

Opposite to Sattimungalum, there are several Passes where bullocks can ascend up to the table-land above. These Tippoo used to avail himself of during our operations in the Coimbetoor country in the former Mysoor wars.

There are other Passes to the westward which lead to Malabar. A small one leads from Coimbetoor over Vellemalla, which is passable for unloaded bullocks; but it is little frequented. The Manaargaud Pass is another which leads to the Malabar, from the N. W. of Coimbetoor. This was formerly much frequented, but as it tended to facilitate smuggling, it has been discouraged, and is now grown over with jungle and infested with tigers.

There must be various roads up the Neelgherry mountains, as they are inhabited on the top, and produce a revenue of about four thousand pagodas annually. No doubt they have various roads down on the Malabar side.

II.—*Descriptive and Geographical Account of the Nilgiri Hills.* By Messrs. Fox and Turnbull.—Communicated by Major T. B. Jervis.

This mass of mountains, situated between the parallels of 11° and 12° of North Latitude, and 76° and 77° of East Longitude, is bounded on the North by the table-land of Davaroypatam, a narrow tract, divided from the table-land of Mysore, by the windings of the Moyar river at the bottom of a deep narrow wooded valley; to the south and east by the open country of Coimbetoor; to the south-west a branch of the Bhavany, called the Maunar, divides it from the populated mountains of Koonda dependant on Malabar; on the west by the chain of Ghats, defined by the Murkurty peak; to the north-west by the windings of the Bakkary river, one of the sources of the Moyar, from the table-land of Wynaad—its greatest length being from east to west 36 miles, and a medium breadth of 15 miles, in figure an irregular oblong, and contains on the whole a superficial area of 469½ square miles, of which only 14 square miles, may be said to be under cultivation. The surface is in no part even, being composed of ridges of different elevations, running parallel to each other, and forming deep vallies between; about the centre it is divided by a loftier chain, running in a north-east and south-west direction; from it lesser ridges branch off in all directions; on this are several conspicuous eminences, as Dodabetta, Bervybetta, their elevation

above the sea being about 8700 feet. On the west of this range, and very elevated, are a series of plain green undulating hills, denominated Mullanaad, affording extensive rich pastures, no part of it being cultivated; the broad valleys formed by these green ridges, are very extensive, their bottoms in general marshy, and the nullahs, or mountain streams, working their way through them in a variety of serpentine courses, become however confined on approaching the fall or exterior of the mountain, which to the north presents a bold face of stupendous precipices, rising in most places, almost perpendicularly from the table-land of Davaroypatam; to the east and south, they are seen to slope down in irregular woody ridges, from an elevation of about 5000 feet, in some parts presenting bold rocky precipices. Most of the narrow streams have their sources in the main chain, flow down on all sides in devious windings, and where arrested by rocks, fall in small cataracts, eventually discharging themselves into the Moyar on the north, the Bhavany on the south: the streams of these rivers unite near the village of Poongar, 3 miles from its eastern base. The surface is formed of innumerable ridges, perfectly open, covered with a short stunted grass, yet not entirely devoid of wood, being fringed with groves of forest trees; these are seen at the heads of ravines, are not unfrequent along the streams in the valleys, and a few are on the summit of the ridges to the eastward; towards the west in Mullanaad, they are very extensive, covering the whole side of the hills to one or two square miles. In the eastern portion of Porunganaad, many of the lower slopes are overrun with a low jungle, principally by a plant which bears a delicious fruit in great abundance, much esteemed by the natives, and called the *Thow-tahun*, in taste and flavor not inferior to a gooseberry. The southern hills in Maikanaad are overrun with a long grass, intermixed with fern and other wild shrubs, and the exterior slopes and deep valleys on all sides, with a variety of forest trees around the southern base. The bamboo grows in great profusion, and on the table-land of Davaroypatam, along the foot of the mountain, the teak, blackwood, and sandal appear to thrive.

It is divided into 3 Naads, viz. Porunganaad, Maikanaad, and Todáwanaad, it contains 160 hamlets or villages, independently of the temporary habitations of the Todáwars in Mullanaad, with a population of above 4000 souls. Porunganaad lying on the east, is by far the most populous; next to it is Maikanaad, occupying the south-west portion; and Todáwanaad, including Mullanaad to the west, though

the largest division, is far inferior to the others, including the Todáwar population. The hill hamlets are in general small, composed of from 2 to 20 houses, arranged in one or two lines, sometimes forming a street: they are built of mud, and covered with thatch, low and excessively filthy, the entrance or door-way generally facing the east, and situated on the slopes of the lower ridges. These are extensively cultivated, and well attended to; some of the neighbouring ridges yearly undergo partial cultivation: the most extensive tracts are cultivated by the Buddagers. Each division has its Cotter village: this being a very low class, they are under the necessity of herding together, which gives their villages, from having a larger number of cottages, a respectable appearance, and though they are the artizans, they cultivate extensive tracts in the vicinage of their habitations. The Mullucurumbers confine themselves to the exterior slopes, and prepare their fields with the hand-hoe. The Todáwars, a migratory race, only tend large herds of buffaloes, chiefly confining themselves to the Mullanaad pastures on the west. It is a singular circumstance that no regular temples, or places of worship are to be seen here, but they have a house in some of the more extensive villages set apart for performing their ceremonies, called Davurmannay, and sometimes a small detached hut in a grove for this purpose. The Todáwars on occasions convert their dairy into a house of worship: there are three deities worshipped by the Buddagers besides Rungasamy, which however is considered to be the principal deity, and held in great veneration by all the mountaineers, the Todáwars even not excepted: he is worshipped on the peak called after him, on the eastern side of the mountain, which appears conspicuous from the plain country on the south-east. The only emblems of the deity seen on it, are a few rude stones, and iron tridents fixed in the ground, and surrounded by a low rude circular wall of loose stone, with a couple of large iron pans on it; these are on the festival of Shevaratry replenished with ghee or oil, and at night illuminated. The hill people during this festival, come from their villages on the west, and make offerings of fruit, ghee, &c.: this peak is also celebrated for a cavern on the north declivity, containing some holy earth, in request by Brahmins, and other castes: much of it is carried away to different parts by pilgrims who come here during the annual festival*.

* A further account of their customs and manners will be seen in another place.

