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indifferent: but there is no people more prone to avarice. Their sole object seems to be the amassing of treasure, and for the strange purpose of burying it afterwards. The avarice of a Lapp is gratified in collecting a number of silver vessels, or of silver inlaid with gold, or even of brass vessels, and pieces of silver coin. Being unable to carry this treasure with him in his journeys, he buries the whole of it; not even, as it was before stated, making his wife acquainted with the place where it is concealed. If sudden death befall the owner, it is generally lost. Some of the Lapps possess 1 cwt, of silver; and those who enjoy a property of 1500 or 1000 rein-deer, have much more: in short, such an astonishing quantity of specie is dispersed among them, that Mr. Grape attributed its scarcity in Sweden to this practice among the Laplanders. As they keep it almost always buried, it does not happen to the owner to be gratified even with a sight of his hidden treasure more than once or twice in a year.

The Lapps marry very early; the men seldom Marriages. later than the age of eighteen, or the women later than fifteen: but the Finns and the Swedes are prohibited from such early marriages. Very little previous ceremony is used upon these occasions: an interchange of presents, and

7 161 5

copious libations of brandy, are all that take place before the solemnization and consummation. The gifts consist of rings, spoons, cups of silver or of silver gilt, and rix-dollars in specie, according to the wealth of the parties. The richest make also other gifts; such as, silver girdles, and silk or cotton handherchiefs for the neck. When bans have been published in the church, which is very commonly the case, the' marriage immediately succeeds their publication; and the nuptials are consummated in one of the log-houses near the church, in which the Lapps deposit their stores for the annual fair. Upon these occasions, the bridegroom treats his friends with brandy, dried rein-deer flesh cooked without broth', rein-deer cheese, and bread and butter. If he be of a wealthy family, beer is also brewed: or, wanting this, plenty of pima and curds and whey are provided. The luxury of smoking tobacco, so general among the Lapps, is, of course, largely indulged upon these occasions, and even takes place during the repast. Dancing being unknown among them, forms no part of the merry-making. After the marriagefeast, a general collection is made in money for the married couple; when the distribution of brandy is renewed, and continued for two or

⁽¹⁾ Enontekis Sohns Beskrifning, of Eric I. Grope, MS. C. 4. § 19.

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three hours, according as the gifts are more or less liberal. Upon this occasion, gifts of reindeer are promised to the bridegroom, which he is afterwards to go and demand: but if he make the visit without carrying brandy to the owner . of the rein-deer, the promise is never kept. The dowry of wealthy parents, among the Laplanders, to their children when they marry, con-· sists of from thirty to fifty and even sighty reindeer, besides vessels of silver and other utensils.

The poorer class of Lapps are supported by Support of the Poor. becoming carriers for the Colonists and more wealthy Laplanders, to the different fairs, &c. In this manner the undertake the most distant journeys, accompanied by all the members of their family, so distributed, as to manage each a train of rein-deer with sledges. Each train belonging to the whole caravan is called a Raid; Raids. and to the management of a raid, women and children are adequate. A Laplander, his wife, and children, even those whose ages do not exceed eight or nine years, have each their raid to conduct, drawn by eight, twelve, or fifteen rein-deer, laden with merchandise. The richest Lapps let out their rein-deer, to work in these raids. The sledge is called Achia. In the first achia, drawn by one of the rein-deer, sits the driver of the raid; followed by a train of sledges,

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drawn by other rein-deer, one after another, all fastened in a line. • As they travel with great rapidity, through forests and among rocks, it sometimes happens that one of the rein-deer falls; or a sledge, encountering some obstacle, is suddenly checked in its progress: and when this occurs, a rein-deer is often strangled by the cord fastened to its neck, before the driver can go to his aid. In all such cases, where accidents ' have occasioned losses not chargeable to any negligence in the driver, his employer is obliged to make good the deficiency. The journeys with raids are, of course, liable to danger, and to the utmost degree of fatigue: yet women far advanced in pregnancy are often the drivers; and such is their easy labour, in parturition, that child-birth hardly occasions any interruption to the progress of the raid. When the child is born, it is packed up in a wooden trough, called Komsio, like a fiddle-case: this was before described1: a little arch over its face prevents the infant from suffocation. The homsio, lined with fur, and coated with a kind of leather a deposition of the section of the state of the state of the section of the secti

Child-birth.

⁽¹⁾ See Chap. VIII. p. 327—The Komsio is very often suspended from the bough of a tree: and the universal mode of rocking an infant, is by means of a long elastic pole stuck into the ground, from the upper extremity of which hangs the Komsio, which is thus made to dance up and down, vertically.

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called Sissna*, is well fenced against the cold; and it is very rare that any accident happens to children born during these journeys. The greatest vice among the Laplanders is their love Dramof spirituous liquor. To their habitual use of brandy may be ascribed almost the only evils to which they are liable. This accursed practice is so general, that mothers pour the hellish dose down the throats of their infants at the breast. At all their christenings and funerals, intoxication prevails; the ceremonies of rejoicing of of mourning being made mere pretexts for dramdrinking. As soon as intoxication begins, both men and women commence the ferocious howl which they call, Joicka; the only species of song, if it may bear the name of song, known among them. Swearing also, and gambling with cards, are pretty much in vogue : although quarrels seldom happen; and blood is rarely, if it be ever, shed in any brawls that may arise. Heathen superstitions still retain a considerable tions. sway over their minds: these are principally had recourse to in healing disorders. The places where antient sacrifices were offered are

drinking.

Supersti-

⁽²⁾ Sissna is made of the skins of rein-deer, in this manner. The skins are soaked four or five days in cold water, until the hair falls off: afterwards, they are tanned in a coction of birch and osier; and then steeped in Norwegian oil, prepared from fishes' liver.

Divining-Drum.

still marked by heaps of decayed horns of reindeer: such heaps yet exist in the parish of Enontehis, at places called Russa-kierro, Ajackajerf, Seita Vuopio, Sissangivaara, Seita Tommol, &c. The divining-drums, by which fortunes are told by their sorcerers, are so well known, and the figures upon these drums have been so often engraved, that it were superfluous to insert a description of them'. The use of them, owing o to the zeal of the Missionaries, is now nearly abandoned; and they are become so rare, that it is difficult to obtain a sight of them. The only curious thing concerning them is, the proof they afford of the very antient knowledge which existed in this country of the artificial magnet: this was always in the possession of the Lapland conjurers and fortune-tellers, who seem to have kept the secret to themselves. In using the divining-drum, a piece of magnetised iron is held beneath the skin of the tambour, giving motion to a needle placed upon its upper surface, which the conjuger causes to rest upon any figure thereon represented, and augurs accordingly. Many a more bungling trick has

⁽¹⁾ See Tab. xc. xci. of the account of Lapland, by Canute Leems; Kiobenhavn, 1767 :-- or, wanting this, the various representations made of those drums in the Lapponia of I. Scheffer, cap. xi. " De sucris Magicis et Magia Lapponum;" pp. 127, 128, 129. Francof. 1673.

served to collect the wealth of nations, and to place it at the disposal of a pampered priesthood - to humble in the dust the noblest powers of the soul, and to elevate ignorance upon an awe-commanding throne.

The manufactures of the Lapps are limited to Manufactheir daily necessaries: the men make sledges, shates, ladles, horn spoons, troughs, and porringers: the women, besides their more necessary apparel, manufacture pelisses, boots, shoes, and gloves, some of which they send to the fairs for sale.

The state of Science throughout Lapland does science. not exceed a knowledge, by rote, of the Church Catechism, or the being able to read the Book of Canticles. In one or two instances, Mr. Grape had found in the possession of the Lapps, a copy of the Bible, and of the Lapland Almanach', as printed at Stockholm.

Their daily food, during winter, consists of Daily Foods the fattest rein-deer venison; which they boil, and eat with the broth in which it has been cooked. Their summer diet consists of cheese and rein-deer milk. The rich also eat bread, baked upon hot iron plates. Butter is sold to them by the Colonists, together with salted and dried fish.

CHAZ.

The costume of the wild Lapps, like that of the Cree Indians of North America, and other savages, is distinguished by the most lively hues, strongly contrasted. Their dress, while it calls to mind the chequered plaid of the Highland Scotch, may perhaps exhibit no unfaithful counterpart of Joseph's " coat of many colours." Both sexes wear a woollen shirt, bound round the waist, either with a leathern girdle or with a vellow woollen sash. The bosom of this garment is used as a pouch for all necessaries, tobacco, food, &c. The cap of the men is made of black plush, having the form of the Asiatic fez: if worn by rich Laplanders, this cap is garnished with bands of coloured lace, gold, silver, &c. The cap of the females is of blue embroidered silk, covered with lace; beneath which the hair is entirely concealed. The female features are, in all, much alike: they resemble those of the Chinese and Calmucks; their skin being of one uniform bright copper colour. They are greedy of brandy and tobacco as the men. In fact, it is a melancholy truth, but it will not be disputed, that there is hardly any nation, however barbarous or refined, in which a propensity to seek forgetfulness of the past, by means of some Lethean drug, or draught, may not be observed. We were much pleased with seeing two of them



B. Polland Smile

Aborto Cara Stran Tomatica Com

in their winter habits. A young man and his CHAP. wife, having their winter clothes in one of the store-houses near the church, put them on, and came to visit us in this dress. The man appeared as much like a bear as any human being could be; and squatting, according to the fashion of his country, before the door of the Parsonage, exhibited a mound of fur, with his head resting upon the top of it'. Being, as we sometimes say in England, "half seas over," his countenance was lighted up, and, appearing more jolly than usual, presented a remarkable contrast to the wretched features of another Lapp, who stood by him in the summer dress. In this posture he began the howl called Joicha, as before mentioned; which, as usual, consisted of few words, uttered in a most discordant vell, about driving away the wolves. His dress consisted of rein-deer skin for trowsers, with the hair on; the common Lapland buskin bound about the feet, over which was a covering made of young bulls' hides. For the inner garment, over the body, he were a sheep's skin, with the wool turned inwards; and over the sheep's skin a rein-deer skin, with the hair on, and turned outwards. Over the rein-deer skin was a broad cape, or tippet, of bear's skin, covering his

⁽¹⁾ See the Vignetta to this Chapter.

shoulders, and rising behind his ears and head. His cap was of woollen, edged with fur: his gleves of rein-deer skin, with the hair outwards. We endeavoured to sketch a portrait of his lady, but failed. Her dress was of softer rein-deer skin, fringed with white, and bound with a plated girdle studded with knobs of silver. From this girdle, among the men, are always pendent the knife, purse, and horn spoon. Among the women, the pin-eushion, a few brass rings, and other trinkets, are occasionally added. This woman's habit would really be considered, in other countries, as elegant: her outer garment might be thought a very modish pelisse. She was herself better-looking than the generality of Lapland females; of exceedingly diminutive stature, but with a great deal of vivacity in her countenance and manner. Her complexion was of a fine shining copper colour; and with a little effort of imagination, she might have been fancied an animated bronze statue.

