THE WORLD displayed;

OR, A

CURIOUS COLLECTION

OF

VOYAGES and TRAVELS,

Selected from

The WRITERS of all NATIONS.

In which the

CONJECTURES and INTERPOLATIONS

OF

Several vain *Editors* and *Tranſlators* are expunged,

Every Relation is made conciſe and plain,

AND

The DIVISIONS of *Countries* and *Kingdoms* are clearly and diſtinctly noted.

Illuſtrated and Embelliſhed

With Variety of MAPS and PRINTS

By the beſt HANDS.

VOL. XX.

LONDON:

Printed for J. NEWBERY, at the *Bible* and *Sun*, in *St. Paul's Church-Yard*; and J. HOEY, jun. in *Skinner-Row, Dublin*. MDCCLXI.

CONTENTS

OF THE

TWENTIETH VOLUME.

A DESCRIPTION *of* SPAIN *and* PORTUGAL.

A DESCRIPTION OF SWEDEN.

An ACCOUNT *of* DENMARK.

The NATURAL HISTORY *of* NORWAY, *by* ERICH PONTOPPIDON.

TRAVELS *through the most* NORTHERN *Parts of* EUROPE, &c.

The TRAVELS *of Mons.* MAUPERTUIS *and his* ASSOCIATES.

A DESCRIPTION OF *SPAIN* and *PORTUGAL.*

CHAP. I.

Of Spain *in general; with the Climate and Produce of the Country. A Description of* Madrid, *and of the* Escurial.

OF all the countries in *Europe*, none are less visited by strangers, except the maritime towns, than *Spain* and *Portugal*, which is partly owing to their situation, in a kind of peninsula in the most western part of the continent of *Europe*, out of the road

to other countries; and partly to the pride and bigotry of the inhabitants, their ignorance of the arts and manufactures, and these countries containing few monuments of antiquity.

Spain is encompassed on every side by the sea, except on that of *France*, from which it is separated by a continued range of mountains called the *Pyrenees*, which are almost eighty leagues in length, and extend from Cape *Olarzo*, in the bay of *Biscay*, to Cape *Creux* in the *Mediterranean* sea. As it has many ranges of high and pleasant hills, beautiful plains, and a variety of rivers, it is both a delightful and a healthy country; free from the scorching heats to which *Africa* is exposed, and from the severe frosts that are felt in more northern climates. The summers are indeed excessive hot; but this sultry weather lasts but about two or three months, while the remainder of the year is temperate. The air is generally serene and clear; the great rains fall regularly in spring and autumn, and it is observable, that as with us most diseases proceed from cold, so in *Spain* they are generally the effects of heat.

The most northern parts of *Spain* are the most mountainous and barren: but some of these mountains are covered with trees, and the rocky parts with thyme, marjoram, and other aromatic herbs, which serve for food to sheep and goats, and give their milk and flesh a finer relish, than any have that are fed on the richest pastures. If these herbs happen to be scorched up with the violent heat of summer, the cattle are driven down to the sides of the mountains,

where

where they find a greater plenty of these herbs, and in many of them a great deal of grass; but if these also fail, as they sometimes do, thro' the excessive drought, the inhabitants are obliged to remove their flocks to the meadows.

The *Spanish* wheat is inferior to none in *Europe*, and the inhabitants produce more than they can consume. Their barley is very good, and in such plenty, that it is the common grain for the horses and mules instead of oats, which are here very scarce; the barley straw serves them instead of hay, of which they make hardly any through the kingdom. They have wine in such abundance, that it is drank by the poor: but the *Spaniards* being naturally sober, seldom drink it without a great mixture of water, and their women rarely taste it, except in their lyings-in, or on some such extraordinary occasions. Besides the fruit commonly cultivated in *England*, they have excellent citrons, lemons, oranges, almonds, prunes, olives, dates, figs, chesnuts, pomegranates, capers, and grapes, of which last they not only make wine, but dry great quantities for raisins; and their oil, wax, and honey are as good as any in the world.

Few countries exceed this in the plenty, goodness, and variety of fowl both wild and tame; or of four-footed game, as deer, both red and fallow, hares, rabbits, and particularly wild boars; and with respect to their tame swine, the *Spanish* bacon is said to exceed that of *Westphalia*.

The *Spanish* horses are famed for their swiftness, and therefore great numbers are exported at a great price to other nations: those bred in the province of *Estremadura*, and the adjacent parts are reckoned the finest and swiftest. Their mules are even larger, stronger and more surefooted than their horses. Some of these are fine beasts, and used for drawing the coaches of the greatest nobility, and for travelling over the most craggy and mountainous parts of the country; but they are nothing near so swift as the horses.

Spain has likewise rich mines of quicksilver, copper, lead, allum, sulphur, and the iron and steel of *Biscay* is esteemed the best in *Europe*. Formerly the *Spanish* mines yielded the *Romans* more gold and silver, than any country under their dominion, though now these mines are either lost, exhausted, or not worth working.

We shall now take a View of the principal places in *Spain*.

Madrid, the residence of the *Spanish* Monarchs, is the capital of *New Castile*, and of the whole kingdom. It is situated in the midst a large sandy plain surrounded with hills; but has neither wall nor ditch. On its west side runs the river *Mauzanares*, over which is a stately stone bridge. The city is said to contain 400 streets, most of which are wide and strait, but so excessively dirty, that the stench may be smelt at the distance of above a mile. Most of the houses are handsome and lofty: they are generally built with brick; and the most of them with lattice windows, chiefly of

canvas

canvas or ſome ſlight oiled cloth. The houſes of the nobility are generally built of ſtone in an elegant taſte, ſome with ſaſhes, and others with caſements; but during the heat of ſummer, the glaſs frames are taken down, and in their ſtead others covered with gauze, or the like thin ſtuff are put up, to let in the air. The city has fourteen ſquares, moſt of which are very fine ones, eſpecially that called the *Place Mayor*. In this ſquare is a large market, and here alſo are exhibited the bull-baitings, and other public ſhews. It is 436 feet long, and 334 broad, and the houſes are on each ſide ſupported by an arcade, like that of *Covent-Garden*, to ſhelter the people from the rain. They are all five ſtories high, and exactly uniform, with balconies to each ſtory. Whenever the ladies ſtand in their balconies to ſee an extraordinary ſhew, they are not only richly dreſſed, but both the balconies and the fronts of their houſes are adorned with the richeſt tapeſtry and pictures, and if it be in the night, with a vaſt number of wax candles. For it is only upon ſuch occaſions, that the fair ſex are allowed to appear unveiled. This city has 18 pariſhes, 57 monaſteries and nunneries, a great number of chapels, with 22 hoſpitals.

At the end of the town is the *Prado*, or *Pardo de St. Hieronymo*, a delightful plain, ſhaded with rows of poplar-trees, and adorned with twenty-three fountains. Thither the nobility and gentry repair every evening in their coaches, or on horſe-back.

At the extremity of the *Prado* is a noble palace called *El Buen Retiro*, or the Good Retreat, designed by the *Spanish* monarchs as a place of retreat from the hurry of the court and town. It consists of a spacious square, built with brick, that contains many noble apartments with the richest furniture, and with paintings by the greatest masters. The gardens have delightful shady walks, water-works, and statues. On the canals are pleasure boats, and on their banks summer houses, for the musicians to divert the King, while he takes his pleasure on the water.

There are two other royal palaces here, one a spacious and magnificent edifice on the west side of the city; the main structure consists of three courts, about which are the apartments for the royal family, with the proper offices and lodgings for the houshold; and the other is called *Casa del Campo*, where the King sometimes refreshes himself during the heats of summer, in the cool shady walks, which are the principal convenience of this seat.

Besides these, the principal things to be seen at *Madrid*, are the churches, some of which are very richly adorned: the King's chapel, the prison, and the houses of several of the grandees, are well worth seeing on account of the excellent paintings with which they are adorned; for in collecting these they spare no expence.

The most noble palace belonging to the King of *Spain* is the *Escurial*, which was originally erected by *Philip* II. who raised the church and mo-

Vol. XX.

monaſtery of St. *Laurence*, the *Spaniſh* martyr, in gratitude for the aſſiſtance he ſuppoſed he had received from his tutelary Saint, in obtaining the celebrated victory over the *French* at *St. Quintin*, in the year 1557.

This royal monaſtery ſtands near a ſmall village called the *Eſcurial*, nine leagues weſt of *Madrid*. It is built of a beautiful white ſtone, veined with blue and brown, and of a very fine poliſh; and is ſurrounded by the moſt delightful proſpects. It is in the form of a vaſt quadrangle, containing 580 feet in front from eaſt to weſt. At each extremity is a ſuperb range of building that extend 430 feet north, and are again joined by another front of the ſame dimenſions as the former. So that it properly conſiſts of four fronts, and at each angle is a tower. The principal front has three gates, of which that in the middle is ſupported by four *Doric* columns of ſpeckled marble on each ſide, and over them are others of the *Ionic* order. Above the portal is a beautiful ſtatue of St. *Laurence*, of white marble, 15 feet high, dreſſed in the habit of a Deacon, with a book in his left hand, and a large gridiron of bronze in his right. In this front are two hundred and forty-ſeven windows.

After paſſing the principal gate, you enter a portico that extends from the college to the convent. Over it is the library, and in the front are three noble arches leading into a grand court, where the eye is ſtruck with the magnificent frontiſpiece of St. *Laurence's* church, on each ſide of which is a lofty tower,

and

and in the centre a dome. It has five grand arches that form the entrance into the veſtibule, and on the lower part of the portal are ſix large ſtatues placed on pedeſtals, of *David*, *Solomon*, *Hezekiah*, *Joſiah*, *Manaſſeh*, and *Jehoſaphat*, with crowns of bronze enamelled with gold on their heads, and ſceptres in their hands.

The whole ſtructure is ſupported by four very ſtrong ſquare pillars round the centre of the church, forming four grand arches. Every pillar has two altars, and two niches over them, and in the niches of the pilaſters along the walls on both ſides, are altars anſwerable to the others. Beſides theſe, the whole circuit of the church is ſurrounded with very elegant chapels, and over theſe are galleries with braſs baluſtrades extending quite round. The cupola is encumpaſſed by two galleries, and crowned with a lantern, that has eight windows divided by pilaſters gradually diminiſhing to the top, where there is another ſmall dome on the crown of the lantern, and over this a fluted ſtone obeliſk, on the top of which is a globe of gilt braſs, with a croſs and vane. The doors are nine in number, and over the arches of the principal of theſe, and on the great altar, are twelve croſſes, of a very beautiful red jaſper. The altars amount to forty, all of which are richly adorned with carved work, and innumerable paintings, many of them by the greateſt maſters.

You next view the great chapel, the aſcent to which from the church is by twelve ſteps of red jaſper. The pavement of this chapel

pel consists of mosaic work of jasper and marble of various colours, arranged in the most beautiful compartments. The altar-piece is adorned with all the orders of architecture except the *Tuscan*. You first see six *Doric* columns, in the middle of which the tabernacle is placed, and in the compartments of the other columns are several paintings of sacred history. Their bases and capitals, with those of all the other columns and pilasters behind them, are of brass enamelled with gold, the shafts are of jasper, beautifully polished and fluted.

The niches at the two extremes contain the statues of four Doctors of the church in gilt brass, which has a fine effect, the jasper of the niches being green. In the spaces on each side of the tabernacle, are two pieces of painting; the one of the nativity, and the other of the eastern *Magi* worshipping the infant *Jesus*. The second range of columns is of the *Ionic* order inlaid with green in the compartments, and in the extreme intercolumniations are niches of green jasper, containing the statues of the four Evangelists, of the same materials and beauty with the former. The principal picture over the tabernacle, represents the martyrdom of St. *Laurence*, and in the side compartments, are our Saviour bound to the pillar, and his carrying the cross; all by *Zuccaro*. The third range consists of only four columns of the *Corinthian* order, the extremes of the lower rank being supplied by two pyramids of green jasper, between which are fine brass statues of St. *James*, the patron of *Spain*, and St. *Andrew*, both

both larger than the life. In the middle is the picture of the assumption of the Virgin *Mary*, and on the sides are those of the resurrection, and the descent of the Holy Ghost. Two columns of the Composite order support the frontispiece, which terminates in the principal arch of the chapel. The compartment is green jasper, in which is a crucifix of brass gilt, with the statues of the Virgin *Mary* and St. *John* standing on the sides, and those of St. *Peter* and St. *Paul*, on the extreme pedestals. The whole height from the pedestal of the *Doric* order, to the centre of the grand arch is 93 feet, and the breadth 49. The above tabernacle stands on a pedestal of jasper, within an arched portal, whose pilasters are of red and green jasper. The form is globular, and the order *Corinthian*. The materials are all gems, and brass enamelled with gold. The first pedestal is of jasper finely inlaid. It supports eight jasper columns of a deep red veined with white. In the intercolumniations are four niches, with as many statues of Apostles. Over the cornice is another base, with eight pedestals supporting the like number of statues in gilt brass: it also sustains the cupola, which is divided into four compartments inlaid with jasper. Above is a small lantern crowned with another cupola, and over all is an image of our Saviour of the same metal as those of the Apostles. In the lower part are two doors of rock crystal leading into the sanctuary, the jaumbs and lintels of which are of a beautiful green jasper; the other parts consist of jasper

of

of ſeveral colours, and poliſhed braſs. In ſhort, this whole chapel is adorned with the richeſt Moſaic work, and a great variety of other ſtatues and paintings.

The convent conſiſts of five beautiful cloiſters, and may be entered from the church. The principal cloiſter is as large as the other four, it extending 210 feet from north to ſouth, and 207 from eaſt to weſt. Its grand ſtair-caſe is forty feet broad, the ſteps are of the moſt beautiful ſtone, each of one piece, and the baluſtrades are of exquiſite workmanſhip. The arcade above is adorned with painting exhibiting the founder's motives for erecting this edifice; and the whole ſtructure is adorned with the works of the moſt celebrated *Spaniſh* and *Italian* painters. Within the body of the cloiſter is a flower garden, embelliſhed with reſervoirs and fountains; in niches on the ſides are the ſtatues of the four Evangeliſts, bigger than the life, of white marble.

In the gallery of the royal apartments are excellent paintings by *Baſan*. Along the wall are repreſented two curtains hanging down from hooks, ſo naturally, that the ſpectators often endeavour to lift them up. On theſe curtains are painted the battle fought by Don *John* II. againſt the *Moors* of *Granada* in the plains of *Higuernala*; and the battle of St. *Quintin*. At the two extremities are two naval victories, gained off the iſle of *Tercera*: and the cieling is covered with ſtucco-work.

In

In the ſouth ſaloon are two doors brought from *Germany*, inlaid with exquiſite beauty, and a variety of fine wood. The inſide is adorned with exquiſite paintings. The next is the apartment of King *Philip* II. where he died. Here the furniture, cieling, and walls are plain, and the floor is brick. It is, however adorned with ſmall ſtatues of Saints, ſome very beautiful pictures of the Virgin *Mary*, and other religious pieces. From this apartment is a paſſage to the Queen's, which is of the ſame conſtruction.

The library is 195 feet long, 32 broad, and 36 in height. The pavement is of black and white marble in beautiful knots. The concave part of the cieling is finely painted by *Pelligrino*, exhibiting Divinity, Phyloſophy, Grammar, Logic, and all the Sciences, ſurrounded with proper groupes of figures. But the number of books amount to only eight thouſand. However, two other rooms have been added, and the books in all three exceed 18,000.

The laſt part of this ſuperb ſtructure we ſhall mention is the *Pantheon* chapel, the ſepulchre of the *Spaniſh* monarchs, which is incruſted and embelliſhed with the moſt exquiſite work in marble, jaſper and gilt braſs, adorned with carving, ſtatues, and painting.

CHAP.

CHAP. II.

A Description of the Cities of Saragossa, Toledo, Valencia, Alicant, Carthagena, Malaga, Cadiz, Seville, *and* Gibraltar.

THE next city we shall describe is *Saragossa*, the capital of the kingdom of *Arragon*, which is situated in a delightful plain at the confluence of the rivers *Ebro*, *Salon*, *Gallego*, and *Guerva*, which render the adjacent country delightful and fertile; from hence the city is well supplied with corn, wine, oil, fruits, and plenty of fish and fowl. It is surrounded with walls and towers, and has four handsome gates facing the four cardinal points, with two bridges over the *Ebro*. The city is of an oblong figure, and contains not only many handsome churches, hospitals, squares, and streets, but has extensive suburbs. 'Tis divided into fourteen large parishes, and has 23 monasteries, 13 nunneries, and a noble hospital, endowed with a revenue sufficient for maintaining 800 sick persons, besides two others for orphans, and several alms-houses for decayed people. There is here also a famous university. The cathedral is a rich and stately building; in which the tabernacle over the high altar, is a magnificent piece of workmanship, all of massy silver, finely wrought, and weighing 612 pounds. The royal palace stood at a

ſmall diſtance without the city; but has been given to the officers of the inquiſition. The collegiate church of our Lady of the pillar, thus called from a pretended miraculous image of the Virgin holding an infant *Jeſus* in her arms, in likewiſe a fine ſtructure, which they affirm was built by St. *James* the Apoſtle. The above image is very ſmall, but its crown and robes are almoſt entirely covered with precious ſtones. It is placed very highon a pillar of jaſper of exquiſite beauty, and a great number of ſilver lamps are kept continually burning in the chapel in which it ſtands, the walls of which glitter with gilding and precious ſtones. To this image a vaſt number of pilgrims annually reſort, to pay their devotions before it.

Toledo, the capital of *New Caſtile*, and anciently the royal ſeat of the *Goths* and *Moors*, is 36 miles from *Madrid*. It ſtands on a ſteep and craggy rock, and has two ſtone bridges over the *Tagus*. The land ſide is fortified by a double wall, that has 150 towers, and five large gates, beſides poſterns. The plain below is ſpacious, fertile and pleaſant, and ſo well watered by the *Tagus*, that it produces corn, wine, oil, and every thing that can be deſired for conveniency or delight. The city has twenty-ſeven pariſhes, thirty-eight monaſteries and nunneries, two large colleges, and twenty-five hoſpitals; and yet the inhabitants are ſaid not to amount to above five thouſand families. The ſtreets are narrow and ſteep, but there are ſaid to be no leſs than 17 ſquares

and

and markets. It has a ſpacious old palace taken from the *Moors*, the ſtables of which can hold at leaſt 500 horſes. The cathedral is a noble ſtructure, 384 feet long, and 191 broad. Eight large and beautiful braſs gates with magnificent porticos lead to this edifice. Its roof is ſupported by eighty-eight lofty pillars, which divide it into five iſles, the middlemoſt of which forms two choirs, beautifully carved and inlaid: one called the chapel of the Bleſſed Sacrament, has been the burying place of many of the *Spaniſh* monarchs, and is incloſed within coſtly iron gates, and on each ſide ſtands a braſs pulpit on pillars of the ſame. The other choir, which belongs to the Canons, is incloſed in the ſame manner, and beautified with curious carving in wood and jaſper. The outſide of both is adorned with ſtatues in niches, and other ornamental imagery, repreſenting the hiſtory of the *Old* and *New Teſtament*. The image of the Virgin *Mary* in this cathedral has a garment covered all over with pearls and precious ſtones, and the paintings are anſwerable to the reſt. In ſhort, this is one of the richeſt cathedrals in the world, and the archbiſhopric, in its power and revenue, is next to that of *Rome*; ſo that the late Queen of *Spain* obtained it from the Pope for one of her ſons.

The next place of importance we ſhall mention is *Valencia*, the capital of the province of the ſame name. This city is ſeated on the banks of the *Turio*, over which it has five bridges, at the diſtance of about a mile and a half

from the ſea, and is ſituated oppoſite to the place where the famous city of *Saguntum* formerly ſtood. It is almoſt of a circular form, and is ſurrounded by a wall that has many towers and gates. *Grao*, its ſea-port, which ſtands on the *Mediterranean*, furniſhes it with a variety of ſea fiſh, and the neighbouring lake of *Albuſera*, with abundance of water fowl, and freſh water fiſh, as does the fertile country round with corn, wine, oil, fruit, herbs, and other proviſions. The parts about the city being well cultivated, are very populous, and the inhabitants amount to about 15,000 families. It has 48 monaſteries and nunneries, beſides other foundations of the military order, ſix chapels, and ſix hoſpitals. Here is alſo a celebrated univerſity which has five colleges. *Valencia* is the ſee of an Archbiſhop, whoſe revenue is worth 30,000 ducats *per annum*. A great variety of manufactures are carried on here, eſpecially the woollen, ſo that the cloth made in this city is reputed the fineſt in *Spain*. The ſilk manufactures flouriſh likewiſe here, the women and children ſpinning it before their doors. They export large quantities of wine, oil, and fruit; and the inhabitants have now an eaſy, agreeable converſation, without any of that ſtiffneſs obſervable in the reſt of the *Spaniards*.

In this province is alſo *Alicant*, which is ſixty miles ſouth of *Valencia*, and the ſame diſtance north of *Carthagena*. It is a famous city and port in the *Mediterranean*: the harbour is defended by ſeveral baſtions, and the city, tho' not

not ſtrong, is well walled, and defended by a caſtle built on a high rock. On the neighbouring ſhore ſtand ſeveral watch towers. This city, which is well known to the *Engliſh* for its wines and fruit, is ſituated between two hills, and from its vicinity to the ſea has a pleaſing proſpect of ſhips continually paſſing to or from the *Mediterranean*. It has a large cathedral, dedicated to St. *Nicholas*, two pariſh churches, ſix convents, and two nunneries. The city is ſaid to contain between 30 and 40,000 communicants.

Carthagena, a city in the province of *Murcia*, was built by *Aſdrubal* the famous *Carthaginian* General, 225 years before *Chriſt*, and lies on the ſide of a hill, at the mouth of the river *Guadulantin*, which forms a fine bay in the *Mediterranean*; but contains only 1200 inhabitants, and has but one pariſh, though it has four monaſteries, and two convents of nuns.

The next city we ſhall mention is *Malaga*, in the province or *Grenada*, which is alſo pleaſantly ſituated on the coaſt of the *Mediterranean*, and has one of the beſt roads in all thoſe parts, into which extends a fine mole 530 paces long, and twenty broad, with ſtairs for taking water, and a chapel for the ſea-faring people. The city is large and of a circular form; ſurrounded by a double wall, that has ſeveral towers, and nine gates. It is alſo defended by two caſtles, one at the top, and the other at the foot of a ſteep mountain, at the bottom of which the town is ſituated. On one ſide the ſea waſhes its walls, and on the other runs the

Guadalmedina, over which is a ſtrong bridge. The neighbouring grounds are covered with vines, and with a great variety of fruit-trees; vaſt quantities of wine, raiſins, figs, almonds, lemons, oranges and other fruits being exported from thence.

To the weſt of *Malaga* is *Cadiz*, the celebrated *Gadir* or *Gades* of the ancients, ſituated in the ſame province, on the north-weſt extremity of a long neck of land in an iſland, which is joined to the main land by the bridge of *Suaco*; both extremities of which are defended by ſtrong works. The iſland on which *Cadiz* ſtands, together with the oppoſite ſhore, form a bay twelve miles long, and about ſix broad: near the middle of this bay are two points of land, one on the continent and the other on the iſland 500 fathoms aſunder, on which are the forts *Puntal* and *Matagorda*, that command the paſſage: within theſe points is a large and good harbour, which no enemy can enter, till the forts have been firſt taken. The *Engliſh* forces commanded by the Earl of *Eſſex* landing in the iſland in 1596, took and burnt the town, after they had plundered it of immenſe treaſures, and deſtroyed the galleons in the harbour. The city contains about 5000 houſes, and 50,000 inhabitants, and being the centre of all the *American* trade, the galleons there take in their lading, and return with the treaſures and rich merchandizes of *Peru* and *Mexico*. The city is ſurrounded with walls and baſtions, but its greateſt ſtrength ariſes from the

the ſteepneſs of its coaſt, its rocks and ſand banks.

At a few leagues diſtance to the north lies *Seville*, the *Hiſpal* of the ancients, ſituated in a fertile country on the river *Guadalquiver*, over which there is a ſtout bridge of ſeventeen boats, that joins the city to a large ſuburb on the other ſide, called *Triana*, where is an inquiſition. The circuit of the city, including the ſuburbs, is fourteen miles; but the wall is only eight. It is pretty ſtrong, and has fifteen gates, and 166 towers. The number of its inhabitants is computed at 300,000. The cathedral is a large ſtructure partly in the *Gothic*, and partly in the *Moreſco* taſte, and its ſteeple, like that of St. *Mark*'s at *Venice*, is aſcended to the top by planes gently inclining. Here is an univerſity, in which the ſtudents are very numerous. Along the river are commodious quays, where veſſels of large burthen may lie in ſafety. The palaces of the Viceroy, the Archbiſhop, and the antique palace built by the *Moors*, are large ſtructures. Here alſo is an ancient aqueduct. Bread, wine, fleſh, and all other commodities are extremely dear in this city, except olives and pomegranates, which are better here than in any other part of *Spain*.

The laſt place of importance we ſhall mention in this extenſive country is *Gibraltar*, the *Calpe* of the ancients, a famous port town and fortreſs of *Andaluſia*. The town, which is neither large nor handſome, ſtands at the foot of mount *Calpe*, about 16 miles north of *Ceuta* in *Africa*. It is built upon a rock, in a peninſula,

ſula, and is acceſſible only on the land ſide, by a narrow paſſage between the rock and the ſea, acroſs which the *Spaniards* have drawn a fortified line, chiefly with a view to hinder the garriſon of *Gibraltar* from having any intercourſe with the country behind them. The harbour of *Gibraltar* is formed by a bulwark properly fortified and planted with guns.

The peninſula upon which the fortreſs of *Gibraltar* is built commanding the ſtreight of the ſame name at the entrace of the *Mediterranean*, has been juſtly conſidered as a place of the utmoſt conſequence. It was taken in 1704 in two days by a combined fleet of *Engliſh* and *Dutch* ſhips under the command of Sir *George Rooke:* but the ſame year the *Spaniards* attempted its recovery, at which time it ſtood out a memorable ſiege, in which between 4 and 500 of the enemy having crept up the rock that covers the town, were the next morning driven down headlong: after which it was ceded to the *Engliſh* by the treaty of *Utrecht*, in 1713. The *Spaniards* again made an attempt, in the year 1727, with a powerful army; but were at laſt obliged to raiſe the ſiege, after lying before it ſeveral months, and even endeavouring to blow up the rock, which they found to be impracticable, it therefore ſtill belongs to the crown of *Great Britain*.

Having thus deſcribed the principal cities of *Spain*, it will be proper to mention the manners and cuſtoms of the inhabitants in general. Notwithſtanding a great part of the country is ſo extremely fertile as to be capable of

affording

affording all the conveniences and luxuries of life, in the greateſt profuſion; it is but thinly peopled. This is owing to the expulſion of the *Moors* about 200 years ago; to the vaſt numbers that have left, and are ſtill leaving their native country to ſettle in *America*, and to the religious bigotry of the people, and the terrors of the inquiſition, which will ſcarcely permit foreigners to ſettle among them, and occaſions a multitude of perſons of both ſexes to be ſhut up in convents. Hence it is not ſurprizing that moſt places are very thin of people, and that there are in this country vaſt tracts almoſt deſolate. Thus in all towns, eſpecially thoſe in the ſouth and weſt parts of this country, are to be ſeen the ruins of many houſes.

The *Spaniards* are grave and ſolemn in their behaviour, and are always dreſſed in a ſhort cloak and coat, and appear abroad with a long ſword, curled whiſkers, and a pair of ſpectacles on the noſe. Pride of birth is no where carried to a greater height, and the inſinuation that a man is deſcended from the *Moors*, who a few ages ago inhabited the greateſt part of the country, is ſufficient to make him ſtab the ſlanderer, or procure his being privately aſſaſſinated. This pride, added to the indolence of the people, has prevented the arts being carried to the ſame perfection in *Spain* as in the reſt of *Europe*; and they have been obliged to have recourſe to the labourers and artificers of other nations to furniſh them with ſuch commodities as they might eaſily procure by

by their own induſtry. Hence not all the mines of *Peru* and *Mexico* have been able to make them rich. They are univerſally too much given to women, and their jealouſy, where either their wife, daughter, ſiſter, or even miſtreſs is concerned ſeldom fails to end in bloodſhed; for they think no means too baſe, violent, or unjuſt, to wipe off any ſtain that is caſt upon their honour, or to gratify their revenge. They affect an haughty air with thoſe with whom they are unacquainted; but no people in the world are more courteous to thoſe with whom they are intimate.

The *Spaniards* are greatly attached to their old notions, and the diſcouragement given to printing has retarded the dawn of true ſcience; but it begins to appear, philoſophy has begun to ſhew itſelf in *Spain*, and the mechanic arts are leſs deſpiſed than they were formerly. The moſt amiable part of their character is their honeſty and fidelity to their engagements, for which they have been always celebrated.

CHAP.

CHAP. III.

Of Portugal *in general; the Produce of the Country, and the Customs and Manners of the People. A Description of the Cities of* Lisbon, St. Ubes, Oporto, Coimbra, Santerem, Portale-Elvas.

THE kingdom of *Portugal*, is situated to the west of *Spain*, from which it is separated on the north and east by the river *Minho*, and some small rivers and hills; on the south and west it is washed by the sea. Its whole extent from north to south is 300 miles, and its breadth from east to west, where broadest, is about 120. It is in the same climate with *Spain*, and as well as that country, is very mountainous; but the soil is in general worse, and never produces corn enough for the support of its inhabitants: as to wheat it has always produced less of that valuable grain than what the people require. In the southern parts pasture is always scarce, and the cattle small and lean, though the flesh is generally well tasted. But to make amends for this want of corn and pasture, here are made vast quantities of wine, which is indeed the best commodity of this kingdom. Oil is likewise here made in great abundance, but it is far inferior to that of *Spain* and *Italy*. Lemons and oranges likewise grow here, and are exported in great

great quantities, tho the acidneſs of the latter are not near ſo pleaſant, as thoſe that come from *Seville*; nor indeed are their raiſins, figs, almonds and cheſnuts either ſo large, or ſo well taſted as thoſe of *Spain*. However, their ſweet oranges, which they have introduced from *China*, and are thence called *China* oranges, are the beſt of the kind in *Europe*. Herbs and flowers of all ſorts are here commonly very good, and abundance of perfumed waters are diſtilled from thoſe of the odoriferous kind, which are here in great requeſt, they being uſed in almoſt every thing that is eat, drank, or worn. This country alſo produces great quantities of alum, white marble, alabaſter, and eſpecially ſalt, of which immenſe quantities are exported from the port of *Setual*. The woollen manufactures of this country are ſo indifferent and coarſe, that they are only worn by the meaner ſort, and though their ſilks are in ſome places much better, they are far inferior in beauty and goodneſs to thoſe made in *Spain*. The country is, however, in general pretty well peopled, and the inhabitants, eſpecially of the ſea-port towns, are much richer than the *Spaniards*.

The women are moſtly beautiful while young, though their complexion is inclinable to the olive; but the indiſcreet uſe of paint renders their ſkins ſhrivelled as with old age, before they are turned of thirty: but their eyes, which are generally black and ſparkling, retain their luſtre after their other charms are withered. The quick decay of beauty is, however, in ſome meaſure

meaſure recompenced by the vivacity of their wit, in which they are ſaid to excel the women of all other nations. They are extremely charitable and generous, and remarkable for their modeſty. Spectacles are commonly worn here as well as in *Spain*, as a mark of age and gravity; for it is obſervable of theſe two nations, that old age, with a grave and ſolemn behaviour, procure ſuch reſpect, that the young affect to imitate the ſolemnity of the old.

The dreſs of the *Portugueſe* like that of the *Spaniards*, never uſed to vary till of late, eſpecially among the men. However, theſe ſtill commonly wear a cloſe doublet, wide breeches, a ſhort cloak, and a long ſword. Their garments are either of baize, or ſome ſuch light ſtuff, or of ſilk, according to the quality of the perſon, and the ſeaſon of the year. The women who go abroad on foot uſe long veils that cover their heads and moſt of their bodies, but leave the face bare. When thoſe of quality go out in their coaches or litters, they wear fardingals, ſhort doublets, and long petticoats that cover their feet. Their hair hangs looſe in curls, and is intermingled with jewels; and ſome wear a dagger by their ſide, inſtead of a fan. In the houſe their dreſs is more airy, their doublets ſhorter, and open before, ſo that their linen appears quite round the waiſt, as well as at the boſom. The maids generally appear in their hair, though ſome of them cover it with a fine ſort of muſlin or gauze; but of late years both ſexes ſeem to give into the *French* mode. To ſo extravagant a height do the

grandees and their ladies carry their pride and arrogance, that they ſtand upon the niceſt punctilios with reſpect to rank and titles; and the ladies of quality are even ſerved on the knee by their maids and ſlaves; indeed the women of quality will ſcarce be ſpoken to by mean people in any other poſture. A degree of haughtineſs peculiar to this country!

