

to our *diluvium*; and the glacial facing, which was easily cut through, appeared to Captain Beechey to be occasioned either by the snow being banked up against the cliff or collected in its hollows in the winter, and converted into ice in the summer by partial thawings and freezings, or by the constant flow of water during the summer over the edges of the cliffs, on which, when converted into ice, the sun's rays operate less forcibly than on other parts. At Blossom Cape, in Kotzebue Bay, the ice, instead of merely forming a shield to the cliff, was imbedded in the indentations along its edges, filling them up nearly even with the point.

The bones found in this deposit of mud and gravel belonged to the elephant, the urus, the deer, and the horse. Some of the tusks examined by Professor Buckland possessed the same double curvature as the tusks of the great elephant in the museum at Petersburg, from the icy cliff at the mouth of the Lena, in Siberia. The head of the musk-ox, brought home with the fossil bones, Professor Buckland says, cannot be considered as fossil. The horns of the deer were similar to those found in the diluvium of England; but there were also the cervical vertebrae of an unknown animal, and which must have differed essentially from any that now inhabit the polar regions of the northern hemisphere.

II.—*A Narrative of a Visit to the Court of Sindh, &c.* By James Burnes, Surgeon to the Residency at Bhooj. Bombay. 1829. Edinburgh. 1831. By W. Ainsworth, Esq.

SIND, or Sindh, extends on both sides of the river Indus, called by the Hindoos Sindh, which thus gives its name to the country. It resembles Egypt in the overflowing of the river, in its climate, in some degree in its soil, and also in being confined on one side by a ridge of mountains, and on the other by a desert. Being of classical celebrity, it has long attracted the attention of geographers; but from the opposition offered to research by the prejudices of its oriental possessors, and the predatory habits of its Nomadic tribes, it has remained until very lately quite unexplored. The views of Napoleon, however, on our Indian possessions, first pointed out the necessity of a better acquaintance with a country which forms their western barrier; and we are indebted to the impulse given by these precautionary measures for Colonel Pottinger's account of Sindh, and his subsequent exploration, with Captain Christie, of Belochistan, and a part of Persia. The final occupation of Cutch by the British troops in 1819, further brought our government in connexion with Sindh; and after an unsuccessful

ful embassy in 1820, finally led to Mr. James Burnes, surgeon to the Residency at Bhooj, and author of the work before us, to be called to the court of Hyderabad in his medical capacity.

Previous to the publication of Mr. Burnes' work, which only took place in this country two years after its publication at Bombay, the reports of Mr. Crow, sometime resident at Tattah, and of Messrs. Seton and Ellis, had furnished us with much that was new relative to the history and resources of this country; and it is to be regretted, as these memoirs are not accessible to the public, that our author did not incorporate more of their details in his own narrative. As, however, so little has hitherto been published on this interesting country, we shall, in analysing the result of Mr. Burnes' observations, draw also from other authorities, more especially the excellent work of Colonel Pottinger; and thus present a sort of digest of what is at present known of the state and condition of Sinde.

Unlike most countries situate on the banks of large rivers, the plains adjoining the Indus have, in no period of their history, attained a very high degree of agricultural or commercial wealth; nor have their inhabitants ever occupied a situation high in the scale of civilization and political power. This is to be attributed first to physical causes, and afterwards to the moral consequences of those which have, as usual, co-operated with them. In the immediate neighbourhood of a mighty river there is a dearth of fresh water, and hence Nomadic tribes and temporary residences. The uncertain sway of its possessors thus gave origin to internal discussions and predatory habits; and the want of imposing institutions, and of exact and severe discipline, entailed their bad effects on society, and prevented its ever arriving at maturity. Science and literature were neglected; arts and agriculture remained consequently stationary; while, for ages, fanaticism and superstition, prejudice and despotism, have united in overwhelming the industry and latent enterprise of the inhabitants.