The hill hamlets or villages, are often seen in clusters of three or four within half a mile of each other, and sometimes nearer. In some cases they are alone in remote situations on the sides of the valleys. The scenery is in all situations beautiful, though somewhat naked, from a scarcity of trees near them : the clear purling streams meandering in every direction at the bottom of the valleys, afford a constant supply of water, of which however no advantage is taken, irrigation being in a great measure neglected in all parts. Since these regions have been visited by gentlemen, several bungalows have been built in different pleasant situations, as at Dimhuty, and here is a very good kitchen garden, as also at Jackanary in a lower situation.

A few temporary ones have been erected for the convenience of travellers, at Kodavamudy, Nunjanaad, Keeler, and Yellunhally, and another is now in some progress at Whotakay in the Mullanaad with a spacious garden laid out with taste, on the shoulder of a low ridge, which promises in time to ontstrip those above-mentioned. One great disadvantage attending building here, is the want of materials. There is a variety of timber, but it appears to be of a very indifferent kind, nor is it possible to burn firm bricks ; the clay being of a bad quality, does not adhere together for any time.

The soil of the hills varies materially. To the east it is of a light red, mixed with gravel ; that peculiar to Mullanaad is a deep brown, sometimes inclining to black ; in the morasses and woods it is perfectly so, perhaps owing to an accumulation of much putrid vegetation ; in many parts about the tracts of cattle, and the different paths, are to be discerned red and yellow ochreous earth, yet is the soil not very stony : in some situations the laterite and granite is found a little below the surface. The soils on the whole are very rich, but a very small portion of the extensive slopes calculated for the plough is cultivated. European vegetables have been tried and thrive exceedingly well, as also apples, strawberries, &c. ; but it is a singular circumstance, that the plantain and other fruit trees, even common vegetables of the open country, have not been found to succeed. The chief productions are corally, gunja, a species of barley, shamay, buttacudla, field peas, poppy, the seeds of greens, and wheat, also garlic, onions, mustard, vendiem or fenugrick. The marshes yield spontaneously vussumbú, or the sweet-scented flag-root ; in certain situations honey and bees-wax is collected from the exterior rocky precipices, and from the hollows of trees. It may be necessary here to remark that the poppy capsules, from

which the opium is extracted, are not punctured till the plants are full 14 months old, this operation being performed by the women and children with a small iron nail, wounding the capsule on the sides towards evening, when during the night, a milk or resin exudes, and coagulates, which is collected on the following day a few hours after sunrise; this operation continues to be repeated every fourth day till the plant shews indications of fading. A few of the plants bear two capsules, but one of them in this case is only punctured, from a supposition if extracted from both, that the opium would then be of a weaker quality.

The Agricultural instruments in use here are precisely the same rude machines seen in the low country: the plough, &c. are all constructed by the Cotters. The Agricultural season commences with April. After a few heavy showers of rain, the lands undergo the operation of ploughing three or four times; the seed of the following grains is then sown, corally, gunja, shamay, wheat, mustard; garlic and onions also are planted, in August gunja is reaped; wheat and mustard, garlic and onions are gathered at the same time. In January following reap corally and greens seed: during September the fields are again ploughed and manured, when poppy, peas, and fenugrick seed is sown, and more garlick planted: in December, gather the poppy capsules, and reap peas and fenugrick seed. From the above remarks, it will appear that cultivation is continually going on for nine months in the year, during which interval some of the grains yield two crops. From January to March, the ryots are employed in the repairs of their cottages, and gathering fuel, which is laid up in large stocks in the vicinity where it is cut, and brought to the villages in small quantities when required.

The domestic animals seen on the hills are herds of black cattle and buffaloes.

The cows produce rich milk in small quantities, and the bullocks are the only animals yoked to the plough; they are however of an inferior kind and generally thin. The buffaloes are superior in size and make to any in India, and are excessively savage. They roam at leisure, in very large herds on the pastures in Mullanaad, are chiefly the property of the Todáwars; they yield very large quantities of rich milk, which is manufactured into butter and ghee, and forms one of the principal articles for export. The wild animals are the elk, spotted deer and hog. Bears and tigers not a few, the latter have been known to attack men, and the buffaloes grazing in the pastures to the west frequently fall a prey to this ferocious

animal : hares abound in all parts, as also pea and wild fowl, and black quail, doves, and a variety of other birds, together with vultures, kites and ravens : but the common crow is never seen to frequent these regions.

The climate of these mountains, is perhaps the finest known between the tropics : during December, January and February, it is extremely cold ; water is often frozen during night, and the ice is sometimes seen to remain on its surface after sun rise : but during the other nine months, it is delightful the whole day : in the morning it is often below 50°, never above 60°, and never in the hottest day in this interval, does it rise above 75° in the shade. Notwithstanding the gelidity, the inhabitants appear on the whole to be extremely healthy : fevers are sometimes prevalent, but of a slight nature, arising perhaps from exposure to the keen night air and rain ; they are however in other respects free from most epidemic diseases, the small-pox excepted which is much dreaded here. It is singular in so extensive a population that a deformed object is rarely seen ; yet from the promiscuous intercourse of the sexes, there is strong reason to believe, they are not altogether free from venereal complaints. A very favourable idea of the salubrity of the climate may be drawn from the many instances of European gentlemen recovering their health after a short residence on them, a circumstance which of itself proves beyond a doubt its extreme healthiness. It is however injurious to health to be exposed the whole day to the keen air and sun, it having a tendency to make the face and lips very sore : the pain arising from it does in some individuals create fever. The south-west or Malabar monsoon has its influence here. It commences early in June, ushered in with violent winds and sleet, with sometimes a heavy fall of rain. This continues with short intervals of fair weather to September, when the north-east monsoon shows indications of setting in, the wind blowing from that quarter, is followed with heavy showers of rain, with thunder and lightning during November and December. From the middle of the latter month to May, the weather is generally fair and serene. In April some heavy showers are experienced, with thunder and lightning, accompanied with hail, and the wind then blows from various quarters, mostly from south-east. During the prevalence of both monsoons, the mountain is for many days together enveloped in dense fogs, which disperse after a heavy shower, when the atmosphere clears up, and the weather continues fair for some days.