The ſole religion profeſſed in *Portugal* is that of the church of *Rome*, no other being ſuffered, or ſcarcely known throughout the country, except that of the *Jews*, who are here in great numbers, though concealed; for the better to eſcape notice, they not only go regularly to maſs and confeſſion, but ſtrive to outdo thoſe of the *Romiſh* church in their zeal for the national religion. But if any of them are diſcovered, they are immediately ſeized by the officers of the inquiſition, when if they will abjure *Judaiſm*, they are only condemned to ſuffer ſome corporal puniſhment, or public ſhame; but if after being converted and pardoned, they are found to relapſe into *Judaiſm*, they are cruelly condemned to the flames, and executed in a public manner, with the moſt pompous and dreadful apparatus. Foreign *Proteſtants* who have never embraced the *Romiſh* religion may live here undiſturbed, provided they neither offend the government, nor affront the eſtabliſhed church. The inquiſition alſo puniſhes thoſe who are charged with ſorcery, witchcraft, blaſphemy, ſodomy, and other crimes.

The

The principal cities of this kingdom are *Lisbon, St. Ubes, Oporto, Coimbra, Santereim, Portalegre,* and *Elvas.*

Lisbon, by the *Portuguese* called *Lisboa,* the metropolis of *Portugal,* is situated on the north banks of the *Tajo* or *Tagus,* about ten miles from its mouth. It is about six miles long, and is built upon seven hills, winding with the river, from which it rises in the form of an amphitheatre. On one of them stands a castle that commands the town, which is surrounded by a wall that has 77 towers, and before the dreadful earthquake on the 1st of *November* 1755, was supposed to contain 30,000 houses, and 150,000 inhabitants. The streets being principally in the valleys between the hills, are narrow, dirty, and some on the sides of them are very steep, which render them inconvenient for coaches, so that litters are generally used. The houses of the citizens are commonly mean, with lattice windows; but those of the nobility are elegantly built of stone, and have large gardens. Here are several handsome squares, the finest of which called the *Rosia,* had the house of inquisition at the upper end, and also St. *Dominic*'s church, which belonged to that office, where the *Jenos,* with the supposed heretics and witches were tried before the King and nobility. This was one of the largest and most beautiful churches in *Lisbon*; the west end was covered with pictures of the heads of those who were executed, taken from the life, and placed in rows. Adjoining to this edifice was a large convent of *Dominican*

Friars. Near this ſquare was another fine one called *Terreira de Paſſo*, in which was the King's palace, a large and commodious ſtructure which took up one ſide of it, and the cuſtom-houſe, corn-market, and meat-market were on the others. From the palace might be ſeen large fleets of ſhips lying in the harbour, and others continually ſailing in and out. In this ſquare they hold their bull-baitings, the diverſion of the great, at which all perſons of diſtinction aſſemble; and here the officers of the inquiſition perform the *Auto de fé*, on which occaſion ſeveral perſons of a different perſuaſion from that of the *Romiſh* church are annually burnt alive, in ſight of the King, Queen, and the whole court; and to the diſgrace of the *Portugueſe*, both the gentlemen and ladies of the greateſt quality are taught to rejoice, and to ſhew a barbarous pleaſure at theſe inhuman ſpectacles.

Beſides the cathedral, there were 37 pariſh churches, with 23 monaſteries and convents for Monks and Nuns, which were generally handſome ſtructures, richly adorned within. The cathedral in particular is a vaſt edifice, but heavy, clumſy, and of the *Gothic* taſte; yet as it ſtands upon one of the ſeven hills, it at a proper diſtance affords a moſt noble proſpect. However, what it wants in elegance and beauty on the the outſide, is amply made up by the richneſs of its ornaments within, as ſtatues, paintings, and utenſils of gold and ſilver enriched with the moſt coſtly gems. Among the many noble hoſpitals in this city, is

the

other Buildings in Lisbon.

the celebrated houſe of mercy, which not only conſtantly breeds up 60 boys, and portions out out 114 maidens; but diſtributes an incredible number of other charities, as relieving priſoners for debt, maintaining of decayed perſons that cannot beg, and aſſiſting families that are aſhamed to let their wants be publicly known. The Great hoſpital is obliged to receive all perſons of whatever nation or religion; nor is this charity confined to the ſick, or to ſuch as meet with caſual misfortunes, as broken limbs, blindneſs, *&c.* but extends to naturals, lunatics, and foundlings. The city, before the great earthquake, afforded a noble proſpect when viewed from the river, on account of the gradual aſcent of the buildings; nor is the proſpect leſs agreeable from the town of the river, which is three miles over, and filled with ſhips from every nation in *Europe*; and farther ſtill, the eye is entertained with the diſtant view of a fine country interchangeably mixed with towns and villages.

But on the 1ſt of *November* 1755, at about ten in the morning, the above-mentioned dreadful earthquake began, which laid the fineſt buildings of *Liſbon* in ruins, and reduced that city to a ſcene of the moſt terrible deſolation. To complete the public diſtreſs, a fire ſoon after broke out, and ſpread among the ruins; and by theſe diſaſters the King's palace, the cuſtom-houſe, St. *Dominic*'s church, St. *Nicholas*'s, and many others were either thrown down or conſumed; together with a great number of private houſes:

but happily ſome whole ſtreets were entirely ſtanding.

About 21 miles below is the port of *St. Ubes*, or rather *Setubal*, as it is called by the *Portugueſe*. This city was the *Cætobriga* of the *Romans*; it is ſituated on a ſpacious bay cloſe to the ocean, and is much reſorted to by moſt northern nations on account of the vaſt quantities of ſalt annually made there. The town has a ſtrong wall, thirteen gates, many towers, and ſome other out-works and fortifications. On the ſea-ſide are two forts or caſtles, one an old one, and the other of modern conſtruction. The inhabitants are computed at about 3000, and the city has four pariſh churches, three monaſteries, two nunneries, five chapels, a houſe of mercy, two hoſpitals, and two conduits, to which the water is brought from a good diſtance by a ſtately *Roman* aqueduct, ſupported on a great number of arches. This city is one of the moſt flouriſhing places in the kingdom; but it ſuffered very greatly in the earthquake that was ſo fatal to *Liſbon*.

The next city we ſhall mention is *Oporto*, or *Porto*, which is a ſea-port on the north ſide of the *Duero*, about three miles from the ſea, and is ſituated on an uneven rocky ground, that river waſhing its walls. The harbour is ſafe againſt all winds; but when the floods come down, no anchor can hold the ſhips, at which times they are forced to faſten them to each other along the walls, to avoid the fury of the torrent. The ſtreets of the city are narrow and irregular, but well paved; the natural rock

rock in ſome places forming part of the pavement. The edifices are of the ancient kind, but handſome and built with ſtone. The churches are ſtately, and ſome even magnificent, particularly the cathedral. There are here five pariſhes, nine monaſteries, four nunneries, eight chapels, four hoſpitals, a houſe of mercy for relieving thoſe in diſtreſs, and the inhabitants amount to about 4000.

Coimbra, is a very ancient city pleaſantly ſeated on the north ſide of the river *Mundega*, over which it has a good bridge of 29 arches. The walls of the city are lofty, and have four handſome gates, adorned with many towers and turrets, and the buildings are ſtately though ancient, eſpecially the palace, which ſtill retains ſome marks of its former ſplendor. The city is inhabited by about 5000 families, and has ſeven pariſh churches, and five monaſteries, one of which called the convent of St. *Cruz*, or of the Holy Croſs, is a large and noble ſtructure, and inhabited by none but noblemen, who embrace the order of St. *Auguſtin*. Here are alſo five nunneries, an univerſity which ſometimes contains 3000 ſtudents, and is the moſt celebrated ſeminary of learning in the whole kingdom; a houſe of mercy, and a noble hoſpital.

Santareim, or *Santerein* a corruption from St. *Irene*, who is held in great veneration there, is a very ancient city ſituated on a high hill cloſe by the *Tagus*. On the ſouth ſide it has a deep valley, with a ſteep winding aſcent from the town, and on the north is a craggy ſolid rock altogether

altogether inaccessible, from which the ancient *Moorish* inhabitants used to precipitate their state prisoners: but on the west it faces a delightful plain covered with gardens, orchards, and fertile fields, that produce vast quantities of corn, oil, and a variety of fruits. The walls of the place are strong, though very old. There are here thirteen parish churches, one of them collegiate; seven monasteries, two nunneries, several chapels, two hospitals, and a house of mercy. The inhabitants, who amount to about 3000, carry on a considerable trade on the river, and are laborious, warlike, and polite.

Portalegre is seated on the side of a high mountain, in the province of *Alentejo*, and is well walled, and defended by eight strong towers, and an old castle. It has eight handsome gates, and is supplied with water by ten fountains, one of which flows with a constant stream out of nine mouths. The inhabitants, who here carry on a woollen manufacture, though of a mean sort, amount to about 3000, who are divided into five parishes; and here are three monasteries, two nunneries, nine chapels, one hospital, and a house of mercy.

The last place of importance in this kingdom we shall mention, is *Elvas*, which is six miles from the river *Coa*, that divides *Spain* from *Portugal*. It was an ancient city of the *Helvi*, and from the number of inscriptions still to be found there, it appears to have been a considerable place under the *Romans*. The country about it is very pleasant and fertile, and in particular produces abundance of oil. The city has a dou-

a double wall, with many towers, and a ſtrong caſtle. It may juſtly be eſteemed the ſtrongeſt fortreſs in all *Portugal*, it having ſeven baſtions, beſides demi-baſtions, and half-moons. Beſides the cathedral, there are four pariſh churches, three monaſteries, two nunneries, thirteen chapels, two hoſpitals, and a houſe of mercy. At a ſmall diſtance are the remains of a noble aqueduct, above ten miles long, and of a great height; eſpecially in ſome places, particularly where the ground runs low, it has no leſs than four arches, one over the other.

A DESCRIPTION OF *SWEDEN.*

CHAP. I.

Its Soil, Climate, and Produce; its Beasts, Birds, Fishes, and Mines; with some Account of the Inhabitants.

SWEDEN is a very extensive country, bounded by *Lapland* on the north, by the dominions of *Russia* towards the east, by the *Baltic* sea towards the south, and by *Denmark* and *Norway* to the west: but there are a great number of barren mountains dispersed over the country, from which fall innumerable rivers or rather torrents, few of which are navigable, on account of the rocks and cataracts that obstruct their passage; and these form many great

great lakes, ſome of which are of conſiderable extent: if therefore abatements be made for the barren mountains, the large lakes, woods, heaths, and marſhes with which this country abound, the habitable part will appear very ſmall.

Among theſe lakes, one named the *Fetter* is very remarkable. It ſeparates eaſt and weſt *Gothland*, extending above 80 miles from north to ſouth, and is about 18 broad in the middle. Its water is very clear, and in ſome places ſo deep as not to be ſounded by a line of 300 fathoms. This lake has but few iſlands, and is often diſturbed by ſtorms, which ſometimes begin ſo ſuddenly, that the ſurface is agitated before the leaſt breath of wind is perceived; ſo that the cauſe ſeems to proceed from the bottom of the water; and it is not uncommon for boats in one part of the lake to be toſſed by a ſtorm, while others at a ſmall diſtance are in a perfect calm. Immediately before a ſtorm, while the ſky is yet clear, a noiſe is perceived in the lake like thunder, which Dr. *Hearne* tells us, he had often heard, and was always followed by a tempeſt. Of this the inhabitants of *Viſingſoe*, an iſland in the middle of the lake, are more ſenſible than any others; for from that part of the iſland whence the wind will blow, they hear a confuſed noiſe like the firing of cannon, which when heard in the eaſt, is generally followed by hail and rain. All this is doubtleſs owing to ſubterraneous winds, and to theſe, together with thoſe from above, we may attribute the ſudden cracking of the ice in the

the ſpring, which one minute is ſtrong enough to bear horſes and ſledges, and the next is broken to pieces. A ſtrange noiſe in the waters, which precedes this ſudden eruption, warns travellers to make the beſt of their way; but thoſe who happen to be at a great diſtance from land are immediately drowned, or float upon ſhoals of ice till they meet with relief; and what is ſtill more dangerous, the ice, with the leaſt blaſt of wind, ſometimes ſinks to the bottom. The violent under currents obſerved in this lake are alſo very ſurprizing, which directly oppoſing the winds and waves, give the fiſhermen a great deal of trouble. From theſe, as well as from its unfathomable depth, and ſubterraneous winds, it is ſuppoſed to have a communication under ground with another lake called *Venner*, about forty miles to the weſtward.

Cataracts, as we have already obſerved, are frequent in the rivers of *Sweden*; but the moſt famous of theſe is within a few leagues of *Gottenburg*; where a river, which iſſues from the lake *Venner*, falls down a prodigious high precipice into a deep pit, with a terrible noiſe, and with ſuch violence, that large maſts which are floated down the river to *Gottenburg*, if they pitch end-ways frequently dive ſo far under water, that ſome are ſaid to be half an hour, others three quarters, and ſome a whole hour or more, before they riſe up again to the ſurface. Many attempts have been made to ſound the depth of this hole, with lines of ſeveral hundred fathoms, but to no purpoſe.

The

The ſoil of *Sweden*, where capable of cultivation, is tolerably fruitful, though ſeldom above half a foot deep, and therefore is frequently plowed by a young woman and an ox. Indeed it is generally beſt where there is leaſt of it, that is, in the little ſpaces between the rocks; and frequently the barren land being enriched by the aſhes of trees burnt on the places where they grow, and the ſeed raked among the aſhes, produces a plentiful crop, without farther cultivation. The country does not, however, produce corn ſufficient for the ſupport of the inhabitants, who are obliged to have great quantities imported from *Livonia*, and the parts of *Germany* bordering on the *Baltic* ſea: and the poor in many places are obliged frequently to live on bread made of the bark of birch-trees, ground and mixed with flour.

As winter in this northern climate commonly begins very early; ſo it is no ſooner ended than it is immediately ſucceeded by ſummer, little or no ſpace being left for ſpring; and the productions of the earth are here more ſpeedy in their growth, than in more ſouthern countries. The heat in ſummer is ſaid to be ſometimes ſo intenſe as to ſet the woods in a flame, which ſpreads many leagues, and can ſcarcely be ſtopt, till it meets with ſome lake or very large plain: but theſe conflagrations may probably be occaſioned by the careleſſneſs of thoſe who burn the woods, in order to enrich the land with the aſhes, and which being now contrary to law, they may perhaps by this pretence ſcreen them-

themſelves from ſuffering the penalty. During the ſummer, which laſts but about three months, the fields are cloathed with a variety of flowers, and the whole country overſpread with ſtrawberries, raſberries, bilberries, and the like, which grow upon every rock. In their gardens, melons are in dry years brought to perfection; but apricots, peaches, and other wall fruit, are almoſt as ſcarce as oranges. They have cherries of ſeveral ſorts, and ſome tolerably good, which cannot be ſaid of their apples, pears, and plums, which are neither common nor well taſted: but they have plenty of all kinds of roots, which greatly contribute to the nouriſhment of the inhabitants.

The ſun in the midſt of ſummer is at *Stockholm* eighteen hours and a half above the horizon, and for ſome weeks affords a continual day. In the middle of winter the days are proportionably ſhort, the ſun being up only five hours and a half, but the abſence of that great luminary is ſupplied by the moon, the whiteneſs of the ſnow, and the clearneſs of the ſky, ſo that travelling by night is as uſual as by day; and journeys are as frequently begun in the evening as in the morning. The want of the ſun's heat is repaired by ſtoves within doors, and warm furs abroad; inſtead of which the meaner ſort uſe ſheep-ſkins with the wool on, and other ſuch defences from the weather; and are generally better provided with cloathing ſuitable to their condition, than the common people in the milder climates of *Europe*. Though when any neglect or failure happens,

it

it usually proves fatal, and occasions the loss of the nose, or some other member, and sometimes of life; unless the usual remedy of expelling the frost be applied, when it has seized any part, which is to remain in the cold, and to rub the part affected with snow, till the blood returns to it again.

The cattle, as in other northern countries, are generally small, nor can the breed be improved by bringing in larger from abroad, for they soon degenerate; because, in summer, the grass is much less nourishing, than in the places from whence they came; and in winter they are usually half starved for want of fodder, which often falls so very short, that the people are forced to unthatch the houses to keep their cattle alive. The coarse wool of their sheep is only fit to make cloathing for the peasants: however, their horses, especially those of *Finland*, are hardy, vigorous, strong, sure-footed, and trot nimbly, which is of great use to the people, on account of the length of the winter, and the fitness of these horses for sledges, their only carriages in that season; and the soldiers pretend, that their horses are able to break a body of the best *German* horse.

Bears, elks, deer, and hares are here hunted for their flesh; as are wolves, foxes, wild cats, *&c.* for their furs and hides. The inhabitants hunt with less ceremony than is used in other places, taking all advantages of shooting their game, at which they are generally very dexterous. They have but few parks, and those meanly stocked, the charge of feeding deer all

winter, exceeding the profit. There are no rabbits here, but what are brought from abroad and kept tame. In winter the foxes and ſquirrels become grey, and the hares as white as ſnow.

Wild and tame fowl are very plentiful and good, except ſuch as feed on fiſh. The moſt common are keders and orras, the former of the ſize of a turkey, and the other of a hen; as alſo partridges, and a bird ſomewhat reſembling them called yerpers. In winter, are taken great numbers of ſmall birds, as blackbirds, thruſhes, and ſydenſcwans, the laſt are of the ſize of fieldfares, but better meat; they are ſuppoſed to come from *Lapland*, and have very beautiful feathers, ſome of which are tipped with ſcarlet. They have but few woodpigeons, on account of the hawks, and have no houſe-pigeons, except ſuch as are kept tame. Eagles, hawks, and other rapacious fowls abound moſt in the northern and deſart parts.

The many lakes of this country afford a variety of fiſh, as ſalmon, pike, trout, perch, tench, eels, and many ſorts unknown in other countries, of which the moſt numerous is the ſtreamling, a fiſh leſs than a pilchard, taken in great quantities, ſalted in barrels, and diſtributed all over the country. Theſe lakes are alſo of great uſe for the convenience of carriage by boats in ſummer, and in ſledges by winter. Beſides, in them, and on the ſea-coaſt, are almoſt innumerable iſlands of different

ſizes,

ſizes, of which there are in *Sweden* above 6000 that are inhabited: the reſt are either bare rocks or covered with woods.

A great part of the country is taken up with woods and foreſts. The trees, which moſtly conſiſt of pines, fir, beech, juniper, birch, alder, and a few oaks, grow in many places almoſt cloſe together, and lying to rot where they fall, the woods are ſcarce paſſable. Theſe, however, afford a plentiful and cheap firing, and being generally very ſtrait and tall, are eaſily converted into timber.

Of the mines in *Sweden*, there is one of ſilver, into which the workmen are let down in baſkets to the firſt floor, which is 105 fathoms under ground. The roof is as high as a church, ſupported by vaſt arches of oak: thence the deſcent is by ladders or baſkets to the loweſt mine, which is above 40 fathoms deeper.

The copper mine is about 80 fathoms deep, and of great extent; but is ſubject to damage by the falling in of the roof; yet that is ſometimes recompenced by the abundance of ore yielded by the ruined pillars. The occaſion of theſe falls is aſcribed to throwing the earth and ſtones brought out of the mine upon the ground over it, by which means the pillars become overcharged and give way. The copper annually made out of this mine amounts to the value of about 200,000 *l.* but a fourth part of this copper belongs to the King.

There are great numbers of iron mines and forges, eſpecially in the mountainous parts, where the people have the convenience of wa-

ter-falls to turn their mills. These mines not only supply the country; but there is yearly exported iron to the value of 300,000 *l.*

The inhabitants, from their breathing a healthful, dry, and sharp air, enjoy a vigorous constitution, which being confirmed by a hardy education, coarse diet, and hard lodgings, enables them to endure whatever uneasy circumstances befal them, better than those who are born in a more moderate climate, and are brought up with greater softness and indulgence. Thus they seem better qualified for a life of labour and fatigue, than for the cultivation of the arts.

The nobility for the most part apply themselves to a military life, in which they are more famous for their courage, and enduring hardships, than for their stratagems. They have a graceful deportment, and make the best appearance they are able, endeavouring to gain respect by the extraordinary number of their attendants, the magnificence of their houses, and the richness of their apparel, rather than by the plentifulness of their tables, or other occasions less liable to attract the observation of the public. They seldom or never accept of any employments in the church, or descend to the practice of law or physic, or the exercise of any trade.

The common soldiers endure cold, hunger, long marches, and fatigue to admiration. The peasants, when sober, are very obsequious and respectful; but drink makes them mad and ungovernable. Most of them live in a very poor con-

condition, and are taught by neceſſity to practiſe ſeveral arts in a rude manner, as making their ſhoes, cloaths, the ſeveral inſtruments of huſbandry, and other neceſſaries, which they cannot ſpare money to buy.

The women while young have generally fair complections, tolerable features, and are well ſhaped; they are fruitful, and ſeldom fail of having a numerous iſſue: but they are no where made greater drudges; for the meaner ſort, beſides the ordinary offices of the ſex, are put to plow and thraſh out the corn, to row in boats, and to bear burthens at the building of houſes, and on other occaſions.

Marriages are here entirely governed by the will of the parents, and founded ſo much upon intereſt, that the inclination of the parties is little regarded. The nation is not much troubled with the extravagances of lovers, and therefore ſtealing of matches is ſcarce heard of in an age; nor can the church give a licence to marry without the publication of the bans. However, domeſtic quarrels rarely happen, and more ſeldom become public, the huſbands being as apt to keep the authority in their hands, as the wives by nature, cuſtom or neceſſity, are inclined to be obedient: divorces and other ſeparations between man and wife ſeldom happen, except among the inferior ſort, whenthe innocent party is allowed to marry again. Couſin-germans are not permitted to marry without the King's diſpenſation, which is rarely refuſed.

Their wedding entertainments are generally more pompous and expenſive than the people

are

are able to afford; for the excefs of that one day frequently involves them in inconveniences that laft many years. This is alfo obfervable in their funeral folemnities, which are ufually accompanied with more jollity and feafting than is fuitable to the occafion. To gain time to prepare for them, they fometimes remove the corpfe to a vault within, or adjoining to their churches, where it remains unburied for a confiderable time.

CHAP. II.

Of the Cities of Stockholm, Upfal, and Lunden; *and an Account of the Political Conftitution of* Sweden.

SWEDEN has but few cities of confequence except *Stockholm*, the capital of the kingdom, fituated on the lake *Meller*, near the *Baltic*. The accefs to it by fea is extremely difficult, from the great number of fmall iflands that lie before the entrance of the harbour, and fecure it from any infults on that fide. It is neither walled nor fortified by art; for it is ftrong by nature, having a dangerous fea on one fide, and the lake *Meller* on the other, and on the land fide are fuch hills and rocks, that it can only be approached by certain paffes, that may be defended by a fmall force againft a numerous army. This city is in a manner the ftaple of *Sweden*, to which moft of the goods of

of their own growth, as copper, iron, wire, pitch, tar, masts, deals, &c. are brought to be exported. The greatest part of the commodities imported from abroad, come to this port, where the haven, though difficult of entrance is capable of receiving 1000 ships, and those of the largest size lie close to the quay, which is near an *English* mile in length, where they are so secure from the wind, that they need neither anchors nor cables to hold them: however, the harbour is not only blocked up by the ice four or five months in the year; but the different winds necessary to carry a fleet out, require a great deal of time, and there is no tide to help them, so that an enemy might destroy the whole coast, before the *Swedes* could put to sea; on which account the royal navy is always stationed at *Carelscroon*. The city extends over the whole island of *Stockholm*, which is only about a mile and a half in circumference: but the suburbs on the continent, with the buildings on the other islands, render it a considerable place.

Stockholm was about 300 years ago only a barren island, with two or three cottages of fishermen; but upon the building of a castle upon it, to stop the inroads of the *Russians*, and the removal of the court thither, it by degrees surpassed the more ancient cities, and has now all that is necessary to render it one of the finest cities in the north: for besides the island of *Stockholm*, there are five other small islands built upon, and joined to it by bridges; these are *Riddersholm*, *Konningsholm*, *Hoglandsholm*, *Schip-*

Schipſholm, and *Ludduggarſland*, which are frequently conſidered as part of the city: in the firſt is the cloiſter church, as it is called, and ſeveral fine gardens. *Hoglandſholm* is the quarter of the mechanics. In *Schipſholm* is the court of admiralty, the arſenal, and magazines of naval ſtores. *Ladduggarſland* is covered with pleaſure-houſes and gardens, and here alſo is the King's park, menageries, *&c.* The ſouth ſuburb on the continent, which is joined to the city by a bridge, has a noble exchange, and contains the houſes of the merchants; and the other ſuburb to the north of the city is joined to it by two bridges.

In the iſland of *Stockholm*, is the ſenate-houſe, the court of chancery, the criminal college, a noble library, and nine churches, built with brick and covered with copper. The ſenate-houſe is a very ſtately pile, and one of the fineſt edifices in the kingdom: it is, as it were, but one large pavilion, adorned on the outſide with marble ſtatues and columns, and within with pictures and ſculptures; eſpecially two large halls where the nobility meet. Next to this palace is that of the Lord High Chancellor; and a little farther are two other palaces belonging to noblemen, all built in the ſame taſte, and covered with copper; as are likewiſe ſeveral other of the houſes of the nobility. The bank is alſo a noble pile of building.

Among the churches, that of St. *Nicholas* is the largeſt and moſt magnificent, it being ſupported by marble pillars, covered with copper, and adorned with a great number of tombs of dif-

different kinds of marble. The ſtatue of St. *George* on horſeback trampling on a dragon is much admired. This is the hiſtory of his delivering *Cleodolinda*, daughter of the King of *Lydia*, and twelve other devoted virgins, from the fury of the dragon; and *Cleodolinda* is ſeen kneeling, with her hands lifted up, returning thanks to their preſerver. Over the altar is a cabinet finely gilt, on which is a table of a pyramidal form, with five ſhelves of maſſy ſilver, wherein are the following hiſtories in baſſo relievo: on the firſt is the nativity of *Chriſt*: on the ſecond, his laſt ſupper: on the third, his crucifix: on the fourth, his burial; and on the fifth, his reſurrection. Theſe are all of ſilver, and on the top is a ſmall ſtatue of the ſame metal, about two feet high repreſenting the aſcenſion. There are other ſilver ſtatues of the ſame height accompanying them, as that of *Moſes* with the two tables, *John* the Baptiſt with a croſs and lamb, and the Evangeliſts with the animals uſually aſſigned them by ſtatuaries and painters, all of maſſy ſilver, weighing together about 30,000 ounces. On the right ſide of the altar is a large picture of paradiſe and hell, reaching from the pavement to the roof; and on the left ſide of the altar is painted the crucifixion. This church is very rich in plate, and has particularly a cup of beaten gold embelliſhed with jewels, which, according to Mr. *Motraye*, is worth no leſs than 40,000 crowns. The other churches do not appear to have any thing remarkable; only they are generally covered with copper, have very lofty ſpires, and

inſtead

inſtead of bells have very muſical chimes in their ſteeples, which play upon feſtivals, and other ſolemn occaſions.

The city on one ſide affords a proſpect over the lake, and on the other over the harbour, which being almoſt encloſed by rocks, reſembles another lake, the water of which is ſo little brackiſh that it may be drank, which is owing to the great quantity of freſh water that runs into it from the lake.

Moſt of the burghers houſes are built with brick, except in the ſuburbs, where they are of timber, and are therefore in danger of fire, which when it once gets a-head, deſtroys all before it. They ſometimes ſend the dimenſions of the houſe they intend to build to *Finland*; where the walls and ſeveral ſeparations are built of pieces of timber laid one upon another, and joined at the corners; and afterwards marked, taken down, and ſent by water to *Stockholm*, there to be ſet up and finiſhed; and when they are kept in good repair they are warmer, cleaner, and more healthful than thoſe of either brick or ſtone.

The next city we ſhall mention is *Upſal*, which is ſituated on the river *Sala*, 42 miles to the north-weſt of *Stockholm*. 'Tis a very ancient city, and was formerly the capital of the north, and the ſeat of the King. 'Tis ſtill an univerſity, and the ſee of an Archbiſhop. It is divided into two parts by the river, which is here pretty broad, and ſo hard frozen up in *February*, that a fair is annually kept upon it. The town is large, but without any confide-

rable

rable fortifications: however, on a ſteep hill above the city is a beautiful caſtle, built after the *Italian* manner, that has a noble proſpect over the city, which it commands, and of the whole country.

The buildings of the city are generally of wood, except the palace of the Archbiſhop, and the houſes of ſome of the principal citizens, which are of brick. Travellers uſually take notice of the cathedral, the library, and phyſic garden, as moſt worthy of obſervation. The cathedral is a fine piece of *Gothic* architecture, 747 feet long; 140 broad, and 230 feet high from the pavement to the vaulted roof, which is covered with copper; this is eſteemed the fineſt church in the whole kingdom. Here are the tombs of many of the Kings and Queens of *Sweden*, ſeveral of which are adorned with ſtatues of white marble.

Lunden was formerly a conſiderable city in which was 22 churches, and an univerſity that has been ſuppreſſed. It is but a few miles diſtance from the ſea-ſhore, and ſtands oppoſite to *Copenhagen*, from which it is about 24 miles diſtant to the eaſt. The cathedral of St. *Lawrence* is a magnificent ſtructure with a high ſpire, which ſerves the ſailors for a landmark: The altar is very beautiful, but what moſt engages the attention of ſtrangers is its curious clock, which not only ſhews the hour, day, month and year, together with all the feſtivals in the year; but every hour two horſemen come forth, and encounter each other, giving ſo many blows as the hammer ſtrikes

upon the bell: then a door opens, discovering the Virgin *Mary* sitting on a throne, with *Christ* in her arms, and the wise men paying their homage to him, two trumpeters sounding all the while.

There are a few other cities in this kingdom, but we do not find they contain any thing very extraordinary, and worthy the notice of the curious reader.

The crown of *Sweden* was anciently elective; but the great *Gustavas* I. who ascended the throne in 1523, and introduced the reformation, rendered it hereditary: *Charles* XI. made *Sweden* an absolute monarchy, and his son *Charles* XII. strained his authority to the highest degree of despotic power: but upon his death, an immediate change was made in the government, and on the accession of his sister *Ulrica Eleonora*, in 1718, to the crown, she renounced all absolute and despotic power, and the government was restored to its ancient form. In 1720, at her desire, her husband, the Prince of *Hesse*, was elected King; and at his death, the present King was raised to the throne; but the power of the sovereign of *Sweden* is in many respects as limited as that of a Doge of *Venice*; for he has scarcely any of the prerogatives of royalty. The states of the Kingdom, who concur in the making of laws, are composed of the deputies from the nobility, the clergy, the burghers, and the peasants: the concurrence of these seem indeed necessary to the preservation of the liberties of the people; and not

not inconſiſtent with the juſt rights of the monarch: but the King is alſo obliged to ſubmit to the determinatious of the ſenate, who have not only authority to give their advice in all affairs of importance; but in ſome caſes to admoniſh, and even over-rule him, who is not at liberty to tranſact any buſineſs of conſequence, without the concurrence of the majority of them. They are indeed choſen by the King; but their oath rather expreſſes their fidelity to the kingdom than to the King. Their office is for life, and as the people look upon them the protectors of the liberty and privileges of the nation, the ſovereign power and majeſty of the ſtate is properly lodged in that body; both war and peace depend on them, and therefore not only attempts upon their perſons, but defaming them is accounted treaſon.

The laws of *Sweden* are reduced to a ſmall compaſs, and compiled into a body: hence the expence of law-ſuits are extremely moderate. Titles to eſtates are here rendered ſecure by the regiſters that are kept of all ſales and alterations; the purchaſer running the hazard of having an after-bargain take place of his, if he omits recording his tranſaction in the proper court. Treaſon, murder, adultery, burning of houſes, and the like heinous crimes are puniſhed with death; but the puniſhment of robbery and ſtealing is perpetual ſlavery. The criminal is condemned to work all his life for the King, at the fortifications or other drudgery, and has always an iron collar about his

neck, with a bow coming over his head, to which a bell is faſtened, that rings as he goes along.

If a party be killed in a duel, the ſurviver is puniſhed with death, and the memory of both is rendered infamous. If neither be killed, they are both impriſoned for two years, and obliged to live on bread and water: they are alſo fined 1000 crowns; or one years impriſonment and 2000 crowns. On the other hand, reparation of honour, in caſe of an affront, is referred to the national court, where recantation, and public begging of pardon is uſually inflicted.

The *Lutheran* religion has been eſtabliſhed in *Sweden* ever ſince the reformation; and no other is tolerated. All orders of men agree in a conſtant attendance on divine ſervice without any nice enquiries into diſputable points, either of their own tenets, or thoſe of other religions. The church is governed by one Archbiſhop, and ten Biſhops, whoſe revenues are very moderate. There are two univerſities, one at *Upſal*, and the other at *Abo*, a town in *Finland*. In the former, which is the principal, the ordinary number of ſtudents amount to about 7 or 800, fifty of whom are maintained by the King; and a few others were formerly ſupported by the nobility; but thoſe in both univerſities who cannot ſubſiſt of themſelves, ſpend the vacation in begging charity in the dioceſe to which they belong, and uſually receive corn, butter, dried fiſh,

or

or flesh, upon which they subsist at the university the rest of the year. In each diocese there is a free-school, where boys are fitted for the university, and other schools to which children are sent to learn to read, write, and sing their prayers; and few want this degree of education.

AN ACCOUNT OF *DENMARK*,

BY

The LORD MOLESWORTH.*

CHAP. I.

Of Denmark *in general, and particularly of the Island of* Zealand; *its Product and Climate: A Description of* Copenhagen, Elseneur, *and* Fredericksburg; *the Peninsula of* Jutland, *the Castle of* Gottorp, *and the Island of* Funen.