The physical characters of Sinde are not, however, quite uniform;—some parts appear to have been but lately claimed from the ocean, and exhibit abundant remains of decayed shells and other marine productions, as in the vicinity of Luckput, though we have not sufficient data to determine whether its saline steps, which here constitute the desert part of the province, are or are not of modern formation. At Kutree, the landing place on crossing the Lloonee branch, there is neither house nor inhabitants, nor even the usual party of soldiers for the collection of the revenue; the country around is equally without trees, and the road, in the rainy season, impassable, though, at other times, firm and hard. The country around Kurrachee, at the south-western extremity, is also a perfect level; and after dry weather, with the exception of a few

shrubs, has no vegetation; but in forty-eight hours after rain, it becomes a perfect grass-plot. The country between Kurrachee and Tattah continues in the same level, and is, in like manner, alternately a wilderness or desert. On the south-eastern side of the Indus the country preserves everywhere pretty nearly the same aspect, being, at Lah, a dead, unproductive flat, sometimes interspersed with scattered and stunted shrubs. Near Hyderabad it becomes more hilly; and, from Ruree to Dhurra, canals are dug for the purposes of agriculture from the branches of the Indus; and over many of them small brick bridges are thrown, on which apparatuses for drawing water are constantly at work for irrigating the fields. The extensive cultivation and richness of the soil are here too remarkable; but from Laiqpoor to Bunna, and from thence to within a short distance of Hyderabad, the whole is converted, by a most selfish policy, into hunting forests for the Ameers. The vegetation of the uncultivated tracts is almost entirely confined to shrubs of the Lye, or tamarisk; the babool (*Mimosa Arabica*), taghuz, a tamarisk with white bark and leaves; the doodhill (*Euphorbia antiquorum*), the Kurbo aleander, or almond flower; the shinz (*Hedysarum Alhagi*); and the trees which cluster round a brackish water are the Peepul (*Ficus religiosa*), Neem (*Melia agadirachta*), and the Guz, or Indian tamarisk.

The villages of Sinde are inferior even to those of Cutch. They are, for the most part, collections of low huts composed entirely of clay and thatch; while even the mosques with which they abound are generally of the same frail materials, and only distinguishable by their greater elevation, and a feeble attempt at ornament. Many of the inhabitants live in grass hovels in the field which they cultivate. Most of the villages have no name except that of their actual owner; and it is not unusual for the whole population of a place to remove their dwellings to another station, as inclination or necessity prompts them, and when either food or forage fails. These villages are, in reality, mere stations in the desert, where a little brackish water can be obtained. Tattah, formerly the capital of Sinde, and one of the richest cities in Asia, is still nearly six miles in circumference, exclusive of the ruins which extend a long way on both sides. The population, at the time Colonel Pottinger visited it, amounted to near 20,000 souls,—and Mr. Burnes gives double that amount; but its sheds consist chiefly of ruinous and uninhabited houses, the walls being built hollow by means of a frame of wood, plastered over with mud or mortar; and this, it is probable, Mr. Burnes mistook for stone, which he mentions as used in the construction of Tattah. All the houses have badgeers, or ventilators, like chimneys.

The Sindians are mostly tall, with good features, and well-formed limbs. Their complexions are dark; but the beauty of the

women is proverbial. The men are a strong and healthy race, though more fitted for fatigue than activity. Rotundity is the mark of greatness, and considered as a beauty; prescriptions for increasing bulk are in much esteem. Many of the Belooch chiefs and officers of their court are too large for the dimensions of any European chair. Under a government where extortion, ignorance, and tyranny are, perhaps, unequalled in the world, they are avaricious, full of deceit, cruel, ungrateful, proud, impatient, knavish, mean, fanatical, and superstitious. According to Crow, they have no zeal but for the propagation of their religious faith; no spirit but in celebrating the Eed; no liberality but in feeding lazy Seyuds; and no taste but in ornamenting old tombs. Their good qualities appear to consist in personal bravery, abstinence, capability of making great exertions, and unqualified submission. They are not regardless either, nor deficient in fidelity and hospitality, which latter is probably imposed upon them by their religion. And their mental energies and natural faculties also appear good.