Nothing of note of fortifications and other ancient buildings, is to be seen here, with the exception of the site of two forts, which though of modern date have fallen to decay; Mullacottah at the head of the valley commands an extensive view of the Mysore country, it is situated 3 miles south-east of Shooloor, built of stone and mud, in form a square, and surrounded by a deep dry ditch, its interior overrun with jungle. Hoolicul on a conspicuous detached ridge to the south, is built on an inaccessible bold bluff rock, with many inequalities, occupies a large surface, its shape an irregular rectangle. The access to it leads over the saddle of the ridge, through an extensive lofty forest, then up a perpendicular rock, admitting the passage of only one individual at a time. It commands an extensive view of the low country to the south and east, and also a large portion of the surface of the mountain on the north; these places were once garrisoned by a few of Tippoo's troops, with a design to keep the mountaineers in check, and also to assist the Sultan's servants in collecting the yearly revenue. It is worthy of notice that there are circular towers on the tops of most of the higher and flat eminences called hokuls: a few of them are perfect at the present day, being in diameter about 20 feet, and 5 feet high, built of loose stones, the interior strewed about with broken images of idols, &c. From this circumstance it would appear that they were once places of worship, but no account of their origin can be obtained from the present inhabitants, further than that these edifices were built by the Boopalams, predecessors of the present race of the Todawars.

A coarse cloth worn by both sexes may be considered the only article imported, excepting bars of iron for implements: tobacco and other requisites being purchased by the inhabitants at the weekly markets held at a few large villages in the low country. The exports consist of wheat, poppy seed, opium, honey, wax, garlic, onions, mustard, fenugreek, vussumbú, ghee, and a little of the superior kinds of dry grain, all which find a ready sale below.

Stone is found on many of the ridges impregnated with Iron ore. A small hill to the south-west of Trichaguddy is remarkable for it; much of it is also to be seen mixed with sand of the different streams washed down the slopes of the hills. None of it is however smelted here, it being imported in bars from the low country.

There are no less than five roads or paths, through different Passes, communicating with the villages on the surface of this mountain. Of these the most easy of access, is the one lately made by a party

of pioneers ; it is the most frequented by travellers, and admits of palanquins ; horses and laden cattle go up it with much ease. The road to the Pass strikes off from the left bank of the Bhavany river at Sirmogay, proceeds thence waving north-west 3 miles over level ground and low jungle to the base of the ridge : here commences the ascent, steep, zigzag and rugged for a mile northerly, to the shoulder of the ridge, along which it winds westerly with many inequalities, principally ascending till it gains a gap, between two high woody tops near Coonjapany ; from thence it descends rather steep on the southern slope of the ridge to a level surface, gradually descends to a nullah, and ascends from it to a temporary bungalow at Serulú, a delightful situation, amidst lofty wood, about 4000 feet above the plain. The road now winding north-west descends gently for half a mile, then in forest over a level surface, west one mile ; crosses a couple of small streams flowing to the east, and here leaves the forest ; the ascent again commences, winding round on the eastern brow of hills, in a general north-west direction, in a deep valley, along a branch of the Kaunday river, close on the right, pouring down in cascades, and after crossing several small streams gains the cultivated slopes, passing the villages of Jackatolla and Jackawary on the left, to the bungalow near Urravan on the right ; from thence the ascent is steep, and, winding round the east brow of a wooded hill, it arrives at a plain level surface, Mailcotagherry village on the left ; then gently winding almost to the summit of another ridge, deep valley on the left, descends gradually to the bungalow at Dimhutty, a distance of 16 miles 4 furlongs.

From the left bank of the Bhavany to the base of

	<i>M. fur. yds.</i>
the ridge.....	is 3 2 160
to Coonjapany, ascent steep	3 1 0
to Urravan Bungalow, descent	1 2 20
to Do. Do. Do. and descent	5 6 40
to Mailcotagherry Village, ascent.....	1 3 40
to Dimhutty Bungalow, gentle descent.....	1 4 180

Measured distance, Miles, 16 4 0

The road leading from Danaikencotta on the west will scarcely admit of laden cattle, being very rugged and rocky, the road from the above place waving over dry grain fields, and some low jungle for $1\frac{1}{2}$ miles to the base of the ridge, which it commences to ascend, and proceeds winding westerly on the summit, has a gentle descent

to Urracode in a small valley, cultivated with plantain, jack, and other fruit trees, thence it descends to a large stream, ascending very steep it winds over the southern brow of the Rungasawmy hill, thence down a valley, crossing another steep ridge, ascends a slope, winding gently—Daynaad on the left—descends a small rugged Pass to a temporary bungalow on the right, again ascends gently to the summit of a ridge, winding round the west brow of a hill, descends northerly into an open valley between low hills, for about a mile and a half descends westerly another small Pass to Nedancolum, a fine village on the right, from thence over low plain ridges, crossing two large streams in swamp, ascends another ridge and descends by a zigzag rugged Pass to a large stream north-west of Cuppatatharay, then up the low brow of a low hill, gently ascends through low jungle, and crossing another small stream rises up to Dimhutti, being on the whole a distance of twenty miles seven furlongs.

From Danaikencotta to the foot of the Pass	1 5 100
to Urracode generally ascending	5 3
to Daynaad bungalow—do	10 6 100
Nedancolum, first part ascent, then descent	16 0 100
Dimhutti ascending gently, steep descent, ascends . . .	20 7 0

This communication with Dimhutti though circuitous, is for a considerable way carried over very easy ground, with the exception of the first portion of it to Daynaad. The Pass on the whole is of an easy ascent, and may be made practicable at a small labor and expence for laden cattle. The pass leading up from Aulhutti, on the left bank of the Bhavany is short, and therefore difficult and steep, joins the new road near the Serulu bungalow, the ascent up the ridge being only two miles. It may be made practicable for laden cattle, and is constantly traversed by the hill people, in preference to the new road, the communication being shorter with the villages on the plain. The Pass from Keelúr down to Soondaputti, a deserted hamlet on the left bank of the Bhavany among hills, is in a great measure steep; from the bungalow at the above place, the path runs south-west $\frac{1}{2}$ mile, having the hamlet of Munjacumba on the left, it winds easterly on the saddle of an open ridge, ascends gently almost to the summit of Soondabetta, in high grass and date bushes, winds on the western slope, southerly to a small pool on the right, then south-easterly to the exterior or fall of the mountain, descends gradually winding to a wood and hut, thence descent steep, passing over a flat rock south-westerly to a nullah, keeps along it for a short distance, and crossing it passes over gentle ascent, descends and

crosses the Manar river, and ascending from it, takes a south-westerly course, descends then south-east, passing over a rather level surface to Soondaputty, and is on the whole a tolerable path, the Pass excepted being tedious in the descent.