THE country properly called *Denmark*, consists of *Jutland*, part of the dutchy of *Sleswick*, and several islands in the *Baltic*

* We have omitted in the account given by this great author, whatever appears to be dictated by partiality, and have improved this article, with the observations of later writers, which as usual we have distinguished by inclosing them in crotchets.

sea,

ſea. The peninſula of *Jutland* is the largeſt and moſt fertile of the countries included under the name of *Denmark*; but the iſlands are more conſiderable on account of their ſituation, eſpecially *Zealand*; becauſe it contains *Copenhagen*, the capital of *Denmark*, and the famous paſſage of the *Sound* is bordered by its ſhore, where on the narroweſt part ſtands the town of *Elſeneur*.

Zealand is almoſt of a circular figure, and about 180 *Engliſh* miles in circumference; but it produces no bread-corn, except rye, of which moſt of their bread is made. It has few meadows, and has no want of good hay; though moſt of the graſs, which is ſhort and ſweet, grows by the ſides of the corn fields, or in ſome marſhy ſpots of ground. It has no rivers, nor above half a ſcore brooks able to turn a mill: but there are a great number of fine lakes ſufficiently ſtored with fiſh. The air is but indifferent, eſpecially at *Copenhagen*; which is occaſioned by its low ſituation and frequent fogs. The inhabitants burn beach-wood for their firing, which is the only ſort of timber trees that abound in the iſland. About one 4th part of it is foreſt, lying open for the King's hunting and game, as ſtags, wild boars, and roe-bucks, which are held ſo ſacred, that nobody dares touch them, though they find them in whole herds deſtroying their corn.

The face of the land is agreeably diverſified with little hills, woods, and lakes. The cattle are generally ſmall and lean, and are kept within doors ſeven or eight months in the year; where

where they are fed partly with hay, and partly with brewers grains, roots, weeds, and ſuch traſh as their owners can provide for them: but in ſummer time their beef is ſweet and juicy.

Throughout all *Denmark* there are but two ſeaſons in the year, winter and ſummer, the more agreeable ones of ſpring and autumn not being commonly known; the ſpring never, and the autumn ſeldom; the tranſitions from cold to heat, and from heat to cold being extremely ſudden. During the months of *June*, *July*, and *Auguſt*, the weather is much warmer than in *England*, and very ſultry in the nights; but it is a gloomy heat, and in the day time people generally perceive ſome interpoſition of thick vapours between them and the ſun. In *Copenhagen*, during theſe three months, they are conſtantly troubled with the plague of flies, which they endeavour to deſtroy by a poiſoned water; upon the ſprinkling of which in their kitchens and chambers, I have ſeen whole buſhels of dead flies ſwept together in one room.

The only city worthy of notice in this iſland, and indeed of all *Denmark*, is the city of *Copenhagen*, there being no other in the King's whole dominions much better than our town of *St. Alban's*. *Copenhagen* is neither a very ancient, nor a very large place; it approaching neareſt to *Briſtol*, of any of our *Engliſh* cities: but its excellent port, renders its ſituation for trade one of the beſt in the world. It is ſurrounded with fortifications, and the port is incloſed by the

the bulwarks of the town, the entrance being so narrow, that but one ship can pass at a time; and this entrance is every night shut up with a strong boom: the citadel on one side, and on the other a good block-house well furnished with cannon, command the mouth. Within this haven rides the royal navy, every ship having her place assigned her; a wooden gallery ranges round the whole inclosure where the fleet lies, and extending over the water, the ships may be viewed from it in as easy and commodious a manner as if they lay on dry land. This harbour is capacious enough to hold 500 sail, out of the reach of storms and tempests. [But it has been found that their fortifications cannot protect them from a bombardment at sea, nor are they always secure on that side against the attacks of a land army; for the *Baltic* has been so hard frozen, that the *Swedes* have drawn their artillery over the ice, and laid siege to the city.] The buildings of *Copenhagen* are generally very mean, they being formed of a kind of cage-work, with the intervals between the timbers filled up with brick. The public edifices, and particularly the palace formerly made a very indifferent appearance; and several of the noblemen were infinitely better lodged than the royal family. [But on the 28th of *October*, 1728, the city was reduced to ashes, and this conflagration has contributed greatly to its beauty; for it rose again in a more magnificent form; the houses were built with brick and free-stone, and the King has erected a very noble palace. The royal museum here contains

tains an admirable collection of curiosities both natural and artificial, preserved in eight chambers over the royal library, which is large and well furnished. One of these rooms is wholly taken up with medals, which are very judiciously arranged. Among the natural curiosities, one of the most remarkable is a petrified child, which was cut out of the mother's belly at the city of *Sens* in *France* in the year 1582, after having lain there between 20 and 30 years. This fœtus was first carried to *Paris*, where it was sold to a jeweller of *Venice*, who happened to be there, for about 20 *l.* sterling; of whom it was afterwards purchased by *Frederic* III. King of *Denmark* for 60 *l.* and added to this collection. That it is not artificial is evident beyond all dispute. Its head, shoulders and belly are of a whitish colour, and nearly resemble alabaster; the back and loins are hard and brown; but from the hips downward it is of a red colour, and perfect stone, exactly resembling the hard sort generated in the bladder.

In this fine collection are several large pieces of silver ore, dug out of the mines of *Norway* in 1666, one of which weighs 560 pounds, and is valued at 5000 crowns: another piece is valued at above 3000; both being supposed to contain at least three parts silver. They are composed of a whitish stone, the cavities of which seem to be filled with pure virgin silver. in some places lying in broad flat plates, and in others like pieces of fine silver lace: but what are most admired, are the threads or branches

branches of ſilver which ſhoot out an inch or two beyond the ſtone, in the form of ſmall ſhrubs or buſhes. Here are alſo ſeveral large pieces of amber, ſome weighing 40 or 50 ounces; which upon opening the ditches about *Copenhagen*, were found ſticking to the ſides of old trees that were buried there, like the gum on the plum-trees in our gardens.

Among the artificial curioſities, is a ſkeleton of ivory, two feet ſix inches high, ſo nicely formed that it is ſcarcely to be diſtinguiſhed from a natural one. Another piece of ivory contains the hiſtory of our Saviour's paſſion, beautifully expreſſed in relievo. There is likewiſe a ſmall man of war in ivory, with ſilver guns, which is much admired, as is alſo a watch made of ivory. There are beſides many other curioſities in ivory, ebony, box, amber, and other materials, kept for the ſake of the elegance or minuteneſs of the workmanſhip, and it is ſaid there there is a common cherry-ſtone on the ſurface of which are engraven 220 heads; but their ſmallneſs makes them appear imperfect and confuſed.

The ſciences now begin to flouriſh at *Copenhagen*; learning is encouraged and makes great advances, and that city has a royal academy of ſciences, which nearly reſembles the Royal Society of *London*.

The houſes of *Copenhagen*, do not take up above half the ground incloſed by the fortifications. The iſle of *Amack*, which is ſeparated from the city only by a ſmall channel of the ſea, is united to it by ſeveral bridges, that afford

afford an easy communication; and in this island is what is called the New Town, which consists of about 4 or 500 houses, and contains the arsenal, the mint, the exchange, and the castle. This little island, which is only about six miles in length, is called the garden of *Copenhagen*, and is esteemed the most fertile spot in *Denmark*.] It was given long ago to several families who came from North *Holland*, to make butter and cheese for the court, and their descendants still retain the habit, language, and customs of their predecessors, together with their cleanliness and industry; for they will not mix with the *Danes*, but intermarry with each other. This island, through the industry of these laborious people, plentifully supplies the markets of *Copenhagen* with all sorts of roots and herbs; besides butter, milk, great quantities of corn, and some hay.

[*Elseneur*, is about twenty miles north of *Copenhagen*, and is defended by the neighbouring castle of *Cronenburg*, which commands that side of the *Sound*, as *Helsinburg* does the other. Every ship that passes this streight must strike sail at *Cronenburg*, and steer to the town, to compound for the custom, under the penalty of forfeiting the vessel and cargo. The castle of *Cronenburg* is 4 or 500 paces distant from *Elseneur*, and is built on oaken piles, in so solid a manner, that it is able to support the fury of the tide, which sometimes beats against it with great violence. It forms a large square court, and was adorned with fine statues: the apart-

apartments were alſo very ſplendid: it is even pretended that not only the locks of the doors, but the very pipes of the ciſtern that ſupplied the garriſon with water, were all of ſilver, before it was plundered by the *Swedes*. This, however, is very improbable, and is doubtleſs no more than a vulgar error. It has four little towers at each corner, covered with copper; but the caſtle, with the chapel, ſteeple, and ornaments are all going to decay. The landſide is ſecured by five baſtions and a half.

Frederickſburg is a ſmall town 20 miles to the north-weſt of *Copenhagen*, and 18 to the ſouth-weſt of *Elſeneur*. This place is famous for the fine palace that ſtands near it, which is called the moſt beautiful and delightful of any belonging to the King, and is generally called the *Verſailles* of *Denmark*. This palace ſtands on an iſland in the midſt of a ſmall lake. Here was formerly the ſeat of a private gentleman; but King *Frederic* II. being charmed with its ſituation, bought it, and began to erect the palace, which was finiſhed by his ſon *Chriſtiern* IV. This ſtructure ſtands on piles, and conſiſts of a very magnificent front, with two large wings, that contain ſeveral grand apartments. The gallery that leads to the hall of audience is adorned with a fine collection of paintings, moſt of them brought from *Italy*; and the hall is hung with the pictures of ſeveral of the *Daniſh* Kings, and of the preſent royal family, as large as the life. The exploits of ſome of theſe monarchs are alſo beautifully painted in different parts of the palace, and the great ac-

tions of *Christiern* IV. are represented in rich tapestry. The chapel is covered with gilt copper, and on the inside embellished with paintings and other ornaments, among which are the statues of the twelve Apostles in silver; and it is said the locks, bolts, *&c.* were of silver, before it was plundered by the *Swedes*. There is a fine garden behind the palace, and in the lake is a kind of terrace, raised on piles, which cost 100,000 crowns. The neighbouring park is about nine miles long, interspersed with canals and fish-ponds, and agreeably diversed with a mixture of grass-plats, little hills, and valleys, well stocked with fallow-deer from *England*.]

The peninsula of *Jutland*, part of the *Cimbrica Chersonesus*, composes the largest part of the kingdom of *Denmark*. The soil of North *Jutland*, which alone is included in that kingdom, is not very fertile; but abounds in cattle, great numbers of which are purchased by the *Dutch*, when very lean, and transported to their own more fertile soil, where they soon grow exceeding fat. The swine of this country are excellent and very numerous. *Jutland* affords corn sufficient for the support of the inhabitants. The most fertile lands lie near the sea-coasts, the inland parts being full of heaths, lakes, and woods. The whole country is divided into four bishoprics; but the cities and towns make but an indifferent figure.

[South *Jutland*, usually called *Sleswic*, is the most fertile, but the Duke of *Holstein* has the joint dominion of a part of this country, and

and in ſome great towns and territories each has a diſtinct dominion. The Duke of *Holſtein*'s capital is *Gottorp*; and though it is not ſubject to the crown of *Denmark*, it may not be improper to give here a deſcription of the gardens belonging to the caſtle, which is not only a fortreſs, but one of the nobleſt palaces in theſe northern countries.

The caſtle of *Gottorp* ſtands on the weſt of the river *Sley* in the midſt of a ſmall lake, and is built in the form of an oblong ſquare. A rampart encompaſſes the firſt court, and the gate of the caſtle is of a fine blue ſtone as hard as marble. On the north ſide of this ſtructure is a bridge over the lake, 200 paces in length, at the end of which a pleaſant walk between rows of trees leads to a fine garden adorned with caſcades, fountains, and other water-works. Particularly in a large baſon, is a ſtatue of *Hercules* combating the *Hydra*, whoſe ſeven heads ſpout water. On the north is a parterre in the form of a creſcent, divided into compartments, and embelliſhed with the buſts of ſeveral Kings and Princes. But one of the moſt curious ornaments of theſe gardens is a fine copper globe, ten feet and a half in diameter, with a ſphere, exhibiting the motion of the ſun and heavenly bodies, which are carried round in exact order, by means of certain wheels turned by water. Before the houſe is a level piece of ground about 150 paces long, divided into three parts, thoſe on the ſides being two fine parterres, and that in the middle having a large baſon in the centre with fine

water-works. From thence you aſcend to different terraces, one above another, ſet round with ſtatues, buſts and other ornaments. The higheſt terrace exhibits a moſt delightful proſpect of the caſtle, the ſurrounding lake, and a fine country; and on the other hand, of a noble orangery, and of the neighbouring park, which is four or five miles in circumference, and well ſtocked with deer.]

Among the iſlands included under the name of *Denmark*, is *Funen*, which is about 36 miles from eaſt to weſt, and 30 from north to ſouth. The ſoil is here fertile and well manured, and the country conſiſts of ſmall fruitful hills, ſome of them well covered with woods. It is better peopled than *Zealand*. Much corn, and great herds of black cattle are exported from thence, and the inhabitants have a good breed of horſes, and plenty of hogs. This iſland is the appenage of the King's eldeſt ſon, and the government of it is one of the moſt conſiderable in the kingdom. There are ſeveral leſſer iſlands comprehended under the kingdom of *Denmark*. But the moſt extenſive part of this Prince's dominions is *Norway*, of which we ſhall hereafter give a particular deſcription.

CHAP.

CHAP. II.

The Manner in which the Danes *made a voluntary Surrender of their Liberty. Of the King's Court, the Laws of* Denmark, *and the Customs and Manners of the People.*

DENMARK was till lately governed by a King chosen by the people of all ranks; but in their choice, they paid a due regard to the family of the preceeding Prince, and if they found one of his line qualified for that high houour, they thought it just to prefer him before any other, and were pleased when they had reason to chuse the eldest son of their former King: but if those of the royal family were deficient in abilities, or had rendered themselves unworthy by their vices, they chose some other person, and sometimes a private man to that high dignity.

Frequent meetings of the states was a fundamental part of the constitution: in those meetings every thing relating to the government was transacted; good laws were enacted, and all affairs relating to peace and war, the disposal of great offices, and contracts of marriage for the royal family, were debated. The imposing of taxes was purely accidental, no money being levied on the people except to maintain a necessary war with the advice and con-

ſent of the nation, or now and then by way of free-gift, to add to a daughter's portion: the King's ordinary revenue conſiſting only in the rents of his lands and demeſnes, in his herds of cattle, his foreſts, ſervices of tenants in cultivating his ground, *&c.* for cuſtoms on merchandize were not then known in that part of the world: ſo that he lived like one of our modern noblemen, upon the revenues of his eſtate. It was his buſineſs to ſee juſtice impartially adminiſtered; to watch over the welfare of his people, to command their armies in perſon; to encourage induſtry, arts, and learning; and it was equally his duty and intereſt to keep fair with the nobility and gentry, and to be careful of the plenty and proſperity of the commons.

But in 1660, the three ſtates, that is, the nobility, clergy and commonalty being aſſembled in order to pay and diſband the troops which had been employed againſt the *Swedes*, the nobility endeavoured to lay the whole burthen on the commons, while the latter, who had defended their country, their Prince, and the nobility themſelves with the utmoſt bravery, inſiſted that the nobles, who enjoyed all the lands, ſhould at leaſt pay their ſhare of the taxes, ſince they had ſuffered leſs in the common calamity, and done leſs to prevent its progreſs.

At this the nobility were enraged, and many bitter replies paſſed on both ſides. At length the principal Senator ſtanding up, told the Preſident of the city that the commons neither under-

underſtood the privileges of the nobility, nor conſidered, that they themſelves were no other than ſlaves. The word Slaves was followed by a loud murmur from the clergy and burghers: *Nanſon*, the Preſident of the city of *Copenhagen*, and ſpeaker of the houſe of commons, perceiving the general indignation it occaſioned, inſtantly aroſe, and ſwearing that the commons were no ſlaves, which the nobility ſhould ſoon prove to their coſt, walked out, followed by the clergy and burghers, and proceeding to the brewers-hall, debated there on the moſt effectual means of humbling the inſupportable pride of the nobles.

The next morning the commons and clergy marched in great order to the council-houſe, where the nobles were again aſſembled, and the Preſident *Nanſon* made a ſhort ſpeech, obſerving that they had conſidered the ſtate of the nation, and found that the only way to remedy the diſorders of the ſtate was to add to the power of the King, and render his crown hereditary, in which if they thought fit to concur they were ready to accompany them to the King, whom they had informed of their reſolution, and who expected them in the hall of his palace.

The ſuddenneſs of this propoſal, and the reſolution with which it was made, cauſed a general conſternation among the nobles. They now endeavoured to ſooth the commons by fair ſpeeches; and urged that ſo important an affair ſhould be managed with due ſolemnity, and that it ſhould be regulated in ſuch a manner

ner that it might not have the appearance of a tumult. To this the President replied, that they only wanted to gain time, in order to frustrate the intentions of the commons; who came not thither to consult, but to act. After farther debate, the commons growing impatient, the clergy and burghers, led on by their Bishop and President, proceeded without them to the palace; and were met by the prime minister, who conducted them to the hall of audience, whither the King soon came to them. The Bishop made a long speech in praise of his Majesty, and concluded with offering him an hereditary and absolute dominion. The King returned them his thanks; but observed that the concurrence of the nobles was necessary; he assured them of his protection, and promised to ease their grievances. The nobles were all this while in the greatest distraction; they could come to no resolution, and broke up in order to attend the funeral of a principal Senator; but while they were at a magnificent dinner, which was usually provided on such occasions, they were told that the city gates were shut by the King's orders, and the keys carried to court. They were now filled with the apprehensions of being all massacred, and the dread of losing their lives took away all thoughts of their liberty: they therefore immediately dispatched messengers both to the court and to the commons, to give notice of their compliance. But the King being resolved to pursue the affair to the utmost, would not suffer the gates to be opened till the whole ceremony

remony of the inauguration was concluded. Three days time were necessary to prepare matters for the fatal hour in which they were to make a formal surrender of their liberty. Scaffolds covered with tapestry were erected in the square before the castle: orders were given for the soldiers and burghers to appear in arms under their respective officers; and on the 27th of *October* in the morning, the King, Queen, and Royal Family being mounted on a theatre erected for that purpose, and placed in chairs of state under canopies of velvet, received publicly the homage of all the senators, nobility, clergy, and commons, which was performed on their knees, each taking an oath faithfully to promote his Majesty's interest in all things, and to serve him faithfully as became hereditary subjects. Here one *Gersdorf*, a principal Senator, was the only man who opened his mouth in behalf of their expiring liberties, saying, that he hoped and trusted that his Majesty designed nothing but the good of his people, and not to govern them after the *Turkish* manner; but wished his successors might follow the example his Majesty would undoubtedly set them, and make use of that unlimited power for the good, and not the prejudice of his subjects. Not one of the rest spoke a word, or seemed in the least to murmur at what was done. Those who had paid their homage now retired to the council-house, where the nobles were called over by name, and ordered to subscribe the oath they had taken, which they all did.

Thus

Thus in four days time the Kingdom of *Denmark* was changed from a ſtate but little different from that of ariſtocracy to that of an unlimited monarchy. The only comfort the commons had left, was to ſee their former oppreſſors almoſt as much humbled as themſelves; while all the citizens of *Copenhagen* have obtained by it is, the inſignificant privilege of wearing ſwords: ſo that now not a cobler nor a barber ſtirs abroad without one by his ſide. The clergy were indeed the only gainers; for they reaped many advantages from this change.

However, no enſigns of majeſty appear at the court of *Denmark*, except ſuch as are military, as horſe and foot guards, yeomen, and the ſound of drums and trumpets; but the badges of peace, as heralds, maces, the chancellor's purſe, and the ſword of ſtate are here unknown. The King ſits down to dinner with his Queen, children, relations, and general officers of the army, till the round table be filled. The court-marſhal inviting ſometimes one and ſometimes another to eat with his Majeſty till all have had their turns in that honour. A page in livery ſays grace before and after meat; for no chaplain appears here but in the pulpit. The attendants are one or two gentlemen, and the reſt livery ſervants. The kettle drums and trumpets which are ranged before the palace, proclaim aloud the very minute when the King ſits down to table; but the ceremony of the knee is not uſed to his Majeſty.

Every

Every winter, the ſnow is no ſooner firm enough to bear, than the *Danes* take great delight in going in ſledges. The King and court firſt giving the example, and making ſeveral tours about the capital in great pomp, with kettle drums and trumpets; their ſledges drawn by horſes adorned with rich trappings, and harneſs full of ſmall bells. After the court has thus opened the way, the burghers and others ride about the ſtreets all night, wrapped up in their furr gowns, with each his female in the ſledge with him.

What is moſt admirable with reſpect to *Denmark* are its laws, which are founded on equity, and are remarkable for their juſtice, perſpecuity, and brevity. Theſe are contained in one quarto volume wrote in the language of the country with ſuch plainneſs, that every man who can read is capable of underſtanding his own caſe, and pleading it too, if he pleaſes, without the aſſiſtance of either an attorney, or of counſel.

The common people in general, throughout all *Denmark* live very mean; the food of the burghers and citizens being rye-bread, ſalt-fiſh, ſtock-fiſh, excellent bacon, and very bad cheeſe; and the peaſants live on roots, white meats, and rye-bread; ſeldom taſting freſh fiſh, and ſcarce ever fleſh, unleſs on ſome extraordinary feſtivals, as on St. *Martin*'s eve, when each family in *Denmark* never fails to make merry, and to have a roaſted gooſe for ſupper. However, the tables of the rich are uſually well furniſhed; but the meat is generally lean.

Wea-

Weather mutton is very ſcarce and ſeldom good. Here are no pheaſants, woodcocks, rabbits, or fallow-deer; but you may ſometimes meet with a ſmall roe-buck in the market; but it is alſo generally lean: the hares are however good. Sea fiſh is ſcarce, and not good; but the river fiſh makes amends, here being moſt excellent carp, perch, and craw-fiſh. One cannot expect extraordinary fruit ſo far north, yet the gentry do not want ſuch as are very tolerable; and ſome of the nobility have melons, grapes, peaches, and all ſorts of ſallads very early, and in great perfection.

The people are fond of drinking; the liquors that are moſt in vogue with the great are *Rheniſh* wine, cherry-brandy, and all ſorts of *French* wine. The poor people who are able to indulge themſelves, do it in bad beer, and *Daniſh* brandy.

The gentlemen and officers dreſs very ſplendidly after the *French* mode; but the winter dreſs of the ladies, which is *Daniſh*, is very convenient and becoming. The burghers, the ſervants, and even the peaſants are neat and cleanly; they love change of their ordinary white linen, which is here made cheap: the women employing their leiſure hours in ſpinning.

They are ſometimes contracted three, four or more years before marriage. The gentry give portions with their daughters; but the burghers and peaſants only give cloaths, houſhold goods, and a great wedding dinner; which are all they part with till their death. Magnificent

nificent burials and monuments are much in requeſt with the nobility; and it is uſual to keep the body of a perſon of quality in a vault, or the chancel of ſome church, for ſeveral years together, till they have an opportunity to celebrate the funeral. The poorer ſort are buried in great thick cheſts; and in the towns there are about a dozen common mourners belonging to each pariſh, who are obliged to carry, and attend them to their graves.

It is difficult for ſtrangers to find conveniences of lodging or eating in *Denmark*; even in *Copenhagen* there are few or no lodgings to be lett in private houſes; and in the taverns people muſt be content to eat and drink in a public room, into which any other company may enter, and eat at another table: unleſs a perſon pretends to higher matters than ordinary.

THE NATURAL HISTORY OF *NORWAY*,

BY

ERICH PONTOPPIDON,

Bishop of *Bergen*, and Member of the Royal Academy of Sciences at *Copenhagen*.

CHAP. I.

Of the Climate and Mountains, with what they contain, particularly of the different Kinds of Marble, and an Account of the Asbestos, or Stone-flax: The Vegetables, and Animals of Norway.

THE climate of *Norway* is much more various than in most other *European* countries, it extending 300 *Norway* miles * from

* The common miles of *Norway* are computed to be about one fourth larger than a *German* mile, or nearly equal to five or six *English* miles.

Cape

Cape *Lindesnaes* in the south, to the north cape on the borders of *Russia*. In the summer nights the horizon, when unclouded, is so clear and luminous, that at midnight one may read, write, and do all kinds of work as in the day, and in the extremity of this country towards the islands of *Finmark*, the sun is continually in view in the midst of summer, and is observed to circulate day and night round the north pole, contracting its orbit, and then gradually enlarging it, till at length it leaves the horizon. On the other hand, in the depth of winter the sun is invisible for some weeks; all the light perceived at noon being a faint glimmering of about an hour and a half's continuance; which, as the sun never appears above the horizon, chiefly proceeds from the reflexion of the rays on the highest mountains, whose summits are seen more clearly than any other objects; but the wise and bountiful Creator has granted the inhabitants all possible assistance; for besides the moon-shine, which by reflexion from the mountains is exceeding bright in the valleys, the people receive considerable relief from the *Aurora Borealis*, or northern lights, which often afford them all the light necessary to their ordinary labours.

On the east side of *Norway*, the cold of winter generally sets in about the middle of *October*, and lasts till the middle of *April*. The waters are congealed to a thick ice, and the mountains and valleys covered with snow. However, this is of such importance to the

welfare of the country, that in a mild winter, the peasants who live among the mountains, are considerable sufferers; for without this severe frost and snow, they can neither convey the timber they have felled to the rivers, nor carry their corn, butter, furrs, and other commodities, in their sledges, to the market-towns, and after the sale of them carry back the necessaries they are there supplied with. For the largest rivers, with their roaring cataracts, are arrested in their course by the frost, and the very spittle is no sooner out of the mouth, than it is congealed, and rolls along the ground like hail. But the wise Creator has given the inhabitants of this cold climate a greater variety of preservatives against the weather, than most countries afford. Extensive forests supply them with plenty of timber for building, and for fuel: the wool of the sheep, and the furrs and skins of wild beasts, furnish them with warm lining for their cloaths, and covering for their beds: innumerable flights of wild fowl supply them with down and feathers: the mountains themselves serve them for fences against the north and east winds, and their caverns afford them shelter.

But while the winter rages thus in the east of *Norway*, the lakes and bays on the west side are kept open by the warm exhalations of the ocean, though lying in a direct line with these frozen eastern parts; and the frosts are seldom known to last above a fortnight or 3 weeks. Even in the centre of *Germany* which is 200 leagues nearer the line, the winters are generally more severe, and the frosts sharper than in the dio-

cese

eeſe of *Bergen*, for here the inhabitants often wonder to read in the public papers, of froſt and ſnow in *Poland* and *Germany*, when they feel no ſuch weather. The harbours of *Amſterdam*, *Hamburgh*, *Copenhagen*, and *Lubeck* are frozen ten times oftener than ours; for with us this ſeldom happens above two or three times in a whole century. Thus our winter at *Bergen* is ſo moderate that the ſeas are always open to the fiſhermen and mariners, and here the north ſea continues navigable during the whole winter as far as the 80th or 82d degree.

In the ſummer months the weather is not only warm but very hot. Theſe violent heats, which are, however, of ſhort duration, may be partly derived from the valleys incloſed within high mountains, where the reverberation of the rays of the ſun on all ſides heat the air; and as there is almoſt no night, neither the atmoſphere nor the mountains have time to cool. Indeed there cannot be a more deciſive proof of the ſummer's heat in *Norway*, than that ſeveral vegetables, (and particularly barley) grow up and ripen within ſix weeks or two months.

The air is pure and ſalubrious, eſpecially in the middle of the country about the mountains, where the inhabitants know little of ſickneſs. Phyſicians are only to be found in the chief towns, where they are eſtabliſhed with a public ſalary; but have generally very little employment. However, *Bergen* and all the eaſtern coaſt, is ſo ſubject to frequent rains, that the women, when they go abroad, in all weathers

wear a woollen or ſilken black veil over their heads, while the men ſecure themſelves by wearing rain-hats, made like umbrellas.

Norway contains a vaſt number of mountains; ſome of which extend themſelves in a long chain from north to ſouth, while others are ſcattered about and ſurrounded by a level country. The chain already mentioned is ſaid to equal at leaſt the *Alps* in height; and abounds with frightful caverns of an amazing extent. Hearing at the parſonage of *Oerſkoug*, that from the ſide of a neighbouring mountain called *Limer* iſſued a ſtream, over which was a cavern, I reſolved to take a view of it, and furniſhed myſelf with a tinder-box, candles, a lanthorn, and a long line to ſerve me as a clue to find the way out. The aſcent to it being extremely ſteep, we were obliged to climb with our hands as well as feet, and ſometimes were hard put to it to clear our way through the buſhes. After getting through the thicket which almoſt hides the mouth of the cavern, I beheld a vaulted paſſage of pure marble without the leaſt flaw, but with ſeveral angles and protuberances ſo bright as to reſemble a paſte moulded into ſmooth globular forms. The paſſage continues about 100 paces in a ſtrait direction; then winds off to the right with aſcents and deſcents; in ſome places growing narrower, and in others widening to double its former breadth, which was about four or five ells: thus two perſons might go abreaſt, only we were now and then obliged to ſtoop and even creep, when we felt a damp vapour like that

of

of a vault for the dead, which prevented my going so far as I intended. Another thing remarkable was the terrible roaring of the waters under us, the course of which was what most excited my wonder, as over it lies a pavement of smooth stone, inclining a little on each side, but flat in the middle, and not above three fingers thick, with some crevices, through which the water may be seen.

The inhabitants of a mountainous country may be said to labour under more inconveniences than others. Thus the arable ground is here but little in comparison with the wastes and desarts, which obliges the inhabitants to procure half of their subsistence from the sea: the villages are small, and the houses scattered among the valleys: but in some places the peasants houses stand so high, and on the edge of steep precipices, that ladders are fixed to climb up to them; so that when a clergy man is sent for, who is unpractised in the road, he risks his life in ascending them, especially in winter, when the ways are slippery. In such places the bodies of the dead must be let down with ropes, or bebrought on men's backs befoae they are laid in a coffin, and, at some distauce from *Bergen*, themail must likwise in winter be drawn over the steepest mountains.

One of the principal inconveniences, especially to travellers, arises from the roads; who cannot without terror pass several places, even in the King's road over the sides of steep and craggy mountains; on ways that are either shored

ſhored up, or ſuſpended by iron bolts fixed in the mountains, and though not above the breadth of a foot path, have no rails on the ſide. If two travellers were to meet there in the night, and not ſee each other ſoon enough to ſtop where the road will ſuffer them to paſs, it appears to me, as it does to others whom I have aſked, that they muſt ſtop ſhort, without being able to paſs by each other, or to find a turning for their horſes, or even to alight. The only reſource I can imagine in this difficulty is, that one muſt endeavour to cling to ſome cliff of this ſteep mountain, or if help be at hand, be drawn up by a rope, and then throw his horſe headlong down a tremendous precipice, in order to make room for the other traveller to paſs.

Another evil reſulting from the mountains, is the ſhelter they afford in their caverns and clefts to the wild beaſts, which render it difficult to extirpate them. It is not eaſy to deſcribe the havock made by the lynxes, foxes, bears, and eſpecially wolves, among the cattle, goats, hares, and other uſeful animals.

Another evil is that the cows, ſheep, and goats belonging to the peaſants often fall down the precipices and are deſtroyed. Sometimes they make a falſe ſtep into a projection called a mountain-hammer, where they can neither aſcend nor deſcend: on this occaſion a peaſant chearfully ventures his life for a ſheep or a goat; and deſcending from the top of a mountain by a rope of ſome hundred fathoms in length, he

ſlings

A dangerous Road in Norway.

ſlings his body on a croſs ſtick, till he can ſet his foot on the place where his goat is; when he faſtens it to the rope to be drawn up along with himſelf. But the moſt amazing circumſtance is, he runs this riſk with the help of only a ſingle perſon, who holds the end of the rope, or faſtens it to a ſtone, if there be one at hand. There are inſtances of the aſſiſtant himſelf having been dragged down, and ſacrificing his life from fidelity to his friend, on which both have periſhed. On theſe melancholy accidents, when man or beaſt falls ſome hundred fathoms down the precipices, it is obſerved that the air preſſes with ſuch force againſt their bodies thus falling, that they are not only deprived of life long before they reach the ground, but their bellies burſt, and their entrails guſh out; which is plainly the caſe when they fall into deep water.

On the other hand, a great chain of theſe mountains ſerve as a barrier between *Norway* and *Sweden*; and are excellent natural fortreſſes for the defence of thoſe ſtates. Beſides, theſe mountains exhibit the moſt delightful proſpects: nature has here been moſt profuſely favourable in adding greater beauties to the ſituation of cottages and farm-houſes, than can be enjoyed by royal palaces in other countries, though aſſiſted with all the varieties of groves, terraſſes, canals, and caſcades. A predeceſſor of mine is ſaid to have given the name of the *Northern Italy* to the diſtrict of *Waas*, which lies ſome leagues to the eaſtward of *Bergen*; and certainly their cannot be a more inchanting

proſpect,

prospect. All the buildings in it are the church, the parsonage, and a few farm-houses scattered on different eminences. The beauty of the place is much heightened by two uniform mountains gradually rising to a vast height, betwixt which runs a valley near half a league in breadth, and a river which sometimes precipitate itself down the rocks in foaming cataracts, and at others spreads itself into small lakes. On both sides it is bordered with the finest meadows intermingled with little thickets, and by the easy declivities of the verdant mountains covered with fruitful fields and farm-houses, standing above each other in a succession of natural terrasses. Between these a stately forest presents itself to the view, and beyond that, the summits of mountains covered with perpetual snow, and still beyond these ten or twelve streams issuing from the snow-mountain, and form an agreeable contrast in their meanders along the blooming sides of the hill, till they lose themselves in the rivers beneath.