Their active diversions are shooting and clapping with their swords. They are good marksmen with their matchlocks, and inimitably dexterous with their bows and a blunt heavy arrow which they use for game, and dart in a transverse instead of a straight direction, so that the body, and not the point of the arrow, strikes the object. With these arrows they kill partridges flying to the right and left, as expeditiously as any European sportsman with a double-barrelled gun.

The courtiers and soldiery are addicted to the use of opium and blung (*Cannabis sativa*); great quantities of *assafoetida* are also used by them as food. The Ameers are, however, much less sunk in sensuality and indulgence than most Mahommedan princes; and, according to Dr. Burnes, they never indulge in intoxicating drugs and liquors.

The Ameers and their attendants are dressed nearly alike, in Angricas or tunics of fine white muslin, neatly prepared and plaited so as to resemble dimity, with cummerbunds or sashes of silk and gold, wide Turkish trousers of silk tied at the ankle, chiefly dark blue, and cylindrical caps made of gold brocade or embroidered velvet. With the exception of the Cashmere shawls and the loongees or sashes, which are made at Tattah, the cloths worn are generally of European manufacture. Loongees are made for sashes, turbans, &c.; some are of silk, others of silk and cotton, and many of them are exceedingly rich and costly, with much gold embroidery. During the cold season the muslin tunics are laid aside, and the Ameers wear robes or cloaks made of the most valuable description of Cashmere shawls, gorgeously embroidered with gold lace, and lined with the black fur of Candahar. Sometimes the apparel consists of European damask silks or

satin, lined with some warmer material, and quilted with cotton. Meer Mahommed wore a surcoat of flowered pink satin. The turbans worn by the great men of Sinde contain some of them upwards of eighty yards in length of gauze, and are from two to three and a half feet in diameter.

The brilliant collection of jewels and armour in the possession of the Ameers of Sinde is calculated to excite the surprise of a stranger. They adorn their daggers, swords, and matchlocks with rubies, diamonds, pearls, and emeralds, many of which they wear as rings and clasps in different parts of their dress. Colonel Pottinger mentions an emerald larger than a pigeon's egg, and Dr. Burnes alludes to one which was cut in the shape of a parroquet as large as life. Their sword blades are extremely valuable, and worth sometimes, even when plain and unornamented, half a lac of rupees. One which was presented to Dr. Burnes by Kurim Ali bore the Mahommedan date, 1122 (A. D. 1708), and was valued in Sinde at two thousand rupees. The armoury of their highnesses is graced with swords which have been worn by almost every prince renowned in Asiatic story. Their swords do not appear heavier than common English sabres, but are differently balanced; and the above mentioned gentleman saw one of the young princes with a single stroke cut a large sheep in two.

In their religious creed the Sindians, like the Beloches, are generally Soonees. The family of the Ameers is very religious. The Talpoors were also originally Soonees, but their connexion with Persia has infected the court with the doctrines of that kingdom, and, with the exception of Mourad Ali and Sobdar, they have become Sheahs or followers of Ali. The two faiths, it is said, cannot exist in concord, though, according to Sir John Malcolm, the difference consists more in matter of opinion than practice; and Pottinger says, that it would be more dangerous to appear in Belochistan as a Scheah than even as a Christian. Religious toleration is not a virtue of the Sinde government. The Hindoos suffer many indignities, and are forced to wear the Mahommedan dress and to wear beards; few are allowed the privilege of riding horses or of having saddles; and circumcision is performed upon them on the slightest pretences. The Seyuds, or descendants of the prophet, are looked upon with the most unbounded and superstitious respect. Faqueers, or religious mendicants, infest the public highways at Hyderabad, demanding alms in tones of overbearing insolence. They also sound horns and trumpets, and continued near the British envoy's tent, in the mission of Mr. Smith; for days at a time.

The system of jurisprudence is taken from the Koran. The Hindoos mostly settle their differences among themselves by punctions or arbitration, without a reference to ruling authorities.

The Beloches seem generally to take the law into their own hands, and to act on the simple principle of retaliation. The Ameers only interfere when the disputes assume a serious character, or extend to whole tribes.