From Keelur to the summit of the Pass	3	7	160
to Nullah at the foot of the Pass	6	4	200
to the Manar river.....	8	1	40
to Soondaputty Banian Tree.	10	0	0

The road and Pass on the north, leading down to the table-land of Davaroypatam, at present frequented, leads from the village of Kulhuttu, descends and crosses a ravine near Tudukully, thence on a flat cultivated surface, intersected by three inconsiderable streams, ascends a low ridge, and descending gradually to a large nullah crosses it, and two smaller ones to a buffalo crib, on a flat table, on the margin of which it runs east-north-east to a nullah in a wood, quitting it descends abruptly by several zigzag windings north-east and north, latter part very rugged to Courmullay, a deserted village at the foot of the mountains, the whole length of the Pass being $2\frac{1}{2}$ miles; the path on crossing the Mullayacotta river and some ruins to Shegoor northerly, runs N. N. W. over some uncultivated paddy lands, and through a jungle of sandal and bamboos, recrossing the above river, here called the Cottaar, from thence again N. W. by N. over high ground covered with low and open wood, again crosses the above river to Shembanuttum fort. This Pass is the most difficult, yet admits of laden cattle, is on the whole from Kulhuttu to Shembanuttum a distance of $9\frac{1}{2}$ miles. The original road skirting the eastern side of the Mullayacotta valley, has been impracticable for years, from parts of the ridges having fallen and barred the path in many places.

The communication on the surface to the westward from Dimhuttu runs on a ridge south-west to Tandanaad, thence through the opening of a high ridge W. N. W. between hills on easy slopes, and crossing a nullah $\frac{1}{2}$ a mile north of Kulhuttu, ascends a ridge, descends it to the Kookul stream, ascends a long slope in low jungle to a conspicuous tree. Kuggoochy, a small hamlet on the left, leaving it ascends a small winding Pass, then on a level slope, at the summit of the Kookul valley, Trichaguddy on the left, descends and crosses a stream and marsh, rises gently from it, and descends rather steep to the bungalow near a winding stream; crosses it to the village of Kodavamudy, on a gentle slope: the road to the west descends, and, crossing another winding stream, rises gently to the

village of Toonairy on the right, then descends on a brow, and crossing another hill stream winds gently up to Hunnikurray on the right, thence ascending on a slope, has a short descent to a winding stream, on crossing it proceeds on a ridge, Kandhutty 2 furlongs on the left, winds round a hill, steep valley on the right, and crossing a few small streams gains the village of Kandhutty, from thence over a level surface, descends rather steep, and crossing a large stream, ascends to Kulhutty on the right: here branch off two paths, one described above leads easily down to the valley, crosses another rivulet, Mailcotta fort on an eminence on the left, descends steep and circuitous to the Mantar, a large winding rivulet, ascent on passing it very steep for a quarter of a mile, then over waving ground to the village of Shoolur: from this place paths lead off to the south and west, traversing the pasture lands of Mulla-naad in all directions.

From Dimhutty to Tandanaad.....	0	6	50
to Kuggoochy.....	5	0	60
to Trichaguddy	6	3	120
to Kodavamudy bungalow.....	8	2	60
to Toonairy.....	9	4	60
to Hunnikurray	10	7	180
to Kandhutty	14	1	140
to Kulhutty.....	14	7	100
to the Mantar... ..	16	5	100
to Shoolur	17	6	100

From Kodavamudy to Toomanhutty..... 3 1 .0

The path from Dimhutty to Whotakaymund, leaves the former one 2 furlongs south-east of Tandanaad, proceeds south, crosses a small stream, keeps waving on a plain surface westerly, Orasola village 3 furlongs on the right, continues to wind on gentle slopes south-west, crossing three inconsiderable streams, gently descending and ascending a high hill on the right, descends a small Pass, and crosses a large stream 2 furlongs west of Togonalhutty, and ascends another ridge southerly, descends on the western slope of it, and crosses another irrigating stream at a junction a furlong north of the village of Yellithoray, situated on a cultivated eminence; the path then runs on a level to the south-west in a narrow valley, low steep ridge covered with jungle on the left, ascends gently, leaving a swamp on the right, and a remarkable hill with a single tree beyond it; it then descends into a narrow vale, crossing a large stream to the top of a ridge, on the slope of which it de-

scends rather steep, crossing another large irrigating stream below a confluence, and rises southerly to the village Munjatulla, then on the north brow of a ridge, waving descends into an open valley, and crossing a few smaller streams on a waving surface, ascends a high ridge rather steep, Yellanully village on the right 2 furlongs; from it descent steep to another stream, and rising again waves round the southern brow of a hill, gently glides down westerly into a valley, Kaytee on the right, and crossing several hill streams at short distances, gains a ridge, and ascends N. N. W. to its summit, descends and crossing another stream, winds round the eastern brow of a hill to a gap, then waving gently down on the western brow of high hills, to a small stream and marsh, ascends the flat ridge of Whotakaymund, Mr. Sullivan's bungalow on the left; it is in general a good path but very circuitous.

From Dimhutty to Tandanaad	0	6	0
to Togulhutty	4	1	120
to Yellithoray	5	2	0
to Munjatulla	8	4	120
to Yellanully	11	0	120
to Kaytee	12	3	20
to Whotakaymund	15	4	20

The direct road now making by a party of pioneers to Whotakaymund; runs south of the village of Orasola, passing a ridge, winds on a waving surface between Pedhal and Kulhutty, ascends a ridge, and descends it rather steep on the west slope of a large rivulet, crossing which it ascends an easy slope, runs south of Bilycumba, descends from it to another stream, ascends an easy slope, and winds north of the villages of Tatarvane, Puggala, and joins the summit of another ridge on which is situated that of Cumbutty; it then descends on the northern slopes of a hill, leaving Cumbagay on the right, descends to a stream, from it ascends another gentle slope, on which it keeps waving for a considerable way. Toomanhutty on the right, 2 furlongs, ascending winds round the eastern brow of the Koonatachapa hill. Village on the left, descends and crosses a few streams, and uneven ground, ascends to the summit of Dodabetta ridge, and ultimately winding in its descent on a slope of the same to Whotakaymund.