When the winter-season begins, and the wolves, being no longer in the environs, leave the Lapps at leisure to pursue their amusements, they betake themselves to hunting: this, however, is not less a business of necessity than of amusement. They go out in parties of twelve or fifteen men, armed with fowling-pieces and lances, in pursuit of wild rein-deer. In the same season,

Hunting.

using their shates, they overtake the wolf, and dispatch him simply with a stick. Foxes, gluttons, martens, and otters, are also caught. Bears are hunted with more success in Norway. . The poorer Lapps set snares for white partridges."

CHAP.

In every description of the animals of Lapland, Rein-Deer. the rein-deer should be considered as holding the highest rank. The breed of rein-deer in the . parish of Enontekis is larger than those of Juckasjerf, but smaller than that of Kittilä; and this difference is wholly to be ascribed to the difference of the soil, as suited to the growth of the rein-deer moss; on which account, the rein-deer of the mountains are always smaller than those of the forests. This animal has a different name bestowed upon him, during the different periods of his valuable life. In the first year, the male is called Vasicka, signifying a calf; in the second, Erack; in the third, Vuorso; in the fourth, Kundeus; in the fifth, Kossutus; in the sixth, 'Maachama; in the seventh, Nimi Loppu; and so long as he lives afterwards, Hærkæ; which rarely extends beyond his fifteenth year; because, at this age, his teeth fall. The ruttingseason begins about Michaelmas. In the third year the males are generally castrated; but the skin of an uncastrated buck, who is called Hirvas, is worth ewo of the skins of rein-deer that in pursuit of mild-rein-olers of In the E

CHAP. have undergone this operation. The female, in the first year, is also called Vasicha; in the second, Pichna Vuongel; in the third, Runo Vuongel; in the fourth, and ever after, she is named Vain, or Vaija, and lives to the age of fifteen years. The only food of the rein-deer, during winter, consists of moss and snow; and the most surprising circumstance, in the history of this animal, is the instinct, or the extraordinary olfactory powers, whereby it is enabled to discover the former, when buried beneath the latter. However deep the snow may be, if it cover the Lichen rangiferinus, the animal is aware of its presence; the moment he comes to the spot; and this kind of food is never so agreeable to him as when he digs for it himself. In his manner of doing this he is remarkably adroit. Having first ascertained, by thrusting his muzzle into the 'snow, whether the moss lie below or not, he begins making a hole with his fore feet, and continues working until at length he uncovers the lichen. No instance has ever occurred of a rein-deer making such a cavity without discovering the moss he seeks. In summer, their food is of a different nature: they are then pastured upon green herbs, the leaves of trees, &c. The other wild quadrupeds of this part of Lapland, besides rein-deer, are wolves, which are the

giferinus.

Other Animals of Lapland.

most numerous; and, rarely, bears. The wolves make their ravages in large troops, and threaten the ruin of the country. There are, moreover, abundance of red, white, black, blue, and yellow foxes; also, martens, otters, beavers, hares, squirrels, and ermines. In August 1793, an incredible number of mountain-mice, called Lemmar, descended upon Enontehis; and in the following summer, some were seen still scattered, here and there; whereas, during forty years, nothing of the kind had ever appeared before, nor have any of them been seen since. Serpents are unknown; but a few lizards are sometimes found.

In the list of birds known here, may be men-Birds. tioned the white partridge, which is very common. To the south of Enontekis is found the Great Cock of the woods (Gallus sylvestris). We had more than once the satisfaction of springing this bird, and of seeing him upon the wing. Rarer birds, collected by naturalists upon this spot, are the following: Strix Scandiaca; Strix nyctea alba, Turlus roseus; Motacilla Svecica: Fringilla Lapponica; Tringa lobata; Platalea leucordia; Anas nigra; &c. Owls are sometimes very abundant.

We shall terminate this chapter with a few Meteorolometeorological observations, during the course of servations. chap. one year, by Mr. Grape. It is only to be regretted that they were made without a thermometer.

January.

The most intense cold took place between the 3d and the 7th. The greatest depth of the snow, 17 of a Gwedish ell.

Fevruary.

Snow falling, with violent wind, from the 9th to the 13th.

March.

Extreme cold from the 8th to the 13th.

April.

The first rook seen on the 15th. Several rooks made their appearance on the 23d. The ways become passable. Wild geese begin to appear.

May.

The partridge (Charadrius apricarius, Linn.) and the Motacilla ananthe, Linn. appeared on the 5th. The season for travelling in sledges ended on the 8th. The rivulets began to flow on the 9th. First rain on the 11th; and at the same time, the Lumme (Colymbus Lumme) made its appearance. The ice began to break up on the 14th. Swallows appeared on the 15th. The ice disappeared on the 17th: the Spring floods in the

⁽¹⁾ Enontehis Sokns Beshrifning, of Eric I. Grape; MS. p. 33.

rivers then at their height. Upon the 18th, CHAP. sowing began; the plains beginning to look green. The last snow fell on the 19th. Upon the 23d, planted potatoes. Cuchoo heard on the 25th; and perch began to spawn. Birch-leaves began to appear on the 27th, and the plains to exhibit an uniform green colour. The last Spring frost happened on the night of the 30th.

June.

The earth white with snow on the 4th. Pasturage commenced in the forests on the 7th. Snow and heavy hail on the 13th. The first Summer heat on the 16th. First thunder on the 18th: at this time sowed the kitchen-garden. Mosquitos in vast number on the 22d. Inundations from the highest mountains on the 26th: at this time the leaves of my potatoe-plants perished with cold.

July.

First ear of barley on the 26th. Hay-making began on the 30th. The first star visible on the 31st, denoting the re-approach of night.

August.

First frosty night towards the 17th. Harvest began on the 20th. Birch-leaves begin to turn yellow, on the 23d.

September.

Hard frost towards the 6th. Swallows disappear

on the 11th. Ground frozen, and ice upon the banks, on the 12th. First snaw fell on the 21st, and remained upon the mountains. Cattle housed on the 24th. Lakes frozen on the 26th.

October.

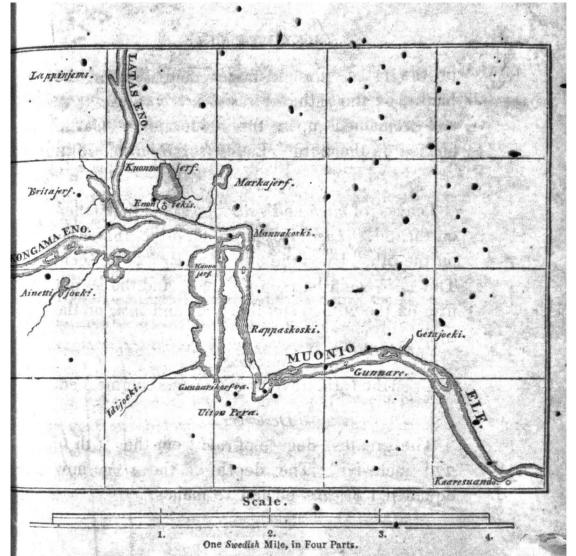
Leaves of birch and osier not altogether fallen on the 3d. Lakes frozen on the 5th; the river, on the 6th. Upon the 9th, not a rook to be seen. The earth again bare on the 22d; and the ice not firm on the 26th. Durable frost and snow on the 27th.

November.

Upon the 19th, travelling in sledges commenced.

December.

The greatest degree of cold from the 16th to 22d inclusive. The depth of the snow now equalled 1 Swedish ell and 18 inches.



CHAP. XII.

ENONTEKIS, AT THE SOURCE OF THE MUONIO, TO THE CONFLUENCE OF THE AUNIS AND KIEMI RIVERS.