The exports from Sind or home produce are saltpetre, salt, rice, cotton, ghee oil, oil seed, sharks' fins, bark for tanning, alkali, calico and felts; and from the kingdoms and provinces to the northward they bring chiefly for exportation assafoetida, saffron, horses, leather, hides, madder, musk, alum, drugs of various kinds, Cashmere shawls, dried fruit, diamonds, lapis lazuli, turquoises, and other precious stones, bdellium and gums. The imports from India are iron, tin, steel, lead, copper, ivory, tea, sugar, spices of all descriptions, chintz, broad-cloth, glass, china ware, cocoa nuts, indigo, areca nuts, muslin, gold cloth, shields, &c. &c. From Khorosan, Persia, and Arabia, the Sindians have for home consumption swords, silk, carpets, dates, rose-water, conserve, tobacco, coffee, and kullyans. Horses are brought in great numbers annually from Kaboul and Candahar to Cutch and Bombay, where they are bought by agents for the British government; but the Beloch soldiers are not well mounted, and except in the stables of the Ameers, there are no fine horses to be seen. The Ameers also keep an immense number of dogs of good breed. The camels of Sind, which are so famed throughout the whole of Asia, are reared all along the delta of the Indus. They are the only species of conveyance used in the country; and there can be no doubt that their superiority is to be attributed to the saline nature of their food, which has also been found to ameliorate the breed in other animals.

The manufactures of the country have been very extensive, but are dwindling away. The fanciful taste of the Ameers and courtiers for swords and jewellery affords an occupation to a considerable number of workmen at Hyderabad; but the weavers of calico and loongees are no longer so numerous as they were in former times. At the visit of Nadir Shah it is said that there were at Tattah forty thousand weavers, and artisans of every description, to the number of twenty thousand more, exclusive of bankers, money-changers, shopkeepers, and sellers of grain, who were estimated at sixty thousand. The principal manufactures of Hyderabad are now of various kinds of arms, such as spears, matchlocks, swords, and of embroidered cloths. There must be considerable activity on the Indus, even in the present day, for Burnes says, that above Bunna, where it is nearly a mile broad, it was studded with boats, filling its channel from bank to bank.

The Sindian soldiers, or military retainers of the Ameers, are dressed in frocks resembling those of English labourers, of a coarse

dark blue cotton ; trousers of the same material, and the national cap, which is of a cylindrical form, about eight inches in height, and commonly made of coloured cloth. Like their countrymen in general, they wear long beards and mustachios, and are armed with swords, daggers, matchlocks, and shields. With the exception of a small corps of Beloches, who are kept to garrison the fortress of Hyderabad, the armed retainers of the Ameers are few in number and contemptible in appearance. The government, it is said, could assemble about forty thousand men in the course of a few days, by some means resembling the red cross of our own forefathers, they being at other times employed in agriculture and other peaceful occupations. The military classes of the subjects of the Ameers may be considered as a body of marauders ready to take arms for any cause which will afford them support, or which offers a prospect of plunder. In the field, though brave and hardy, the Sindian soldier has no discipline, and their vanity and boasting are excessive.

The few walled towns in the province of Sinde are contemptible, and scarcely deserve the name of fortresses. Omerhote, the repository of the wealth of the Ameers, is within a few miles of a branch of the Indus, and utterly untenable. The fortifications of Kurachee, the principal port, are mean and irregular ; the houses within the walls amounted, in 1813, to three thousand two hundred and fifty ; but the population did not amount to thirteen thousand souls. The city of Hyderabad is a collection of houses of very poor appearance, according to one author, wretched low mud hovels. The fortifications consist of a high wall and citadel ; the latter is entirely brick-work, but very thick ; the figure circular, and not more than a hundred yards in diameter ; the walls are gradually crumbling away.