From Dimhutty to Orasola	1	2	0
to Kulhutty	3	0	0
to Bilycumba	4	1	0
to Puggala	5	2	0

to Cubbagay,	6	3	0
to Toomanhuty,	7	1	0
to Koonatachapa,	8	5	0
to Whotakaymund,	11	3	0

To enter into a full description of all the paths, would perhaps be superfluous, the surface of the hill being traversed by them in every direction. A few of those measured are however here inserted.

From Mullacottah to Nunjanaad,.....	8	6	20
Nunjanaad to Whotakaymund,.....	6	4	0
Ditto to Ootalmund,	6	2	0
Ditto to Keelur,	8	1	100
Keelur to Kaytee,	8	4	0
Whotakaymund to Baricooly,	7	2	0
Baricooly to Keelur,	4	3	0
Nunjanaad to Baricooly,	3	6	100

A Statistical Table of the three Naads on the Nilgiri Mountains.

Number.	Names of the Naads.	No. of Villages.			No. of Peons.	Husbandmen.								Herdmen.		Artificers.				No. of Ploughs.	Bullocks.	Cows and Calves.	Buffaloes.	No. of Houses.								
		Principal.	Subordinate.	Total.		Lingavunt.		Buddagers.		Torayens.		Kycolens.		Mullu-coorburs.		Baders.		Todewars.	Cothurs.						Cusavers.							
						Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.		Male.						Female.	Male.	Female.	Male.	Female.			
1	Parunga Naad, . . .	32	25	57	3	62	59	62	621	532	80	70	0	0	17	10	0	0	13	7	69	57	0	0	166	431	605	892	493			
2	Maika Naad,	7	37	44	2	34	12	11	446	411	27	21	0	0	0	0	0	0	7	5	22	22	0	0	81	202	434	332	278			
3	Thodava Naad, . . .	12	47	59	39	55	23	15	696	647	10	9	12	9	0	0	3	2	120	70	81	66	5	4	161	708	734	1385	435			
	Total	51	109	160	44	151	94	88	1763	1590	117	100	12	9	17	10	3	2	140	82	172	145	5	4	408	1341	1673	2609	1936			
	Total of Male and Female,			182	3353		217		21		27		5		232		317		9													
	Male,			2323																												
	Female,			2030																												
	Grand Total,			4353																												

Miscellaneous Observations on the inhabitants of the Nilgiri hills.

It may be necessary in this place to give some account of the different castes of people inhabiting this vast mountain. These principally consist of four castes, Buddagers, Todawars, Cotters, and Mullucurumburs, the latter are the officiating priests to the former, who are the principal cultivators, occupying villages and lands in all the three Naads or divisions, with the exception of the western portion or Mullanaad, dependant on the Todawanaad, a tract of low green hills in ridges affording pasture to large herds of buffaloes. About it are interspersed the Kralls or Munds of the Todawars, in remote places to the west, forming their summer, those again to the east, almost on the skirts of the Buddager villages, their winter habitations. Each division has its Cotter village, distinct from the Buddagers. They are in general extensive, having from forty to fifty houses, arranged in lines; they are the artizans, and also cultivate large tracts of land, around their habitations. The women of both these classes, perform the principal labours of the field, in common with the men, who, however, leave the more arduous service of watching, weeding and cleaning them to the women after the plough has done its duty. In their physiognomy, habits, and language, they materially differ from one another, the prevailing language among all is the Canarese, much corrupted with peculiar phrases and idioms of their own invention: they are perfectly illiterate. An attempt to establish a school among them at Daynaad, not long ago has failed, on what account is not known.

Agriculture in primitive times was carried on on a very limited scale by the Mullucurumburs only, in exterior valleys and slopes. To the Buddagers must be attributed the merit of diffusing husbandry all over the face of the mountains, to these aerial regions they are said to have emigrated about four centuries ago from Woomatur, and other places in the south of Mysore, and consequently have derived the appellation of Vada or Buddagers, having come from the north, the compound word Budda-gur signifying literally, people of the north. It appears they were originally invited by a Chieftain or Rajah of Woomatur, who had about that period taken refuge on these mountains, who on their arrival finding the land fertile settled on them, and in course of time were followed by others, and now form the largest proportion of the population of the hills. This class of people are again subdivided into the following sects. Harruwars, Buddagu, Shevacharas, Odykary, and Torayen;

these do not intermarry, however agreeing in most other particulars. The Hurruwars are of the superior class; and wear the sacerdotal thread, similar to the Brahmins of the low country.

Of the Buddagers.

An individual wishing to marry proceeds to pay court to one of the other sex, for a month and upwards. During this interval he is assiduous in making her small presents, and by attention he seldom fails of gaining his object. He then settles with her parents the stipulated sum to be paid, which varies from six to ten pons (fifteen to twenty rupees). Matters being thus adjusted, he takes his partner home, and the ceremony concludes with a repast. The parents of the young woman make over with her a cow and bullock, a metal dish, and an ornament for the neck called a tally. It often happens that the present stipulated is not promptly liquidated, but payment deferred to a definitive period on ample security. In default of payment, the relatives of the woman endeavour to separate her from her husband. If she will not be prevailed on, it is then determined according to the circumstances of the husband, a part of whose cattle and other property is disposed of to meet the demand. Polygamy is not uncommon among them. An individual may have two or more wives, if his circumstances will admit of maintaining them, and they generally speaking prove of infinite service to him in the labours of the field, the largest portion of that duty devolving on the women. The standard of union here appears very fickle and capricious—divorces or separations are not uncommon, arising from disgust or disaffection, and when such is the case, are seldom reconciled: this disposition to incontinency is more predominant with the fair sex. In case of a separation of this nature, all the children remain with the father, and the woman is moreover obliged to give up all presents, &c. she may have received, the dowry being left to be adjusted on her second espousal. In case the woman is in a state of pregnancy when she takes this measure, the child when weaned is also consigned to its father, who pays her six rupees, twenty cantiria fanams for her trouble. Her next husband pays the amount of the dowry stipulated on the former marriage, and is moreover responsible for all debts she may have incurred during it, which if not liquidated by her second husband, she is separated from him by coercion, and married to a third person fixed upon by the community. While in a state of separation, if she should have clandestine intercourse

with another individual, and prove with child, the gallant is then compelled to take her, on paying the stipulated dowry.