Mild Disposition of the Lapps—False Notions entertained of them—Spirit of the Woods—Diviners—Rubus Chamæmorus—Impracticability of a farther Progress—

L 12 Preparation

Preparation for Departure-The Party leave Enontekis-State of Vegetation-Descent of the Cataracts-A Wolf driven from its prey by a Child-Bread of the Bark of Trees-Different Condition of the Nomade and Agricultural Lapps-Expedition to the Source of the Aunis-Lake Sotka- Solitary Dwelling on the Muotka Lake-Source of the Aunis-Fish taken in the Muotkajerf-Abundance of the Cloudberry - Description of the Aunis Lake-Hättan Village-Alpine Frontier of Finmark-Origin of the word Feldspar-Season for killing Reindeer - Description of the Aunis near its source-Kuru-Characteristic Portrait of a genuine Lapp-Mountain Pallas Tunduri-Curiosity of the Natives-Tepasto-Lapland Cream - Dreadful Conflict with a Bear -Kongis-Ofver Kittila-Midnight Mowers-Homeric Torches-Nedre Kittila-Colonial Finns-Ylijasco-Metallic Rock-Boundary of Kiemi Lapmark-Alajasco-Dearth of Provisions - Pahta-koski - Beauty of the Boats-Pirti-koski-Ravaniemi-Confluence of the Aunis and Kiemi Rivers-Arctic Circle-General Reflections upon leaving Lapland. and Market mades recent

CHAP. EVERY individual, who has visited Lapland, must have remarked one characteristic common to all the Lapps; namely, their mild and pacific disposition. When inflamed by spirituous liquor, their intoxication betrays itself by acts of intemperance; but never by anger, malice, or cruelty. It is manifested only in an elevation of spirits, amounting indeed to madness; in

shouting, jumping, and laughing; in craving for CHAP. drams, with hysteric screams, until they fall senseless on the ground; in a total disregard of all that belongs to them, offering any thing they possess for brandy; in raging lust, and total violation of all decency in their conduct; suffering, at the same time, kicks, cuffs, and blows, insults and provocations of any kind, without · the smallest irascibility. When sober, they are as gentle as lambs; and the softness of their . language, added to their effeminate tone of voice, remarkably corresponds with their placable disposition. It might be supposed they had borrowed this meekness of character (as it has been sometimes remarked of shepherds) from the animals to whose care their whole lives are dedicated: for the rein-deer is, of all quadrupeds, the most gentle and harmless. Eyen the wild reindeer, when taken, and led by a slight rope of leather, does not seem restless or alarmed, but suffers its conductor to put his hand into its mouth, and to play with it. The teeth of the rein-deer are very small, especially in the under jaw, and quite even. The custom, said to exist among the Laplanders, of whispering in the ear of the rein-deer before setting out upon a journey, by way of letting the animal know to what, place he is going, is altogether fabulous. It is

not only not practised, but the custom was never heard of in Lapland, either among the Natives, or by the Clergy sent as Missionaries into the country. Mr. Grape had bestowed great pains in collecting every information respecting the manners and customs of the Lapps, but this he considered as having no foundation in truth. We are accustomed to speak of the severity of their protracted and dark winter; but they all prefer this secson to that of summer; because winter, to all the inhabitants of the Frigid Zone, is the season of festivity and social enjoyment; or, as the Poet has so aptly named it,

--- " The long night of revelry and ease."

To the Laplander it is particularly precious; because, in the winter season, a less degree of vigilance is requisite in the management and guardianship of the rein-deer: they are not so apt to wander in quest of food. In summer, constant watching is necessary, to keep the herd together: and even when the most unremitted attention is paid for this purpose, many of them are frequently lost.

All the Agricultural Colonists of Lapland, and almost all the Swedish inhabitants and peasants of the provinces surrounding the north of the Gulph of Bothnia, believe that the Lapps are

CHAP. witches; that, as magicians, they possess the power of committing injuries upon the persons. of those whom they do not see, and even upon those whom they never have seen. This persuasion exists among the Swedes in more civilized parts of their country. Mr. Grape told us, that a merchant, south of Stockholm, was fully persuaded, that, as he had lived so long in Lap-· land, he had learned some of these wizard arts, and vehemently besought him to exhibit some . proof of Lapland magic. Finding that the most solemn protestations had no power to banish this credulity from his friend's mind, and being tired with his repeated importunities, he at last resolved to make a dupe of him. Pretending, therefore, reluctantly to acquiesce, he said, that he had no longer any objection to accomplish the only thing it was in his power to perform, in order to satisfy such urgent curiosity: and knowing that his friend had lately lost a spouse to whom he was by no means attached, he added, "If you have any matters you wish to settle with your late wife, which were left unfinished at her decease, I will introduce her to you for a few minutes." 'The terrified merchant regarded him in silence for an instant; when, perceiving that Mr. Grape was beginning to mutter some incantation, he seized him by both his

arms, exclaiming, with the greatest eagerness and agitation, "Raise the D——l, if you will; but, for God's sake, suffer my wife to rest in peace!"

Spirit of the Woods.

The Laplanders, on their part, have also a number of idle superstitions, and fears connected with a belief in Spirits of the woods and waters. The imaginary being held most in dread by all of them is the same which the Swedes call Troller, . or Evil Spirit of the Woods-a sort of fairy, delighting in all manner of mischief. A Scotch gentleman, resident in Gothenburg, who resided for some time in Lapland, said that he once found a whole family in the deepest affliction: a child was missing; and so convinced were the family and every inhabitant of the place that the 'Troller had taken it, that the natives of the whole district, from far and near, had assembled, and were gone in troops into the forest, in search of the child; each being fearful of venturing alone upon such an occasion. The pretended gift of being, able to predict future events is common among all the Laplanders, as among the Gipsies in other countries. Men and women affect the power of fortune-telling; not by means of the divining-drum, as mentioned in the last chapter, but in two ways: first, by the common trick of palmistry: secondly, by inspecting

Diviners.

TO THE AUNIS AND KIEMI RIVERS.

a cup of liquor; and this, to ensure the greatest possible certainty, must be a cup of brandy, which at once explains the whole business of the prophecy.

July 29 .- Upon this day, the mercury in Fahrenheit's thermometer fell to 47°, the wind being very high. There was not a mosquito to be seen. Upon reviewing our statement of the weather, we found, to our surprise, that we had experienced only two transitory showers of rain during our whole journey, from the time we left England; one in Holstein, and one in going from Stockholm to Upsal: yet this continuance of dry weather in Sweden is remarkable; the traveller may rely upon its fine clear atmosphere during the entire summer season. A kind of jelly, Rubus made with the fruit of the cloudberry, was served morus with cream for our dinner. Our benevolent host, finding the salutary change produced in the author's health by eating of this fruit, caused it to be sent to table in all the various ways of cooking it known in Sweden. The Lapps make a jelly of it, by boiling it with fish. At this time the bogs near the water-side were covered with the fruit in a ripe state. Our Swedish interpreter egathered half a bushel of the berries in an hour and a half. In its natural state, no fruit looks more beautiful! We endeavoured to preserve

a small cask of it, to send to England; but wanting a sufficient quantity of sugar, the acetous fermentation took place, and the whole was spoiled. Whenever we walked near the river, we found whole acres covered with its blushing berries, hanging so thick, that we could not aroid treading upon them. As they ripen, they lose their crimson hue, and turn yellow: the flavour of the fruit is not then so refreshing to the palate. They are always most delicious when they have been cooked. In their unripe state, they resemble in taste those diminutive, stinted apples gathered from codlin-trees, which boys call crumplings. Although they flourish most in marshy places, their roots do not strike into the swamp, but are found covering the hard and dry mounds of earth which rise above it. The larger berries are as big as the top of a man's thumb. The representation of the Rubus Chamæmorus, in the Flora Danica, beautiful as it appears ', is so far imperfect, that it was taken' from an inferior specimen of the plant.

Impracticability of further progress. ·Up to this day, we had always entertained a hope that it would be possible for us to penetrate still farther towards the north; and by

TO THE AUNIS AND KIEMI RIVERS.

ascending the Kongama to the Lake Kilpis, afterwards follow the Omaises, in its descent from the Alps, as far as the Icy Sea. But, Mr. Grape told us, that we should not find a single dwelling the whole way; that the only method of resting, during the dews of the night, would be, by turning our boats bottom upwards; and thus, beneath a sort of tent, lie upon the bare earth. Food might also fail: and, our worthy host, judging, from the weak state of the author's health, that he would be unequal to such an enterprise, persuaded him to abandon the undertaking. The following day (July 30) was therefore spent in preparations for our departure. And that we might not return by the same route, we resolved to cross over, by means of a chain of lakes, from the Muonio to the Aunis' river, and thence descend the Kiemiriver to the Gulph of Bothnia. We have, therefore, nothing more to add of Enontekis, than what relates to the obligations conferred upon us by the hospitable Clergyman; who, from the hour of our arrival, until our departure, never suffered his assiduity and attention to his guests to admit of a moment's relaxation. In addition to his own

⁽²⁾ This river is perhaps more correctly written Sunas: we have given the name exactly according to its pronunciation in Lapland.

statistical observations', and the manuscript copy of his Map, since engraved for this work, upon which his brother and himself worked incessantly while we staid, he presented us with an accurate List of all the Cataracts in the two rivers, between Enontehis and Tornea ; with reveral other detached pieces of information. He then brought to us a book, in which all strangers, who, of late years, had visited Enontekis, had inscribed their names; desiring us to do the same. Having complied with his request; and suspecting that Acerbi, in his return from North Cape, might possibly pass through Enontehis, the author addeds in Italian, a few lines from Ariosto, descriptive of his journey; subjoining, at the same time, the apostrophe to English travellers which Acerbi afterwards inserted into the account of his travels'.

The passages alluded to were as follow:

⁽¹⁾ The Manuscript containing these observations is mentioned by Acerbi, who made a few extracts from it. The original was afterwards sent to the author of these Trevels, at Stockholms it is now deposited in the University Library at Cambridge.

⁽²⁾ See the Appendix. This List will be found useful to any future traveller, who may wish to visit the north of Lupland by the same route.

⁽³⁾ See "Travels through Sweden," &c. Vol., 11. p. 122. Lond. 1802. ACERBI arrived at Enontekis the day after we left it; having yentured on foot a journey of near one hundred Finglish miles, over the mountains which separate Enontekis from Kautokeino in Finmark.

TO THE AUNIS AND KIEMI PIVERS.