From the many springs issuing from the mountains, and the vast masses of snow accumulated on their summits, whence in summer they gently dissolve, are formed many considerable rivers, the largest of which is the *Glaamen* or *Glommen*. But none of them are navigable far up the country, the passage being every where interrupted by rocks and cataracts. The bridges over them are no where, that I remember, walled; but merely formed of timber cases filled with stones, which serve for the piers

piers, on which the timbers are laid. The largeſt bridge of this kind is a thouſand paces in length, and has forty-three ſtone caſes. In many places, where the narrowneſs and rapidity of the current will not admit of ſinking ſtone caſes, thick maſts are laid on each ſide on the ſhore, with the thickeſt end faſtened to the rocks; one maſt being thus laid in the water, another is placed upon it, reaching a fathom beyond it, and then a third or fourth, in the like manner, to the middle of the ſtream, where it is joined by other connected maſts from the oppoſite ſide. Thus in paſſing over the bridge, eſpecially in the middle, it ſeems to ſwing, which to thoſe who are not uſed to theſe bridges, appears ſo dangerous, that they alight from their horſes, till they imagine themſelves ſafe.

Within the bowels of ſome of the mountains are the moſt beautiful kinds of marble, ſome white, others veined, and others variegated with a variety of colours: there is here alſo blue marble with white veins, green marble with greyiſh veins, and black marble ſpotted with white. The mountains alſo contain that ſurprizing ſubſtance called the magnet or loadſtone, in ſuch quantities that ſome tons of it have been exported. They likewiſe yield the amianthus or aſbeſtos, of which incombuſtible linen or paper have been made.

Having heard of ſome wood petrified by a certain ſpring I wrote for ſome ſamples, and a large parcel of it was ſent me. At firſt I thought it reſembled hazle that had lain a long

time

time in the water; but upon a narrower inſpection, and drawing out ſome of the filaments, I found it to be amianthus, much finer than the *Greenland* ſtone-flax, which the Rev. Mr. *Egede* ſays, is uſed there as wicks in the lamps, without being in the leaſt waſted, while ſupplied with oil or fat. This amianthus, from the ſoftneſs and fineneſs of its fibres, deſerves to be called ſtone-ſilk, rather than ſtone-flax: I alſo made a wick for a lamp of it, and it was not conſumed; but its light being much dimmer than that produced by cotton, I laid it aſide. I have alſo in my poſſeſſion a piece of paper of this aſbeſtos, which when thrown into a fierce fire is not in the leaſt waſted; but what was written on it totally diſappears.

The manner of preparing this ſtone-ſilk or ſtone-flax, is this: after its being ſoftened in water, it is beaten with a moderate force, till the fibres, or long threads ſeparate from each other; afterwards they are carefully and repeatedly waſhed till clear of all terrene particles; then the flax is dried in a ſieve: all that remains now is to ſpin theſe fine filaments, wherein great care is required; beſides which the fingers muſt be ſoftened with oil, that the thread may be the more ſupple and pliant.

It is remarkable that though this country thus abounds in ſtones, no flints have been yet found there, ſo that thoſe for fine arms are imported from *Denmark* or *Germany:* but though there are no flints, there are amathiſts, garnets, chalcedonies, agate, jaſper, and cryſtals.

This

This country formerly produced gold; but the expence of working the mines, and separating the gold from the ore being greater than the profit, they have been neglecting. There are, however, silver mines of great value, which give employment to several thousand persons. The copper mines ore likewise extremely rich, and employ vast numbers. Iron is also one of the most profitable products of *Norway*, several hundred thousand quintals being annually exported, chiefly in bars, and the rest cast into cannon, stoves, kettles, *&c.* Here are also some lead mines; but none of either tin, or quicksilver.

The country produces wheat, rye, barley, white, grey, and green peas; vetches, used as provender for horses; hops, flax, and hemp; many kinds of roots and greens for the kitchen, with a considerable number of hardy flowers. In *Norway*, as well as in *Denmark*, are several kinds of cherries, of which the peasants sell great quantities dried: there are also many sorts of wholsome and well tasted berries, as red and white currants, sun-berries, rasberries; red and white goosberries; barberries; bilberries, cranberries, strawberries, blackberries, and many other kinds. Several sorts of plums attain to a tolerable ripeness, which can very seldom be said of peaches, apricots, or grapes. However, apples and pears of several kinds are found all over the country; but the greatest part of these are summer fruits, which ripen early; for the winter fruit seldom comes to perfection,

unleſs the ſummer proves hotter, and the winter ſets in later than uſual.

But though with reſpect to fruit-trees *Norway* muſt be acknowledged inferior to moſt countries in *Europe*, yet this deficiency is liberally compenſated in the bleſſings of inexhauſtible foreſts; ſo that in moſt provinces immenſe ſums are received from foreigners for maſts, beams, planks, boards, *&c.* not to mention the home conſumption for houſes built entirely of beams of wood, ſhips, bridges, and an infinite number of foundaries, which require an immenſe quantity of charcoal, in the fuſion of metals; beſides the demands for fuel and other domeſtic uſes; to which muſt be added, that in many places the woods are felled only to clear the ground and be burnt, the aſhes ſerving for manure.

Among the animals, we ſhall begin with the horſes, which are better for riding than drawing; their walk is eaſy, they are full of ſpirit, and are very ſure-footed: when they mount or deſcend a ſteep cliff, on ſtones like ſteps, they firſt tread gently with one foot, to try if the ſtone they touch be faſt; and in this they muſt be left to themſelves, or the beſt rider will run the riſk of his neck; but when they are to go down a very ſteep and ſlippery place, they, in a ſurprizing manner, draw their hind-legs together under them, and ſlide down. They ſhew a great deal of courage in fighting with the wolves and bears, which they are often obliged to do, for when the horſe perceives any of them near him, and has a mare or gelding with

with him, he places them behind him; attacks his antagonist by striking at him with his fore-legs, and usually comes off conqueror.

The *Norway* cows are generally of a yellow colour, as are also the horses; they are small; but their flesh is fine grained, juicy, and well tasted.

The sheep here are small, and resemble those of *Denmark*. The goats, in many places, run wild winter and summer in the fields, till they are ten or twelve years old; and when the peasant who owns them, is to catch them, he must either do it by some snare, or shoot them. They are so bold, that if a wolf approaches them, they stay to receive him, and if they have dogs with them, they will resist a whole herd. They frequently attack the snakes, and when they are bit by them, not only kill their antagonists but eat them, after which they are never known to die of the bite, though they are ill for several days. The owner warms their own milk, and washes the sore with it.

Near *Rostad*, is a flat and naked field, on which no vegetable will grow. The soil is almost white, with grey stripes, and has somewhat of so peculiarly poisonous a nature, that though all other animals may safely pass over it, a goat or a kid no sooner sets its foot upon it, than it drops down, stretches out its legs, its tongue hangs out of its mouth, and it expires if it has not instant help.

There are few hogs in *Norway*; and not many of the common deer; but the hares, which in the cold season, change from brown or grey

to a ſnow white, are very cheap in winter. Here are alſo in ſome parts of this country elks; but they are not numerous. The rain-deer, however, run wild in herds, and are ſhot for food by the inhabitants. Theſe animals conſtitute the greateſt, and almoſt the only riches of the *Finlaplanders*, who live upon their milk, the cheeſe they make of it, and on their fleſh: they make their cloathing, tents, and bed covering of their ſkins; and of the tendons they make their ſewing thread. In *Finmark*, there are vaſt numbers of them both wild and tame, and many a man has there from ſix or eight hundred to a thouſand of theſe uſeful creatures which never come under cover; they follow him wherever he is pleaſed to ramble, and when they are put to a ſledge, tranſport his goods, from one place to another. They provide for themſelves, and live chiefly on moſs, and on the buds and leaves of trees. They ſupport themſelves on very little nouriſhment, and are neat, clean, and entertaining creatures.

It is remarkable, that when the rain-deer ſheds his horns, and others riſe in their ſtead, they appear at firſt covered with a ſkin; and till they are of a finger's length, are ſo ſoft, that they may be cut with a knife like a ſauſage, and are delicate eating even raw; therefore the huntſmen, when far out in the country, and pinched for want of food, eat them, and find that they ſatisfy both their hunger and thirſt. When the horn grows bigger, there breeds within the ſkin a worm which eats away the root. The rain-deer has over his eye-lids

a kind of ſkin, through which he peeps, when otherwiſe, in the hard ſnows, he would be obliged to ſhut his eyes entirely: a ſingular inſtance of the omniſcence and benevolence of the great Creator, in providing for the wants of each creature, according to its deſtined manner of living.

The hurtful beaſts are the bears and wolves already mentioned; the lynx; vaſt numbers of white, red, and black foxes; and the glutton, a creature which few other countries know any otherwiſe than by report. This animal receives its name from its voracious appetite; it in ſize and ſhape has ſome reſemblance to a long bodied dog, with thick legs, ſharp claws and teeth: his colour is black, variegated with brown and yellowiſh ſtreaks. He has the boldneſs to attack every beaſt he can poſſibly conquer, and if he finds a carcaſe ſix times as big as himſelf, he does not leave off eating as long as there is a mouthful left: when thus gorged he preſſes and ſqueezes himſelf between two trees that ſtand near together; and thus empties himſelf of what he has not time to digeſt. As his ſkin ſhines like damaſk, and is covered with ſoft hair, it is very precious; it is therefore well worth the huntſman's while to kill him without wounding the ſkin, which is done by ſhooting him with a bow, and blunt arrows.

The marten is alſo hunted on account of its ſkin, as is likewiſe the ſquirrel and the ermine, both of which are therefore ſhot with blunt arrows. I am in doubt whether the ermine be

different in kind from the *Danish* weasel: its valuable skin is of a beautiful white, and it has a black spot on the tail. The ermines run after mice like cats, and drag away what they catch, particularly eggs, which are their nicest delicacy. Here also are castors, badgers, otters, and hedgehogs.

Among the mice, some are thought poisonous, and others are remarkable for their being white, and their having red eyes. But the most pernicious vermin is a little animal, called the læmus or lemming, which is between the size of a rat and a mouse; the tail is short, and turned up at the end, and the legs are also so short that they scarce keep the belly from the ground. They have very soft hair, and are of different colours; particularly black, with yellow and brown in streaks, and some in spots. About once or twice in every twenty years, they assemble from their secret abodes in prodigious numbers, like the messengers of heaven to punish the neighbouring inhabitants. They proceed from *Kolens* rock, which divides the *Nordland* manor from *Sweden*, and is held to be their peculiar and native place, marching in vast multitudes through *Nordland* and *Finmark* to the western ocean; and other bodies of them through *Swedish Lapmarck* to the *Sinus Bothnicus*, devouring all the grass and vegetables in their way.* They do this in a direct

* It appears that in their manner of marching these creatures resemble the locusts, of which Mr. *Hanway* has given a curious description. See VOL. XIV. p. 151, 152.

line,

line, and going ſtrait forwards proceed into the rivers or the ſea; thus if they meet with a boat on any freſh water river, they run in at one end or ſide, and out again at the other, in order to keep their courſe. They carry their young with them on their backs, or in their mouths; and if they meet with peaſants who come to oppoſe them, they will ſtand undaunted, and bark at them like dogs. This evil is, however, of no long duration; for on entering the ſea, they ſwim as long as they are able, and then are drowned. If any are ſtopped in their courſe, ſo that they cannot reach the ſea, they are killed by the froſts of winter, and if any eſcape, moſt of them die as ſoon as they eat the new graſs.

As to the reptiles there are neither land ſnakes nor toads beyond the temperate zone, and even thoſe ſnakes on the extremities of the temperate climate, are leſs poiſonous than in more ſouthern countries: lizards are here of various colours, as brown, green, and ſtriped. Thoſe that are green are found in the fields, and the others in the cracks and holes of rocks.

Among the fowls are moſt of thoſe ſeen in the reſt of *Europe*, and ſome that ſeem peculiar to this country. Among the former are cocks and hens, turkeys, peacocks, tame and wild geeſe, ducks, and pigeons; nightingales, larks, quails, partridges, ſtarlings, wrens, magpies, water-wagtails, eagles, faulcons, hawks, ravens, cormorants, ſtorks, herons, gulls, owls, bats, and many others: among thoſe that are in a manner peculiar

culiar to this country is the francolin, an excellent land bird, which ſerves the *Norwegians* inſtead of the pheaſant, its fleſh being white, firm, and of a delicious taſte. The black cap is almoſt as ſmall as the wren; the body is black and yellow, it is white under the belly, and the top of the head is black. Theſe birds keep near the houſes, and are ſuch lovers of meat, that the farmers can hardly keep them from it, and therefore catch them like mice in a trap.

In ſhort, there are here ſuch incredible numbers of ſea and land fowl near the rocks on the ſea-ſhore, that they ſometimes obſcure the ſight of the heavens for many miles out at ſea, ſo that one would imagine all the fowl in the univerſe were gathered together in one flock.

Norway is alſo as plentifully ſupplied with fiſh as any country in the world. *

* The learned and pious author mentions two or three aquatic animals, which are of ſo extraordinary a nature as to exceed all the bounds of probability. But as he never ſaw them, and only depends on the credit of thoſe who furniſhed him with theſe accounts; we who can have no proofs of their veracity; muſt at leaſt ſuſpend our belief; and it ſeems moſt prudent to omit deſcribing them till we can have more certain proofs of their exiſtence.

CHAP.

CHAP. II.

Of the Persons, Dress, Employments, and Customs of the Inhabitants; particularly of the extraordinary Manner in which they catch fowl on the highest rocks.

THE *Norwegians* are generally tall, well made and lively; yet those on the coast are neither so tall nor so robust as those who inhabit the mountains; but are remarkable for being fatter and having rounder faces. The people in general, are brisk, and ingenious; which appears from the peasants not employing any hatters, shoemakers, taylors, tanners, weavers, carpenters, smiths, or joiners; for all these trades are exercised in every farm-house, and they think a boy can never be an useful member of society, nor a good man, without making himself master of all these arts. They are remarkable for their civility and willingness to serve every one; and a traveller is seldom suffered to pay for his lodging; for they think it their duty to treat the stranger as well as it is in their power, and look upon it as an honour done them, if he accepts of their civilities. Yet the peasant never gives the upper end of the table to the greatest guest that ever comes under his roof; for he thinks that place belongs only to himself. They keep open house for three weeks at *Christmas*, during which their

their tables are ſpread and loaded with the beſt proviſions they can afford. At *Chriſtmas-eve* their hoſpitality extends to the very birds; and, for their uſe, they hang on a pole at the barn door an unthreſhed ſheaf of corn, which draws thither the ſparrows and other ſmall birds.

The inhabitants of the trading towns live, with reſpect to proviſions, much in the ſame manner as the *Danes*; but the peaſants keep cloſe to the manners of their fore-fathers. Thin oat-cakes are their common bread; but upon particular occaſions, as weddings or entertainments, they have rye-bread. If grain be ſcarce, which generally happens after a ſevere winter, the peaſants have recourſe to a diſagreeable method of preſerving life, by boiling and drying the bark of the fir-tree, mixing it with a little oatmeal, and making it into a kind of bread. Even in times of plenty they eat a little of it, that they may think it leſs diſagreeable in a time of ſcarcity.

The lakes and rivers furniſh the people with plenty of freſh water fiſh, and the mountains with game. For their winter ſtock they kill cows, ſheep, and goats; part of which they pickle and ſmoak, and ſome of it theycut in thin ſlices, ſprinkle it with ſalt, then dry it in the wind, and eat it like hung beef. They are fond of brandy, and of ſmoaking and chewing tobacco.

The *Norwegians* who live in towns have nothing remarkable in their dreſs; but the peaſants do not trouble themſelves about faſhions. Thoſe called ſtrile-farmers have their breeches and ſtockings of one piece. They have a wide looſe jacket, made of a coarſe woollen cloth;

Vol. XX.

P. 95.

The Dress of the Boors in the Province of Bergen in Norway.

as are alſo their waiſtcoats, and thoſe who would appear fine have the ſeams covered with cloth of a different colour. The peaſants of one pariſh are remarkable for wearing black cloaths edged with red; another for wearing all black; the dreſs of another pariſh is white edged with black; others wear black and yellow; and thus the inhabitants of almoſt every pariſh vary in the colour of their cloaths. They wear a flapped hat, or a little brown, grey, or black cap made quite round, and the ſeams ornamented with black ribbons. They have ſhoes of a peculiar conſtruction without heels, conſiſting of two pieces; the upper leather fits cloſe to the foot, to which the ſole is joined by a great many plaits and folds. When they travel, and in the winter, they wear a ſort of half boots that reach up to the calf of the leg, and are laced on one ſide; and when they go on the rocks in the ſnow they put on ſnow ſhoes. But as theſe are troubleſome when they have a great way to travel, they put on ſcates about as broad as the foot, but 6 or 8 feet long, and pointed before; they are covered underneath with ſeal-ſkin, ſo that the ſmooth grain of the hair turns backwards to the heel. With theſe ſnow-ſcates they ſlide about on the ſnow as well as they can upon the ice, and faſter than any horſe.

The peaſant never wears a neckcloth, or any thing of that kind, except when he is dreſſed; for his neck and breaſt are always open, and he lets the ſnow beat into his boſom. On the contrary, he covers his veins, binding a woollen fillet round his wriſts. About their body they wear a broad leather belt, ornamented with

convex brafs plates; to this hangs a brafs chain, which holds their large knife, gimblet, and other tackle.

The women at church, and in genteel affemblies drefs themfelves in jackets laced clofe, and have leather girdles, with filver ornaments about them. They alfo wear a filver chain three or four times round the neck, with a gilt medal hanging at the end of it. Their handkerchiefs and caps are almoft covered with fmall filver, brafs, and tin-plates, buttons, and large rings, fuch as they wear on their fingers, to which they hang again a parcel of fmall ones, which make a gingling noife when they move. A maiden-bride has her hair platted, and hung as full as poffible with fuch kind of trinkets, as alfo her cloaths: for this purpofe they get all the ornaments they can.

Their houfes are, in general, built of fir and pine-trees, the whole trunks of which are only chopped even to make them lie clofe, and then laid one upon another, and faftened with mortices at the corners. Thefe trunks are left round as they grew, both on the infide and outfide of the houfe, and are frequently boarded over and painted, efpecially in the trading towns, which gives them a genteel appearance.

In the country villages the houfes are built at a diftance from each other, with their fields and grounds about them. The ftore-houfe for the provifions is generally at a diftance from the dwelling-houfe, for fear of fire, and placed high upon poles, to keep the provifions dry, and preferve them from mice, and all kinds of vermin.

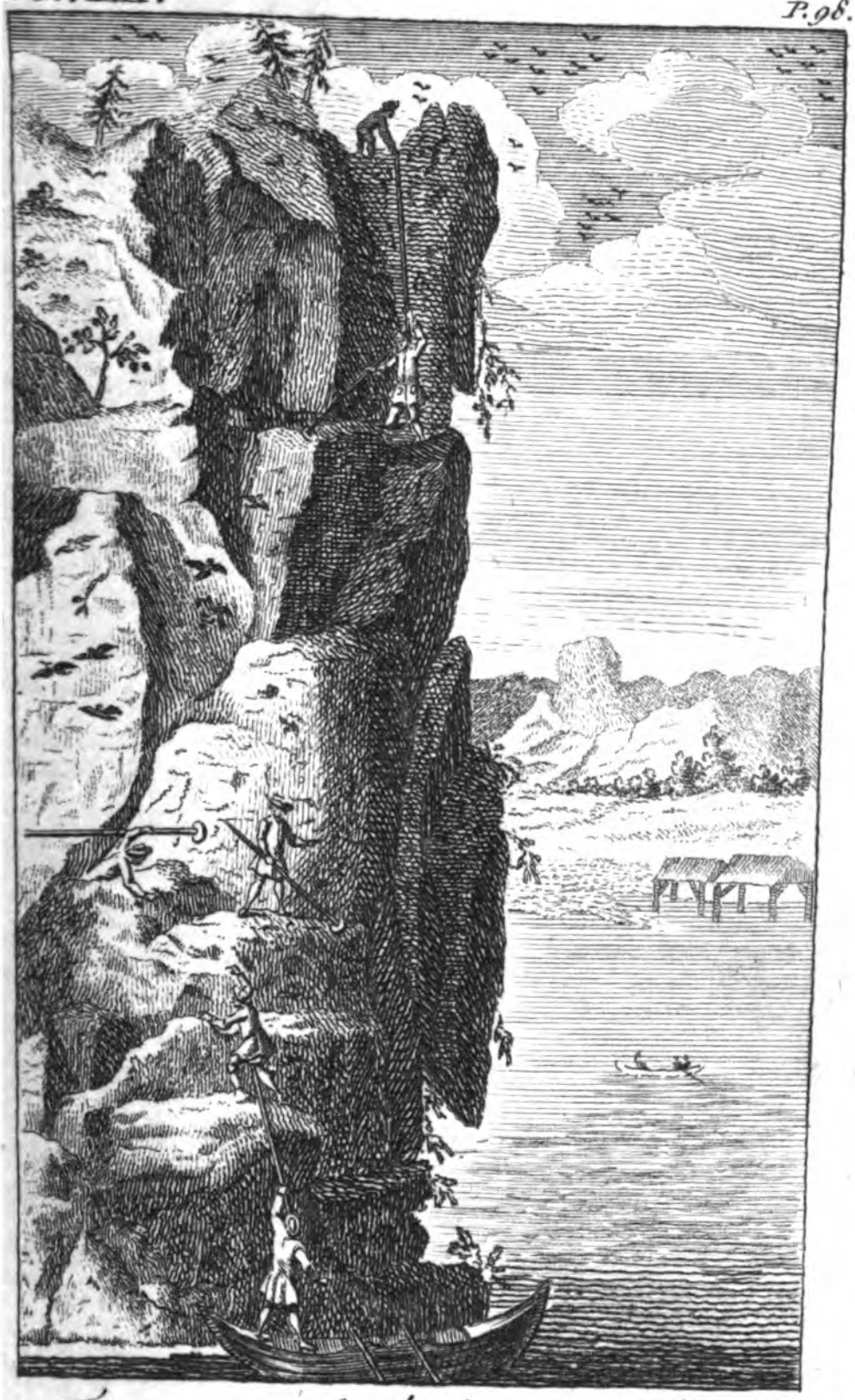
vermin. The kitchen ſtands alſo ſeparate, as do the barns, hay-loft, cow-houſes, ſtables, and the like. A farm has likewiſe commonly a mill belonging to it, ſituated by ſome rivulet, beſides a ſmith's forge; for every farmer, as hath been obſerved, is his own ſmith. Up the country, where timber for building is but of little value, there is many a farm-houſe as large as a nobleman's ſeat; it is frequently two ſtories high, and has a railed balcony in the front, and the additional buildings reſemble a little village. The common farm-houſes have, however, only the ground floor, and no other window but a ſquare hole in the wall, which is left open in ſummer; but in winter or in wet weather is filled up with a wooden frame covered with the inward membrane of ſome animal, this is very ſtrong, and as tranſparent as a bladder. This hole which is as high as it can be placed, alſo anſwers the purpoſe of a chimney by ſerving to let out the ſmoke.

Under the light-hole generally ſtands a long thick table, with benches of the ſame wood; and at the upper end is the high ſeat which belongs to the maſter only. In towns theſe houſes are covered with tiles; but in the country the people lay over the boards the ſappy bark of birch-trees, which will not decay in many years. They cover this again three or four inches thick with turf, on which good graſs always grows.

The peaſants are buſied in cutting wood, felling and floating of timber, burning charcoal and extracting of tar. Great numbers are employed in the mines, and at the furnaces

and ſtamping mills; and alſo in navigation and fiſhing, beſides hunting, and ſhooting; for every body is at liberty to purſue the game, eſpecially in the mountains, and on the heaths and commons, where every peaſant may make uſe of what arms he pleaſes.

It has been already obſerved, that the catching of birds afford ſome of the inhabitants a very good maintenance: but it is impoſſible to give a juſt idea of the fatigue and danger with which the people ſearch for the birds in the high and ſteep rocks, many of which are above 200 fathoms perpendicular. Theſe people who are called birdmen have two methods of catching them: they either climb up theſe perpendicular rocks, or are let down from the top by a ſtrong and thick rope: when they climb up they have a large pole of eleven or twelve ells in length, with an iron hook at the end. They who are underneath in a boat, or ſtand on a cliff, faſten this hook to the waiſtband of the man's breeches who climbs, by which means they help him up to the higheſt projection he can reach, and fix his feet upon. They then help up another to the ſame place; and when they are both up, give each his bird pole, and a long rope which they tie at each end round their waiſts. The one then climbs up as high as he can, and where it is difficult, the other by putting his pole under his breech, puſhes him up, till he gets to a good ſtanding place: the uppermoſt of the two then helps the other up to him with the rope; and thus they proceed till they get to the part where the birds



The manner of Fowling in Norway.

birds build, and there they ſearch for them. As they have many dangerous places yet to climb, one always ſeeks a convenient place to ſtand ſure, and be able to hold himſelf faſt, while the other is climbing about. If the latter ſhould happen to ſlip, he is held up by the other who ſtands firm; 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: and then they clamber about after birds where they pleaſe. But accidents ſemetimes 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 killed; and thus ſome periſh every year.

When they thus reach the places that are ſeldom viſited, they find the birds ſo tame that they may take them with their hands; for they are loth to leave their young; but where they are wild, they either throw a net over them in the rock, or entangle thoſe that are flying with a net fixed to the end of their poles. Thus they catch vaſt numbers of fowls, and the boat keeping underneath them, they throw the dead birds into it, and ſoon fill the veſſel. When the weather is tolerably good, and there is a great deal of game, the birdmen will continue eight days together on the rocks; for there are here and there holes in which they can ſecurely take their repoſe: they draw up proviſions with lines, and boats are kept coming and going to take away the game.

On the other hand, many rocks being ſo ſteep and dangerous that they cannot poſſibly

climb up them, they are then let down from above; when they have a ſtrong rope 80 or 100 fathoms long, and about three inches in thickneſs. One end of it the birdman faſtens about his waiſt, and then drawing it between his legs ſo that he can ſit on it, he is let down with his bird-pole in his hand, by ſix men at the top, who let the rope ſink by degrees, but lay a piece of timber on the edge of the rock, for it to ſlide on, to prevent its being torn to pieces by the ſharp edge of the ſtones. Another line is faſtened round the man's waiſt, which he pulls to give ſigns when he would have them pull him up, let him lower, or keep him where he is. He is in great danger of the ſtones looſening by the rope, and falling upon him; he therefore wears a thick furred cap well lined, which ſecures him from the blows he may receive from ſmall ſtones; but if large ones fall he is in the greateſt hazard of loſing his life. Thus do theſe poor men often expoſe themſelves to the moſt imminent danger, merely to get a ſubſiſtence for their families. There are ſome indeed who ſay there is no great hazard in it, after they are accuſtomed to it; but at firſt the rope turns round with them, till their heads are giddy, and they can do nothing to ſave themſelves. Thoſe who have learnt the art make a play of it; they put their feet againſt the rock, throw themſelves ſeveral fathoms out, and puſh themſelves into what place they pleaſe. They even keep themſelves out on the line in the air, and catch with their poles numbers of birds flying out and into their holes.

holes. The greateſt art is required in throwing themſelves out, ſo as to ſwing under the projection of a rock where the birds gather together; here they fix their feet, looſen themſelves from the rope, which they faſten to a ſtone, to prevent its ſwinging out of their reach, and then the man climbs about and catches the birds either with his hands, or his pole, and when he has killed as many as he thinks proper, he ties them together, faſtens them to the ſmall line, and by a pull gives a ſign for thoſe above to draw them up. In this manner he works all day, and when he wants to go up, he gives a ſign to be drawn up, or elſe works himſelf up with his belt full of birds.

When there are not people enough to hold the rope, the birdman fixes a poſt in the ground, faſtens his rope to it, and ſlides down without any help, to work as before. There are in ſome places ſteep cliffs of a prodigious ſize, lying under the land, and yet more than 100 fathoms above the water, which are likewiſe very difficult to be got at. Down theſe cliffs they help one another in the above manner, and taking a ſtrong rope with them, faſten it here and there in the cliff, where they can, and leave it all the ſummer: upon this they will run up and down, and take the birds at pleaſure. It is impoſſible to deſcribe how frightful and dangerous this bird-catching appears to the beholders, from the vaſt height, and exceſſive ſteepneſs of the rocks, many of which hang over the ſea: it ſeems impoſſible for men to enter the holes under theſe projections, or

to walk 200 yards high on crags of rock where they can but just fix their toes.

The birds being brought home, they eat part of them fresh, and part is hung up to dry for the winter season. These birds afford the inhabitants a very good maintenance, partly from their feathers and down, which are gathered and sent to foreign parts, and partly from their flesh and eggs. Some sorts of the latter are as good as hens eggs, and though of various colours and sizes are sent to market.

TRA-

TRAVELS

THROUGH THE

Most NORTHERN Parts of EUROPE,

Particularly

NORWAY, DANISH, SWEDISH, *and* MUSCOVITE LAPLAND, BORANDIA, SAMOJEDIA, ZEMBLA, *and* ICELAND.

Extracted from

The JOURNAL of a Gentleman employed by the NORTH SEA COMPANY of COPENHAGEN to make DISCOVERIES.

CHAP. I.

The Occasion of these Travels. The Author sails from Copenhagen, *and arrives at* Christiana *in* Norway, *where he hunts the Elk. A Description of that Animal.*

FREDERIC III. King of *Denmark* being desirous of increasing the trade of his kingdom, established two companies of merchants at *Copenhagen*, his capital; the one an *Iceland* company, and the other a company of

of traders to the north. The latter having observed that the trade to *Norway* was very beneficial, presented a petition to his *Danish* Majesty, in *February*, 1653, representing that great profit would arise to his subjects by enabling them to enlarge their trade, by making farther discoveries to the north, whence several valuable merchandizes might be imported, his Majesty readily granted their request, and allowed them to extend their commerce as far northward as they thought proper. Upon which they fitted out several ships for that purpose. The author, a *French* gentleman, happened to be at *Copenhagen* when one of the northern fleets was outward-bound, and being informed that the King had commanded those concerned in this enterprize to make all possible discoveries of the countries to which they came, and to bring back the most extraordinary curiosities they could find, he desired one of his friends, who belonged to the company, to recommend him as a proper person to go surgeon of one the ships, upon which he was entertained, and entered into their service. Having given this introduction we shall proceed in the following extract as near as possible in in the gentleman's own words.

All our merchandize and provisions being on board, we embarked in the beginning of *April* 1653, weighed anchor, and set sail from *Copenhagen*, with two ships in our company. We soon arrived at *Kat-gat*, a streight which divides the *German* from the *Baltic* sea. This is a dan-

a dangerous passage full of rocks, extending about 40 leagues from *Elsinore* to *Schagerhort*.

When we arrived a-breast of *Mailstrand*, a small sea-port town 30 leagues from *Copenhagen*, the wind veered to the north-ward, drove us back ten leagues, and forced us into a creek called *Schalot*, where we cast anchor, and rode safe under the castle, which looked rather like a heap of ruins than a place inhabited, and is only famous for its promontory, which is well known to all the mariners, who use the *Baltic*. Here we staid three days, when the wind shifting again to the eastward, we proceeded on our voyage; but had not been at sea above four hours, before the wind blew so stiff a gale from the north-east, that we were forced to leave the coast of *Gottenburgh*, and steer directly over to that of *Jutland*, where we drove at a great rate, and were in such danger from the shoals with which this road abounds, that had not we had a skilful pilot and able sailors, we should certainly have run aground; but making a quick tack, we gained the advantage of the wind, and after a few days sailing had sight of *Christiansand* in *Norway*, a promontory that takes its name from a small village at its foot, where there is a commodious port. Our stay here was very short: for the next day, we proceeded to *Christiana* or *Obslo*, the capital of one of the five governments of that kingdom.

As soon as we were got into port, we went ashore to deliver our letters to the company's agents, who gave us a very cordial reception. One of them hearing I was a stranger, and had been

been recommended by one of their ſociety, behaved to me with great civility; ſhewed me every thing worth ſeeing, and commanded one of his ſervants, who ſpoke *French*, to attend me in a ſhort excurſion, three or four miles up into the country. Early the next morning we took horſe, and rode to a large village named *Wiſby* * nine miles from *Chriſtiana*. The houſes are here built of wood and covered with turf, they are very low, without either iron work or windows, except a lattice on the top to admit the light.

The peaſants of *Norway* are remarkable for their ſimplicity and hoſpitality. The women, who are very handſome, though red haired, are fond of ſtrangers, look after the cattle, of which there is here great plenty: they are alſo excellent houſe-wives, and in general make their own family cloth. The country affords excellent game, as ſtags, elks, roebucks, boars, goats, lynxes, otters, rabbits, hares, and wild cats of various colours, with plenty of wild fowl.