Their funeral rites are performed in the following manner, the corpse is laid on a cot, opposite to the house, under a canopy four feet high. From the centre rises a pole of ten feet, with cross yards decorated with pendants of white cloth. Beneath it are exposed in wicker baskets, boiled victuals, grain, &c. as offerings to the defunct. The relations and neighbours for a considerable time keep singing and dancing round the canopy; the ceremony concludes by knotting in a corner of the shroud, the roll of a palm leaf, worn by the wife of the deceased on her ears; and the contrary if a woman dies a piece of light wood, worn by the husband; the corpse is then removed to the pile accompanied by music, and consigned to it with the oblation; the male children of the deceased shave their heads and face. The sect of Shevacaras bury their dead.

Besides Rungasamy, the deities worshipped in the interior are Hereadeo, and the goddess Hethadeo; also a subordinate deity called Kunkotú Karodia, or the eye-giving power: the latter is their tutelary goddess. The Harruwars and Shevacaras have their Mahalinga.

The coarse clothing of the mountaineers, stiffened with starch, intended as a defence against the gelidity of the climate, gives to men, and more especially to the women, a most uncouth appearance. The men wrap round them a large sheet with coloured borders, and a handkerchief about the head: those individuals who can afford it, have rings of gold to their ears, and of silver on their fingers. The dress of the women consists of a coarse cloth four or five cubits in length, hemmed in at the upper and lower extremities by triple lines of cotton twist, and drawn up in a fringe, giving it the shape of a petticoat, fastened with ligatures below the arm and midriff, yet in spite of thick starch and bandages, exposes a great part of the legs. Their jewellery consists of heavy brass bangles, worn above the elbow of the right arm, and those that can afford it, a silver bracelet graces the left wrist, rings of gold and brass to their ears, fingers and toes, with a pendant jewel affixed to the membrane of the left nostril. Very few, if any, of the women in years can be termed beauties. The fine features of some of the young girls, occasionally seen, are eclipsed by their awkward dress and propensity to dirty apparel. A few of the males in circumstances are robust, and well made, but the generality are meagre and of a phlegmatic temperament, occasioned by the poor diet they subsist on, and the pernicious use of raw opium; in their disposition, with but a few excep-

tions, it may with propriety be said they are cunning, suspicious, and incommunicative ; in their dealings with strangers they display a covetous desire for lucre, which stimulates them to duplicity and falsehood ; among themselves they are tolerably social : jealousy is perhaps a negative passion, as fornication appears to be the prerogative of both sexes.

They subsist generally on koralý and shamay (two species of millet), gunja or barley, and the flour of the keeray or garden greens seed. Condiments are not in general use, but garlic gives a zest to all their meals, they are not averse to animal food (beef excepted), but very little, if any enters their fare, excepting at a marriage, or some grand day of feasting. Milk, tyre, and rancid ghee, may be considered among their luxuries.

In all the duties of husbandry, women partake more of the labors than the men, the holding the plough is perhaps one exception, being the sole duty of the men, performing all the duties of the field, besides their internal household affairs, to which in a great measure we may attribute their strong harsh masculine features and deportment ; the dairy it must be remarked is, however, the exclusive duty of the men, the milk kept in an inner apartment, and there churned : the females are scrupulously prohibited from entering it. The poorer class make good porters.

Todáwars.

The remarkable dissimilarity of these people in their persons and features from the other mountaineers, is very striking. They are evidently a distinct race, and are in fact the aborigines of these orial regions. Their origin it is impossible to trace : when interrogated on this point, we could only learn, that they have some idea, that they were originally self-born, and they have also a notion that their ancestors in primitive times were the palankeen bearers to the Giant Rawan, and were expelled from Lunka on his being slain by Rama. This migratory tribe confine themselves and herds of buffaloes to the Mullanaad, Taranaad, and Keelarum hills, which afford excellent pastures. This tract, consisting of the western portion, denominated Tondanaad, is marked by several of their Kralls or Munds, with a circular roof of thatch, and a door scarce high enough to admit a dog, into which they crawl on all fours. Their site in general retired, near a tuft of forest trees in delightful situations, with extensive circular peas fenced with wood and stone for their buffaloes ; those towards the west are occupied during summer. On the

approach of the Malabar monsoons, they retire with their cattle to the east, on the skirts of the Buddager villages. A few families however continually reside in Parunganaad and Maikanaad, and tend with their own the cattle of the Buddagers. Their chief occupation is the care of their buffaloes, and the dairy, for which purpose a house of large dimensions at each mund is reserved : a part is by them considered sacred, women not being permitted to enter it. They also perform such ceremonies in use on the anniversary of their deceased relatives ; having no temples or other place of worship, each clan being in possession of from one to two hundred buffaloes, pay a tax annually for each cow half a rupee : this they are well enabled to do, from the sale of raw ghee and poultry. Leading a pastoral life, and abstracted from all agricultural pursuits, they are indebted to the Buddagers for grain given them gratis at the annual harvest, a custom from time immemorial, in consideration of their being the hereditary claimants of the soil. On the celebration of any marriage among the more wealthy Buddagers, they receive from a quarter to half a rupee as a present ; they also subsist in a great measure on a variety of bulbous roots, procured by digging, large quantities being obtained on all the hills in the Todawanaad. The Todawars are in general well made, and robust ; in stature tall, some of them exceed six feet in height, and approach nearer to the European in feature, with Roman noses ; they evince a friendly propensity to strangers, and appear to display more candour than their eastern neighbours ; but it must, however, be remarked from personal observation, they are not now behind the Buddagers in cunning, deceit and falsehood. The women are reputed beauties ; some of the younger ones are possessed of handsome lineaments, and exceedingly fair, with some vivacity, but like all other native women are old and wrinkled, before they attain their thirtieth year ;—the men are very much attached to them, and carry their affection for the sex to a most voluptuous degree. Their colloquial language is the Canarese, as spoke by the Buddagers, but they have a most difficult and intricate one of their own, perfectly distinct from all the languages of India, and only known to themselves : (they are illiterate.) The same neglect of cleanliness in their apparel is observed here : both men and women wear a large white sheet, with coloured borders, the only difference observed is the manner of wrapping it about the person :—with the female, the habit is a perfect dishabille ; the right hand, which is exposed, serves to keep the wrapper from disrobing, or being blown away.