Wednesday, July 31 .- Towards the evening of this day, we left Enontehis. Mr. Grape, his wife, his brother-in-law, and all the other members of leave Enonhis family, attended us to the water-side. The farewell affected us deeply. The thoughts of leaving for ever, and in such a solitude, so good a man, were very painful. His little children hung about our knees; and, as we parted, tears were shed on all sides. In the last view we caught of them, we saw the venerable missionary, surrounded by his relatives, waving his hal in the air, in token of his adieu: and, at this distance of time, notwithstanding all the subsequent images that have filled the mind under other impressions of grief or gladness, the sight we had. of this affecting groupe remains as fresh upon the memory as when it was actually beheld. The evening was beautifully clear and serene: all the distant mountains towards Finmark appeared with their summits unveiled and cloudless: the unruffled surface of the water, half-a-mile in

[&]quot;Sel giorni me n' andai mattina e sera, Per balze: e per pendui orridi e strani, L'ove non via, dove camin non era, Dove nè segno, nè vestigia umana."

Stranger, whoever thou art, that visitest these remote regions of the North! return to thy native country, and acknowledge that philanthropy is taught amongst civilized nations, but practised where moral theories never came?"

CHAP. XII. State of vegetation.

width, shone like a flood of liquid silver. The sides of the river were bordered by a little overhanging birch, south of Enontehis; but to the north of the cataract called Ollisenhoshi, the firtrees, so characteristic of the Northern forests, are no longer seen. The last tree of the last forest, towards the Pole, is the birch; and this dwindling into a creeping shrub, mingled with Betula nana, is found all the way to the shores of • the Icy Sea. Excepting the fine spreading plants of the Rubus Chamæmorus, all other vegetation diminishes in proportion to the distance northward from Enontekis; and in receding back towards the South, a very few miles cause a striking o difference in the appearance of the plants. We halted during the first night at Kaaresuando. Upon the evening of the next day (August 1), at Palajoensuu, distant only thirty-five English miles from Erontekis, we found flowers blooming upon the banks of the river, and flourishing in a degree of exuberance unknown at the source of the Muonio'. At Kuttanen, which is twenty-one

⁽¹⁾ From the valuable observations upon Lapland which are contained in the eighteenth chapter of Dr. Thomson's Travels in Sweden, p. 314. Lond. 1813. it appears that the height of Enontekis has been ascertained by the worthy and intelligent Missionary, the Rev. Eric Grape. According to barometrical observations continued for three years, the church of Enontekis was found to stand at an elevation of 1429 feet above the level of the sea.

miles from Enontekis, the inhabitants were beginning to mow their hay; the first sight of the kind we had yet seen. The same employment

CHAP.

Descent of

was going on at Palajoensuu, and elsewhere, the whole way down the river. The hay appeared in excellent crops, and it was well made. 'As we now descended with the stream, small oars were the Catasubstituted by the boatmen, instead of poles; one oar at each extremity of the boat. We were made to shoot all the cataracte with surprising velocity; the boats often striking against the rocks in their descent. The boat which conveyed our servants and a part of the baggage, in descending the Glisen-koski, became wedged between two rocks, and with much difficulty was saved from being overwhelmed by the torrent. Our boat was sent to its rescue; the men belonging to her having landed us, and forced their way back to the assistance of their comrades. They reached the Fall just soon enough to take every one out of the boat that had struck, before she became completely filled with water.

Von Buch assigns for the elevation of Palajoensuu one thousand and sixty-nine English feet. (See Von Buch's Travels, p. 351. Lond. 1813.) The ascent from Palajoensuu to Enontekis, a distance of thirty-five English miles, must be calculated according to the fall of the river during that space; making, at the same time, allowance for about ewenty cataracts or rapids.

Being thus lightened, and afterwards baled, she was disengaged from her perilous situation.

A Wolf driven from the new by a Child.

At Kuttanen, a wolf had visited the cottage, and killed two of their sheep. A little girl, nine year, or age, was brought to us, who seeing the wolf mangling the second sheep, took a small stick, and beat the assailant about the head, not being sensible of her danger. The wolf, in consequence, left his prey, and 'ed; the whole flock being thus saved from de ruction by the interference of a child. Her parents considered it as next to a miracle that she was not devoured. The owner of the cottage where we passed the second night, at Palajoensuu had sixteen chil-Iren: and in this village the bread of the poor peasants was worse than any we had yet seen: it consisted of the inner bark of the fir-tree, mixed with chaff and a very little barley. It seemed to us almost inconceivable that such bread should contain nourishment. We brought som) of it to England; where it has remained ever since, unaltered, and in the same state in which it was offered to us for food! The nonade

Bread of the bark of trees.

⁽¹⁾ Many years afterwards, at an auction of minerals, a piece of this bread, which the author had given to a friend, was offered for public sale, as a specimen of Rock Leather, one of the sub-various of Asbestus. The fact is well known in the University of Cambridge, several of its Members being present at the time.

Laplanders never taste of this bread: if it were , CHAP. presented to them, they would cast it away. They endure none of the hardships which their agricultural brethren undergo. A rich nomade Laplander lives, for the most part, upon the fattest venison. For the consumption of his family, two rein-deer are killed weekly; or, annually, about one hundred. It is a usual. thing with them to boil down forty pounds of venison to make soup for a single meal. During this operation, the fat is carefully skimmed as it rises, to be afterwards mixed with the boiled meat. But the condition even of the nomade Laplanders is much altered of late years; principally owing to the incursions of the wolves. A few years ago, for six drams of common Swedish brandy, a Laplander would press the acceptance of one of his best rein-deer, and would deem it as an affront if this remuneration were declined. Now, the number of the reindeer is so much diminished, that it is difficult to purchase any of them. . It was about ten o'clock' P.M. when we reached Pulajoensus. We found the weather, much colder; the mercury in Fahrenheit's thermometer having fallen this day to • 54°. The name of this place, Palajoensuu, signifies the mouth of the Palojocki. Here we were to quit the Muonio altogether; and make

M M.

CHAP. the best of our way, through forests and lakes, to the sources of the Aunis River.

Expedition to the Carree of the Aunis.

August 2. - We left Palajoensuu; and proceeded on foot, carrying our baggage for about an English mile, to the river Palajocki, which we crossed in boats'. Afterwards, continuing to walk through the forests for about three miles,

we came to a small stream of water, called LakeSotka. Sotkajocki, flowing from the Sotka Lake. Two little boats here received us: and these were forced against the current; the boatmen often getting into the water, to assist in lifting and dragging the boats, which seldom seemed to float, up hill, over large loose stones. The banks of the Sotha almost met over our heads: and the little cavity that appeared open above us was well nigh choked with birch. Afterwards, the bed of the river became more level; but it was filled with weeds, the channel not being more than four feet wide. Mr. Cripps and the interpreters preferred walking, and left the boats.

While the rest of us were forcing a passage through this gullet, we took numbers of wild fowl; the boatmen striking them with the ends of their poles, as they were seen diving in the stream: Presently we entered the Sotha Lake, called Sothojerf; and here found our compa-

nions, waiting upon the shore, with baskets, made of birch bark, filled with the finest fruit we had yet seen of the Rubus Chamemorus. Our Lapland interpreter shot the largest kind of solitary snipe that is known; and this we afterwards roasted, which proved a most delicious morsel; making, with our wild-ducks, ample provisions for our whole party. We were only, ·badly off for bread, being forced to use the abominable substitute made of the bark of trees, which we have before described. We crossed the Sotha Lake, a shallow piece of water, full of reeds and other aquatic plants, and surrounded by low woods. Its fish are neither large nor numerous. In general, the natives prefer the fish caught in lakes to those which they find in the rivers; because they are fatter. The principal of these are the lavarets, which abound in every lake. Pike are not so common. Having. landed upon the eastern side of the Lake Sotha, we carried our boats and baggage, through a forest, for about the space of an English mile, and observed fresh marks of ravages made by . the bears among the ant-hills. In our way, we sprung a very fine Black-cock, which we supposed to be the large Coq de Bruyère: it made an

⁽²⁾ Salmo Lavaretus. See Von Buch, p. 339. Londe 1813.

CHAP. XII. Solitary dwelling on the Muotka odd croaking noise. Soon afterwards we were surprised by the appearance of a path, giving us the comfortable assurance of our being near the residence of human beings. It conducted es to a small farm-house, the appearance and construction of which was ruder than any we had seen inhabited by the poorest Colonisis. stack of the trunks of fir-trees, resting in a sloping direction against one end of this building, protected the place of entrance (which served both as a door and a window) against the inclemency of weather, and formed a little shed, in lieu of portico, before it. This dwelling stood upon the side of another lake, called Muothajerf. The hole for entrance was so small, that we were compelled to creep into it. All within was black and wretched; but the chamber itself was spacious, as they generally are, having a row of penches all round. The poor owner of this hut possessed three sheep, one of which he sold to is; asking only two shillings, English, for it; and being glad to part with it; saying the wolves would soon leave him-entirely destitute. He brought us also a dozen of wild-ducks, which he had taken just before our arrival. We were happy to make the price paid for them far exceed his expectations: but so thoroughly insensible are the agricultural Laplanders to the

TO THE AUNIS AND KIEMI RIVERS.

passion of avarice, and so little disposed to take advantage of a stranger, that we could never, without difficulty, prevail upon the poorest among them to accept of our offers of payment. The fact is, that money has little estimation in their eyes: they have no opportunity of exchanging it for other commodities, unless they undertake an expedition of some hundred miles, or wait until the winter season invites the Tornea merchants into their country. There is . very little doubt, that if they were offered, at the same time, a rouleau of bank-notes, and one of pigtail-tobacco, they would give to the tobacco a decided and an eager preference. If pieces of money in specie be given to them, they bore . holes through them, and then hang them, as frivolous trinkets, about the heads and necks of their women and children.