When we were returning towards *Chriſtiana*, we met one of the neighbouring gentlemen followed by two ſervants and a pack of dogs going to hunt the elk; who, knowing the man that was with me, invited us both to partake of his diverſion, and as I had time enough to ſpare, I readily accepted his propoſal. After we had rode about a mile we met his huntſman with more of his ſervants, and ten or twelve of

* The Capital of *Gothland*, where the famous marine laws were made.

the

the peasants, who led us three miles farther to a wood full of bushes, at the entrance of which we dismounted, and gave our horses to one of his domestics. Preparations had been made for the chase the day before by the gentleman's vassals. We were scarce 40 yards within the wood, before we perceived an elk, who instantly dropped, being seized, as they told me, with the falling sickness, whence they derive the name of elk, which signifies a miserable creature, and it seems that they often fall in this manner at the beginning of the chace. Had not this accident happened, I believe it would have been hard for us to have brought him down, as I perceived soon after, when we had roused another, which we chaced above two hours, and should never have been able to have taken him, had he not also dropped down dead. He killed three of the best dogs with his fore feet, and the gentleman being extremely sorry for their loss, would hunt no more; but sent to a farm of his a mile off for a cart to carry the game we had caught to his castle, and insisted on our going home with him, where he treated us in a very splendid manner. This castle was an odd sort of a building, and like the rest in that country, was void of elegance or taste.

The elk is as big as a large horse, and his body like a stag's, but larger and longer; his legs are also long, his feet broad and cloven, his antlers large, hairy, and broad like a fallow deer's, but he is not so well furnished with horns as a stag.

At

At my departure the lord of the caſtle made me a preſent of the two left ſhanks of the elks we had killed, or rather ſeen die of themſelves, letting me know that this was no ſmall favour, they being an excellent cure for the falling ſickneſs. To which I replied by my interpreter, that I wondered ſince the foot of an elk had ſuch virtue in it, why the animal, that always carried it about with him, did not cure himſelf. The gentleman reflecting on what I ſaid, laughed out aloud, and told me I was in the right, for he had given it to ſeveral perſons afflicted with the ſame diſeaſe without its producing a cure. Upon which he had long ſuſpected that the pretended virtue of the elks foot was a vulgar miſtake, of which he no more doubted than that the eating of the fleſh of the beaſt infected people with their diſtempers. He then gave me many inſtances of the ill effects produced on human bodies by eating the fleſh of elks.

The gentleman obliged us to ſpend the night with him, and having entertained us in a plentiful and agreeable manner, we took our leaves of him early the next morning and returned to *Chriſtiana*, where we ſtaid four or five days, and then weighing anchor, ſailed for *Berghen*; but being becalmed in our paſſage for five days, we employed ourſelves in catching fiſh, of which we caught ſuch a quantity, that we kept *Lent* a long while after, being unwilling to throw the fiſh over board.

CHAP.

CHAP. II.

A Description of Berghen. *The Author arrives at* Drontheim, *and sets out for the Copper and Silver Mines, into one of which he descends. A Description of the Mine, and the Manner in which the Miners spend their Time. He returns to* Drontheim, *continues his Voyage, and lands at a Village, where the Ship's Crew purchase a Wind. The selling of Winds accounted for. The Ship puts into* Varanger *to refit. The Religion, Customs, and Manners of the* Danish Laplanders.

BERGHEN, the capital of the province of the same name in *Norway*, has one of the finest ports in *Europe*, and is divided into the upper and lower town, the one built on the rocks, and the other on the sea-shore. It is a large trading town full of merchants, and was formerly an archbishopric; but it has not been acknowledged such since the Reformation. The Archbishop's palace was given to the *Hans* towns, for their ancient merchants to live in, and the greatest part of the houses were turned into ware-houses, which still bear the name of cloisters, and the merchants are called Monks, though they do not wear a cowl, nor observe the rules of any order. The King has, however, obliged them so far to keep up the form of a religious house, that none of the merchants who live in it are allowed to marry without remov-

ing. The principal branch of trade carried on at *Berghen*, are herrings, cod, and ſtock-fiſh, for which there is a great vent in *Muſcovy*, *Sweden*, *Poland*, *Denmark*, *Germany*, *Holland*, and other parts of *Europe*.

As ſoon as we had diſcharged the cargo we had to deliver at *Berghen*, we ſet ſail with a ſouth-weſt wind for *Drontheim*, half our lading being conſigned to the ſurveyor of the copper and ſilver mines, for the uſe of the miners and other workmen; it conſiſting principally of bread and beer; but being ſeveral days becalmed, we again caught a great quantity of klip-fiſh, a great part of which we ſalted and barrelled. They are a kind of cod, bigger then thoſe of *Newfoundland*, and obtain the name of klip-fiſh from their never leaving the rocks; they always lying upon or under them; *klippe*, in the *German* tongue, ſignifying a rock.

On our arrival at *Drontheim*, we applied to the ſurveyor to unlade our ſhips as faſt as poſſible, that we might purſue our voyage; but he told us, he could not begin till the officer, who were to receive their proviſions, came back from the mines, and offered to ſend a meſſenger for him, whom I got leave to accompany. Early the next morning the ſurveyor's man and I mounted on horſe-back, and began this journey; but the roads were ſo very rugged that we could not reach farther than *Steckley*, which is only eighteen miles from *Drontheim*; for the night came on, and we had a long wood to paſs through, in which were wolves, lynxes and

boars

boars in great numbers, that render travelling in the dark very dangerous.

The next night we arrived at our journey's end, and lodged at the forges, where according to the cuſtom of the country we were entertained by the people, who have the care of the mines, with tobacco, beer and brandy. And our hoſt believing that we would not think ourſelves welcome unleſs we were made drunk, plied us ſo faſt with bumpers, that there was no avoiding a debauch. I here became acquainting with one of the officers of the mines who ſpoke *French*, and promiſed, on my expreſſing a deſire to go down into one of them, to gratify my curioſity. The next morning the meſſenger who came hither returned back to *Drontheim* with an officer proper to clear the ſhip.

Having breakfaſted with the perſon who ſpoke *French*, and the maſter miner, they went with me 50 or 60 paces from the forges, which are upon an high mountain, to the mouth of one of the mines, over which was erected a machine reſembling a crane turned by two men in two great wheels to draw up the oar, and the maſter and I being fixed in a wooden bucket were let down above 50 fathoms. Never did I ſee a more horrid proſpect, or what appeared a truer picture of the infernal regions. Nothing was to be ſeen all around but rugged caverns, flames of fire, and creatures that appeared to have a nearer reſemblance to fiends than to men. They were dreſſed in black leathern jackets, with leathern mufflers about their heads juſt under their eyes, reaching down to the breaſt,

and had leathern aprons. These miners have all different employments. Some use the chissel and some the hatchet to knock out the copper stones: others search for new veins of metal, and others try to discover caverns filled with water, which sometimes unexpectedly burst forth, and drown those in the mines. The master miner, who descended with me, perceiving I was afraid, and that I was taken with a cold fit, rung a bell, which being a signal for the people above to draw us up, we soon ascended with the same ease with which we had gone down. When I was glad to breathe the fresh air, freed from the unwholesome damps of these subterraneous dwellings.

We went to the house of the officer who spoke *French*, and were entertained in a very handsome manner: after dinner that gentleman ordered horses to be got ready to take me to the silver mines, and the master miner accompanied us. Having introduced me to the surveyor, we were each of us presented with a large glass of brandy, and then treated with beer and tobacco. When we had smoaked and drank as much as the surveyor thought fit, he conducted us to the forges, which were about a mile from his house, at which, as in those of the copper mines, there are always several workmen employed, some of whom break the stones, others wash them, while others melt and refine the oar. These mines turn to a very good account, and are not the least part of his *Danish* majesty's revenue. We soon after reached the mouth of a mine, down which we went in the same manner as at the copper

copper mine. Theſe miners are cloathed like the others, and their work and habitations are much the ſame. The miners both in the one, and the other never work in winter. In ſpring and autumn, they only labour three hours in the forenoon, and three after dinner. But in ſummer they work four hours in the morning and five in the afternoon. The reſt of their time they ſpend in mirth and feaſting. They delight much in dancing, and have their hautboys, violins and other inſtruments for that purpoſe. This merry life they are able to ſupport, being paid a crown a day all the year round. On my return to the copper forges I found the people at their ſports, and was not a little pleaſed to ſee the variety of their humours and paſtimes.

Having ſeen every thing worth notice at the mines, the ſurveyor took us home with him and treated us with the uſual collation of brandy, beer and tobacco; we afterwards partook of a good ſupper, and when we had ſufficiently refreſhed ourſelves went to bed. In the morning the maſter miner and I, after a plentiful breakfaſt, took leave of the ſurveyor, and rode back to the copper mines, where having thanked the officer who ſpoke *French* for his civilities, the maſter miner and I ſet out for *Drontheim*.

Night overtaking us before we had proceeded eight miles, we were obliged to take up our quarters at a peaſant's houſe in the next village, when the honeſt man knowing my companion, thought himſelf highly honoured by having ſuch

a guest, and therefore did his utmost to oblige us. Before we sat down he brought us his brandy, tobacco and beer; provided a couple of pheasants, and a hare he had lately killed, for our supper. For that game being free for the boors in those parts, they are seldom unfurnished with them. After supper we all sat down to smoaking, and continued drinking brandy and beer almost all night, till the peasant perceiving that the master miner was quite drunk, was so rejoiced at it, that he soon became in as bad a condition himself, nor was I much better. We had all now our dose. Upon which some clean straw was brought, and spread in the middle of the chamber to serve instead of beds, on which we lay down together, and slept till morning; when being resolved to reach *Drontheim* that night, I arose before the master miner, and the boor awaked, and by signs made the boor's sons understand, that I wanted the horses to be got ready, and they being saddled I rouzed my companion and his host, but they were no sooner up than we again fell to eating and drinking, which being at length ended, we mounted on horseback, and made the best of our way to *Drontheim*, where we arrived before it was dark.

In two days after my return the ship having taken in her stock of provisions and other necessaries, set sail with a fair wind, to continue our voyage to the north, but after a few days we were becalmed under the Arctic circle, and some of our crew being so superstitious as to give credit to the opinion, that the inhabitants

of

of the neighbouring coaſt, like thoſe of *Finland*, could rule the elements, and diſpoſe of the winds at their pleaſure, our captain ſent his boat aſhore with the mate to purchaſe a wind of them, that being the commodity he moſt ſtood in need of, and though I believed nothing of the matter, I had the curioſity to accompany thoſe employed in this ridiculous commiſſion.

We landed at the firſt village we came to, and as the mate could ſpeak enough of the language to make himſelf underſtood, he ſoon found out the chief necromancer; told him what he wanted, and aſked if he could furniſh us with a wind that would laſt till we arrived at *Mourmanſkeimore*, to which the necromancer gravely replied, that he could not, for his power extended no farther than the promontory of *Rouxella*. The mate conſidering it was a great way thither, and that if we reached ſo far we might eaſily make the north cape, deſired him to go on board with us, and drive a bargain with the captain: to this the wizard conſenting, took three of his comrades with him, and leaping into a ſmall fiſhing boat went aboard our ſhip, where the captain and he ſoon agreed upon the price, and he was paid ten kroners, which is about five or ſix and thirty ſhillings ſterling, and a pound of tobacco. When the bargain was concluded, and the money paid, the wizard tied a woollen rag about half a yard long and a nail broad, to the fore-maſt. This rag which had three knots was all the captain had for his money, and the necromancer immediately

mediately returned in the fishing boat to the village with his companions.

He had not been gone long when the captain, according to the instructions he had received, untied the first knot in the rag, and soon after a brisk gale sprung up from the west-south-west, which drove us and the other ships in our company thirty leagues beyond *Maelstroom*, a whirlpool in the *Norwegian* sea, that has proved fatal to many vessels. For this reason such as are acquainted with those coasts keep eight or ten leagues out to sea to avoid both that and several other eddies, as well as the rocks that lie off *Ostraford*.

The wind beginning now to shift a little to the northward, the captain untied the second knot, and the wind continued till we reached the cape of *Rouxella*. After we had passed that promontory, the needle of our compass turned back half an inch, from which some fancied that there was a load-stone in the mountain. However, if we had not had a very expert pilot we should certainly have lost our course. He shut up the compass, and knowing that the other ships in our company were in the same trouble as ourselves, hung out a flag on the fore-top-mast head, as a signal for the ships to follow us. We were two days and nights in this dangerous situation, having nothing to depend upon but the pilot's experience; but on the third day, when we were at a considerable distance from the mountains of *Rouxella*, the needle again pointed to the north, whence

whence we concluded that we drew near the north cape.

By this time the wind failing us, our captain untied the third knot, and soon after a most dreadful tempest blew from the north-north-east, upon which we were obliged to take in all our sails and drive before the wind under our bare poles, expecting every minute to go to the bottom; dreading lest this should be a judgment inflicted upon us for our infernal commerce. However, on the 4th day the storm ceased, when we were under great concern at our having lost sight of the other vessels, which we feared were by this time lost: but having a favourable gale, we continued our course, resolving to make the first port in order to refit.

With respect to the sale of winds, for which these northern people are very famous, it is necessary to observe, that like all other species of witchcraft and necromancy, it is no more than mere fraud and imposture. Those who deal in it study the weather, and from constant observation, are able to judge of the variation of winds for several days to come, and take care to start so many difficulties in making their bargains, that they are sure never to come to a conclusion, till the signs appear by which they are morally certain that those winds will blow, which they pretend to sell. When our supposed conjuror affirmed that his power reached no farther than *Rouxella*, it ought to be understood, he very well knew by experience that cape to be the limit of his observations, and

and that he ſhould riſk his credit. if he preſumed to exceed his bounds. This account we have received from ſome intelligent perſons who reſided a while in *Iceland*, where the people are the moſt famous for this kind of traffic, and they ſell them with leſs limitation, becauſe living in an iſland, they are more able to judge of the variation of winds in all the ſeas round about them. This ſpecies of knowledge is confined among a few people, who by this means keep their neighbours in ſubjection, and put foreigners under tribute; nor are theſe ſtrange notions much to be wondered at in a barbarous country, where religion is at a very low ebb, and learning has not improved the mind.

The coaſts of the ſea all over the north are ſo full of rocks, that the ports and creeks are almoſt inacceſſible, and we were obliged to ſail two days longer before we could make a proper port. However, we at length reached the coaſt of *Wardhuys*, the chief town of *Daniſh Lapland*, where there is a caſtle, which has a garriſon of two companies of ſoldiers, belonging to the King of *Denmark*, and alſo a collector to receive the duties impoſed on foreigners trading to or from *Archangel*, who ſuffered us to paſs without examination, judging from our ſaluting the caſtle, and by our colours, that we were *Danes*. We then ſailed to *Varanger*, and caſt anchor half a league from the town, when the captain being impatient till he found a place where we might refit, and being deſirous of obtaining ſome information in relation to trade, ordered out the long-boat, and taking with him

him eight men well armed, rowed towards the town, where he arrived in about half an hour. *Varanger* is a populous town and a convenient port, but so little frequented, that the inhabitants; amazed at seeing them, gave them small encouragement for trade, but offered their assistance to refit the ship.

The Captain having observed the commodiousness of the harbour, returned with the boat, upon which we weighed anchor, and entered the port; when we unladed the cargo, which consisted of bales of cloth, and rolls of tobacco, with which we designed to have traded. These goods were locked up in a house near the shore, and a watch set to guard them. To some of the principal inhabitants we presented bits of roll tobacco, which they valuing more than gold, it secured their friendship, and in return, they treated us with the best they had, particularly with dry fish, which serves them instead of bread; with the flesh of rain-deer, which I did not think very palatable; with bear's flesh, and that of other wild beasts, of which we had no knowledge. They also treated us with fresh fish, boiled without salt, and served up either with the oil of other fish, or a sour liquor that is highly esteemed by them. We could not, however, bear them company in their repasts, and their dainties not suiting our taste, we sent for provisions from the ship, the chief of which was salt beef and biscuit; but when we offered some of it to the *Laplanders*, we found that our food was as disagreeable to them as theirs was to us.

Their

Their ſour drink conſiſts of an infuſion of juniper-berries, and of a grain like lentils, the name of which I forgot; it grows there in great abundance, as do alſo juniper-trees; of that grain they alſo make brandy, which has the ſame effect as that diſtilled from grapes, and their common drink is as ſtrong as *French* wine. Our beer was indeed more acceptable to them than our meat; they drank freely of it, and were alſo pleaſed with the brandy we gave them; yet they preferred their own ſour drink to either our brandy or beer.

The religion of *Lapland* is *Lutheraniſm*; but though they have clergy among them, they are ſo ſuperſtitious, that if in the morning they meet a beaſt in their way whoſe appearance is eſteemed ominous, they return home and do not ſtir out again all that day; and when they go a fiſhing, if they take but one fiſh in the firſt draught, they think it an ill omen, pack up their nets, and leave work for that time.

Both the men and women are of a low ſtature, but are ſtrong and active. Their faces are broad and flat, and particularly their noſes. Their eyes are ſmall like a hog's, and their eyelids in general make them look as if they were blear-eyed. They are of a ſwarthy complection, and are of a rude uncivilized and laſcivious diſpoſition; eſpecially the women, who readily proſtitute themſelves to all comers, if they can do it without the knowledge of their huſbands.

The men are cloathed in rain-deer ſkins, with the hair outwards; their coats are ſhort and

and reach down to the middle of their thighs: their breeches and ſtockings are of the ſame materials, with the hair outwards; but over theſe ſome of them wear a kind of boots made of fiſh ſkin, which, though rough and courſe, are ſtitched ſo neatly, that the ſeams are hardly to be ſeen. Their bonnets are alſo made of rain-deer ſkins, with the hair outwards, but are edged with a ſtrip of either grey or white fox ſkin.

Their caps are like thoſe of the *Norwegian* women, and are made of coarſe canvas, and their hair is twiſted up in two rolls, that hang down on each ſhoulder. Some of them wear a ſort of ruff eight fingers broad, which they tie behind. Their other cloaths are made either of coarſe cloth, or the ſkins of rain-deer, with the hair turned outwards; but their ſhoes are of fiſh ſkins with the ſcales on, and ſomewhat reſemble the wooden ſhoes worn by the peaſants in *France*.

Their houſes reſemble thoſe of the boors about *Chriſtiana*. They have no light but what enters by a hole at the top of the hut, and do not make uſe of beds any more than the other *Laplanders*. The whole family, as the maſter, miſtreſs, children, and men and maid ſervants, lie down together promiſcuouſly, upon bear ſkins ſpread in the middle of the room, which, when they riſe in the morning, are taken up and laid by, till they are wanted again at night. In every houſe there is a great black cat which they highly value. The *Laplanders* talk to it as if it was a reaſonable crea-

ture: every night they go out of their huts with it, as if to consult it alone; and in parties of fishing or hunting it follows the people like a dog.

We unladed the ship the day after our arrival, and the inhabitants helped us to haul her ashore, when the Captain finding that she was more damaged than he expected, desired the *Laplanders* to provide him timber to refit her, to which they readily agreed, and the crew went to a neighbouring mountain to fell it.

CHAP. III.

The Author and some others travel into the Country, in order to trade with the Inhabitants. The Manner of travelling in Sledges drawn by Rain-Deer. A Description of that Animal. The Customs and Manners of the Russian Laplanders. *The Ceremonies of a* Lapland *Funeral, and the Adventures they met with upon the Road till their Return to* Varanger; *with a general Character of the People of* Lapland; *and an Account of their Beasts, Birds, and Fishes.*

AS we found that the ship would be some time in refitting, our supercargo thought it would not be improper to take a journey into the country, to try whether any trade could be carried on with the peasants there; and for this

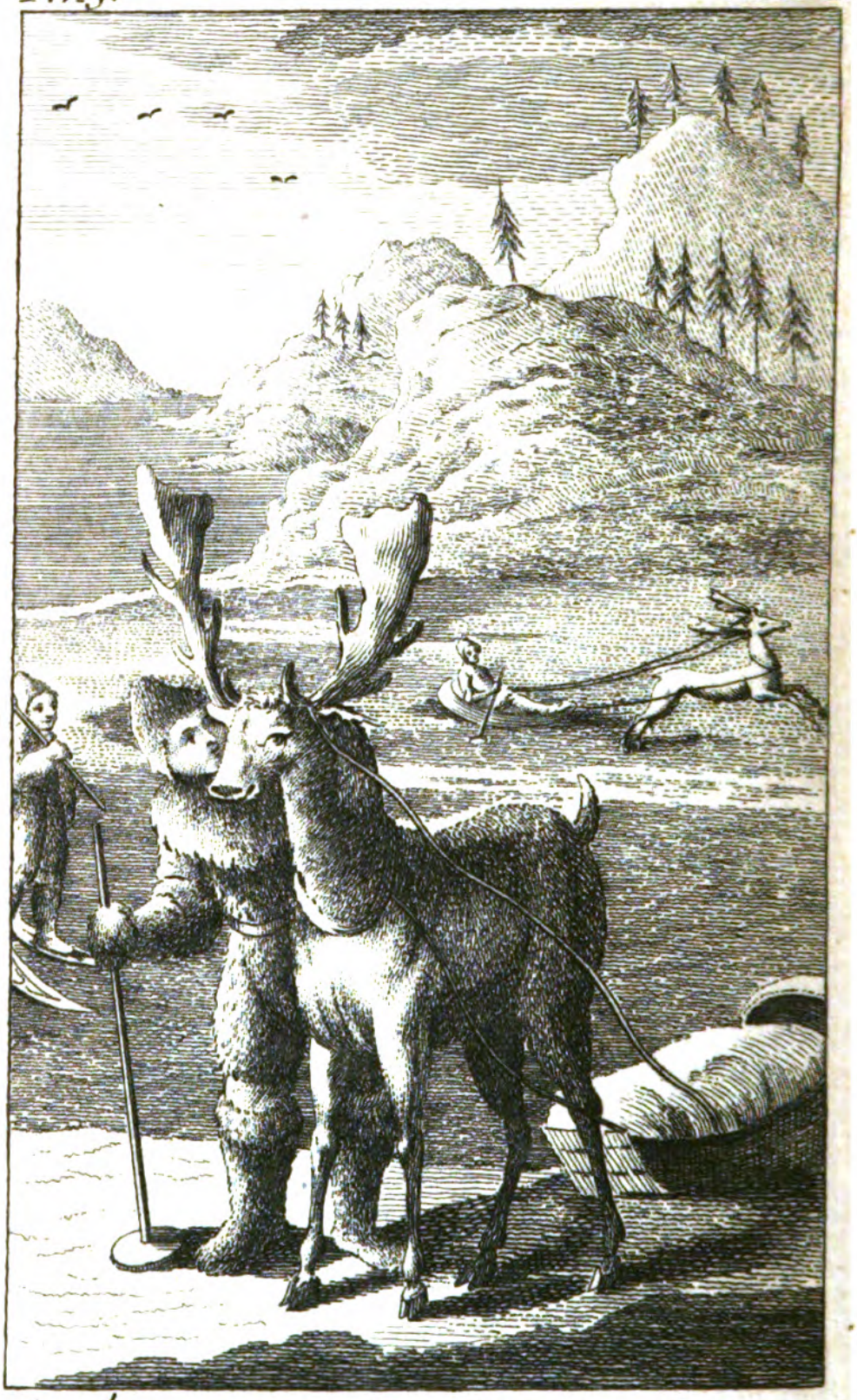
this purpose picked out me, and two more of the ship's company, to attend him.

Early the next morning, which was the 12th of *May*, we set out, taking with us some cloth and tobacco to trade with, and salt beef and pork for our provisions; having engaged three of the inhabitants of *Varanger* to attend us, both to shew us the way, and to help to carry our goods and provisions to the next village. We followed them through woods, mountains, and valleys without meeting any living creature, till about four o'clock in the afternoon, when we perceived two white bears of a prodigious size approach, as we thought, to devour us; but our guides observing the terror we were in, bid us not be afraid, for we need only have our arms ready for defence in case they approached too near us. Upon which we cocked and primed our pieces, and prepared our flints; but whether the bears were frightened at the fire which struck from our flints, or smelt our powder, they soon fled away so fast, that they were presently out of sight.

As we were descending a mountain an hour before night, we perceived at the foot of it a dozen houses at a considerable distance from each other, and a little beyond them a herd of beasts like stags, which our guides told us were rain-deer. On our arrival at the village, our guides conducted us to a hut, when being very weary, we were glad to rest ourselves, for we had made a long journey in a very bad way, with our luggage at our backs, which tired and encumbered us. We presented our host with a

piece of roll tobacco, and he received in with extraordinary joy, aſſuring us, he had not had ſo valuable a preſent in nine months before; and in return he brought out his brandy bottle, ſome rain-deer's fleſh dreſſed without ſalting, and ſome dried fiſh, which we gave to our guides, and ſupped ourſelves upon the proviſions we had brought with us; after which we went to ſleep upon bear's ſkins, after the faſhion of the country.

In the morning we aſked our hoſt if he had nothing to barter with us for cloth and tobacco, to which he anſwered that he had ſome wolf, fox, and white ſquirrel ſkins, and that his neighbours had ſome of the ſame commodities, and would gladly exchange with us. We bid him, by our interpreters, bring out his ſkins, and if he had any cloaths made of rain-deer ſkins, we would deal with him for four ſuits, which we wanted to keep us warm; accordingly he brought forth his merchandize, which we bought, and paid him part in tobacco and part in cloth. We alſo trucked with his neighbours as long as they had any thing worth buying, and then deſired our hoſt to lend us ſome rain-deer to carry us farther up the country, to which he readily conſented; and taking down a horn that hung up in his cottage, went out and blew it, upon which fourteen or fifteen of thoſe animals came running towards the hut, ſix of whom he immediately yoked to ſix ſledges. In one of them we put our merchandize and proviſions, another we aſſigned to one of our guides who underſtood



The manner of travelling in Sledges drawn by Rain deer, in Lapland.

derstood the language of the *Muscovite Laplanders*, and that of the *Kilops*, dismissing the two other inhabitants of *Varanger*, after having first paid them in tobacco for their trouble. We then put on our *Lapland* cloaths, and each of us lying down in his sledge, was covered with a bear's skin. At the back of the sledge were two girths made of rain-deer's skin leather, in which we thrust our arms up to the shoulders to keep ourselves steady, and we had each a stick with a strong ferrel to it to support the sledge, if it should be in danger of overturning against the stumps of trees, or stones lying in the way. We were no sooner ready to set out, than our host muttered some words in the ear of the rain-deer; and when I afterwards enquired of our guide what he meant by it, he gravely replied with the utmost simplicity, that it was to tell them whither they should carry us. However, custom had made this muttering so familiar to them, that when our host had gone to all the six, they set off with an amazing swiftness, and continued their pace over hills and dales without keeping any beaten path, till seven o'clock in the evening; when they brought us to a large village situated between two mountains, on the borders of a great lake. Stopping at the fourth house in the place, and beating the ground with their feet, the master of the house came with some of his servants to take us out of the sledges, and unharness our cattle, one of them bringing out a little juniper can filled with brandy, of which he gave each of us a brimmer out of a larger

veſſel that was alſo made of juniper wood. This it ſeems was to revive or ſpirits, our guide having informed him, that we were frightened at our being drawn ſo ſwiftly by theſe animals, we not being uſed to that way of travelling.

The rain-deer is of the colour of the ſtag, and is not much bigger. The horns of this animal are ſomewhat higher than thoſe of the ſtag, but more crooked, hairy, and no ſo well furniſhed with branches. They have cloven feet like their's, but they are as big as the hoofs of oxen. Of the milk of the females the *Laplanders* make good butter and cheeſe. Their harneſs is a collar of rain-deer leather, by which they are faſtened to the ſhafts of the ſledge, not much unlike the manner in which a horſe is faſtened to a chaiſe; and thus they draw it with incredible ſwiftneſs, without being guided by the rider.

When we got out of our ſledges, our hoſt conducted us into his hut, which, like the reſt of the cottages in the place, was very little, low, and covered with the bark of trees, the light entering in at a hole in the top. The people here were cloathed much like thoſe of *Varanger*, their apparel being of the ſame materials and make, but longer. The women were alſo dreſſed in rain-deer ſkins, with the hair outwards, and their hair was twiſted like that of the women of *Varanger*; but inſtead of a canvas cap, they wore on their heads a high bonnet made of the ſame ſkins as their cloaths, with the hair outwards.

We

We gave our hoſt a piece of our roll tobacco about two inches long, with which he was highly pleaſed, and in the moſt hearty manner returned us his thanks. We alſo gave a piece not quite ſo long to each of the inhabitants of the place to make them our friends, and the better to ſecure ourſelves againſt their attempts, for they ſeemed more uncivilized than thoſe we laſt dealt with: we again ſupped on the proviſions we had brought with us, and our guide eat ſome of our hoſt's ſalt fiſh, and freſh rain-deer veniſon. We aſked how many leagues we had come that day, he anſwered about thirty, and that we were in the territories of *Mourmanſkeimore*. The inhabitants talked a language very different from that uſed at *Varanger*; but our guide had been often in the country, and underſtood them. After ſupper we lay down on bear ſkins, to take our reſt, as we had done the night before, having firſt exchanged with our hoſt our *Lapland* habits for thoſe that were longer, and a parcel of tobacco, for the ſkins of 100 grey ſquirrels, a furr much eſteemed in *Denmark* and other parts of *Europe*.

The next day our hoſt, at our deſire, provided us with ſledges to go farther into the country, and the other inhabitants of the village came to ſee us depart, bringing brandy with them to drink to us at our taking our leave of them; when our hoſt having performed the ſame ceremony of muttering in the ears of the ſix rain-deer, they ſet off, and we were drawn with the ſame ſwiftneſs as before. We came to no place that was inhabited till about three in the afternoon,

ternoon, when we arrived at a village, in which were eight cottages built on a high mountain by a wood ſide, where our cattle ſtopped, by which we gueſſed that there were ſome inhabitants; but finding that nobody came to us, we baited our rain-deer with moſs, which grew there very plentifully, and refreſhed ourſelves with ſalt beef and biſcuit; while our interpreter regaled himſelf upon ſome rain-deer veniſon and dried fiſh, all of us making merry with the brandy we had given us in the laſt village.

We ſtaid in this place near an hour, and this being the uſual ſtage, the rain-deer had no inclination to quit it; in order to induce them to move, our guide uſed many ridiculous and ſuperſtitious ceremonies: he went alone into the wood, and coming out again, muttered ſome words in the ears of theſe animals, which, whether they underſtood or not, had but little effect on them, till he had played this farce over four or five times, when they began to proceed, though not ſo ſwifty as before. We then aſked him the reaſon why we ſaw nobody in the village, to which be replied, that it was a very common thing in that country, theſe dwellings belonging to the *Kilops*, a nation of *Laplanders* who often change their habitations, fly from ſtrangers, and ſubſiſt only upon what they get by hunting. We now deſcended the mountain, and about nine o'clock diſcovered four *Kilops* at a ſmall diſtance, returning from hunting in ſledges drawn by rain-deer, but they turned aſide, and took another way to avoid us. In

leſs

less than half an hour after we entered a long wood, in which we heard terrible howlings, but saw no beast of prey. When we had passed the wood we had another mountain to descend, at the bottom of which we observed a village; thither our cattle carried us, and stopping, beat their feet before a cottage, at which the master made his appearance, and we having sollicited his friendship with a piece of tobacco, he made us welcome: we supped on our provision, as our guide did on his; and then, according to custom, laid down to rest on bear skins, being sufficiently tired with our journey.

The next morning we asked the interpreter how many leagues we had travelled the preceding day, to which he replied, at least forty; but he must certainly have been mistaken, or else the leagues must not be so long as they are generally calculated, for forty of their leagues make 160 of those of *France*, each *Lapland* league being as long as a *German*. Our guide also informed us, that we were in *Muscovite Lapland*; and we bid him ask the inhabitants of the village, whom we had presented with tobacco, and been treated by them with brandy, whether they had any commodities to exchange with us for tobacco and cloth. We had some rolls of the former left, and most of our bales of the latter. The *Laplanders* replied, that they had some furrs, and on our desiring to see them brought us white, black and grey fox skins, grey squirrels and sables, though not of so fine a colour as those of *Borandia*, *Samojedia*,

jedia, and *Siberia*. These merchandizes were what we wanted; we therefore soon agreed with them, and paid them in cloth and tobacco. When we had finished our business, we sat down to drink with them, and though they were not quite so brutal as some other of the *Laplanders*, their conversation was extremely rude and indecent. It now grew late, and we designing to proceed yet farther to dispose of the few rolls of tobacco we had left, desired our host to furnish us with sledges and fresh rain-deer.