The men wear a scanty piece of cloth round their middle, in addition to the sheet thrown round the shoulder, and hanging to the knees, wearing their hair thick, and full six inches in length, with bushy beards, having recourse only to shears, when either become troublesome to the wearer, and never by any chance are known to shave or cover the head. The women have flowing tresses waving down the shoulders, and often curled up with short sticks; on the whole, they pay much attention to their hair, anointing it with rancid ghee. In lieu of jewels, which all are unable to afford, with the exception of a couple of brass bangles on the right arm, and silver or brass rings on the fingers, they puncture with an indelible black dye, their necks, hands and legs in imitation of jewellery. A singular custom among them is wearing a brass chain or girdle next to the skin round the waist, an appendage that no grown-up woman or girl should be without. They have no formal rites of marriage, concluding alliances by reciprocal choice, the present on the part of the man to the connections of the bride, being from six to eight buffaloes: when arrived at the house of her husband, she is obliged in case he has brothers to acknowledge them as husbands, and to render them the services and submission due from a wife. Independent of her husbands, she is by their laws allowed to choose an individual from a separate family as a gallant, styled coombhal, who is as eligible to her embraces, as any of the former: in short the coombhal has a discretionary power over her, for in case the young woman should be at the house of one of her husbands, and the coombhal comes in, the husband immediately retires, and leaves her to his alliance. The legal husband contributes towards her maintenance, and the coombhal provides her with a cloth yearly, with tobacco, and other small presents. Notwithstanding this inconsistency, the Todáwars live very peaceably together. The partition of the boys begotten in this manner, chiefly depends on the seniority of the brothers, the eldest claiming the first born, and so on consecutively; the girls left to the care of the mother, are generally betrothed when very young. In a connection of this nature, when one woman is common to a plurality of husbands, it is natural to suppose, that the males must far exceed those of the females. An investigation into the cause of this disparity in the sexes, has led to a supposition that they have been in the habit of destroying the females hitherto, at least those born on ominous days of the week, by some unnatural means, leaving them, as has been conjectured, at the door of the pen to be trampled by the buffaloes rushing out

furiously when liberated ; and if what is above stated be a matter of fact, we have still to ascertain the cause from whence originates this unnatural deed. The duties of the women often lead them out to tend the cattle when grazing, they also attend to all domestic affairs, the dairy excepted, and when at leisure amuse themselves with needle-work, darning the hems of cloth, with red and blue thread : in this performance they display some taste, and are by the Buddagers for whom they work, recompensed with grain, or small money according to exigencies. In their migrations, the infirm and old women are removed on the shoulders of the men : this circumstances gave rise to a credulous report, that they invariably transport their women in this manner. It has been an ancient practice among them, that one of the males should devote himself to a life of pious solitude ; such is denoted a Terriara, and sometimes Pollon, who is revered as a priest : this anchorite resides perfectly secluded in the recess of some deep forest, in a state of nudity, a small hut being there prepared for him, seldom communicating with the laity : such of those who have any temporal or spiritual business, accost him and hold a conference, taking care to keep at respectful distance. The Terriara is generally the most wealthy of the tribe, having large flocks of buffaloes, presented to him by the laity, the produce of which is chiefly distributed among the herdsmen, the anchorite reserving but a small part to himself ; he however occasionally makes an eleemosynary excursion to the neighbourhood of the munds. The dairy or milk-house (having no pagoda or idol of worship) is consecrated annually in memory of departed relatives. On this occasion they burn a lamp fed with butter, and make offerings of milk, ghee, fruit, invoking the manes of the departed souls with supplication ; during the performance of these ceremonies, the Terriara is invited to officiate as high priest. The office of a Terriara is by no means permanent, he may resign of himself, by signifying his intention to the community at large, who appoints some other individual in his room. From what is above stated a conclusion may be drawn, that they are not very zealous idolators, yet are superstitious enough to have their lucky and unlucky days : this has a powerful influence in all their concerns. Thus Thursday, Saturday and Sunday, are reckoned good days ; and the contrary with the remainder of the week. If a person dies on any of the ominous days the funeral rites are deferred to the succeeding good day : the ceremony on this occasion consists in assembling the relations of the deceased, when they utter their con-

dolence in loud lamentations ; after this follows a sacrifice of two or more buffaloes, which are killed with heavy clubs, and their skulls and horns chopped off ; the corpse is then placed on the pile for cremation. On the anniversary following, the relations convene at the same spot, each bringing a buffalo. To these are added others belonging to the stock of the deceased, and picketed near the place, where the body was consumed ; the ceremony being performed, eight or ten able men with heavy clubs enter on a promiscuous slaughter, when they proceed to part the horns from the head of the animals. It has been a perfect mystery hitherto, what was done with the flesh of these animals ; from some inquiries in another quarter, it has been ascertained that the Todáwars eat of it, and are in the habit always when they can afford it, of partaking of the flesh of this animal, the hides serving them as beds when clean and dressed, yet they pretend all animal flesh to be unclean.

Múlúcoormbers.

The aggregate amount of this caste is very small, inhabiting the recesses of the valleys, or slopes of the mountains, towards the plain country. They are a primeval race, almost contemporary with the Todáwars, have an equal right to the inheritance of the soil, and from very remote times have followed the occupations of husbandry, cultivating the steep acclivities, in the execution of which they only use the hand hoe, a species of culture called Cottúkád, and assessed very moderately. The produce of their fields however is very precarious, and seldom affords them a sufficiency for consumption, for which they are in a great measure indebted to the Buddagers, to whom they officiate as priests. The Buddager will never undertake any agricultural affair, without some ceremonies performed by the Múlúcoormber, who is feed for his spiritual duty. At the commencement of the ploughing season, a sacrifice of fowls and sheep is offered by the Múlúcoormber to Kalibuntiyan. This ceremony ended, he holds the plough, and turns up the glebe in each field, when the duty of the husbandmen commences : he then receives from each ryot from four to ten colagays of grain according to the circumstances of each individual and retires at harvest time ; his services are again required to apply the sickle to the ripe grain, when the reapers proceed for this duty, he is permitted to take as many of the sheaves as he can well bear away on his shoulders :— their marriages, funeral ceremonies, are similar to those of the Buddagers, differing very little in their habits, and manners from

them ; living in a seclusion they are seldom seen abroad, visiting the villages from mere necessity.