Here, accompained by the poor owner of this hut, and by his daughter, we embarked upon the Muotha Lake, whose waters properly constitute the source of the Aunis River; although the Aunis. the natives give the name of Aunis to a larger lake, into which they are discharged. The Lake Muotha is two hundred feet in depth, and very clear. The fishes caught in it are a kind of Fish taken in the Musalmon-trout, called Rauto; common pike, of very otheriers. large size; and another fish, shaped like a herring,

of a dark glossy hue, ten inches in length, which is called Harr. The flesh, when boiled, is white, and very delicious. We believed the Harr to be the same as the Char of our Northern lakes; indeed, the name is nearly the same; but the flesh of the char, when potted, the only state in which we have seen it, is of a pale pink colour. The harr is found in all the lakes of Tornea and Kiemi Lapmark, and in the rivers of Muonio, Torneco, Aunis, and Kiemi, even to the Gulph of Bothnia. At the eastern extremity of the Muotha Lake, we landed, to walk about a mile, by the side of the stream which runs out of it into the Aunis Jerfun or larger lake before mentioned. During this walk, we found the Rubus Chamæmorus in such prodigious abundance, and its fruit of a size so large, that the whole surface of the morasses was covered by its plump and fair berries, inviting us to a delicious feast by their blooming appearance. When fresh gathered, even the ripest of these berries are not insipid; and just before they become quite ripe, their flavour is exquisite. We all of us ate of them as long as we pleased; and afterwards, filling a tub to the brim, we placed it in the boat, to serve with our meals, as long as the fruit might be preserved from fermentation.

Abundance of the Cloudberry.

Description of the Annis

We now embarked upon the Auris Lake, re-

· TO THE AUNIS AND KIEMI RIVERS.

CHAP. joicing in the consciousne's of having no longer any cataracts to ascend; our voyage the whole way to the Gulph of Bothnia being with the current: and, of course, there remained for us an easy descending course along the rapids and falls of the Aunis and Kiemi, instead of the tedious and difficult labour of what is called forcing, which we had so often encountered in the Tornea and Muonio. According to the common custom of all Lapland, the principal lake . whence a river is derived gives its name to the river itself. This river, therefore, flowing from the Aunis Jerfvi, towards the south, until it joins the Kiemi, bears the name of Aunis. The lake extends ten English miles and a half in length, from west to east; and it is three in breadth. It is, moreover, fifty fathoms deep. To say of its waters, that they are clear, would give a very inadequate idea of their beautiful appearance: they are so pellucid, that, as we floated along its glassy surface, we saw the depths below our boat as through the most diaphanous crystal. About mid-way down the eastern side of this lake is the village of Hättan. Here we passed Hattan the night in great comfort; having supped upon wild-fowl, a part of the sheep we had bought at-Muotha, and the cloudberries we had gathered. Patches of rye, barley, &c. surrounded the cot-

tages of Hättan, reaching to a considerable extent from the village. The inhabitants, as it frequently happens upon the borders of lakes, were distinguished by their cleanly and wholesomerappearance, and by the neatness of their dwellings. It is true, we had sent forward a messenger, to say we should pass the night in this place, which might be a cause of the neathess we observed. Every article of furniture was as cleanly and pure as industry could make it; the table, benches, bowls, platters, ladles, being all of wood, and principally of deal, were white and spotless. A large fire was kindled; and this, for the first time, was felt as a great comfort; some rain having fallen, and the air being chilly. Mr. Grape, too, was expected here, to make his annual visit, and to administer the Sacrament. Many of the natives, from distant villages, had assembled, to meet him upon his arrival; which, it was expected, would be on the following day. In the fodder-houses we observed a quantity of the Lichen rangiferinus, collected as food for the cattle.

August 3.—We embarked again upon the Aunis Lake. The scenery was grander, and somewhat mountainous: the shores, bold, rocky, precipitous, were covered with trees; among which the dark foliage of the pine, mingled with

the lighter green of the firch, formed a pleasing CHAP. variety of tint. We had here a valuable companion in a dog belonging to one of the boatmen: it-was of the true Lapland breed; and similar in all respects to a wolf, excepting the tail, which was bushy, and curled, like those of the Pomeranian race. This dog, swimming after the boat, if his master merely waved his hand, . would cross the lake as often as he pleased; carrying half his body, and the whole of his head . and tail, out of the water. Wherever he landed, he scoured all the long grass by the side of the lake in search of wild-fowl, and came back to us, bringing wild-ducks in his mouth to the boat: • then, having delivered his prey to his master. he would instantly set off again, in search of more. At the eastern extremity of this lake, we came to what is called a force; that is to say, one of those falls, or rapids, we have so often mentioned; and for which, in our language, we .have not, as the Laplanders have, a specific name, suited to every characteristic circumstance of situation, height, or violence. By this fall the River Aunis makes its exit. Here the boatmen offered to fish for us; and soon caught plenty of the Rauto, Harr, and others, whose names we have not retained. As for wild-fowl, besides what the dog had brought, we killed

them in such numbers, with our poles, that our guns were laid aside, as useless things. Mountain scenery seemed now to inclose us; but none of these mountains possess any grandeur of appearance, of remarkable elevation. When mention is made of the mountains of Lapland, or of Sweden, if should be understood that the expression generally relates to mere hills; such as those, called the South-downs, along the Sussex coast. The Alps, which constitute the frontier of Fint nark, and those mountains which occur between the source of the Auris and its junction with the Kiemi, were the highest that we saw until we afterwards crossed, the Alpine barrier, between Sweden and Norway, in our journey towards Röraas and Trönijems The Lapps call the highest mountains Fjal, borrowed evidently from the Swedish Fjäll, and corresponding with

Alpine of Finmark.

Origin of the world Feldspar. from the Swedish Fjäll, and corresponding with the words Fel and Feld, given, by all the Teutonic nations, to a high ridge or chain of mountains; whence, in mineralogy, the word Feldspar, signifying Mountain-spar, has been derived, so erroneously explained by French writers, to signify field-spar, or spath des champs. Upon these mountains the Lapps reside, with their rein-deer, during the hottest part of the summer; descending

⁽⁽¹⁾ FELD-SPATH, c'est a dire, spath de amps. Hauy, Traité de Mineralogie, tom II. p. 425. Paris, 12.

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into the plains when the mosquitos begin to disappear; at which time they also begin to kill their rein-deer for food.

After its exit from the lake, the Aunis is one Description of the continued cataract, for many miles in extent; Aunis, near and it required almost as much labour to, force the boats over the stones, although descending with the whole force of the fall, as it had been necessary to exert when stemming the Japids of the Muonio in opposition to the stream. This, day we stopped to dine in a forest, through which the river fell; and hauled, meanwhile, our boats on shore. Here we found swarms of mosquitos: our boatmen, therefore, tearing down . the dry trunks and boughs of old decayed trees. and piling upon them large pieces of solid timber, made such a prodigious bonfire, that the smoke of it, added to the protection afforded by our veils and by green boughs, kept aloof these. troublesome insects; and we were enabled. although with difficulty, to roast some of our fish. Afterwards, we continued our voyage. The scenery was much the same as we have often described, in our passage up the Muonio; but it is better to repeat former observations, than leave the reader in ignorance as to the nature of these regions. The lower banks, or shores, of the river were covered with luxuriant

birch, hanging over im a copious waving and playful foliage. Below the boughs of birch, a fresh green turf, now just mown, appeared as soft and verdant as the lawn of an English pleasure-g ound. High towering over all, behind the birch, rose the dark forest of pine. The bark of the birch is serviceable to the natives, in various ways: mingled with barley meal, it constitutes a part of their food; many of their domestic utensils are made of it; and when collected in flakes, as tiling, it is used in covering the roofs of their houses.

Kuru.

Characteristic Portrait of a genuine Lapp,

It was late in the evening when we reached a place called Kuru, and entered a true Lapland house; that is to say, its owner was a genuine Lapp; and although wealthy, when compared with the generality of agricultural Laplanders, looked as wild and as wretched as any of his nomade brethren. The chambers of his dwelling were dark, and full of symbolical testimonies of the life he led: sledges, skiders, rein-deer harness, poles, fishing-tackle, tubs of pima, milk, cheese, &c. occupied almost every pace under cover. His features, like those of all the Lapps, marked him at once as belonging to a distinct and peculiar race of men-eyes half closed; mouth pinched close, but wide; ears full and large, projecting far from the head; complexion tawny and

TO THE AUNIS AND KIEMI RIVERS.

copper-coloured; hair dark, straight, and lank, CHAP. none growing near the nape of the neck: add to this a small and stunted stature, with singular flexibility of limbs, easily falling into any posture, like all the Oriental nations; looks, regarding objects askance; hands constantly occupied in the beginning of conversation with filling a short tobacco-pipe; the head being . turned over one shoulder to the person addressing, instead of fronting the speaker-such is, the characteristic portrait of one and every Laplander. The moment we saw any of them, we could immediately recognise those traits by which the whole tribe are distinguished from the other . inhabitants of Europe, and in which they differ from the other natives of the land in which they live. Even the Finlander, who is supposed to be a sort of cousin-german, differs, in many respects, from the Laplander. The hair of the Finlander is of a fair colour; either pale yellow, flaxen, or almost white: and the honest Swede, of nobler race than either, is a giant, in whose person and manners there is nothing of the cat-like flexibility of the Asiatic, nor any resemblance to that Orient complexion and form of countenance which as-• similates the Laplander to the natives of Japan

Behind Kuru, a mountain, here called Pallas Mountain Tunduri, which we had seen hear Muonioniska, Tunduri.

seems to rise to a cons derable height, and with some appearance of grandeur. It is entirely destitute of trees, and we observed small patches of spow now lying upon it. We had a fine prospect of it at midnight, the atmosphere being clear, except towards the base of the mountain, where a thin fog was spread over the forests. It was from this mountain, during our ascent into Lafriand, that we might have seen the midnight sun considerably elevated above the horizon. Turduri is a Finnish word: it signifies 'a mountain destitute of trees.' The family of our Lappish host, at Kuru, was very large: they all came, as it was usual in places where we rested for the night, to see us undress. We could not repress their curiosity without giving them offence: therefore we suffered them to remain in the room; where they behaved with great gravity, whispering to each other, and making some remarks upon every article of our apparel. Our boots or shoes were always examined with great. surprise: but if we took off our stockings, or put on a night-cap, the wonder was heightened; for having no idea of their utility, and perhaps not thinking them ornamental, we had always some questions to answer, as to the meaning of such a ceremony. Pipping undertook to explain matters to dur visitants; entertaining them

Curiosity of the Natives.

with his strange storie of the country where all these marvels were manufactured; and how and then, cracking his jokes with the women, who would be prying into every thing, a momentary mirth was excited.