He harnessed and prepared as many sledges as we had occasion for, upon which we departed at one o'clock, and ran with our former speed, through different and unbeaten wastes, till past six, without meeting with one habitation; when descending a hill, we observed two huts under a rock a little out of the way. Our guide told us, that they belonged to two *Kilops*, who no sooner saw us, than they fled with their wives and families. We travelled two hours longer, but came to no house, till we at last discovered a large village at the foot of a hill by a river side, where we arrived at eleven o'clock at night, and went to a cottage in the middle of the place, whither our cattle were pleased to conduct us. The master of the house gave us a very kind reception, made us a fire in the middle of his hut, and treated us with brandy, dried fish, and salted venison, with salt butter and milk. We were surprized at this change, for we had not before met with any salt provisions in our journey: we had al-

ready

ready eat up our bread, and ſhould have been very much put to it had we not met with ſuch good entertainment here; our guide, however, would not taſte a bit of ſalt meat, and was therefore obliged to live on the freſh veniſon he brought with him. In the morning we found they had nothing to trade with, and that they could not ſupply us with ſledges: upon which we croſſed the river, and ſoon reaching another village, went to the moſt likely houſe, to hire ſledges and rain-deer, to carry us to *Kola*, where having furniſhed ourſelves, we arrived there about noon. *Kola* is a large town ſituated on the ſide of a river near ten leagues from the *North Sea*, having large foreſts and deſerts to the eaſt, *Mourmanſkeimore* to the weſt, and prodigious high mountains to the ſouth. It conſiſts of one indifferent ſtreet, the houſes of which are built of wood, and very low; but are handſomely covered with fiſh-bones on the top, where the light enters at a hole, as in other parts of *Lapland*. The inhabitants, like the other *Muſcovites*, are ſo jealous of their wives, that they lock them up to prevent their being ſeen by ſtrangers. Our landlord took all our cloth off our hands, for which he gave us in exchange two lynxes ſkins ſpotted like a leopard's, three dozen of white fox ſkins, ſome ermines, half a dozen of wyetfras, an animal which ſomewhat reſembles a badger, but it is longer, and has rougher hair; his colour is a blackiſh red, and his tail like a fox's. There being ſome ells of cloth above what we were to give him in exchange, he

he obliged himſelf to ſupply us with proviſions for our journey back to *Varanger*, and to help us to ſledges as far as the river we had lately paſſed. He treated us as well as he was able, and we ſupped and ſlept as we had done in other places.

The next morning when we were preparing to depart, ſome of the town's people enquired whether we had any rolls of tobacco left, and whether we would exchange them for ſkins. We replied, with all our hearts. Upon which they fetched a dozen of ermine, two white fox ſkins, and four lynxes, for which we gave them the remainder of our cargo of tobacco, except ſeven or eight rolls, which we reſerved for our own uſe, and to pay for the hire of our rain-deer and ſledges in our way back; for tobacco is more neceſſary than money to thoſe who travel in this wild and unfrequented country, the *Laplanders* valuing a piece of tobacco of the length of one's finger, at above a crown piece. The Kings of *Denmark* and *Sweden* have taxed it ſeverely, and there are collectors ſettled in every frontier town to gather the impoſts upon it.

When we had diſpatched our buſineſs, we were obliged, according to the cuſtom of the place, to drink with our chapmen. Our entertainment every where was brandy, and it laſted till two in the afternoon, when we deſired our hoſt to get the ſledges ready, which he did in a minute, packed up our furrs for us, furniſhed us with biſcuit, gingerbread, and ſalted rain-deer veniſon, beſides a rundlet of brandy.

Every

Every thing being thus ready, we ſtored our merchandize in one of the ſledges, got into the others ourſelves, drank a full glaſs at parting with our friendly dealers, and ſet out on our return for the village on the other ſide of the river, which we had paſſed the day before, and in my opinion we travelled much faſter than we had hitherto done.

We arrived at the firſt village by ſeven o'clock, ſoon croſſed the river, and went directly to our old quarters, where our landlord, in hopes of getting more tobacco, received us very joyfully: he immediately preſented us a cup of brandy, and aſked us if we would have the rain-deer put to the ſledges, to which we replied, that we choſe to reſt ourſelves till morning, there being no village for ſeveral leagues from his habitation. Upon this he filled us another cup, and when we had drank it, offered to take us with him to the funeral of one of his neighbours who had been dead about four hours.

We were very glad of this opportunity of ſeeing their funeral ceremonies, and therefore accompanied him to the houſe of the deceaſed, when we ſaw the corpſe taken from the bears ſkins on which it lay, and removed into a wooden coffin, by ſix of his moſt intimate friends; the body being firſt wrapped in linnen, and the face and hands only left bare. In one hand they put a purſe with money in it, to pay the fee of the porter of the gate of Paradiſe, and in the other a certificate, ſigned by a Prieſt, directed to St. *Peter* to certify that he was a good *Chri-*

ſtian, and ought to be admitted into heaven: and at the head of the coffin was placed a picture of St. *Nicholas*, who was one of the ſeven Deacons mentioned in the *Acts* of the Apoſtles, a Saint greatly reverenced in all parts of *Muſcovy*, where he is ſuppoſed to be a particular friend of the dead; upon which account his picture is always fixed near a corpſe, inſtead of a crucifix. He is repreſented in a pilgrim's habit, with a long robe, a broad girdle about his waiſt, and a ſtaff in his hand. They alſo put into the coffin a rundlet of brandy, ſome dried fiſh, and rain-deer veniſon for him to eat and drink on the road. They then lighted ſome fir-tree roots, piled up at a convenient diſtance from the coffin, wept, howled and made a variety of ſtrange geſtures, aſſuming a thouſand different attitudes to ſhew the extravagancies of their ſorrow. When this noiſe and theſe geſticulations were over, they marched round the corpſe ſeveral times in proceſſion, aſking the deceaſed, why he died? whether he was angry with his wife? whether he ſtood in need of meat, drink or cloaths? if he had not ſucceeded when fiſhing, or had loſt his game when hunting? they then reſumed their howling, and ſtamped with all the ſigns of diſtraction. One of the Prieſts who aſſiſted at the ſolemnity frequently ſprinkled holy water upon the corpſe, as alſo did the mourners. Being now almoſt deafened with noiſe, and wearied with looking on theſe barbarous rites, we left our landlord behind us, and returned to his cottage, where we found his wife at home. She had made a ſally from the place in which her

huſband

husband had confined her, on our arrival, and no sooner saw us, than supposing he was in our company, would have retired to her corner; but our interpreter letting her know that the good man was at the funeral, and would not return for some time, she staid and viewed us all round, one after another, drew her seat near us; and shewed us a bonnet of her own embroidering, very curiously performed with tinsel thread. The wives of the *Muscovite Laplanders* make cloaths for themselves, their husbands, and their children, and at the edges they are all embroidered with that thread. She was pretty handsome, well shaped, and appeared to be good humoured, and well pleased with us. While our host was busied about the funeral, we pulled out some of our provisions, and gave our landlady some of every sort to taste. She liked them all, especially the gingerbread; but having drank two or three glasses of brandy, withdrew to her place of confinement, for fear of her husband's return; for he would have certainly resented her having taken such liberty, which would have raised his jealousy, had he found her among us. When he came home, he obliged us to take a cup or two more, to smoke a pipe, and to sup with him; for he brought such provisions as he thought would be most grateful to our palates, particularly salt butter, which we eat with bread; and as our guide would not taste any thing that was salt, he got him some dried fish, and some bear's flesh, which he broiled on the coals.

All the cottages in this village were, like those we had observed in other places, built of wood and covered with turf, but they were handsomer than any we had yet seen, being both within and without adorned with fish bones, curiously inlaid. We according to custom laid down with the family on bears skins, our landlady alone being obliged to conceal herself till we were gone.

Early the next morning our host got ready our rain-deer and sledges, when having stowed our bales, our cattle set off, and in two hours carried us six leagues. As we were passing between two hills, we saw a *Laplander* going a hunting, who came up to us skating on the snow, as fast as we rode in our sledges, for the snow seldom melts there till *Midsummer*. His skates, which were made of the bark of a tree, were seven feet and a half long, four fingers broad, and flat at the bottom. He was dressed like the other *Laplanders*, in a garment made of the skin of a rain-deer, had an arrow in one hand, a bow in the other, and a large quiver hanging at his back, and was followed by a black cat. He kept company with us about half a league, and we parted at the foot of the next mountain.

We continued our rout three days, stopping at the same places where we lay before, and meeting with nothing extraordinary; our entertainment, our way of travelling, and every thing else being the same as before: and on the 21st of *May*, about nine o'clock at night, we arrived safe at *Varanger*, having every where been

been received with great civility, and suffered no injury in our whole journey.

From observing the manners and dispositions of the *Laplanders*, I am enabled to affirm, that notwithstanding their ignorance and superstition, they are remarkable for their honesty, and are unacquainted with theft or fraud. They throw the dart with such dexterity, as easily to hit a mark of the size of a crown piece, at the distance of 30 paces; and are so expert in the use of the bow and arrow, that they can shoot their game in what part they please, and yet are so averse to war, that whenever the Kings of *Denmark* or *Sweden*, or the Czar of *Moscovy*, have occasion for soldiers, they leave their dwellings and fly to the woods, for fear of being pressed into the service.

They have plenty of geese, ducks, pullets, and other sorts of fowl, which they feed with the grain of which they make their drink, and when that is scarce, give them dried fish. Here is also a bird of prey, of a deep pearl colour, much bigger than an eagle: his head is like that of a cat, and his eyes are red and sparkling: his claws and beak resemble those of an eagle, and he feeds upon hares and other small game. Most of the beasts of *Lapland* are white, as the wolves, bears, foxes, and hares; even their crows may be compared to the swan for whiteness, and have nothing black about them but their bills and feet. They have a kind of dogs a foot long, and only four inches high; their hair is an inch long, of a yellowish white, rough, and standing up like a hog's bristles;

the head and snout resemble those of a rat; they have strait ears like a wolf, with a curled tail, and are very ready at catching mice, which they watch, and eat like our cats; on which account the *Laplanders*, notwithstanding their uglines, set a high value upon them. The fish, which when dried, serves them for bread, is called raff, and is firm, substantial, and excepting the fat, has a very good taste. They have plenty of other sorts of fish; and though they have such an antipathy to salt, yet they boil all their meat in salt water, if they are near enough to the sea to get it conveniently.

CHAP. IV.

They sail from Varanger, *and land on the Coast of* Borandia; *trade with the Natives, who are described; and take a trading Journey in Sledges through* Borandia. *They embark on board a Vessel, and sail to* Petzora.

WITHIN two or three days after our return to *Varanger*, the Captain had repaired the ship, and taken in his lading and ballast; in the mean time our crew treated the inhabitants with brandy and tobacco, to keep them in good humour; for fear lest if they were not bribed to be our friends, they should, in revenge, plague us with contrary winds. We set sail from *Varanger* on the 26th of *May*, with a gale

a gale as much in our favour as we could possibly desire, which the sailors ignorantly attributed to the friendship of the *Laplanders*; but this breeze soon shifting, we were obliged to cast anchor under the shore opposite the island of *Wardhuys*; when being observed by the Governor of the castle, he came off to us in a shallop, and was entertained in as obliging a manner as possible; after which he returned to the castle very well satisfied with his reception. The next day the wind settling, we proceeded again to sea, and held our course north-north-east, and in three days got into a climate where there was now no night, we never losing sight of the sun, which was always above the horizon.

On the 31st day of *May*, we saw the mountains of *Greenland*, at which time a north wind blew with such violence, that we could not keep to sea, and were obliged to steer to the east-south-east, in order to make the shore, that we might be sheltered from the weather. We continued our course for several days, and at length cast anchor in a good harbour on the coast of *Borandia*.

We had scarce entered this harbour, before we espied two ships that were at anchor about a musket-shot from us, which we found were the two ships in our company that had been separated from us in the storm that drove us into *Varanger*. We were extremely glad at finding them, and accordingly fired three guns, and hung out our flag in the stern as a signal of our arrival. They were filled with equal joy at seeing us safe, answered our guns by twice as many,

many, and hung out all their flags and pendants: we did ſo too; but though we wiſhed for an opportunity of ſending our long-boat to them, to learn the particulars of their eſcape, the wind blew ſo ſtiff, that we durſt not attempt it till 24 hours after. They were no leſs impatient to know how we eſcaped, and as ſoon as the wind ſlackened, a boat came off from each of them on board us, when we embraced each other with extraordinary joy and affection, as people who had found friends whom they thought buried in the deep.

They told us that the ſtorm drove them on the coaſt of *Juhorſkt*, near an iſland, where they had like to have run aſhore in three fathoms water, and were forced to tack about immediately, for fear of running upon the rocks; when by the favour of a north-north-eaſt wind, they got out to ſea with much difficulty, and in three days reached the bay where we found them. We in our turn told them the dangers we had encountered, and our being forced to enter the port of *Varanger* to refit our ſhip; and informed them of our journey through *Daniſh*, *Swediſh*, and *Muſcovite Lapland*; and of our traffic and adventures. This account encouraged them to go aſhore, to try if they could find any body to trade with them; when a council being held, it was reſolved, that a captain, a ſupercargo, two accountants, who underſtood both the language of the North and the *Ruſſian*, with twenty ſeamen, and myſelf, well armed, ſhould land, and

and take with us ſeveral days proviſions, and ſome goods for traffic.

Purſuant to this reſolution, two long-boats were got ready, and having landed, we aſcended a hill, to ſee if we could diſcover my habitations; but perceiving none, we marched to a neighbouring mountain at half a league's diſtance, where we obſerved five or ſix perſons among ſome buſhes of thorns and briars, who came towards us, till they perceived us advancing; and then turned their backs and fled away ſo faſt, that we loſt ſight of them in an inſtant. However, imagining that their track would lead us to ſome village, we followed it, and after a march of two hours, as we deſcended a mountain, we obſerved ſome huts in the valley below; and advancing towards them, perceived thirty or forty men armed with darts and arrows, prepared to give us battle, for ſeeing ſo ſtrong a body of us, they took us for enemies. We halted for ſome time, in order to conſult whether we ſhould retreat to our ſhips or attack them, and being ſenſible that nothing was to be got by defeating them, were inclined to retire; when one of our accountants offered to go to them by himſelf, and to let them know that we were friends and merchants, who were come with a view of trading with them, if they had any thing to exchange with us.

This propoſal being approved, he approached them, carrying two rolls of tobacco, and a ſmall keg of brandy. When he came within hearing, one of them, who ſeemed to be their chief, called to him in the *Muſcovite* language,

language, aſking who we were, and what we would have, and on being anſwered that we were merchants come to trade with them, they ſeemed ſatisfied, and made ſigns to him to come nearer, when giving us the ſame ſignal, we, to our mutual ſatisfaction, joined companies.

On our coming up to them, I was ſurprized to ſee them much ſhorter than the *Laplanders*, their eyes are ſmall like ferrets, and what is uſually called the white, is of a reddiſh yellow; their heads are large, their faces flat and broad, with flat noſes, and ſwarthy complections; and their legs are ſhort and thick. The *Borandian* women are not at all handſomer than the men; they dreſs like them, and alſo, like them, ſpend the time in fiſhing and hunting. Their cloaths are a cap, a jacket that reaches down to their knees, a ſtrait pair of breeches, and ſtockings, all made of white bears ſkin, with the hairy ſide outwards; but their ſhoes are made of the bark of a tree. They roaſt all the meat they obtain by hunting, eat it without ſalt, and uſe fiſh inſtead of bread. Their common drink is water, in which juniper-berries are ſteeped, till they rot, which gives the water an agreeable taſte, at leaſt in a country where nothing better is to be had. Their huts are low and oval, covered with fiſh bones, and have no light, but what comes in at the door, which reſembles the mouth of an oven. They drink immoderately when they can get brandy, and the moſt acceptable preſent that can be made them, is either

ther ſome of that liquor or tobacco: but they ſeem to have little or no notion of religion.

They ſoon purchaſed all the brandy and tobacco we had brought aſhore with us for fox ſkins, wolve ſkins, and a few ermines. When finding that they had a great quantity remaining, we perſuaded them to take them to the beach, to which they readily agreed, and having carried them to the ſhore, ſtood admiring our ſhips. We then made a ſignal for the boats to be ſent off to fetch our chapmen; upon which each ſhip ſent two, in one of which went the ſupercargo, the accountant who treated with the *Borandians*, and I, with ſeveral of the *Borandians*, while others ſtaid on the ſea-ſhore. On our going on board, the captain being informed of their fondneſs for brandy and tobacco, filled out a brimmer for each of them, and alſo made a preſent to each of a bit of roll tobacco of about an inch long, at which they were tranſported with joy.

Having purchaſed all the furrs they brought with them, we aſked if there was any conveniency for travelling in order to trade with the inhabitants, to which they anſwered in the affirmative; but that we muſt expect nothing but furrs. This we let them know was the commodity we wanted, and they aſſured us that we might have what we would of that kind, for tobacco, brandy and money; and if we pleaſed, might trade as far as *Siberia*, whither they would conduct us. We accordingly agreed with them to be our guides thither and back again, and to furniſh us with what conveni-

ences

ences the country afforded in our journey, for two rolls of tobacco, and two quarts of brandy, promiſing them farther rewards, in caſe the trade turned to account, and they contributed to it by their aſſiſtance. The bargain being concluded, our captain gave them another brimmer of brandy, and ſent them aſhore to prepare what was proper for our journey. They ſoon got every thing ready, and made ſuch a report of our kindneſs to them, while they were on board, that their countrymen expreſſed great friendſhip for us, and two boats were ſent aſhore with our ſupercargo to purchaſe for us. They were, however, at firſt unwilling to come aboard our ſhips; but we ſoon became better acquainted, and they came freely whenever they had an opportunity. We bought their furrs, treated them with brandy, and, in return, they invited us to their habitations.

In ſeven or eight hours we had provided every thing ready for our journey, and our two *Borandian* guides had brought ſix ſledges drawn by ſix rain-deer to the water ſide, which were all that were to be had in thoſe parts. The rain-deer, however, being larger than thoſe of *Lapland*, were able to draw two men, and the *Borandian* ſledges were contrived to hold them. The captain now called a council of all the officers, and it was agreed that our ſupercargo, the two accountants, who could ſpeak the *Ruſſian* language, myſelf, and a ſeaman out of each ſhip, ſhould go with the two *Borandians*. One of the ſledges we loaded with tobacco, brandy, gold, ſilver, and copper, to the value of three

or

or four thousand pounds: our supercargo, and myself rode together in another of these sledges: one accountant and a *Borandian*, in a third: the other accountant and the other *Borandian*, in the fourth; two seamen in the fifth; and the other seaman in the sixth; and as he rode by himself, we stowed some barrels of brandy and tobacco in his sledge. We sat one at one end of the sledge, and the other at the other, facing each other. The rain-deer ran as swiftly as those of *Lapland*, and in eight hours time drew us twenty leagues over hills and dales, and through several woods; yet in all this great extent of country we met nobody in our way. We then stopped at a village, and baited our rain-deer with moss, while we ourselves eat some biscuit and beef, and our *Borandians* refreshed themselves with dried fish dipped in fish oil; for they would not touch our salt meat, and did not like our biscuit. Both they and we drank at a neighbouring spring, and then cheared ourselves with a glass of brandy. Being thus refreshed, we again mounted our sledges, and travelled three hours longer; when we perceived a large village at the foot of a mountain, the huts of which were better built, and closer together than those of *Lapland*, thither we hastened to take up our lodging; but were obliged to divide our company, because one of these cottages would not hold us all. We met with the same reception from our landlords as in *Lapland*, and gratified them with a piece of roll tobacco and a cup of brandy; our guides took care of our rain-deer, and we laid down to rest on bears skins.

I diſtinguiſhed one part of the day from the other, by day and night, though there was really no night at all; but having ſlept ſix or ſeven hours we aroſe, in order to trade with the inhabitants of the village, who being informed of our buſineſs by our guides, ſoon produced ſome wolve ſkins, white fox ſkins, two dozen of ermines, three hundred grey ſquirrels, and ſeven pair of ſables; but they were neither ſo fond of tobacco nor brandy as the *Laplanders* or the *Borandians* dwelling on the coaſt. Hunting is their only diverſion and employment. In the ſummer, they eat their meat either boiled or broiled on the coals, and during that ſeaſon provide enough to ſerve them in winter, preſerving it by drying it in the ſun, cutting it in pieces, and ſpreading it on the tops of the houſes, which is the only dreſſing they beſtow upon it. They change their dwellings like the *Kilops*, are extremely ſtupid, and have very diſagreeable features. Their white bear ſkin cloaths reſemble thoſe of the other *Borandians*, and are tied round their waiſt with a girdle four inches broad, at which hangs a ſtone that will cut like a razor. The only difference obſervable between the women, who are dexterous hunters, and the men, is that their hair is twiſted, and hangs down on their ſhoulders, and their carrying only a ſtick in their hand, which is ſharp at one end, and being of a tough wood, ſerves them for a defenſive weapon. The men carry at their backs a quiver, and the ſtrings of their bows are made of the rind of a tree.

We bought the furrs the inhabitants had to ſell for money, and copper; ordered our rain-

deer

deer to be put to the ſledges; mounted them, and having each of us drank a glaſs of brandy, proceeded on our journey. We now rode eight or nine hours before we came to any habitation; but at laſt our guides perceiving three or four huts, turned our rain-deer up to them; but finding nobody there, we regaled ourſelves on our own proviſions, while our cattle fed on the moſs which grew there in abundance, and having refreſhed ourſelves and our beaſts for three hours, proceeded on our journey.

We were now fifteen hours without ſeeing any human creature, or ſo much as a hut, when we overtook three hunters at the foot of a hill, one of whom was dreſſed after the *Muſcovite* faſhion in a long robe, tied round his waiſt with a girdle four inches broad. It was made of a white bear's ſkin, with the hair outwards, and edged with a fine black. His cap was made of a black fox's ſkin, and his breeches and ſtockings of the ſkin of a rain-deer; his ſhoes were made of fiſh ſkin, and were not unlike thoſe worn at *Varanger*. The two other perſons were dreſſed like us, in white bear ſkins with the hair outwards, and carried at their backs bear ſkins, wolve ſkins, white fox ſkins, ſome ermines, and very fine ſables. The former carried only 12 white crows, and ſeven ſables, which hung at his girdle. On our coming near them, one of our guides ſtopt to talk with them, and to our great ſurprize got out of the ſledge, and the other went into it. Neither the ſupercargo who rode with me, nor I, could tell how to account for this complaiſance. We however purſued our journey with the hunter

in our company for above an hour longer thro' this desolate country, without meeting any other person, or the least sign of an habitation; but at last drawing near the brow of a high mountain, we perceived at the foot of it several houses built close together, and had a distant view of the sea. When we arrived at the village, we stopped at the door of the person who had taken our guide's place, and soon found that he was a man of authority, and he desired the inhabitants to serve us as his friends.

The name of this village is *Vitzora*. The inhabitants no sooner saw this person in our company, than they ran to help us out of the sledges, and to unharness our rain-deer. He bartered all his skins with us for brandy and tobacco, except his bear skins, which we did not chuse to buy, and his sables, which he durst not sell; for the Czar reserving that commodity for himself, those in any part of his dominions who sell it without a licence from him are severely punished. Officers are appointed to take these furrs of such as have them, they have warehouses in several places of the empire, and are the only persons permitted to trade in that merchandize.

Having dealt with the *Borandian* gentleman for all the furrs he had to sell, he sent two of his servants about the village to tell the inhabitants, that if they would bring their skins to his house, they might have brandy and tobacco for them, as their master had already had for his. The *Borandians* of *Vitzora* were glad to hear of so good a market, they immediately brought us all their furrs, and we bought this in

this place above 1500 ſkins of all ſorts, except ſables; when our cargo becoming too bulky to be carried in a ſledge, we deſired our landlord to do us the favour to lend us his bark, and ſome of his ſervants to go in it with one of our ſeamen, who was a good ſailor, to carry the furrs aboard our ſhip, which lay at above 100 leagues diſtance; for the ſailor and the *Borandian* ſervants who were uſed to the coaſts might eaſily manage that ſmall veſſel and convey our merchandize to our companions. He readily agreed to this requeſt, and we paid him for the uſe of his bark in tobacco and brandy.

This bark was built in the form of a gondola, it being broad in the middle and ſharp at each end. It was entirely of wood joined with pegs, without ſo much as a nail in it, or the leaſt bit of iron. In the middle it had a fir-tree maſt, to which was faſtened a ſquare piece of coarſe cloth made of the rind of a tree, which ſerved for a ſail; the cordage was made of the ſame materials, and the two anchors were formed of a very heavy kind of wood. When they were about to put to ſea he privately ſhewed us thirty pair of ſable ſkins, which we bought with ready money, ſlipt them on board, and the veſſel put off immediately. This, however, was running a dangerous riſk, for had there been any ſearchers at hand, he would not only have been corporally puniſhed; but alſo he and whole family ſent as ſlaves into *Siberia*.

The bark being out of ſight, our ſupercargo and accountants ſat down to drink with the

Borandian gentleman, while the two ſeamen and I walked out to take a view of the place, the ſituation of which was very pleaſant, having two mountains on each ſide of it, almoſt a league in height. All the houſes were built and artfully covered with fiſh bones, and the crannies every where ſtopped up with moſs, as cloſe as the caulking of a ſhip, and in ſome places that were moſt expoſed to the wind, were covered with turf very neatly laid. The doors, like thoſe we had ſeen in other parts of the country, were built like the mouths of ovens, and at the top of the houſes were a kind of lattices to admit the light. The inhabitants were very ſhort, and ſwarthy, with flat noſes and diſagreeable perſons. All the women and children appeared induſtrious, for we found them buſily employed, ſome making fiſhing nets of the rind of trees, others ſails, which looked like fine mats, their needles were formed of fiſh bones. Others were employed with knives, and others again with hatchets, in different kinds of buſineſs.

As we had not yet diſpoſed of half our commodities, and were in a country abounding with furrs, we, at our return to our lodgings, conſulted with our ſupercargo and accountants, when it was agreed, that as our commiſſion for traffic and diſcovery was very extenſive, we would proceed as long as we found the trade good, and our caſh, brandy, and tobacco held out. Having taken this reſolution, we ſent our guides back with the rain-deer and ſledges, and with letters to our Captains to inform them

of

of our ſucceſs and reſolution; and then, by the aſſiſtance of our hoſt at *Vitzora*, hired a bark to carry us to *Petzora*, the capital of a principality of the ſame name, on the north coaſt of the *Muſcovite* ſea; our landlord was ſo kind as to embark with us, and by the help of an eaſterly wind, we coaſted along the ſhore, and in fifteen hours reached *Petzora*.

CHAP. V.

The Author and his Company are kindly entertained at Petzora, *and having purchaſed a great Quantity of Furrs, ſet out in Sledges to proſecute their Journey. They meet with five Exiles in the Woods of* Siberia, *one of whom is known by the Author, and gives him an Account of the Cauſe of his Baniſhment, and the Hardſhips endured by thoſe poor People. The Author arrives at the Town of* Papinowgorod, *where he is kindly entertained by the Governor and his Lady. An Account of the Manners, Cuſtoms, and Buildings of the Inhabitants. He travels through* Samojedia. *A Deſcription of the Perſons and Manners of the* Samojedians.

ON our arrival at *Petzora*, we waited upon the collector of the cuſtoms, who there aſſumes the title of Governor, and lives at the caſtle. He was dreſſed after the manner of his country, in a robe of violet coloured cloth, with a mixture of red, and entertained us with ſome

ſome excellent metheglin, which was as racy as ſack, after which we had brandy and ginger-bread, the common collation all over *Muſcovy*. As we knew that he had the care of the Czar's ſables, we aſked him to ſell us ſome, and on his deſiring to know how many we wanted, we told him we would take all he had, if he would let us have them a pennyworth. Upon this he conducted us to the warehouſe, where there were five zimmers, each zimmer being fifty pair, among which there were two zimmers as black as jet, and the fineſt I ever ſaw, for which we paid him 500 ducats, and the other three zimmers we purchaſed for 800 crowns or 400 ducats. Having paid him his money, he gave us a noble entertainment of roaſted wild fowl, young rain-deer veniſon, which is very good meat, and freſh fiſh; two boats having at our firſt arrival been ordered out to catch ſome for our entertainment. After this meal, we ſat eight hours drinking brandy and metheglin, the fumes of which would much ſooner have got into my head, had I not ever now and then eat a *Muſcovite* biſcuit, which is moſt excellent bread. At length, however, becoming intoxicated, the Governor and his gueſts all laid down on white bear ſkins, for he had no beds, when having ſlept ſix or ſeven hours, we aroſe, and the Governor immediately preſented us with a bumper of brandy.

After breakfaſt being deſirous of going thro' the town, in order to try whether we could carry on any trade with the inhabitants, the Gover-

nor

nor ordered one of his officers to accompany us, and we ſoon bought of ſeveral people 2000 grey ſquirrels, 4 dozen of ermines, 500 fox ſkins, the greateſt part of which were as white as ſnow, 120 white wolf ſkins, and 200 martens of a greyiſh colour. All which we purchaſed for 400 ducats, half of which we obliged them to take in copper money, becauſe it incumbered us, and the other half in gold and ſilver. We then returned to the caſtle, whither we ſent our merchandize, and there packed it up in bales, covered with the ſame ſort of ſtuff as the ſails of the bark. Having thus taken care of our goods, it was reſolved that one of our accountants ſhould return with them to the ſhips, for which purpoſe we deſired the governor to furniſh us with a bark, to which he agreed. We alſo hired three *Borandians* to aſſiſt the accountant in his voyage, theGovernor paſſing his word for them, that they ſhould be truſty and do us no wrong. For the hire of the bark, and the wages of the *Borandians*, we paid him ten ducats more, and gave the *Borandians* ſome pieces of tobacco, the Governor promiſing to ſatisfy them for their trouble, when they came back.

This veſſel having ſet ſail, we fell to drinking again, when the quantity drank by the gentleman of *Vitzora* was quite ſurprizing; but having continued drinking four hours together, we compoſed ourſelves to reſt on bears ſkins, as before.

The next morning our ſupercargo deſired the Governor, to let us have ſome rain-deer, to carry us into *Siberia*, upon which he furniſhed us

us with ſeven of them, and the ſame number of ſledges, one for our ſupercargo, one for our other accountant, one for myſelf, two for our two ſeamen, one for our guide, and the other for our tobacco and brandy. He alſo ſupplied us with proviſions, that were to laſt till our arrival at *Papinowgorod*, a city in the province of *Petzora*, on the borders of *Siberia*. Our factor having taken the money he had left, and the ſeven rain-deer being put to the ſeven ſledges, the Governor ordered another to be got ready, for one of his domeſtics, whom he directed to wait upon us ſeven leagues of our way, till we arrived at a village, from whence he was to take back our rain-deer, for all which he was to have no more than four ducats. But he would not let us go without our drinking five or ſix glaſſes at parting.

Having returned our hearty thanks to the Governor and the gentleman of *Vitzora*, for their many civilities, we got into our ſledges, and travelled four hours through intricate unbeaten ways, without ſeeing any living creature, till at laſt we met four white bears of an enormous ſize, which croſſed our way, and ſeeing us fled into a wood. In about two hours after we arrived at a village, conſiſting of ſeven or eight cottages; but the inhabitants being all gone to hunt, we alighted to refreſh ourſelves on the proviſions we had brought with us. In the mean time five or ſix men with their wives and children returned from hunting, bringing with them ſix bear ſkins, four wolve ſkins, a couple of ermines, and eight ſables. They were ſurprized

prized to ſee us there, and would have fled, had not the Governor of *Petzora*'s ſervant aſſured them that we were friends and merchants bound for *Papinowgorod*, when coming up to us, they viewed us narrowly, being amazed at ſeeing ſo many ſtrangers in ſo unfrequented a place. They were aſtoniſhed at our dreſs, our looks, and ſhape, and at our ſpeaking a language ſo different from theirs, which to them was quite unintelligible. However, by the aſſiſtance of our interpreter, we bought all the ſkins they dared to ſell us, and they lent us rain-deer and ſledges to carry us to the mouth of the river *Papinowgorod*.

We now left the river *Petzora*, the coaſt of which we had followed ſome time, and proceeded towards that of *Papinowgorod*, through almoſt impaſſable ways, over high mountains, and through woods and foreſts for three hours; but at length on our approaching a thick wood, we obſerved five men in white bear's ſkin long coats, made after the *Muſcovite* faſhion, each of whom had a gun on his ſhoulder, a pouch on one ſide, and a knife and ſheath on the other. As they made up towards us, our guides ſtopped their rain-deer, when the five men being near enough to be heard, one of them perceiving that we were ſtrangers bad us good-morrow in the *German* tongue, wiſhing that they were as free as we were. Our ſupercargo being a native of *Lower Saxony* was attracted by the ſound of his own language, and aſked him what countryman he was, when entring into converſation, ſeveral things were ſtarted, by which they

they underſtood that they had been formerly acquainted. Upon which the ſupercargo alighted out of his ſledge, embraced him, and aſked how he came there, to which he replied, that he had been baniſhed for hunting ſables, a very capital offence, for which ſome are ſent into exile for ten years, ſome for ſix, and ſome for three.

While they were diſcourſing, I had time to look at the other four, when I imagined that I had ſome knowledge of one of them; but could not recollect who he was, and the more I looked at him, the more firmly was I perſuaded that I had ſeen him before, and therefore could not forbear getting out of the ſledge to ſatisfy my curioſity; but I no ſooner ſet my foot on the ground, than the man who remembered me, better that I did him, ran to me and embraced me, aſking in *French*, whence I came, and were I was going. This increaſed my ſurprize, ſince I could not yet call to mind who he was, for he was ſtrangely altered by his habit, by the length of his beard, and his head being bald; he was beſides reduced almoſt to a ſkeleton. Finding that I could not recollect him, he told me his name, and that he had often drank with me at *Stockholm*. Upon this I immediately recollected, that he was a perſon to whom I had been very much obliged, and had received many civilities from him in *Sweden*. He was born in *Lorrain*, was a gentleman by birth, and Lieutenant-Colonel of a regiment of *Muſcovite* horſe. He had endeavoured to perſuade me to go with him to *Moſcow*, by offering

offering to procure me an honourable and profitable poſt; but I declined accepting his propoſal. When I compared the fine appearance he made at that time, the reſpect with which he was treated, as well on account of his eſtate, as the place he enjoyed, and his bearing the character of a man of honour and bravery, with the miſerable condition to which I now ſaw him reduced, I could not help being afflicted; I embraced him with extraordinary affection and tenderneſs, and aſking the cauſe of his diſgrace, he replied, that the Czar ſuſpecting that he had not been ſo zealous in his ſervice as he ought to have been, had baniſhed him to *Siberia* for three years, where he endured miſeries that are not to be expreſſed, he being expoſed to the greateſt dangers in hunting wild beaſts for his ſubſiſtance, to the miſeries of hunger and the rigour of the ſeaſons, which he and his companions were forced to endure, nobody daring to afford them any relief. He added, that they were almoſt every day attacked by wild beaſts, which they met in herds ſeeking for paſture, and that they frequently found great difficulty in defending themſelves; that beſides they were condemned to ſupply the Czar's officers with a certain number of ſables, under the penalty of being ſeverely laſhed with a whip of leathern thongs, on their naked backs, till they were covered with blood.