Kothurs.

This caste of people are the most industrious race on the Nilgiris, following all the most useful occupations, as carpenters, blacksmiths, potters, &c., and officiate as musicians at feasts, funerals, and marriages ; in short they are the only artizans on the hills, and are moreover good husbandmen, paying more attention to agriculture ; the fields appear to thrive better around their hamlets than those seen in the vicinity of the Buddager villages. They are however of a very inferior caste, and by their neighbours considered in the same light as the Chuckler in the low country. They have cattle, but from superstitious motives never milk the cow, are not permitted to have buffaloes, but such unserviceable old animals as the Buddagers dispense with for a trifle ; these are allowed to die, when they partake of them, in short, of the flesh of all kinds of dead animals ; not being allowed by their laws to kill any. The hides being dressed are disposed of to advantage. Their exterior and filthy propensities render them so peculiarly disgusting to their neighbours, that a Buddager will not drink of the stream that flows in the vicinity of their villages, polluted as it is supposed to be, with the flesh of the dead animals and their raw hides, these being generally drest on the side of a stream. In all the three divisions or naads, are Kothur villages, denominated Kothagerrys. These hamlets though few, have generally a large population, and always in pleasant situations, with a grove of large trees, present an agreeable prospect from a distance. They are a more ancient people than the Buddagers, their dress similar to that of Todawars, both sexes wearing their cloths in the same manner as the latter race. The men go bare-headed, wear the hair long tied in a knot behind. They are in general of the middle stature, ill made, short and bad-featured. Some of the women however are fair, and withal well made and handsome.

The ceremony of marriage, if such it may be called, takes place on the mutual consent of both parties, being allowed a previous cohabitation. The parents of the young woman receive from the husband a compensation of three to five rupees. The man is at liberty to take a second wife, provided the first has no male issue after three successive female births. A woman from any disagreement is allowed to separate herself from her husband ; in this case she leaves all her chil-

dren, and moreover returns the present on marriage ; but to their credit it may be said, though mean and contemptible, that female infidelity is not common. Their ornaments are of small value. Copper bracelets adorn their wrists, and brass bangles above the left elbow, the neck decorated with black beads of stone or glass. The Kothurs burn their dead, and worship the manes in some dark grove on the following anniversary. Their idol is Cumbatodeo ; for the worship of this deity, small thatched edifices are erected, and offerings made on certain occasions.

Irrelurs.

These are a distinct race of people from the other highlanders of the mountains, classed among the lowest of the Soodra caste, are very little superior to the Pariar, diminutive and ill made, are grossly ignorant, and in their apparel scanty, and excessively filthy. Their cottages are situated on the exterior slopes and valleys, the sides of which they cultivate with a variety of dry grain, also plantain, jack, and other fruits, which are seen in groves in the bosom of low valleys. They have scarcely any communication with the people of the hills, but often come down to the plains to dispose or barter plantain, and other hill productions at the market villages. Those occupying the ridges on the east towards Danaikencota, are invariably called Irrelurs, to the south on the ridges forming the Bhawany valley are called Múdúmars, and on the Northern slopes towards Davaroypatam, they go by the appellation of Cússúwars ; these also cultivate large tracts on the plain surface of the table-land, and yet are all one race, differing in no one instance, their customs, manners, and occupation being alike. In their marriages perhaps they are singular. This contract does not take place between the parties cohabiting, till the second or third child is born, when the man agrees to pay a stipulated sum by instalments, as a dowry to the friends of the woman, who give with her as a portion a buffalo ; the contract now becomes binding. In case of her demise, the man must make over the whole of the balance before he forms another connection, but if she should survive her husband who has a brother, she must immediately become his wife, and also to the next, till all are extinct, so that a fruitful woman according to their customs is always provided for. In their cemeteries and burials, they differ widely from the other castes, appearing to venerate the manes of their dead above every other consideration. The cemeteries are scattered in pleasant, but lonesome situations, being a neat house

quite open to the East :—about the middle and against the inner walls of all of them, are seen a heap of circular black stones ; these are placed on one of the community being interred, and consequently are accumulating from day to day. The males are buried on one side, females on the other. The ceremonies and feasting on these occasions last a month, and during this interval the earth lies very loose on the corpse ; it is then softened with water, and beaten down after the last rites are performed. If one of the community should happen to die at a distance even, his corpse is sent for, and the usual rights are performed, though it be in a putrid state. The deities worshipped by them are Rungaswamy, and the goddess Masula or Buttracalli : offerings of sheep, &c. are made to her on certain days of ceremony.

III.—*Descriptive and Geographical account of the Province of Malabar. By Captains B. S. Ward and Connor, Madras Survey Establishment. Communicated by the Right Honorable Sir F. Adam, Governor of Madras, to Major T. B. Jervis.*

This Province on the western coast of India, extends from $10^{\circ} 12'$ to $12^{\circ} 15'$ north latitude, and between the parallels of $75^{\circ} 10'$ and $76^{\circ} 50'$ east longitude. The coast runs diagonally in a south easterly direction, and forms a few headlands and small bays. It is bounded on the north by the province of Canara, on the east by those of Koorg and Mysore, to the southeast by Coimbatour, and to the south by the small province of Cochin. It is divided into 18 talooks or districts, containing 2,222 deshums or villages ; few or none of them are compact, the houses being scattered on the skirts of the cultivation. By a census taken in 1827, the whole of the population amounted to 1,022,215, which gives 160 individuals to the square mile. A large portion of country to the eastward being mountains and hills over-run with forests, the population is most dense along the coast, and for some distance into the interior : its superficial area is 6,262 square miles : 788 are estimated to be under rice cultivation, and 120 square miles are occupied by extensive gardens and enclosures of cocoanut, areka, jack and other productive trees : the remainder by low hills, separated by narrow valleys, in general with steep sides and level summits. The slopes in many places are formed into terraces for cultivation. The valleys in general contain