· August 4.—We left, Kuru. Observations made with a pocket-compass proved that our course twice lay N.E.; and consequently, that not only . Hermelin's but also Mr. Grape's Man's afford only a general idea of the course of the Aunis, During this day, the author made sketches of some of the scenes upon the river; these were always picturesque; but particularly so when they enabled him to introduce views of the Aunis. Tunduri. One of them exhibits this mountain in a very conspicuous manner; and its mamilary form is characteristic of all the mountains! towards the sources of the Muonio and Aunis. In the evening of this day we arrived at Tepasto Tepasto. where we supped on wild-fowl, and cloudberries ·mixed with cream, so rich, that without being sour, it was ropy, and, when taken up with

⁽¹⁾ The mountains are all of Gneiss.

⁽²⁾ Before we reached this plaze, we discovered a considerable error in the Map published by Hermelin. A river which he has introduced as falling from the north into the Aunis, below Tepasto, joins this river more than seven miles above Tepasto. It has no name in the Map, but it is called Tepasto jocki: it brings a considerable body of water into the Munis.

CHAP. XII. Lapland Cream. a spoon, drew out in stlings. This is often the case with Lapland cream: its slimy appearance is not tempting, but its flavour is sweet and delicious.

Dread ul conflict with a Bear.

Here we saw another instance of a peasant who had been wounded in hear-hunting. Having missed Lis aim, he plunged the short pike, with which they attack the bears, into the thigh of one of these animals, instead of striking him in the right place. Immediately perceiving how ineffectual the blow had been, and consequently his own perilous situation, he leaped upon the bear's back; but the enraged animal contrived to fasten his tusks into the arm of his assailant, and would soon have dismounted and dispatched him, had not his companion succeeded better: who; while the bear was upon his hind legs, with the man upon his back, thrust a spear into his heart. The scars remaining upon the man's arm shewed that the bear's, tusks had entered deeply on both sides; but the bone had not been broken.

August 5.—After leaving Tepasto, the river was full of islands. In other parts of it, where there were no islands, it was now about 150

⁽¹⁾ We were told here that the cows do not yield such rich cream, unless when fed with Lichen rangiferinus.

yards wide. We changed our boats, and dined CHAP. at Kongis; below which place, the channel saddenly became contracted, and formed a cataract,

called Kongis-koski: in this cataract it is only forty feet wide. The rocks, over which the

torrent falls, consists of Trap. Afterwards, the

river was smooth and tranquil, with the ex?

ception only of one long rapid, three English .

miles in extent; below which, is Ofver Kittila. Ofver Kittila.

We found the natives, with lighted fires 2, employed in mowing, throughout the entire night. Mowers.

The same sort of scythe was every where in use; not being larger than a sickle. This is

fastened to the end of a pole; and they swing .

it to the right and left, turning it in their hands.

with great dexterity. Not only women, but girls perform this labour, as well as men: We

often endeavoured to mow the grass with this

kind of instrument; which always excited their

laughter. Upon one of the shores, among a

party who were thus occupied in mowing, we

found the owner of a farm at Ofver Kittila; and

as it was now midnight, we prevailed upon him

to accompany us to his house. All the soil near

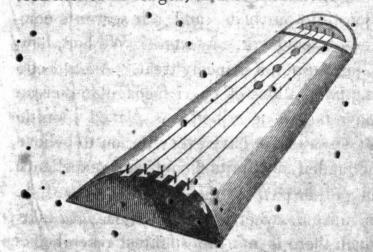
the river is sandy; and this is the general ap-

pearance of the land near the Aunis: but the

(2) To keep off the mosquitos.

most ornamented pleasure-ground could not exhibit more decorated or pleasing scenery. The occasional views, towards the west, of Pallas Tunduri, were very fine; and the new-mown banks of this pellucid river, sloping to the water's edge, garnished with weeping birch and the most elegant fir-trees, had rather the appearance of grounds set off by studied and tastely art, than by the wildness of uncultivated nature. About half a Swedish mile lower down the river, welandeds and were led by our guide, through some meadows, to his farm. The house of our conductor was dirtier than any we had yet seen in Kiemi Lapmark. Vermin of the most unpleasant description found their way from the floor into our beds, and our servants complained of being worse infested. We had, however, for supper, a princely treat. A bowl containing two gallons of the rich coagulated cream we have before described was placed upon the table; such as, we have every reason to believe, is unequalled, as to its flavour and excellence, in any other part of the world. We had, kesides, mutton, sweet as that of the Shetland Isles; to which there is not the slightest resemblance in meat bearing the same name in England. And . to heighten the luxury afforded by these viands,. our feast was accompanied by the sound of the

only musical instrument we had yet heard in all Lapland. Poets might have believed that Orpheus, in his long wanderings through the region of the Hyperboreans, had left his Lyre among them; for it was, in fact, the Lyre of the antient Finns, with five strings adapted to the five notes peculiar to all their music and poetry. The strings were all of wire, and of the same size. Its form was that of an oblong shell, wider at one extremity than the other; but made of wood; the strings being placed above the convex surface, through which three holes were perforated, in a straight line, beneath the strings, and ranged longitudinally. It was eight-teen inches in length, and of this form:



The genuine Lapps are strangers to music.

⁽¹⁾ Solus Hyperboreas glacies — - VIRG. Georg. IV.

CHAP. neither is there any nusical instrument known among them. Our Lapland interpreter, in all his interceurse with Laplanders, had never seen any thing of the kind. He considered this instrument as a relique of the most antient customs of the country. The wife of our host said it had been in her family for many generations. When asked if she could play upon, it, she answered in the affirmative; adding, that her mother had taught her s and that her daughter could play likewise. We then desired to have a proof of her skill. . She placed the instrument before her, upon the table, with its extremities towards her right and left, striking the chords with the fingers of both hands at the same time, near the head of the Lyre. All her tunes were but variations of the same humdrum; which consisted of so few notes, that we could hardly give it the name of an air. For the rest, our accommodations in this farm-house were any thing but comfortable. The only apertures for air and light were little holes, like the mouths of chimneys. A prodicious stove, like a brickkiln, in which whole trunks of trees were consumed, occupying a corner of the chamber in which we passed the night, filled rearly a fourth of the room; and the heat of it was intolerable: . it served the family as an oven and a fire-place.

At this season of the year, they bake bread, as CHAP. they informed us, once in each week: and this baking had just ended, when we arrived. We were therefore forced to open the vent-holes. before we could breathe in such a place. The upper part of our chamber, as in all the other" houses in this province, was covered with soot; but the lower part was slean washed. Presently, we found, that in avoiding surfocation, we should encounter an evil almost as much to be dreaded: for the room became filled with mosquitos; and we were forced to kindle a new fire, and to fill the chamber with smoke, in order to expel them, when we closed up all the holes . again by which they entered. The only lights Homeric Torches. used by the natives, in these dark dungeons, are made by burning splinters of deal (the most antient kind of torch known to the antient Greeks, and mentioned in Homor), about two yards long. which they stick in the crevices between the

⁽¹⁾ In the dwellings, tents, soil, and people of Lapland, the traveller may often be reminded of the Ode composed by Johnson, in the Webrides:

Permeo terras, ubi nuda rupes
Saxeas miscet nebulis ruinas,
Torva ubi rident ateriles coloni
Rura labores.
Pervagor gentes, hominum ferorum
Vita ubi nullo decorata cultu
Squallet informis, tugurique sumis
Fooda latescit.

trunks of the trees of which their houses are constructed; and thus it is eary to explain the cause of those numerous accidents by fire to which the villages are liable. Marks in the walls, where large portions of the timber have Been charred, betraved the neglect shewn to these barning brands. The bread of this family was full of chaff, and of the bark of the birch-tree: it was only when stewed in butter that we were able to swallow it; and even then with difficulty. We bought, however, some cheese, which they had made of cow's milk. From all that we saw here, we were inclined to believe that a slight mixture of Russian habits might, upon this eastern border of Lapland, account for any difference we had observed in the manners and customs of its inhabitants: and if this were really the case, both the airt and the music might be easily explained.

Nedre Kit-

"August 4.—We left Ofver Kittila. Farms appeared near the river, the whole way to Nedre Kittila; a distance nearly equal to two English miles; where we saw a wooden church, of very rude construction, in which service is performed twice only in each year." Here the river becomes deep and wide, and free from rapids. Some rein-deer from the interior of the forests came to the water's edge, to drink; not being dis-

quieted by the passage of the boats, but quietly CHAP. keeping their station near the side of the river. The mountain Pallas Tundiri was still visible towards the north-west. The inhabitants were everywhere employed in mowing'. We had Colonial some passing showers during the last two days. Finns. The people on this river are much more wealthy than those who inhabit the banks of the Muonio or Tornea, and their farms are much larger: they keep horses, besides their other cattle. They are principally Finns. Their language, softer than that of the Swedes, is less so than that of the Lapps, The mode of salutation among the latter distinguishes them from the Finns: the wildest Lapp, meeting one of his own tribe, or even an acquaintance, gently raises his scull-cap from the crown of his head, throwing, at the same time, one arm round the body of the person whom he salutes. . Finding an oven heated at Mijasco, we tried what effect Flijasco. heat would have upon the ripe fruit of the Rubus Chamæmorus. The berries were baked in vessels made of the back of the birch-tree, and tasted very well afterwards.

