he finds the key in the key-hole outside of the door, which he is required to unlock and place in the same direction on leaving the place, for the next comer. Strangers are sometimes traced hither, and beset by bears and wolves during their nocturnal repose; and lamentable consequences have ensued through carelessness. The place is twenty miles distant from every other habitation, and is generally surrounded with snows. Inscribed on its walls and windows are many poetical lines, and addresses of persons, who have occasionally stopped to partake of its hospitable shelter, and it is delightful to observe the anxious solicitude, and reverential attention paid to it by the uneducated boor, as well as by all travellers, to avert the least act of wanton injury or dilapidation from these premises, which all mankind would justly condemn as a most impious offence.
No. LXXVII.

NORTH BERGEN.

This city is the largest in Norway, and perhaps the most populous, the inhabitants being computed at 20,000. It is situated on the north coast, having a noble back-ground of mountains which rise immediately behind it, and give the name Bergenhus to one-fourth part of Norway, over which its diocesan bishop has the ecclesiastical jurisdiction. There is a cathedral, built in the Saxon Gothic style. The streets are straight, spacious, and handsome, and there is an extensive square at the head of the inner harbour. From the elevated summits of some of the mountains in clear weather, may be seen hundreds of others, among which are many of fantastic shapes interspersed with lakes, cataracts, and rivers, extending in a southerly direction to the great chain of the Hardangerfield. To the northward are seen the town, its three harbours, ships, fortifications, and islands, with the North Sea in the distance. The proximity of the latter furnishes abundant occupation to the extensive fisheries, and a very considerable trade is carried on by the inhabitants in catching, curing, and extracting oil, from these inexhaustible supplies. They also collect about the rocky shores immense numbers of seals, lobsters, crabs, wild-fowl, feathers, and eggs. Their timber and skin trade is very considerable; they are also ingenious carvers on wood, and have a general spirit of enquiry about them, which is greatly promoted by their public institutions for the welfare of Norway, and their schools for useful arts and sciences. The churches, the bishop's palace, the hospitals, mansions, &c. give this city an interesting and imposing appearance. Its strength is very considerable, being always well garrisoned and kept in a complete state of defence, having castles, forts, and ramparts, well mounted with heavy cannon on the most commanding points for its protection. The inner harbour, where the ships lie, has a strong chain-boom extending across its entrance, at the castle. Bergen and its environs are subject to incessant rain, fogs, and heavy clouds, which give the place a very gloomy aspect, rendered still more so by the broad shadows of the barren rocks. It is also subject to tempests and bleak winds. The inhabitants of these northern regions are obliged to wear extra clothing. The tides of the North Sea visit with their salt waters. This city formerly had to boast of its kings and eminent men. The learned Pontoppidan was a bishop of Bergen, where he wrote his esteemed History of Norway. The trade of this city, for a long period, was wholly engrossed by the Hanseatic leaguers, who possessed fifty-eight large warehouses. By the vigorous and unceasing exertions of Bailiff Walkendorf they were at last expelled, since which period the place has gradually become more flourishing and populous. In the year 1790, the exports of fish alone amounted to 958,000 rix-dollars, and they have been annually increasing to this day.
This small town is situated on the margin of an extensive bay, on the north coast of Norway, near the sea, in the district of Romsdal, and not very distant from Christiansund. It has a good church, built in the form of a cross, with a tower and spire, erected on a gentle eminence, which commands views of the town and bay, as well as of the entrance from the sea. On the approach to the town, on this side, is an agreeable walk under an avenue of tall trees, greatly esteemed at this place; and the hills, in its environs, are more covered with trees than many regions in this high latitude; yet the supplies of timber for exportation are very inconsiderable, and the few cargoes collected are at best of an indifferent quality. But ample amends for this loss are derived from the abundant products of their fishing establishments, which are conducted on a very large scale, and with indefatigable care and attention. This town, in common with almost all those along the northern coast, from the Naze to the North Cape, containing in the aggregate a population of one hundred thousand souls, depends solely for subsistence on the finny tribes of the great northern ocean. They hence obtain ample supplies of fish of the primest quality, particularly cod, ling, turbot, hollibut, herrings, sturgeon, salmon, crabs, lobsters, and other shellfish. Of the larger kind are the unicorn, finfish, sawfish, grampus, porpoise, and whales. The torpdeo, sucking-fish, and others of disgusting forms, are not eaten, and the mackerel, through prejudice, is rejected. The merman and mermaid, it is said, have been seen about these shores, and also enormous sea-serpents, not to mention a doubtful creature, supposed to inhabit the great depths of the North Sea, called the kraken. Well-attested accounts of the appearance of this monster may be read in the Bishop Pontoppidan's History of Norway.

The herring fishery perhaps exceeds all others in Europe, and may justly be called their staple commodity; cod is next in estimation, then lobsters and other shellfish, and lastly oil, skins, &c. The general tempestuousness of the North Sea, with its dreadful sheers and rocks, so numerous distributed all along this coast, render it so dangerous that the poor fisherman's life is of all human conditions the least enviable. Subject to privations of food and of sleep, buffetting the ocean in the most inclement weather, and the darkest nights, in a crazy boat, on a precarious employment for a wretched subsistence; frequently founderings at sea, or driven to distant, and to him unknown shores, he often feels his miseries augmented, by the apprehension that his already half-starved family, despairing of his return, and disappointed of their daily support, are but too likely to sink under the agonizing calamity. In some cases, the loss of one parent is supplied by the survivor; the women are from their infancy very expert in the joint management of the boat and lines, and have more than their proportion of the labour. They are stout and hardy, with a fair complexion, and generally go without stockings, shoes, or hat; and their lower garments extend but a little below the knee.
No. LXXIX.