One of the other had been Receiver-general of the Czar's revenues in one of the provinces, another had been a Major-General, and the fifth a man of note. They all joined in de-

ploring their misfortunes, exclaimed loudly against the Czar, and declared that when once their time of exile was expired, they would get far enough out of his power.

We now sat down with them on the moss, took out the best provisions we had, and desired them to partake with us, we even offered them our assistance to facilitate their escape; but they told us it was impracticable, they being known to all the Governors of the forts and places through which they and we must necessarily pass, and in case they should be taken, both they and we would be put to a most cruel death. This increased our concern for these unfortunate gentleman, and we all shed tears at the sight of what they suffered, and the ideas of what they were still to endure. We could not think of parting immediately with persons in such a disconsolate state, some of whom we had known in better days; we therefore told them, our trade was not in such haste as to prevent our spending a day or two with men in their unhappy circumstances, whom we equally loved and esteemed. They received this proposal with great joy, told us they had five little huts which they had built in the neighbouring wood, and if we would be so kind as to go thither with them, they should be infinitely obliged to us, and all the skins they had should be at our service, except the sables, which they were forced to reserve for the Czar; and added, that the remembrance of the happy hours they should spend with us in their solitude, would make many future

months

months glide on the more ſweetly. We therefore ordered our guide to unharneſs their rain-deer, and to convey our goods into the huts the gentlemen had erected to defend them from the weather.

We found, on approaching theſe huts, that neceſſity had rendered theſe unhappy men ingenious. They were built of fir, higher than any we had ſeen in our travels; there were two or three rooms in each of them, and lattices to let in the light at the ſides. They were each ſhaded by trees, and ſo artfully paved with fiſh bones, that the floors looked as if they were inlaid with ivory. To ſecure themſelves from the wild beaſts, they had dug a trench round theſe buildings, and palliſaded the inſide of it with ſtrong poſts, and pieces of wood nailed acroſs them, on the top of which were ſpikes of fiſh bones. Thus when their gate was ſhut, they were as ſecure as in a fortified place. They had within all ſorts of hunting and fiſhing tackle, beſides a good ſtore of ſalted rain-deer veniſon, biſcuit, and metheglin.

While the reſt of the company ſat down to drinking, my friend and I withdrew to his hut to converſe together. We entered into diſcourſe on his adventures; he told me he intended to return home after his time of exile ſhould be expired, and gave me his direction in *Lorrain*. Our converſation turned partly on our former acquaintance, and partly on the wildneſs of the country, and the barbarity of its inhabitants.

When my friend and I had tired ourſelves with talking, we laid down upon bear ſkins, as our companions alſo did when wearied with drinking, and ſlept ſound till the next morning.

We aroſe early, and at the deſire of the five baniſhed gentlemen, took each of us a gun, and went with them into the woods to examine their ſnares, to ſee what prey was caught in thoſe they had laid the night before. We killed among us ten or twelve white foxes, and half a dozen grey martens, but met with none of the larger game; and as we reſolved to purſue our journey in the afternoon, we did not chuſe to loſe our time in hunting. We therefore ſoon returned to the huts, and both we and our hoſts, furniſhing proviſions, refreſhed ourſelves as well as could be expected in ſo wretched a place. After we had drank plentifully, the gentlemen forced us to take ſeven bears ſkins, ten white fox ſkins, two pair of ermines, and eight wolf ſkins, for which they would take no money. However, we with difficulty prevailed on them to accept ſome brandy, tobacco and cloth, which we took care ſhould exceed in value the commodities they had given us. We wept reciprocally at parting, wiſhing them patience to endure their ſufferings, and a happy deliverance out of them; and having mounted our ſledges, continued our travels with the uſual expedition.

Having now proceeded three hours without meeting with any habitation, we diſcovered five or ſix huts together, in which were about a dozen

a dozen perſons, from whom we bought all their ſkins. We now following the courſe of the river *Petzora*, frequently met with ſmall villages, in ſome of which we found inhabitants, and in others none; but whenever we met with any body to trade with us, we bought their furrs either with money or brandy.

We now reached a large ridge of mountains, that are almoſt always covered with ſnow, and ſo barren, that neither man nor beaſt can live upon them. On both ſides of theſe mountains were vaſt numbers of white bears and wolves, which put us in fear of our lives; we being under continual apprehenſions of their falling upon us, though perhaps theſe animals were as much terrified at us, as we at them; for they fled before us, ſome on the one hand and ſome on the other, frightened perhaps at the glittering of our arms. We were twelve hours in croſſing the mountains, over which our cattle had much ado to draw us; but we at laſt reached the deſcent, and arrived at a village in *Siberia*, where the people had linen ſhirts, cloſe buſkins, and garments of bear ſkins, with the hair outwards; but they appeared to be leſs barbarous than thoſe with whom we had lately converſed. They received us very civilly, aſked whence we came, and whither we were going: having reſolved their queſtions, we bought all their ſkins for ready money, feaſted with them on dried bears and wolf's fleſh, rice cakes, and brandy; and then ſlept upon bears ſkins, in houſes built after the manner of the *Laplanders*.

We no ſooner awaked than we mounted our ſledges, and ſet forward for *Papinowgorod*, which we reached in about twenty hours. The Governor hearing of our arrival, ſent for us to come to his caſtle, to inquire into our country and buſineſs. Upon which we immediately waited on him, and our accountant, who underſtood the *Muſcovite* language, anſwered all his queſtions to his ſatisfaction. Being informed that we were *Daniſh* merchants who travelled ſo far to buy furrs, he treated us in a very friendly manner; and, as a mark of reſpect, ſent for his wife to entertain us, upon which ſhe came with a bottle of brandy in one hand, and a ſilver cup in the other, followed by a maid ſervant with a plate of gingerbread. We ſaluted her according to the cuſtom of the country, by bowing our heads, when untying the knot of her ſhift-ſleeve, ſhe let it fall to the ground, and the ſupercargo taking it up, we each of us kiſſed it. She then furled it up again with her left hand, and taking the bottle and cup, which ſhe had ſet down to perform this ceremony, gave each of us a bumper of brandy and a piece of gingerbread, ſtanding all the while near her huſband at the end of the table. She then withdrew, and the Governor regaled us with an excellent ſupper.

This entertainment being over, we were conducted to lodgings prepared for us in the caſtle, and conſidering the country, lay in very good beds. Having ſlept about ſeven hours we aroſe, of which the Governor being informed by one of his ſervants, got up and

came

came to ſee us, bringing a bottle of brandy with him, and one of his domeſtics having another, filled a large cup for a morning's draught. We each of us drank one, and then the Governor aſking if we would buy his ſkins, our ſupercargo ſaid that he would if he liked them, and could agree on the price. His furrs were extremely well choſen, and though they were valued much higher than any we had met with in all our travels, they were the beſt worth our money. Theſe being bought and paid for, he ordered one of his men to call ſome of the inhabitants, who had a quantity to ſell; and while our ſupercargo was dealing with the Governor and his neighbours, I took a turn about the town.

Papinowgorod is commodiouſly ſituated in a ſmall plain, in the midſt of a fruitful country, ſurrounded with high mountains; and near it runs a large river, well ſtocked with fiſh. The houſes are low, and meanly built of wood, with the chinks ſtopped with moſs, and the ſtreets are paved with timber laid cloſe together. The people of faſhion wear a long cloth coat, which reaches down to their toes, with very cloſe ſleeves of another colour, under which they have breeches and ſtockings of the ſame cloth. Their ſhoes, or rather boots, are of blue, red or yellow leather, buttoned on the top; and upon their heads they wear cloth caps lined, and bordered with ermine, ſable, or black fox ſkins. The women are fair, beautiful, and ſomewhat fat; their hair is of a light cheſnut colour, hanging down to their waiſt, and

and their head-dreſs is an oval cap: their upper garment, like the men's, hangs down to the feet, and is made of a red, blue, or violet coloured cloth, and is lined with white fox ſkin or ſable. They have round their waiſts a broad girdle adorned with pearls, and their ſhifts are made of fine callico, with ſleeves all ruffled up from the wriſt to the ſhoulders, ſome of which are five ells long; and this bundle prevents their uſing the arms of their robes, which therefore hang uſeleſs, and are only pinned on. On their feet they have ſhoes made of *Ruſſia* leather.

The people of *Siberia* are grave, robuſt, ſwift, and very dexterous at ſhooting with the croſs-bow; but they are ignorant, churliſh, and jealous of their wives, whom they generally lock up; and even if they do not, none of them dare quit their rooms without their huſband's leave. The religion of this province is called *Nicholation*. Their judical proceedings are terminated with great expedition; for all their courts of juſtice are courts of equity. There are no petty-foggers either here or in *Ruſſia*, who, under the pretence of relieving the innocent, and ſuccouring the diſtreſſed, rob the poor, and inrich themſelves with the ſpoils of the widow and the fatherleſs. Falſe witneſſes are moſt ſeverely puniſhed, as are alſo traitors and robbers; murderers are proſecuted by the friends of the deceaſed, and adultery in either ſex is puniſhed by ſtoning the guilty to death.

When

When we had bought up all the furrs we liked at *Papinowgorod*, we found we had enough to load a ſledge and a half; and having ſtill ſome tobacco and about 5000 ducats left, our ſupercargo reſolved to proceed farther, in order to purchaſe more for us, and to return to our ſhips through *Samojedia*. As our brandy fell ſhort, we bought a ſupply of the beſt the Governor had; we agreed with him for proviſions ſufficient to laſt us twelve days, and for rain-deer to carry us to the end of our journey. When we had concluded all our dealings with him, and paid our money, we were forced to have a drunken-bout at parting, without which there is no getting away. We eat and drank for ten hours together, and then took our reſt for eight more: after which we aroſe, harneſſed our rain-deer, loaded our ſledges with our merchandize and proviſions, mounted them, and took leave of the Governor.

We proceeded ſeventeen hours, all the way buying up what furrs we could find of the *Siberians*; and having in ſix hours more croſſed the *Riphean* mountains, we entered *Samojedia*, a deſolate mountainous country, full of juniper trees, pines, and firs. It abounds in moſs as well as ſnow; and we every moment, to our no ſmall terror, met with white bears, wolves and foxes.

On our aſcending mount *Stolphen*, whence ariſes the river *Borſagatz*, we came to eight or nine houſes, where we ſtopped, in order to reſt ourſelves and our cattle, and exchanged with

with the inhabitants brandy for white and black wolf and fox ſkins, caſtor and otter ſkins. They had ſeveral dozen of ſables, which they would not ſell upon any terms, though they were aſſured by our *Borandian* guide that there was no manner of danger, we being traders who were going to our ſhips, and could not be diſcovered before we reached the coaſt, becauſe we were not to paſs through any place where there were officers impowered to ſearch for prohibited goods. All our arguments had, however, no effect, till we had drank them down; when our brandy rendering them couragious, they brought out their ſables, and ſold us the beſt and the greateſt quantity we had picked up in our whole journey.

We ſtaid to reſt ourſelves in one of the chief huts of the village. The maſter of the houſe, with his wife and children, and we his viſitors lying all together on bear ſkins. Having ſlept four or five hours, I was awakened by the noiſe made by our hoſt to raiſe his family, all of whom went out, when having the curioſity to follow them at a little diſtance, I obſerved them fall down on their knees behind the cottage, lifting up their hands and eyes to adore the ſun.

The people of *Samojedia* are ſhorter and thicker than either the *Laplanders* or the *Borandians*. They have large heads, their faces and noſes are flat, they are of a ſwarthy complection, and have ſcarcely any hair. They wear a round furr cap; and a white bear's ſkin coat, that reaches down to their knees, and is faſtened round the

the waiſt with a girdle four inches broad; they alſo wear breeches, ſhoes and ſtockings, made of the ſame ſkin with the hair outwards, and inſtead of a cloak, they hang a black bear's ſkin over their ſhoulders, the feet dangling at the four corners; this ſkin is placed more on the left ſide than on the right, to leave the right arm at liberty in the management of their bows and arrows, and upon this ſkin they tie their quiver. They alſo wear upon their feet a kind of ſkates two feet long, with which they ſlide with prodigious ſwiftneſs over the ſnow, that almoſt always lies on the mountains.

The *Samojedian* women, have more diſagreeable perſons than thoſe of the men. They are capable of enduring great hardſhips, and take care to breed up their children in uſing their bows with great dexterity. They are dreſſed like the men, only their upper garment is a little longer, and all the difference in their head-dreſs is, that the women have a lock of twiſted hair, hanging down on their ſhoulders, at the end of which is a knot, formed of a long ſlip taken from the bark of a tree, which hangs down as low as their heels, and this is all their finery. They hunt as well as the men, and are in the ſame manner armed with bows and arrows. The huſbands are true to their wives, and the wives to their huſbands, and if either man or woman is found guilty of adultery, the criminal is immediately ſtoned to death.

Having traverſed *Samojedia*, and exchanged away our money and goods for ſkins, we returned, and in twelve days after our departure from

from *Papinowgorod*, reached the coaſt of *Borandia*, without meeting with any adventure worth notice. Upon that coaſt our ſhips had waited for us, at an appointed place, where we put all our merchandize on board, paid off our *Borandian* guide and embarked.

CHAP. VI.

The Author ſails to Nova Zembla. *An Account of the Sea-horſe Fiſhery in the Streights of* Weygats. *Some of the Crew land in a ſmall Iſland in thoſe Streights, and catch a Number of Penguins : Four* Zemblians *taken : A Deſcription of their Perſons and Dreſſes.*

HAVING weighed anchor, we ſailed from the coaſt of *Borandia* with a fair wind, and the next day in the afternoon, caſt anchor near the coaſt of *Zembla*, when we obſerved upon the ſhore, about 30 perſons with quivers on their backs, worſhipping on their knees the ſetting ſun. Our maſter and ſupercargo immediately conſulted what courſe it would be proper for us to take to come at the ſpeech of them. They thought them more wild than any ſavages they had yet ſeen, and thinking it would be difficult to perſuade them to deal with us, it was reſolved to ſend out three long-boats with ten men well armed in each, that they might be able to defend themſelves, in caſe they ſhould be attacked. I was one of the number

number dispatched upon this service; but when we were about a quarter of a mile from the land, the savages arose from their knees, discharged their arrows at us, and then fled with surprizing swiftness, but being at a great distance when they let fly at us, they did not do us the least harm.

We no sooner reached the shore than we landed, and pursued them to the place whither we thought they had fled, in hopes of making some of them our prisoners; but we found it impossible, though we followed them till we approached some mountains covered with snow. However, we continued to advance farther into the country, till we came to a rising ground, upon which was erected a piece of wood very wretchedly cut into the figure of a man, and before it two *Zemblians* on their knees, with their arms lying by them. They were worshipping this idol, who was called *Fetizo*, as the others on shore had been adoring the sun; but the moment they beheld us they fled into an adjoining wood of firs, and as night approached, we thought it would be in vain to pursue them, and therefore returned to the ships.

From thence we steered towards the streights of *Weygatz*; to catch sea-horses, and having proceeded about six leagues, kept near the shore, and put out our long-boats, with eight harpooners in each besides the rowers. We were three days without catching any thing; but at last observed two great fish approaching us, one of which had a large horn in his for-

head, when the boats coming near, the harpoons were thrown at him on all ſides; and the ropes to which they were faſtened let loſe, after which the men haſtily retired, to be out of his reach while he was ſtruggling. At laſt the fiſh ſwimming above the water, which was a proof of his weakneſs, the men in the boats drew him to them by the ropes faſtened to the harpoons, and then cutting off his head, threw the body into the ſea; it being neither fit for food nor oil. This was a ſea-horſe, which is taken only for the ſake of his teeth and horn, the former being more valuable than thoſe of the elephant, becauſe they are whiter and not ſo apt to turn yellow. The horn of this ſea-horſe was ten feet long, and very heavy; from the root, which was as thick as a man's ſhoulder, it gradually decreaſed, wreathing handſomely, till it ended in a ſharp point. One of the boats coming too cloſe to the other fiſh, in order to make ſure of it, and not retreating with ſufficient ſpeed was unhappily overturned by his tail, with which he laſhed the boat with prodigious fury, on his feeling the harpoon; by this means two of the men were drowned, notwithſtanding which the fiſh was taken; but though this was no recompence for the loſs of our ſailors, yet it was a good prize, the teeth being larger and whiter than the former.

We were four days cruiſing about before we met with any more, and were preparing to change our ſtation, when we perceived four of the ſame fiſh, that ſeemed larger than thoſe we had caught; three of them we took, but none of

of them had any horn. Twelve hours after we discovered five more, but three of them escaped, one of which had a horn. Two hours after we espied three more, one of which we took, each of whose great teeth weighed 29 pounds. Two days after we caught five more, among which was one with a horn, like that of the first we caught, but it was neither so heavy nor so large, it being scarce seven feet long.

We staid there five days longer; and in perceiving no more fish, took the advantage of a north-north-east wind to sail towards *Waygatz*, in hopes of passing those streights, which if practicable, would shorten the passage to the *East-Indies* by three fourths. We pursued our course pretty well for 36 leagues; but were unable to proceed any farther on account of the large pieces of ice that opposed our passage, and those mountains covered with snow which lie at the mouth of the *Frozen Sea*, and are known by the name of the *Pater-nosters*. Hence these streights have received the name of *Weygatz*, which signifies impassable.

We now came to an anchor on the eastern coast of *Zembla*, when one of the seamen landing, a bear came behind him and struck him down with his paw, and had we not happily seen it, and shot the bear dead, he would certainly have been devoured. This accident deterred the rest of the mariners from venturing on land.

Shortly after three bears swam to the sides of the ships, and strove to come on board; but though we cut off the paws of one of them

with our hatchets, and ſhot the other with a muſket, the third, while we were diſpatching theſe, mounted the ſide of the ſhip, and got upon deck, when a ſailor who was near, cried out, for the bear was juſt at his heels; but we all took up the firſt offenſive weapons that came to hand, as oars and pieces of timber, with which we knocked him down and diſpatched him, while others ſhot at and killed two others that were ſwimming towards us. This ſlaughter we thought would have hindered any more attempting to board us, but we were miſtaken; for about four or five hours afterwards, 10 or 12 more came as far towards us on the ice as they could, and then took to the water making directly for the ſhips, when we uſed our arms ſo ſucceſsfully that not one of them eſcaped. However, many others ſtill approaching from the high mountains, and being unwilling to continue expoſed to ſuch hourly attacks, we weighed and ſtood over to the weſt coaſt of *Zembla*, where we firſt anchored, and got clear of the ſtreights of *Weygatz*, with an eaſterly wind in fifteen hours; but not without great danger of running upon the rocks of ice that lay in our way.

There is an iſland at the mouth of this ſtreight which appeared very green, and is covered with fir and juniper-trees. Some of the ſailors going on ſhore ſaw a bird ſo large as to be ſcarcely able to fly, and giving at their return an account of what they had ſeen, I deſired leave to land with about 40 men to hunt theſe birds and make diſcoveries, which being granted,

granted, we killed about 60 of them, ſome of which we ſhot, and others we knocked down with clubs, and afterwards carried them on board. Theſe birds, which are not much taller than ſwans, though a great deal larger, are called penguins. They have a ſharp beak, under which begins a gullet, that reaches down to their breaſt in the form of an urinal, only it is larger, and in this bag they ſtore their proviſions, which they take out to eat as they have occaſion. They are of a brown colour, and have webbed feet like a gooſe. Their fleſh is extremely palatable, and taſtes like that of a wild-duck, only it is fatter. We eat heartily of it, and had not ſuch a feaſt in all our voyage, but before we dreſſed them we were obliged to take off the ſkin which is very tough.

Having ſtaid at this iſland two days, we ſailed with a ſouth-eaſt wind; and in about 30 hours arrived at a cape, near which we again found the *Zemblians* worſhipping the ſun.

As his *Daniſh* Majeſty was very deſirous of having a perfect account of the riches and nature of *Zembla*; and for the more eaſy acquiring of that knowledge, had ordered our officers to bring off ſome of the natives, we reſolved, if poſſible, to put this order in execution; and 30 perſons, of whom I was one, were ordered to land in the long-boat; but we had ſcarcely got over the ſhip's ſide before we diſcovered a *Zemblian* in his boat about half a league off land, who ſeeing us make towards him, rowed ſo faſt that it was impoſſible to get

up with him, and as ſoon as he ſet his foot on ſhore, throwing his boat upon his ſhoulder, ran ſo ſwiftly, that we perceived we ſhould find it very difficult to overtake him, nor did he ſeem encumbered either with his boat or a dart he had in his hand. We, however, landed and purſued him towards a hill which we ſaw him mount, and he was quickly out of ſight. We therefore gave over all thoughts of taking him, but as we were rowing back to our ſhips we perceived two *Zemblians* further out at ſea, and they obſerving us at the ſame time, rowed towards the promontories and rocks on the coaſt to hide themſelves; but we plied our oars ſo briſkly, that we ſurrounded them in four boats as they were rowing with all their ſtrength towards a rock, when finding no poſſibility of making their eſcape, they ſet up a howling that was the moſt hideous I had ever heard. They were a man and woman dreſſed in cloaths made of the ſkin of the ſea-calf, with the hair outwards, and their waiſtcoats were formed of two ſkins joined together, the tails dangling, the one before and the other behind, almoſt as low as their knees. Their drawers were very ſtrait. The man ſeemed to be about 50 years of age, and though he had no hair on his head, he had a round beard of a cheſnut colour. The woman, who ſeemed to be about 30, had her ears and noſe bored, and pendants of blue ſtones hanging at them; her hair was twiſted, and dangled on her ſhoulders. Their features were extremely diſagreeable, and they were both of them ſhorter and ſquatter than either the *Lap-*

landers,

landers, *Samojedians*, *Borandians* or *Siberians*. They had ſqueaking voices and ſtinking breaths, the latter was probably cauſed by their eating of fleſh without ſalt, or fiſh with train-oil.

We ſoon took them into one of the boats, and towed that in which we found them, by faſtening it to one of our own boats. It was made of the rib bones of fiſhes, very artfully joined, and neatly covered with fiſh ſkins ſewed together. It was ſixteen feet in length, and two feet and a half broad. They were ſhut up in it as high as their waiſts, by having a fiſh ſkin drawn over it, with two holes that fitted their waiſts; ſo that a drop of water could not get into it. They therefore expoſed themſelves in the fouleſt weather, to all the dangers of the ſea; without the leaſt fear of foundering. But though we made all the friendly ſigns we could to them, in order to induce them to let us know their habitations, it was impoſſible for us to learn any thing from them.*

We now reſolved to try whether we could not get ſome other of theſe people into our power, who were leſs ſtupid and more communicative. Upon which 30 of us landed again, taking ſeveral days proviſions with us, and went in two companies well armed about 100 yards diſtance from each other, and having hid ourſelves in caverns under the rocks, poſted

* It evidently appears that thoſe people are of the ſame race with the *Eſkimaux* of *Hudſon*'s *Bay*. See *Ellis*'s voyage to *Hudſon*'s *Bay*, Vol. X. from p. 207 to 213.

cen-

centinels in proper places, to diſcover if any ſavages approached, whom we intended to ſeize and to force them to ſhew us their habitations. We were two days without ſeeing any of the natives; but at laſt one of our centinels gave us notice that two of them were deſcending a hill towards the ſea-ſide, on which we divided ourſelves into companies at proper diſtances, and the poor *Zemblians* ſoon entered the ſnare, without ſuſpecting any treachery, till one of our companions diſcharging his fuzee, we all made our appearance, and the ſavages finding is impoſſible to fly, were eaſily taken. Their garments were of penguins ſkins with the feathers outwards. They had each a pair of ſtrait breeches which reached to their knees, a kind of waiſtcoat, the ſleeves of which reached only to their elbows, the reſt of their arms being naked. The feathers were picked from their waiſtcoats before and behind. They had caps in the form of a ſugar-loaf, and ſtockings made of the ſkin of a ſea-calf with the hair outwards. Though their dreſſes were the ſame, yet we ſoon perceived that one of them was a a man and the other a woman. The man ſeemed to be about 24 years of age; his face was very broad, his noſe flat, and his complexion ſwarthy. He had neither beard on his chin, nor hair on his head; at his back hung a quiver filled with arrows; on his ſhoulder he carried an ax, and in his other hand held a bow. The woman ſeemed to be about 20, and held a dart in her hand; her hair hung down in two twiſted locks on each ſhoulder; ſhe had blue

blue ſtreaks on her forehead and chin, and her ears and noſtrils had holes bored in them, in which were fiſh bone rings, to which were faſtened blue ſtones, thoſe in her ears being as large as filberts, and thoſe in her noſe no bigger than peas.

We tried all the ways we could think off to oblige them to ſhew us where they dwelt, but without effect. They were as reſolute and ſullen as thoſe we had taken in the boat, and we carried them on board without making any further diſcoveries. When we brought them to their fellow priſoners, we found that notwithſtanding their being ſo differently dreſſed, they knew each other. Theſe four *Zemblians* ſeemed the moſt deſpicable part of the human ſpecies I had ever ſeen. Their features were extremely diſagreeable, and when they walked they waddled like ducks. We could never make them eat any bread, ſalt meat, or fiſh, nor drink any beer; they being uſed to drink nothing but water; they ſometimes taſted our brandy, but had a great averſion to the ſmell of tobacco. The wood-work of their bows and darts was very heavy, and of a red brown colour, but that of the arrows was much lighter and paler. Their needles, the points of their darts, arrows, and all their other ſharp inſtruments were made of fiſh bones,

CHAP.

CHAP. VII.

The Author ſails to the Coaſt of Greenland, *lands in* Iceland, *and aſcends Mount* Hecla, *where he is expoſed to great Danger by an Irruption of that burning Mountain. Other Curioſities in the Iſland deſcribed, with ſome Account of the Inhabitants. The Author ſails on his Return to* Denmark, *and arrives at* Copenhagen.

THE ſummer was now far advanced, it being the latter end of *Auguſt*, and the cold increaſing, we began to think of returning home, and therefore weighing, held on a ſouth-weſt courſe, but the wind ſhifting to the ſouthward, obliged us to make the coaſt of *Greenland*, where we dropped anchor, near a *French* and *Dutch* fleet employed in the whale fiſhery. The ſhips ſeldom lie far from the ſhore, for the whales which, are caught in the ſame manner as we took the ſea-horſes, are like them commonly found near the land. When they are caught they are cut to pieces, and the blubber being taken out, is put into large kettles, and melted to oil in huts erected for that purpoſe along the ſea-ſhore. During our ſtay here, I ſaw one whale that yielded 350 pounds weight of good bone, which together with its oil, muſt have afforded a conſiderable profit. Our arrival in this place proved very fortunate for our *Zemblian* priſoners, who had for ſome time pined

pined away for want of whale oil, they being able to eat nothing, unless it was soaked in it, and our store was intirely exhausted: but for their sakes we here took in a fresh supply.

Having staid two days on this coast, we took the advantage of a north-east wind, and proceeded on our voyage, but being overtaken by a storm, we steered to the coast of *Iceland*. On our approaching that island we heard a dreadful noise at land, like the firing of several pieces of ordnance, after which we saw flames issue in abundance from mount *Hecla*. We found so many rocks on the coast, and the sea was so extremely rough, that we were afraid of venturning within a league of the land; but we steered to cape *Heri*, under which we anchored in safety.

Soon after a strong party of us landed at the village of *Heri*, whence we proceeded to *Kirkebar*, a large town, where we met with eight or nine *Danish* merchants, who were much surprized at seeing us there, and entertained us very cordially with dishes of fresh meat, good bread, and excellent wine. From them we learned, that the day before the island had so terrible an earthquake, that they expected to be swallowed up alive.

Our Captain, supercargo, and others of our company intimating to the chief merchant at *Kirkebar*, that they were desirous of seeing whatever was worth notice in the island, he very obligingly ordered horses to be got ready for all of us, that were willing to travel into the country, and I saying that I would make

one

one of them, eight of us mounted, while the rest having less curiosity, chose to stay and drink at this merchant's house. This gentleman gave us one of his servants, and two *Icelanders* to be our guides, and also furnished us with a horse-load of provisions. We travelled two days in rugged and unfrequented roads; when we found ourselves about five miles from mount *Hecla*, and perceived the ground strewed with ashes and pumice-stones, over which we passed to the foot of the mountain, the weather being now very serene and calm, and seeing no flames issue out of the volcano, we resolved to go up to the top; but we being informed by our guides, that if we went farther, we should be in danger of falling into pits, where we might be suffocated with the fumes, caused by the fire in the bowels of the earth, and that it would be impossible to pull us out, all our company except myself, declared against proceeding: but I told them, that if they would stay for me, I would go up alone, and they promising that they would, I alighted and prepared to ascend the mountain, when one of the *Danish* merchants whom we met at *Kirkebar*, and who accompanied us out of curiosity, said he would go along with me.

Having given our horses to our guides, who staid behind with the rest of our company, we boldly ventured forwards, resolving to reach the top of *Hecla*, and in a short time we saw a large flight of crows and vultures, that had their nests in the top of the mountain. When we had ascended about half a league we felt the ground

ground ſhake under us and heard a terrible noiſe in the bowels of the earth, which ſeemed ready to burſt open. At the ſame time there appeared on all ſides chinks, out of which iſſued bluiſh flames, that had a ſtrong ſuffocating ſmell of burning brimſtone. This made us turn back, for fear of being burnt to aſhes. But we had ſcarce proceeded 30 yards back before a black cloud of ſmoke aſcended out of the mountain, obſcured the light of the ſun, and covered us ſo thick that we could not ſee each other. Our fears encreaſed every ſtep we took; for behind us came flames of fire, ſhowers of aſhes, and pumice-ſtones that fell as thick as hail, and this dreadful ſtorm was attended with horrible noiſes. We beſides every moment expected that the earth would open and ſwallow us up, which added wings to our flight, and we ran as faſt as we were able, to eſcape the danger to which we had expoſed ourſelves by our idle curioſity; and indeed our fears made us ſo nimble, that in a quarter of an hour, we got to the bottom of the mountain.

Our companions on ſeeing us come down ſo faſt, burſt into a fit of laughter, which was ſoon increaſed by their obſerving us to be as black as if we had been covered with ſoot; their mirth, however, ſoon abated, for on our approaching them, we both dropt down ſpeechleſs. They immediately came to our aſſiſtance, and by rubbing our temples, noſtrils, and hands with vinegar, brought us to ourſelves, and then revived us with a cup of canary; upon which recovering our ſtrength and ſpirits,

we related what had happened, and they were rejoiced at our escape.

We now left the foot of the mountain in order to see two springs at ten or twelve miles distance from the mountain, one of which is always boiling, and the other so cold, that it is said to turn every thing put into it into iron. When we had proceeded about 100 yards from the foot of mount *Hecla*, we found a pumice-stone as large as a hogshead, which had been lately thrown out of the volcano; when our guides seeing us astonished at its prodigious size said, they had seen several much bigger, which ten men could not stir; and that instead of flames, ashes, and pumice-stones, the volcano sometimes cast up water, at others nothing but flames, and at others again, nothing but ashes or stones.

After three hours riding we drew near to the springs, which are thirty yards distance from each other. We came first to the cold one, when putting in a small cane I had in my hand, I was surprized on taking it out again to see the end which touched the bottom metamorphosed into iron.* From thence we went to the boiling fountain, from which we saw a number of what appeared to be fowls of a red colour, and about the size of ducks, playing in the water; when being pleased with the novelty of the sight, we stood for some time look-

* The author's mistake probably arose from the cane being incrusted with a stony concretion resembling iron rust.

ing

ing at them, but on our approaching nearer they dived to the bottom, but we had no ſooner left it, than they appeared again playing up on the ſurface. Our guides informed us, that they always continue upon the water when nobody is in ſight, and conſtantly dive to the bottom as ſoon as they ſee any perſon approach.

From this ſpring we travelled to the ſea-ſide, within half a league of which we heard diſagreeable ſounds, that were not unlike the cries of perſons complaining. Our ignorant guides, who were natives of the country, would fain have perſuaded us, that they were the lamentations of the damned, who, when the devil had roaſted them in the flames of *Hecla*, cooled them by plunging them amongſt the ice on the coaſt; and that they were thus alternately tormented, by making them feel the extremes of heat and cold. But though we gave no credit to this *Iceland* tradition, we reſolved to ſee thoſe ſhoals of ice, which bound that part of the iſland and no other. Theſe we were told by our guides come upon the coaſt in *June*, and go away in *September*. On our arrival at the coaſt, we found that theſe imaginary complaints were only occaſioned by the agitation of the ice and water driven violently againſt the rocks by the wind.