⁽¹⁾ Several plants began to be in seed: among these, Pecicularis Sceptrum Carolinum; Lychnis alpina; Parnassia palustris; and different species of Endobium. We afterwards collected the seed of the first, when it became mature; and sent it in letter to England, to the Potanic Garden at Cambridge; where the utmost care was used to make it germinate, but in vain.

of Kiemt

About reventeen English miles below Ylijasco; we observed the junction of a small river with the Aunist upon its western side, having a little island in its mouth. This small river marks the boundary between Kiemi Lapmark and the Fin-Lapmark. Lend province of Ostro Bothnia. As we were here to take our leave of Lapland, we heaped a pile of forest-trees upon the shore; and kindling da immense bonfire, once more dined, in the thick smoke of it, al freco. The mosquitos, as if convened to bid us farewell (for we never saw them afterwards), were more numerous than ever: the whole atmosphere seemed to be full of them. During this, their last visit, they enade as good use of their time as possible: when we left the spot, our faces and hands were streaming with blood. The legs of our English servant were so covered with the wounds inflicted here, that an alarming suppuration took place; and unless very great care had been used, there was reason to fear a mortification would have ensued. We procured for him some of the Lapland boots, made of pliant leather; which are fastened with garters, like stockings, below the knee, and are large enough to draw over both swathing and trowsers at the same time: then, by keeping linen bandages, constantly wetted with the Goulard lotion, upon the

wounded parts, the inflammation was at last subdued. The Aunis now appeared about a quarter of an English mile wide. We afterwards descended a very considerable rapid; and arrived at Alajasco, situate upon an islande The Alajasco. approach to it was very beautiful? Here we had the worst accommodation we had yet experienced. We were compelled to kindle a fire, that we might fry some of the abominable birelltree bread we have before described: but there. was no chimney, nor even a window for the smoke to escape. The only light in our apartment issued from our fire, through the dense smoke which filled the room; and from lighted * splinters of deal, brought in lieu of candles, which they deposited in a large bundle, or fagot, upon the floor. The poor owners of the hat had not a Dearth of single article of food in their dwelling. Had it not been for bark bread, which we had brought with us, and the remains of our cloudberries, we should have been in a starving plight, At last, a neighbouring peasant arrived, bringing a bowl of delicious cream; which, with the rest, made a tolerable mess for the whole of our party.

August 8 .- We left Alajasco. Cataracts and rapids are not so numerous in the Aunis as in the Muonio. Perhaps to this circumstance, as to one of the causes; it may be attributed, that the farms,

which are always situate by the side of the rivers, are in general more numerous, more extensive, and in better order, here, than in Tornea Laptuark. But the river is full of shallows, which often interrupted the progress of our boats, and of namerous islands, called Sari by the natives. Whenever we touched upon the shallows, our boatmen leaped overboard into the river, and dragged their vessels over the . stones. Sometimes it was necessary for us to do the same. Wild-fowl again appeared in great number: ducks, teal, geese, and loom1. Two immense birds, of the stork kind, passed over our heads this day; the first we had seen since we left the south of Sweden. Seven miles below Alajasco, we passed Tolonen. 'All these places are single farms, stationed near the river. We dined and changed our boats at Pahta-koshi. The house here was very clean; and we were regaled with barley-bread, butter, cream, and cheese made

Pahta koski.

⁽¹⁾ This bird is figured in the Lapponimof John Scheffer; and the remarkable formation of its feet is also stated by him, which we were inclined to consider as fabulous. "Id peculiare ipsi, quot non exeat in terras, and aut volet, and in aquis natet! Habet quippe pedes, sed breves admodum, si cum reliquo componas corpore, multumque ad posteriora rejectos, ut natere quitem possit optime, sustinere vero se in terra iterque instituere hand valeat. Unde quoque nomen ei indition, nam Locai, est caudum, et inhabite ad procedendum." Vide Cap. 30. dt Avibus, &c. p. 349. Francof. 1673.

of cow's milk. This place is eighteen English CHAP. miles from Alajosco. We were enabled to procure a boat large enough to contain us all. It was about the size of a Thames wherry, but with Beauty of het Poats. less draught of water, and particularly degant as to its form; lying upon the water like a feather; and calculated, by its shallow form, to pass the rapids and shallows, buoyant, without These boats were afterwards common striking. upon the river: they are all manufactured by. the natives, with scarcely any other instrument than their knives; and some of them are so beautiful, that if sent to our country, they would be exhibited as curiosities. In descending with the stream, little oars, or baddles, areused; one at the prow, and another at the stern; the helmsman paddling and steering at the same time. About ten English miles from Pahta-koski, we passed Heishari, and came to a very neat farm, with a clean house, called Pirti-koshi. Here the banks of the Aunis appear to be much inhabited. We observed several farms; and meadows filled with prasants, all making hay. Around these farms we saw fields of rye, hemp, and barley: proving, that an industrious people might render the land here highly productive. In some future period, posterity may perhaps read descriptions of the provinces watered by

the Munistand the Muonio, as of the granaries of the North of Europe. The soil, it is true, is sandy; but wherever cultivation has been introduced, it is attended with success.

Pirti-

At Pirtt-koshi, we rested for the night; and found a field of young turgips, which afforded a grateful novelty to our eyes. The boats in the river, and others lying upon the shore with their keels upwards, afforded, by their beauty, striking proofs of the ingenuity and industry of the people. Their form is that of a crescent, the prow and stern rising high out of the water; and, as they glide along, they hardly seem to penetrate the surface. They are constructed entirely of thin slips of deal, kept clean and burnished; and even when deeply laden, are as light and manageable as the most elegant boats of the Turkish watermen, in the Canal of Constantigople. One of our English wherries, placed by the side of an Aunis boat, might seem constructed with more skill, but would appear clumsy in the comparison. Beneath the sandy surface of the soil lie pebbles of Trap : in some of the varieties, upon breaking them, we discerned threads of sulphuret of iron, resembling silver. Fragments also of red granite occur among these pebbles.

The next day, we left Pirtihoshi. The Aunis

eixteen English miles and a half from Pirtikoshi we passed Ravaniemi, a place falsely laid down in Hermelin's map: it lies north of the confluence of the Aunis and Kiemi rivers. At Ravaniemi we observed, for the first time since returning from the borders of Finnark, a house with two stories, and window-frames painted red; evident symptoms of our approach towards a more inhabited. country. Immediately afterwards, we saw the Confluence Kiemi River entering from the north-east; the Aupis and Aunis joining it from the north-west. Each Rivers. of these rivers has an island in its mouth, at the point of confluence. The Arctic Circle, according Arctic to Hermelin, is fixed exactly at the junction of the Aunis with the Kiemi. A sudden feeling of General exultation, at the successful termination of our upon leavexpedition within the Frigid Zone, prompted us ing Lapto stand up in the boat, with our hats off, as we crossed once more this polar boundary. looked back towards the regions we had traversed, unmindful of the toils, the trials, and privations, to which we had been exposed; not being altogether insensible of a contending emotion of regret, in the consciousness that we should see those scenes no more. Similar sensations were experienced and acknowledged by a late enterprising and lamented traveller, when being liberated from prison, he quitted the

CHAP. dungeons in which he had been confined: they are natural to all men who have long had fellowship even with a state of wretchedness. A moment's retrospect upon the general condition of the Arctic regions will shew whether we had reasonable cause of regret, in the consciousness that we should never again return thither. It is true, as Linnaus said of this country, that it is the land of peace; kut it is the peace of an unbroken solitude, into which, if man presumes to penetrate, his first interrogations are answered by the howling of wolves and bears; and, at every step he takes, the stings of venomous , insects inflict excruciating torments. When he looks around him, a wide and trackless forest extends in every direction; in which there is a character of sameness so little varied, that dulness rather than peace may be said to reign with supreme dominion. Many a weary league is passed without meeting a single animal. quadrupeds, excepting beasts of prey, are seen only neaf the solitary dwellings. Birds are few in number, excepting upon the rivers; where aquatic fowls, during one short season of the year, find an unmolested retreat, in which to

hatch and rear their offspring. With the

exception of the few colonical families settled in fittle farms, widely d'spersed along the banks of the. rivers, the human race may be considered as amongst the greatest rarities of the country.1 A single tent, more like a mole-hill than any habitation of men, in the midst of some forest, or upon the summit of some mountain, harbours a few wretched pigmies, cut off from all communion with society; whose dwarfish stature, and smokedried aspect, scarcely admits of their being recognised as intellectual beings "created in the image of God." What then are the objects, it may be asked, which would induce any literary traveller to venture upon a journey into Lapland! Many! That of beholding the face of Nature undisguised; of traversing a strange and almost untrodden territory; of pursuing inquiries which relate to the connexion and the origin of nations; of viewing man as he existed in a primæval : state; of gratifying a taste for Natural History, by the sight of rare animals, plants, and minerals; of contemplating the various phænomena' caused by difference of climate and latitude: and, to sum up all, the delight which travelling itself affords, independently of any definite object; these are the inducements to such a journey. Nor is it unrewarded in its consequences; for whether Science be materially VOL: IX.