NORWEGIAN SIDE OF SVINESUND.

From the post-house at Helle, the high-road winds through a wild country to the precipitous boundary, between Sweden and Norway, called Svinesund. Within about half a mile of it, a single separation between the mountains discovers a tremendous descent strown with masses and fragments of rocks, where with great labour a kind of road has been made down to the ferry, which latter, at particular times of the day, owing to the usual gloom, is horribly magnificent and imperfectly seen at the bottom, where the water is very deep, and appears as black as ink. The coup-d’ceil, with the sudden and difficult declivity, affects the frame with an involuntary tremor, until the traveller is advised to quit his carriage and use great caution in descending it on foot. In seasons when the road is slippery, ropes are used to check the velocity which the carriages may acquire in the descent, but this contrivance is for travelling-carriages only. The vehicle in general use here is a long kind of box on four wheels, six or eight inches diameter, containing two or three persons in low seats, vis-a-vis; it is drawn by one horse. The traveller in a carriage drives four abreast. The rocks and fragments in the way being on so large a scale, the mind is kept in a continual state of alarm, lest one of them should be disposed to quit its resting-place, and follow in the train. On arriving at the bottom, the silence and gloom impress the beholder with the belief of being immured in a vast cavern, whose perpendicular sides seem to meet above the clouds; and he may here fancy himself about to cross the river Styx. The stupendous rocks, over the house, on this the Norwegian side of the view, are only warts, or mole-hills, compared with the others seen behind, when looking back up the road we have descended, or in the opposite direction into Sweden. At the house is performed the double duty of inspecting, receiving, and granting passports, and of affording other personal accommodations, as at an inn. Although the water receives such a dark complexion from its depth and situation, in a glass it is pure as crystal, but saline. At this place it is about a quarter of a mile over; the ferry-boat is large and flat, sufficiently ample for conveying two carriages, their horses, and necessary attendants. The horses are not unharnessed, but draw the vehicle in and out by means of a convenient platform on each side of the river, to which the head of the boat is affixed, and its side to a causeway for the foot-passengers. Travellers, however, generally sit in their carriages all the way over. This place is so encompassed with rocks, that the water seldom presents a rough surface, neither is there any tide. The stream glides gently from a long chain of lakes above the town of Fredericksall, to which there is an uninterrupted navigation. The ship introduced is supposed to be sailing from that place. The rocks behind it form the equally bold termination of the coast of Sweden.
No. LXXX.

SVIENSUND FERRY, SWEDISH SIDE.

On crossing the ferry at Svinesund, from Norway, this View presents itself on the Swedish side. Some time is usually employed in contemplating the grand and awful assemblage of the stupendous rocks and scenery around. The labour and fatigue of ascending commence immediately on quitting the boat; a narrow winding road leads between the rocks to the house, which is situated under a bold projecting mountain, fearfully overhanging its roof, and threatening to crush it at every blast of wind. Here persons attend to grant passports to travellers passing through Sweden. In that document are inserted the person's name, country, and address, occupation, destination, place from whence he last came, &c. &c. It is enjoined that this paper be produced at every successive inn, on the route through Sweden, for the purpose of being registered in a book kept by each landlord, who also requests the traveller's signature. These registers are weekly transmitted to court. Thus may be seen the facility with which a regular pursuit of friend or enemy may be instituted throughout the northern continent, and also the daily advantage of knowing who are travelling the same road. This house also presents the usual accommodation of an inn, with horses, carriages, and guides. After rains a small murmuring rivulet passes it from among the mountains, and glides under a rude wooden bridge. A little above it is a small tuft of trees, under which a seat is placed, for the purpose of viewing the wild and savage landscape which it commands. The high-road winding round the house, up to a tree, on the top of the centre rock, being very precipitous, is usually ascended and descended on foot, while the carriages are slowly proceeding with the luggage. This is truly an arduous undertaking, particularly in frosty or snowy weather, when the safety-ropes are adopted. This great barrier of Sweden is, in altitude and magnitude of parts, similar to the Norwegian side, though not exactly so in respect to their forms, which are more precipitous, angular, and pointed, barren and desolate, closely joined together, a circumstance from which the small part of the Sviesund assumes the appearance of a dark well at the bottom. When an occasional ship passes, the tops of her tall masts are seen from rocks a mile above them. This ferry being the only public one, between the Skager and Frederickshall, is much resorted to, and well known by travellers; it connects the high post-roads from Norway through Sweden, to Helsinborg, the Sound, and Denmark, and it is here that the silver post crosses monthly with the silver from the mines at Kongsberg, for Copenhagen. It is transported in large iron chests, weighing from 3 to 400 tons each, placed on strong waggons, guarded by a lieutenant and assistants, well armed and provided. The post or convoy has the exclusive privilege of passing at night through garrisoned towns: the sentries on its approach instantly lower the drawbridges, and open the gates, at the words "silver posten." Travellers avail themselves if possible of the accommodation of joining it on the road, and sometimes the cavalcade amounts to twenty carriages from all parts, going by that road. They stop only a few hours either by night or day, for rest or refreshments, at certain places. This rapid journey in fine weather, being in open carriages or carts, at moderate charges affords much pleasure, which is generally heightened by agreeable society.