Having ſeen all that was worth obſervation, we returned to *Kirkebar*, where we arrived on the 16th of *September*, and having ſtaid a few hours in the town, went on board, when we found the Governor of the iſland, accompanied

by the Bishop of *Sceltholt*, who, hearing that we had been at *Zembla*, came to see our ships, and to discourse with us.

As *Iceland* abounds in rich pastures it produces great plenty of all sorts of cattle, and the beasts that feed in these pastures are so fond of an herb called caitophe, that the inhabitants are forced to prevent their eating too much of it, for fear they should burst themselves; but though the fields look green and pleasant, yet the north-east wind, which blows here with great violence, is so very cold, that no wheat, or any other grain fit to make bread will grow there, for it either kills the seed, or the corn while it is green.

The *Icelanders* for the most part dwell in caverns hewn out of the rocks, and the rest live in huts built after the manner of those in *Lapland*, some with wood and others with fish bones, covered with turf; and both they and their cattle lie under the same roof. Their beds are composed of hay or straw, upon which they lie in their cloaths with skins upon them, and make but one bed for the whole family. Both the men and women have very disagreeable persons; they are swarthy, and dressed like the *Norwegians*, in coats made of the skins of the sea-calf with the hair outwards, with no other linen than sack-cloth. They live by fishing, and are very nasty. [The food of the poor is very coarse, it consisting of a sort of stock-fish pounded with a stone, very bad butter and cheese, and no other drink but water, milk or whey; yet on this hard fare many of them are

said

ſaid to live without the help of a phyſician, to a hundred and fifty years of age.] Moſt of them pretend to witchcraft, and are ſaid to worſhip the devil under the name of *Kobald*, who it is pretended frequently appears to them under a human ſhape. They have alſo a kind of houſhold God cut out of a piece of wood with a knife, who is extremely hideous, this idol they adore privately, and hide it for fear of the *Lutheran* Miniſters, who endeavour to inſtruct them in the principles of Chriſtianity.

Three days after our coming on board we took the opportunity of a north wind, and ſet ſail. We continued our courſe to the ſouth-ſouth-eaſt, and at length happily arrived at *Copenhagen*, where having ſaluted the caſtle, we dropt anchor, and went aſhore.

His Majeſty being informed, on our entering the city, that we had brought ſome *Zemblians* with us, commanded us to bring them to court, which we immediately did, every body gazing at them as if they had been born in another world. The King himſelf admired the oddneſs of their dreſs, and the ſtrangeneſs of their figures. He ordered the ſteward of his houſhold to give directions for their being kept with care, well provided for and taught the *Daniſh* language, hoping he might then get ſomething out of them, relating to their country, that would be beneficial to his own. He commanded us to give him an account of the ſeveral places we had viſited, the manners of the people and their way of living: and having given his Majeſty full ſatisfaction with re-

ſpect to all he deſired to know, we went to wait upon our owners, in order to inform them of the markets we had met with, and what returns we had brought home, which proved highly to their advantage. Our ſhips were ordered up to *Chriſtian Haven* in order to be unladen, which was done in two days time, when one of the chief merchants of the company preſented the King in the name of the reſt, with the two horns we had taken from the ſea-horſes, and his Majeſty received them as rarities of ineſtimable value; and believing that they were really the horns of the unicorn, he gave orders for their being depoſited in the treaſury chamber, and in return promiſed to grant the company as many privileges as it was in the power of his prerogative to beſtow. The merchant who preſented the horns was rewarded with a chain of gold with his Majeſty's picture hanging to it, and with a licence to trade cuſtom-free for a certain term of years.

THE TRAVELS OF Monsieur MAUPERTUIS,

And his ASSOCIATES of the ROYAL ACADEMY of SCIENCES.

Made by Order of the FRENCH KING, to determine the Figure of the EARTH at the POLAR CIRCLE.

CHAP. I.

They attempt to make their Observations on the Coast of the Gulph of Bothnia; *but are disappointed. A Description of several Mountains, Woods, and Rivers in* Lapland, *in Summer. A Mountain on Fire.*

IN order to give a clear idea of this undertaking, it is necessary to observe, that the great Sir *Isaac Newton* and Mr. *Huygens* had from different observations concluded that the earth

earth was flatted at the poles; but upon measuring the whole area of the meridian that passes through *France*, and from other operations, it was conlcuded by several of the members of the academy of Sciences at *Paris*, that the terraqueous globe was prominent at the poles. Hence the members became divided in their sentiments, and perplexed by their own enquiries, upon so important a subject, that was justly considered as having a real influence upon Astronomy and Navigation. To put an end to this dispute, the *French* King resolved that it should be finally decided, and to the great joy of the academy, an order was dispatched from court for a certain number of the members to go and measure the first degree of the meridian at the equator. These, says Mons. *Maupertuis*, set out a whole year before us. The rest were commissioned northward to measure the remotest degree they could reach. And the same alacrity, the same zeal to serve their country appeared in those who were to endure the rage of the equator suns, and those that were to freeze beneath the Polar Circle. The travels in the north were wrote, as hath been already hinted, by Mons. *Maupertuis*, and we shall give them in his manner.

The company destined for the north, says he, was composed of four academicians, Mess. *Clairaut*, *Camus*, *Le Monnier*, and myself; the Abbe *Outhier*, and M. *Celsius* the celebrated professor of astronomy at *Upsal*, also assisted at all our operations, and their abilities and advice were of singular use to us.

No

No ſooner was the veſſel that carried us arrived at *Stockholm*, than we reſolved without loſs of time to ſet out for the bottom of the gulph of *Bothnia*, where we might judge which ſide of the gulph was proper for our operations, better than we could do by truſting to our charts. Nothing could retard us, neither the frightful ſtories they told us at *Stockholm*, nor the goodneſs of his *Swediſh* Majeſty; who, notwithſtanding the orders he had given in our behalf, told us oftener than once, that it was not without a ſenſible concern he ſaw us purſue ſo deſperate an undertaking.

We arrived at *Tornea* time enough to ſee the ſun perform his courſe for ſeveral days together without ſetting: a ſight which ſtrikes with wonder an inhabitant of the temperate zones, even though he knows it is what muſt neceſſarily happen in that climate.

We had flattered ourſelves with the hopes of performing our operations upon the coaſts of the gulph of *Bothnia*, where we ſhould have the convenience of tranſporting ourſelves and our inſtruments to the different ſtations by ſea, and where the many advantageous points of view, from the iſlands in all our charts, ſeemed to promiſe us ſucceſs. But when we went with great impatience to view them, all our labour ſerved only to convince us, that this deſign was impracticable. The iſlands that line the coaſts of the gulph, and the coaſts themſelves, which we had fancied to be ſo many promontories, that might furniſh us with diſtant points of view from one to another, lay all

all of them ſo low upon the ſurface of the water, that at a ſmall diſtance, the convexity of the earth muſt ariſe between them and us. So that after ſeveral ſmall voyages in purſuance of our firſt deſign of making uſe of theſe iſlands, we were at laſt obliged to give it up.

We now reſolved to endeavour to perform our operations upon the tops of the mountains to the northward of *Tornea*, though it appeared next to impoſſible. In the deſarts of a country ſcarcely habitable, in that immenſe foreſt which extends from *Tornea* to cape *Nord*, we muſt go through operations that are not eaſy, even where no convenience is wanting. There were but two ways of penetrating into theſe deſarts, both of which we muſt prove; one the ſailing up a river full of cataracts; the other croſſing thick woods and deep marſhes on foot: and if we ſhould be able to make our way into the country, we muſt, after the moſt painful marches, be obliged to clamber up ſteep rocks, and to clear the tops of mountains of the wood that would intercept our ſight. In theſe deſarts we ſhould be forced to take up with the moſt wretched diet, be expoſed to the flies, which in this ſeaſon are ſo inſufferable as to drive the *Laplanders* and their rain-deer from their habitations, to ſeek ſhelter on the coaſts of the ocean. We were, in fine, to undertake this work without knowing, or being able to inform ourſelves, whether it was practicable; whether the want of one mountain might not, after all our toils, interrupt the ſeries of our triangles; or whether it would be poſſible to find

find upon the river a baſe by which they might be connected. But if we ſhould ſurmount all theſe obſtacles, we ſhould ſtill have the labour of building obſervatories on the moſt northerly of the mountains; the trouble of carrying thither as numerous a collection of inſtruments as is perhaps to be ſeen in *Europe*, and of making there the niceſt aſtronomical obſervations: but we were ſo far from being deterred by theſe difficulties, that the proſpect of conquering them filled us with pleaſure.

We ſet out from *Tornea* on *Friday* the 6th of *July*, 1736, with a company of *Finland* ſoldiers, and a good number of boats laden with inſtruments, and proviſions. We began our journey by ſailing up the great river, which, riſing in the inmoſt parts of *Lapland*, purſues its courſe till it falls into the gulph of *Bothnia*, having firſt divided itſelf into two branches that form the iſle of *Swertzar*, where is built a town of the ſame name in the latitude of 65°. 51′. From this day forward, our only habitation was the deſarts, and our time was ſpent on the ſummits of thoſe mountains which we were to connect by our triangles.

After a voyage of twelve hours, we landed in the evening at *Korpikyla*, an hamlet by the river-ſide inhabited by *Finlanders*; and having for ſome time travelled on foot acroſs the foreſt, arrived at the bottom of a ſteep mountain called *Niwa*, whoſe ſummit, which is a bare rock, we choſe for our firſt ſtation. Upon the river we had been tormented by great flies with green heads, that fetched blood wherever they fixed: but

but on the top of this mountain we were peſtered with ſeveral other kinds that were ſtill more intolerable. By good luck we found two *Lapland* girls tending a ſmall herd of rain-deer; but almoſt hid in the ſmoak of a great fire they had kindled: and being told, on enquiry, that they thus defended themſelves from the flies, we had immediately recourſe to the ſame method.

On the eighth of *July* at one in the morning, Mr. *Camus* and I left our company upon *Niwa*, to reconnoitre the mountains to the northward. We travelled up the river to a high mountain called *Avaſaxa*, where having cleared its top of the trees we cauſed a ſignal to be built. Our ſignals were hollow cones compoſed of a great many large trees, ſtripped of the bark, by which means they were white enough to be viſible at ten or twelve leagues diſtance.

This being finiſhed we came down from *Avaſaxa* and embarking on the little river of *Tenglio* which falls into the great river at the foot of this mountain, we directed our courſe upwards to the neareſt place we could find, to a mountain that ſeemed to ſuit our purpoſe; and from thence a march of three hours, over a moraſs, brought us to the foot of *Horrilakero*. Though extremely fatigued, we got to the top of it, and ſpent the night in cutting down the wood that covered it. Moſt part of this mountain is a reddiſh ſtone interſperſed with a kind of white cryſtal. Here the flies, more mercileſs than thoſe at *Niwa*, were not to be driven off by ſmoke, and we were obliged, notwithſtanding

ing the exceſſive heats, to wrap our heads in our *Cappmudes*, a ſort of gown made of rain-deer ſkins, and to cover ourſelves with branches of fir, and even whole trees; which rather ſtifled than defended us from theſe troubleſome inſects.

Having cut down all the wood on the top of *Horrilakero*, and built a ſignal, we return'd by the ſame road to our boats, which we had drawn upon the bank. It is indeed no hard matter to drag along, or even to carry the boats uſed in the rivers of *Lapland*. A few thin fir boards compoſe the whole veſſel, which is ſo extremely light and flexible, that its beating, with all the force of the ſtream, againſt the ſtones, which theſe rivers are full of, does it no manner of harm. It is terrible to thoſe not accuſtomed to it, and aſtoniſhing even to thoſe who are, to ſee one of theſe weak veſſels drive down a cataract, in a torrent of foam and ſtones, ſometimes raiſed aloft in the air, and the next moment loſt in the deep. A bold *Finlander* ſteers it with a long oar, while his two companions row hard to ſave it from the purſuing waves that threaten every moment to overwhelm it. You may then ſee the whole keel by turns raiſed above water, and leaning only with one extremity on the top of a yeilding billow. With ſuch courage and addreſs do theſe *Finlanders* paſs the cataracts; but their art and ſkill in the management of their boats upon other occaſions, is no leſs remarkable: a tree, branches and all, commonly ſerves them both for maſt and ſail.

We now embarked again on the *Tenglio*, which brought us down into the river of *Tornea* on our return to *Korpikyla*. At four leagues from *Avasaxa* we left our boats, and after an hour's walk over the forest, reached the foot of *Cuitaperi*, a steep mountain; its summit is a rock covered with moss, affording an extensive prospect all round, and to the south taking in the gulph of *Bothnia*: here we erected a signal, whence we could discover all the others we had raised, and then continued our course down the river. Between *Cuitaperi* and *Korpikyla* we found some frightful cataracts, where the *Finlanders* always set their passengers ashore; but our excessive fatigue made us chuse rather to risk the passage in the boat, than to walk only an hundred yards. At last, on the evening of the 11th, we joined our friends on the top of *Niwa*, who had discried our signals, but from the continual fogs, were unable to make any observations.

The fogs being at length dispersed by the cold north wind, we had such a view of our several signals, as to take their angles; and having finished our observations there, we set up signals at *Kakama* and *Pullingi*, where having also made our observations, we all set out for *Avasaxa*.

This mountain is seated on the bank of the river, fifteen leagues from *Tornea*. Its ascent is difficult, lying through a wood that reaches half way up, where it is interrupted by steep slippery rocks, and afterwards continued to the very top of the mountain before we cut down

so

ſo much of it as was neceſſary to open our proſpect. The north-eaſt ſide is a moſt frightful rocky precipice, where the falcons build their neſts. At its foot runs the *Tenglio*, by which it is encircled. From its ſummit the proſpect is the moſt beautiful that can be imagined; to the ſouth it is unbounded, and diſcovers the courſe of the river to a vaſt extent: towards the eaſt the *Tenglio* may be traced in its paſſage through ſeveral lakes; and the view is terminated on the north, at twelve or fifteen leagues diſtance, by a prodigious number of hills heaped one upon another. Upon this mountain we ſpent ten days, during which curioſity prompted the inhabitants to pay us frequent viſits, bringing us fiſh and ſheep, and ſuch bad fruits as are produced in the woods.

The day we left *Avaſaxa*, we croſſed the Polar circle, and at three the next morning, which was the 31ſt of *July*, arrived at *Turtula*, a hamlet where they were cutting their little crop of barley and hay. After having travelled for ſome time in the woods, we embarked on a lake that brought us to the foot of *Pullingi*, the higheſt of all our mountains, and of exceeding difficult acceſs, as well on account of its ſteepneſs, as the depth of the moſs wherein we were obliged to fix our ſteps: we, however, reached the top at ſix in the morning. Our ſtay here, which was till the 6th of *Auguſt*, was no leſs diſagreeable than the aſcent had been painful. We had a whole wood of the largeſt trees to fell, and the flies attacked us with ſuch fury, that our ſoldiers of the regiment of

Weſtro-Bothnia, a body diſtinguiſhed for their bravery even in *Sweden*, and hardened by the greateſt fatigues, were obliged to wrap up their faces, or to ſmear them over with tar. Theſe inſects alſo poiſoned our victuals; no ſooner was a diſh ſerved, but it was quite covered over with them, while another ſwarm, with all the rapaciouſneſs of birds of prey, was fluttering round, to carry off ſome pieces of a ſheep that was dreſſing for us.

On the 6th of *Auguſt* we left this mountain to go to *Pello*, where we arrived the ſame day, after having forced our way up four cataracts. *Pello* is a village inhabited by a few *Finlanders*: in its neighbourhood is *Kittis*, the loweſt of all our mountains, where was one of our ſignals. As we were going up, we diſcovered a copious ſpring of pure water, that reſiſts the keeneſt froſts; for when we returned to *Pello* about the end of winter, while the ſea at the bottom of the gulph, and all the rivers were frozen as hard as marble, we found this ſpring running as in ſummer. We had the good fortune to make our obſervations ſoon after our arrival, and the next day went to *Turtula*.

For a month paſt we had been inhabitants of the deſarts, or rather of the mountain tops; the earth or rocks ſpread with the ſkins of rain-deer had been our beds; and our food was chiefly fiſh, brought us by the *Finlanders*, or which we ourſelves had caught, and berries or wild fruit that grew in the woods.

I left *Turtula*, in company with Meſſ. *Outhier* and *Celſius*, to croſs the foreſt and find the

ſignal

ſignal erected at *Niemi*; and a frightful journey it was. We ſet out on foot, and walked till we got to a brook, where we embarked in three little boats. But they paſſed with ſuch difficulty between the ſtones, that we were obliged every inſtant to get out of them and leap from one rock to another. The brook brought us to a lake ſo full of little yellowiſh grains of the bigneſs of millet, that the whole water was diſcoloured with them. I took them to be the chryſalis of ſome inſect, and was tempted to fancy, that this inſect muſt be ſome kind of thoſe flies that ſo tormented us; for I could think of no other ſpecies of animals whoſe numbers correſponded to the quantity of grains that covered this large body of water. From the extremity of this lake we had to walk to another of very clear water. Here we found a boat, and putting our quadrant on board reſolved to follow it along the ſide of the lake on foot: but the wood was ſo thick, that we were forced to cut our way through it, and were intangled at every ſtep by the depth of the moſs, and the fallen fir-trees that lay acroſs our way.

In all theſe woods there are almoſt as many trees fallen as ſtanding; for the ſoil, after it has reared them to a certain height, can no longer furniſh the proper nouriſhment, nor is it deep enough to allow them to take firm root, whence the leaſt blaſt of wind overſets them; and in all theſe woods nothing is to be ſeen but firs and birches blown down. Time reduces the wood of the latter to duſt, without

affecting the bark; and one is ſurprized to find pretty large trees that crumble upon the ſlighteſt touch. This probably gave the *Swedes* the hint of covering their houſes with this bark, and indeed nothing could be imagined fitter for the purpoſe. In ſome provinces they cover the bark with earth, and form upon the roof a kind of garden, ſuch as are to be ſeen upon the houſes of *Upſal*. In *Weſtro-Bothnia* the bark is bound with fir poles that hang down on either ſide of the roof.

Our woods had therefore the aſpect of the ruins of woods whoſe trees are moſtly periſhed; and it was through one of the moſt horrid of theſe that we now paſſed with twelve ſoldiers, who carried our baggage. Having at length reached a third lake, which was very large, and the fineſt water imaginable, we put our inſtruments and baggage on board two boats we found there, and waited their return upon the coaſt, when we were ferry'd over to the foot of *Niemi*.

The fine lakes that ſurround this mountain and the many difficulties we encountered in getting thither, gave it the air of an inchanted iſland in romance. On one hand you ſee a grove of trees riſe from a plain, ſmooth and level as the walks of a garden, and at ſuch eaſy diſtances, as neither to embarraſs the walks, nor the proſpect of the lake that waſhes the foot of the mountain. On the other you have apartments of different ſizes that ſeem cut by art in the rocks, and to want only a regular roof to compleat them. The rocks themſelves are ſo per-

perpendicular, ſo high, and ſo ſmooth, that you would take them for the walls of an unfiniſhed palace, rather than for the work of nature. From this height we ſaw thoſe vapours riſe from the lake which the people of the country call *Haltios*, and deem the guardian ſpirits of the mountains. We had been frightened with ſtories of bears haunting this place, but ſaw none. Indeed it ſeemed rather a place of reſort for fairies and genii, than for thoſe ſavage animals.

Having compleated our obſervations, we left *Niemi*, repaſſed the three lakes, and got back to *Turtula*. We afterwards departed from thence, and ſet out for *Horrilakero*, entering the *Tenglio* with four boats. Its cataracts are troubleſome, rather from the lowneſs of the water, and the great number of ſtones, than the rapidity of the ſtream. As we ſailed along, I was ſurprized to ſee upon the banks of this river, roſes of as lively a red, as any in our gardens. We compleated our obſervations at *Horrilakero* on the 17th of *Auguſt*, and the next day went to *Oſwer-Tornea*, where our whole company was now aſſembled.

But afterwards going up to *Avaſaxa* to take the angles that muſt connect the baſe, which we had fixed on the bank of the river with our triangles, we ſaw *Horrilakero* all in flames. This is an accident not uncommon in theſe woods, where there is no living during the ſummer, without ſmoke, and where the moſs and firs are ſo combuſtible, that a fire once kindled will ſpread over ſome thouſand acres; and the

ſmoke

ſmoke of theſe fires have ſometimes retarded our obſervations as much as the thickneſs of the air. As this fire on *Horrilakero* had been doubtleſs occaſioned by our not taking ſufficient care to extinguiſhed thoſe we had kindled there, we diſpatched 30 men to cut off its communication with the neighbouring woods: but three days after, when he had finiſhed our obſervations at *Avaſaxa*, *Horrilakero* was ſtill burning; we ſaw it involved in a cloud of ſmoke, and the flames, which had made their way downwards were ravaging all the foreſt below.

By the 9th of *September*, when we had paſſed 63 days in theſe deſerts, we had finſhed as complete a ſet of triangles as we could have wiſhed for; and an undertaking begun in a manner at random, without knowing whether it was at all practicable, had turned out ſo much better than expectation, that it looked as if the placing of theſe mountains had been at our diſpoſal. We had built two obſervatories upon *Kittis*, in the one was a quadrant of two foot radius, a clock of Mr. *Graham*'s, and an inſtrument which we owed to the ſame gentleman, conſiſting of a teleſcope, moveable about an horizontal axis, which was to determine the direction of our triangles with reſpect to the meridian. The other obſervatory, which was much larger, was built ſo near the firſt, that the voice of him who counted the pendulum's vibrations, could be diſtinctly heard from one to the other. An admirable ſector alſo made by Mr. *Graham* took up almoſt the whole room.

What

What difficulty we had in carrying up ſo many inſtruments to the top of the mountain, I ſhall not mention; it is ſufficient that we carried them up.

CHAP. II.

The dreadful Hardſhips they ſuffered from the Severity of the Weather. The amazing Sharpneſs of the Cold; and the Beauty of the Northern Lights in a Lapland *Winter.*

WE had ſome ice on the 19th of *September*, and ſnow on the 21ſt; ſome parts of the river were alſo frozen. On the firſt of *November* it began to freeze harder, and on the morrow the river was quite frozen up. The ice, which thawed no more, was preſently covered over with ſnow; and this vaſt body of water, but a few days before full of ſwans and other waterfowl, was now one immenſe plain of ice and ſnow. Our work was now in a manner compleated, we had only to meaſure our baſe, which was no more than ſurveying the diſtance between the two ſignals we had erected laſt ſummer; but this was to be done upon the ice of a river in *Lapland*, at the diſtance of above three leagues, in a country where the cold was growing every day more intenſe. On the 21ſt of *December* this work was begun. In this ſeaſon the ſun but juſt ſhewed itſelf above the horizon towards noon; but the

the long twilights, the whiteneſs of the ſnow, and the meteors continually blazing in the ſky, furniſhed us light enough to work four or five hours every day. We lodged at the houſe of the Curate of *Oſwer-Tornea*, and at eleven in the forenoon began our ſurvey, attended by ſo great an equipage, that the *Laplanders*, drawn by the novelty of the ſight, came down from the neighbouring mountains. We ſeparated into two bands, each of which carried four rods of fir, each 30 feet long. I ſhall ſay nothing of the fatigues and dangers of this operation. Judge what it muſt be to walk in ſnow two feet deep, with heavy poles in our hands, which we were obliged to be continually laying on the ſnow, and lifting again; in a cold ſo extreme, that whenever we would taſte a little brandy, the only thing that could be kept liquid, our tongues and lips froze to the cup, and came away bloody: in a cold that congealed the fingers of ſome of us, and threatened us with ſtill more diſmal accidents. While the extremities of our bodies were thus freezing, the reſt, through exceſſive toil, was bathed in ſweat. Brandy did not quench our thirſt; we muſt have recourſe to deep wells dug through the ice, which were ſhut almoſt as ſoon as opened, and from which the water could ſcarcely be conveyed unfrozen to our lips; thus were we forced to run the hazard of the dangerous contraſt which ice-water might produce in our heated bodies.

Our work, however, advanced 'apace; for ſix days labour brought it to within about 500 toiſes,

toiſes, where we had not been able to plant our ſtakes ſoon enough: three of the gentlemen therefore undertook this office, while the the Abbé *Outhier* and I went upon a pretty extraordinary adventure. We had laſt ſummer omitted an obſervation of ſmall moment: this was taking the height of an object that we made uſe of in meaſuring on the top of *Avaſaxa*; and to perform this, I undertook to go with a quadrant to the top of the mountain, ſo ſcrupulouſly careful were we that nothing ſhould be wanting to the perfection of the work. Imagine a very high mountain full of rocks, that lie hid in a prodigious quantity of ſnow, as well as their cavities, wherein you may ſink through a cruſt of ſnow as into an abyſs, and the undertaking will ſcarce appear poſſible. Yet there are two ways of performing it; one by walking, or rather ſliding along upon two ſtrait boards eight feet in length, which the *Finlanders* and *Laplanders* uſe to keep them from ſinking into the ſnow: but this way of walking requires long practice. The other is by truſting yourſelf to a rain-deer uſed to ſuch journeys.

The machine drawn by theſe animals is here a kind of boat ſcarce large enough to hold the half of one's body. As this travelling in the ſnow is a kind of navigation, that the veſſel may ſuffer the leſs reſiſtance in its courſe, it has a ſharp head, and a narrow keel, like an ordinary boat; and on this keel it tumbles ſo from ſide to ſide, that if a man does not take good care to balance himſelf, it will be every

moment

moment in danger of overſetting. It is fixed by thongs to the collar of the rain-deer, who, as ſoon as he finds himſelf on a firm beaten road, runs with incredible fury. If you would ſtop him, it is to little purpoſe to pull a ſort of rein that is tied to his horns: wild and unmanageable, it will only make him change his track, or perhaps turn upon you, and revenge himſelf by kicking. If this happens to a *Laplander*, he turns the boat over him, and uſes it as a buckler againſt the attacks of the rain-deer: but as we were ſtrangers to this addreſs, we might have been killed before we could put ourſelves in ſuch a poſture of defence. We had nothing to defend us with but a little ſtick each of us held in his hand, by way of rudder to ſteer our courſe, and keep clear of the trunks of trees. In this manner was I to climb *Avaſaxa*, accompanied by the Abbé *Outhier*, but we were attended by two men and a woman of the country, and Mr. *Brunnius* their Curate.

The firſt part of our journey was performed in a moment; for our flight over the plain beaten road from the curate's houſe to the foot of the mountain can be compared only to that of birds. And though the mountain where there was no track greatly abated the ſpeed of our rain-deer, they got at length to the top of it; where we immediately made the obſervation for which we came. In the mean while our rain-deer had dug deep holes in the ſnow, where they browzed on the moſs that covers the rocks; and the *Laplanders* had lighted a great

great fire, and we preſently joined them to warm ourſelves. The cold was ſo extreme, that the heat of the fire could reach only to a very ſmall diſtance. As the ſnow juſt by it melted, it was immediately froze again, forming a hearth of ice all round.

Our journey up hill had been painful; but now our concern was leſt our return ſhould be too rapid. We were to proceed down the ſteep in conveyances, which, though partly ſunk in the ſnow, ſlid on notwithſtanding, drawn by animals, whoſe fury in the plain we had already tried, and who, tho' ſinking to their bellies in the ſnow, would endeavour to free themſelves by the ſwiftneſs of their flight. We very ſoon found ourſelves at the bottom of the hill; a moment after this great river was croſſed, and we were returned back to the curate's houſe.

The next day we finiſhed our ſurvey, and made all poſſible haſte back to *Tornea* to ſecure ourſelves in the beſt mannner we were able from the increaſing ſeverity of the ſeaſon. The town of *Tornea*, at our arrival on the 30th of *December*, had really a moſt frightful aſpect, Its little houſes were buried to the tops in ſnow, which, had there been any day light, muſt have effectually ſhut it out. But the ſnow continually falling, or ready to fall, for the moſt part hid the ſun the few moments he might have appeared at mid-day. In the month of *January* the cold was increaſed to that extremity, that Mr. *Reaumur*'s mercurial thermometers, which at *Paris*, in the great froſt of 1709, it was thought ſtrange to ſee fall to 14 de-

degrees below the freezing point, were now got down to 37. The ſpirit of wine in the others was frozen. If we opened the door of a warm room, the external air inſtantly converted all the vapour in it into ſnow; whirling it round in white vortexes. If we went abroad, we felt as if the air was tearing our breaſts in pieces; and the cracking of the wood of which the houſes are built, as it ſplit by the violence of the froſt, continually alarmed us with an encreaſe of cold. The ſolitude of the ſtreets was as great as if the people had been all dead: and in this country you may often ſee people who have loſt an arm or leg by the froſt. The cold, which is always very great, ſometimes increaſes by ſuch violent and ſudden fits, as are almoſt infallibly fatal to thoſe who are ſo unhappy as to be expoſed to it; and ſometimes there riſe ſudden tempeſts of ſnow that are ſtill more dangerous. The winds ſeem to blow from all quarters at once, and drive about the ſnow with ſuch fury, that all the roads are in a moment rendered inviſible. Dreadful is the ſituation of a perſon ſurprized in the fields by ſuch a ſtorm: his knowledge of the country, and even the mark, he may have taken by the trees cannot avail him: he is blinded by the ſnow, and if he attempts to find his way home is generally loſt. In ſhort, during the whole winter the cold was ſo exceſſive, that on the 7th of *April*, at five in the morning, the thermomiter was fallen to 20 diviſions below the point of freezing, though every afternoon it roſe two or three diviſions above

above it: a difference in the height not much leſs than that which the greateſt heat and cold felt at *Paris* uſually produce in that inſtrument. Thus in the ſpace of 24 hours, we had all the variety felt in the temperate zones in the compaſs of a whole year.

But tho' in this climate the earth is thus horrible, the heavens preſent the moſt beautiful proſpects. The ſhort days are no ſooner cloſed, than fires of a thouſand colours and figures light up the ſky, as if deſigned to compenſate for the abſence of the ſun in this ſeaſon. Theſe fires have not here, as in the more ſoutherly climates, any conſtant ſituation. Though a luminous arch is often ſeen fixed towards the north, they ſeem more frequently to poſſeſs the whole extent of the hemiſphere. Sometimes they begin in the form of a great ſcarf of bright light, with its extremities upon the horizon, which, with a motion reſembling that of a fiſhing-net, glides ſwiftly up the ſky; preſerving in this motion a direction nearly perpendicular to the meridian; and moſt commonly after thoſe preludes, all the lights unite at the zenith, and form the top of a kind of crown. Arcs like thoſe ſeen in *France* towards the north, are here frequently ſituated towards the ſouth; and often towards both the north and ſouth at once. Their ſummits approach each other, the diſtance of their extremities widens towards the horizon. I have ſeen ſome of the oppoſite arcs whoſe ſummits almoſt joined at the zenith; and both the one and the other have frequently ſeveral concentric

arcs beyond it. Their tops are all placed in the direction of the meridian, though with a little declination to the weſt; which I did not find to be conſtant, and which is ſometimes inſenſible. It would be endleſs to mention all the different figures theſe meteors aſſume, and the various motions with which they are agitated. Their motion is moſt commonly like that of a pair of colours waved in the air, and the different tints of their light gives them the appearance of ſo many vaſt ſtreamers of changeable taffeta. Sometimes they line a part of the ſky with ſcarlet. On the 18th of *December* I ſaw a phænomenon of this kind, that in the midſt of all the wonders to which I was now every day accuſtomed, raiſed my admiration. To the ſouth a great ſpace of the ſky appeared tinged with ſo lively a red, that the whole conſtellation of *Orion* looked as if it had been dipped in blood. This light, which was at firſt fixed, ſoon moved, and changing into other colours, violet and blue, ſettled into a dome, whoſe top ſtood a little to the ſouth-weſt of the zenith. The moon ſhone bright, but did not in the leaſt efface it. In this country, where there are lights of ſo many different colours, I never ſaw but two that were red; and ſuch are taken for preſages of ſome great misfortune. After all, when people gaze at theſe phænomina with an unphiloſophic eye, it is not ſurprizing if they diſcover in them armies engaged, fiery chariots, and a thouſand other prodigies.

During

During the winter we repeated many of our obſervations and calculations, and found the moſt evident proofs of the earth's being conſiderably flatted at the poles. Mean time the ſun came nearer, or rather no more quitted us. It was now *May*, when it was curious enough to ſee that great luminary enlighten for ſo long a time a whole horizon of ice, and to ſee ſummer in the heavens, while winter ſtill kept poſſeſſion of the earth. We were in the morning of that long day of ſeveral months; yet the ſun with all his power wrought no change either upon the ice or ſnows.

On the 6th of *May* it began to rain, and ſome water appeared on the ice of the river. At noon a little ſnow melted; but in the evening, winter reſumed his rights. At length, on the 10th, the earth which had been ſo long hid began to appear; ſome high points that were expoſed to the ſun ſhewed themſelves, as the tops of the mountains did after the deluge, and all the fowls of the country returned. At the beginning of *June*, winter yielding up the earth and ſea, we prepared for our departure back to *Stockholm*, and on the 9th ſome of us ſet out by land and others by ſea. But the ſequel of our adventures, and our ſhipwreck in the gulph of *Bothnia*, ſays our author, belong not to the preſent ſubject.

F I N I S.