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advanced by it, or any addition made to the general stock of human happiress, yet, so far as the traveller is himself concerned, he will be almost disposed to say with Reignard, that it is a journey "he would not but have made for all the gold in the world; and which, for all the gold in the world, he would not make over again." After all that has been urgede it should be admitted, that the summer season is not thate in which it is best to visit Lapland; although it be in lispensable towards many purposes of scientific research. Winter is the festival time of all the inhabitants, of these Northern latitudes. It is then that he Laplanders may be said to fly upon the wings of the wind. season, so congenial to his nabits, his spirits are more elevated; a constant intercourse prevails among the nomade and agricultural families; all the fairs are held; provisions are more abundant, and more easily kept and conveyed; none of the evils of which travellers most complain are then felt; the perpetual darkness, in which the whole region is said to be shrowded, has been strongly mis-represented and exaggerated; the absence of the sun's rays is greatly compencated by serene and cloudless skies, in

⁽¹⁾ See Acerbi's Travels, Vol. II. p. 27. London, 1809.

TO THE AUNIS AND RIEMI RIVERS.

which all the other luminaries of heaven shine with a degree of lustre unknown in other latitudes; and, among these, the Aurora Borealis, added to the effect of reflection from a surface of glittering snow, produce a degree or light, of which persons can have no idea who have not witnessed a Lapland winter. The air, too, is then calm and dry: even when the frost is most intense, a traveller, well wrapped in fars, and seated in his sledge, is never known to complain of those chilly sensations, and that coldness of the extremities, which are produced by dampness, in a more hum id atmosphere.

⁽²⁾ These remarks are, of course, founded upon subsequent observations made by the author: he had, for the most part, a personal experience of their truth, during the following winter; and, besales, collected information, confirming the statement here made, from travellers who visited Lapland during the winter season.

APPENDIX.

No. I.

The following List of all the CATARACTS and RAPIDS between Enontekis and Tornea, in the Rivers Mulnio and Tornea, will be found very useful to future Travellers, who may follow the author's route, in the rejourney into Lapland. The principal Falls are marked with an asterisk; but, as a general rule, it may be observed that a Cataract has the termination kosk: where the word Niva occurs, it implies only a Rapid or Force. The original document was presented to the author by the Rev. Eric Grape, Pastor of Enontekis, in his own hand-writing. His orthography will therefore be adhered to, even where it differs from that adopted in the Work.

CATARACTÆ AB ENONTEKIS AD TORNAM

*Manna-koski.

*Olappas-kos.i.

Gunnari-korfva.

Niva.

Niva

Jatani Niva.

Niva

Niva.

Niva.

Pitka Niva. .

Niva.

*Kuttaisen Kürcki.

Niva.

Niva.

*Ollison Koski.

Niva.

Orre Luongas Diva.

Nedre Luongas Niva.

Niva.

*Orre Tat o-koski.

Nedre Tapo korki.

Petäjä-koski.

Niva.

Niva.

Jalo-korfva.

Ping's Niva.

Niva.

Niva.

*Ofre Hirvas-koski.

*Nedre Hirvas-koski.

Suopatus Niva.

Kelo Kürckio.

Jalo Pola.

Songa Niva.

Ambari Korfva.

Cauho Nira.

*Ofver-koski.

Niva.

Widan Pola.

Offe Visando-koski.

*Nedre Visando-koski

Niva.

nio-koski.

Car Lapin Niva.

Nedre Lapin Niva.

Saari-koski.

*Jalkoinen.

*Kangos-koski.

Puripaja.

Ofre Reponiva.

Nedre Reponiva.

Kåta Niva.

*Karimellan Niva.

Kaarne-koski.

Napangi.

Niva.

Mattila Niva.

Ofre Penaja Niva.

Nedre Fenaja Niva.

*Kaalama.

*Matkos-koski.

*Ja o-koski.

Garea-koski.

harea Niva.

Muckas-koski.

Niva.

Yekara Niva.

Huukin Niva.

Annan Niva.

Ripi Mellan Niya.

Matin Niva.

Lapin Niva.

Niva.

Lonbolon Niva.

Törmës Niva.

Ricais Niva.

*Nedre Lappea.

*Jaapa-koski. •

*Hjetainen

APPENDIX. *Ka780 7 Turtelan Niga. Tuponiva. Lambisen Niya. *Kattila-koski. Kaardisen Riva. Kave-koski. *Jarhoinen. Pymä Kari. Marjosaaren Niva. Kosio Niva. *Vuolenao Martimo Niva Teiko Niva. *Matka-koski. Kartuloma. Sorua. Saapas. *Purus-koski. Niva. *Hirvas-koski. *Gylkä. *Karsicko. *Valkia-koski. *Öfre Korpi-koski. Yso Närä. *Nedre Korpi-koski.

No. il.

The Author has not thought it necessary to specify the names of all the Plants he collected in Lapland: some of them would not be considered worthy of notice: and the Botanical virtings of Linnaur has a rendered superfluous almost any thing the right be said respecting them. But there is one thing which he conceives would be an acceptable of ring to Travellers who visit Laplane; namely, a Flora Lapponica; so compendious, that it may be written upon two or three blank teaves of a Pocket Journal, and yet contain the names of all the Rarer and more Characteristic Plants of the Country. This will be afforded, by an materical List from the Author's own Collection; augneted, as it was, by gifts from the Herbarium of Dr. D. E. Næzen, or Umeå.

PLANTÆ RARIORES LAPPONIÆ.

Andromeda coruler rariss.

Andromeda hypnoïdes. rariss.

Andromeda polifolia.

Andromeda polifolia. rar.

Andromeda tetragon: rar.

Angelica Archangelica.

Anthericum calyet latum. rar.

Arabis alpina.

Arbutus alpina. ra iss.

Arbut - pina. Flores sub nive, tempore vernali, collectæ. rariss. Arbutus Uva Ursi. Asplenium Trichomanes. Astragalus alpinus. Astragalus alpinus. rarism Calea Lapponica. rar. Azalea procumbens. Srara. Bartsia alpina. rariss. Betula nana. Betula hybrida. rariss. Campanula uniflora. rariss. Cardamine bellidifolia. Carex atrata. Carex atrata. rariss. Carex vesicaria. Cerastium alpinum. Cerastium semidecandrum. Cerastium viscosum. Comarum palustre. Cornus Svecica. Cypripedium bulbosum, om ium rariss. planta! Dianthus superbus. Diapensia Lapponica. Draba alpina? Droba alpina. rar.

Erigeron acre.

Erica vulgaris.

Gentiana nivelis.

Erigeron alpinum: rariss.

Erigeron uniforum." rar.

rariss.

Geranium columbinum. Geranium sylvaticum. Gnaphal.um alpinum. Gnaphalium alpinura. Gnaphalium dioicum. Gnaphalium (at nova species facien induit Gnaphal. Sylvatici.) Gnaphalium uliginoswan. Hieracium alpinum. Hypochæris n.aculata. Junta Sufonius. Juneus carpestris. Juncus , va species) ignotus. Juncus pilosus. Juncus spicatus. Juneus trifidus: rariss. Juneus triglumis. rar. Lichen centrifugus. Lichen croceus. Lichen deformis. Lichen fragilis. Lichen nivalis Limosella aquatica. Linnæa borealis. Linum radioia. Lobelia Dortmanna Lyghnis alpina. Lychnis apetala. Lychnis dioica. Lycoperdon tuber. Lycopodium alpinum. Lycopodium annotinum

Lycopodium selago.

Myosurus minimus.

Pedicularis flammea rurissima.

Pedicularis fiirsuta. Car.

Padicularis Lapponica. rara.

Ped aularis Scephum Carolinum.

rar.

Phaca alpitha. ra iss.

Phleum all inum. rar.

Pinguicula alpina, rariss.

Pinguicula villosa. rariss.

Polemenium cœruleum.

Polygonup avicular.

Polygonum vivifarum.

Pyrola rotundifolia.

Ran neulus aquatilis.

Ranunculus glacialis. rar.

Rananculus Lapponicus. rar.

Ranunculus nivalis. rar.

Ranunculus pygmaus Variatio

Penunc. nivalis.

Renunculus repene, flore pleno.

rariss."

Ranunculus reptans.

Rhodiola rosea.

Ribes rubrum.

Rosa spino issima.

Rubus Arcticus. "Planta bæc

cogn occurrit copiosè per

Lapi-mam desertam, præser-

tim ad tuguria et casas Lap-

ponum." Linn.

Rubus Chamaynorus! ** Lapponiæ sylvis in immensa cop' prostat, necnon copiosè in

alpiura convallibus generatur."

Rumex digynus. rar.

Salix Afsca.

Salix glauca. rar.

Salix herbacea.

Balix lanata. rar.

Salix Lapponum. rar.

Salis (nova species). In Lappo-

fuit.)

Salix myrs nites. rar.

Salix reticulata. rariss.

Saxifraga azoïdes.

Saxifraga cæspitosa.

Saxifraga cernua.

Saxifraga Cotyledon. omnium

rarissima.

Saxifraga nivalis.

Saxifraga oppositifolia.

Saxifrage rivularis.

Saxifraga stellaris.

Saxifraga tridactylites.

Scheud zéria palustris.

Siboaldia procumbens. rarks.

Silene acaulis.

Sisymbrium amphibium.

Solidago viigaurea,

Sonchus alpinus,

Sonchus Sibiricus. raviss.

Splan' ... A ampullaceum. C, lachnum luteum. rariss.

Sphagnum palustre.

Subularia aquatica. rar

Thalictrum alpinum.

Tillea aquatica. rariss. Trientalis Europæa.

T. dlius Europæus.

Tussilago Fasfara.

Tussilago frigida. reris.

Turritis arpina? rar.

Turritis hirsata.

Veroniça alpina. Veronica mariticha. Alr.

Vi la bif.bra: rariss.