The general style of the court of Sinde excited the admiration of the travellers ; and Dr. Burnes says, there was an air of dignity and good breeding in the younger princes seldom to be met with either in the European or native characters. After the second visit of this gentleman to the court, the ceremony of taking off the shoes was dispensed with. The Ameers pay visits to the Shikargahs, or preserves for game, once or twice a month. These are large tracts of jungle so carefully inclosed as to prevent the egress of all quadrupeds ; and the walls being closed up, the game is hunted till dire necessity obliges it to seek for water in a well, near a temporary building or wicker bungalow, which is placed in gardens beautifully shaded and decked with flowers, and from which the Ameers shoot the animals deliberately, and receive the acclamations of their followers. They are also extremely fond of hawks ; and all the grandees in Sinde, when they appear in public, are attended by

their bazbans or falconers, with hawks, some of which are of great value. The best are brought from Turkistan and the northern parts of Cabul.

The princes show their distrust of one another in nothing so much as in never leaving any of their number behind on a hunting excursion; great precautions are also taken to prevent treachery or combination against themselves. Like all Asiatic governors they never sacrifice present gains for future advantages; nor do they consider the interests of the people and their rulers as the same. Their internal policy is directed towards the accumulation of wealth, on which they consider the grandeur and stability of their dynasty to depend. The enormous imposts and taxation resulting from this system have the effect of paralysing trade, and trampling down industry. The revenues are farmed to the highest bidders, who only enjoy their contracts by the grace of their masters, and exert, in consequence, to the utmost, during their often brief administration, their powers of exaction and oppression.

The advantage which Sindh has, and which enables her to struggle against the curses of misrule and ignorance, is her independence of periodical rains. The government has no more sympathy with the farmer than the ryot, and is not deaf to appeals against him. The Mussulmen are all soldiers, and rarely leaseholders, and the revenues are thus, for the most part, in the hands of Hindoos who are out of favour at court; and the farmers are not, as is the case in Cutch, civil magistrates. Certainly there is no country adjoining our East India possessions which would better repay the fostering care of a mild and enlightened management than Sindh. The narrow policy of its governors does more to annihilate national prosperity than the whole combination of physical evils; and it is with a feeling entirely independent of a desire for our country's aggrandisement that we would wish to see the Indus once more the seat of a commerce and industry which had been planted there by European hands.

Course of the Indus.—The investigations of late years have rectified many errors regarding the course of the Sindh or Indus, though the charts given by Colonel Pottinger and Mr. Burnes, the latter from a sketch of the Indus, by Samuel Richards, in the Quarter-master-general's office, Bombay, differ considerably in their details; and it appears that, at different periods of the year, the repletion or exsiccation of cross branches gives variable features to that part of the country which is below Bhukor. It is supposed to rise between the 35th and 36th degrees of north latitude, whence it runs a little to the southward of west, for a distance of seven or eight degrees, forcing its way among the snowy mountains that separate Cashmere and Little Thibet. To the fortress of Attock, in latitude 33° 55' N., it varies its course between

south and south-west. To this place it is distinguished by the title of Aboo Seen, or Father River; and beyond this, until joined by the Punjund, or five streams, it is usually called the Roode Attock;—from this point it is exclusively spoken of as the Duryaé Sinda, or Sea of Sinda. It flows south-south-west, almost without a curve, until seventeen miles below Bhukor;—it sends off a branch called Kumburgundee and Larkhanu River, which expands into a lake at the foot of the Brahoorch Mountains. The district of Chandoohee is fertilized by this branch. Halfway between Bhukor and Sehwan the Indus receives the Khyrpoor, or Doorlee River, to the eastward. The river forms an island of some extent near the fort of Sehwan; and many minor branches disengage themselves from it, which are dry when it is not swollen. The next branch is the Fulelee, which encircles the island on which the capital of Hyderabad is built;—ten miles south-west of the city it re-unites with its mother stream. At its most eastern point it detaches the Goonee, across which Futtah Ali threw an embankment in 1799, and now the fresh water presses against the dam on one side whilst the tide flows up to it on the other. The river below the dam is called the Loonee or Salt River, in contradistinction to the Goonee, which signifies efficacious or useful. After the Fulelee rejoins the Indus, the latter winds a little to the eastward of south, but soon regains its predominant inclination to the south-south-west, which becomes still more westerly after passing Tattah; and, according to Pottinger, enters the Indian Ocean in one vast body; but Mr. Burnes navigated two large arms below the last-mentioned place, called the Meyraum and Bugghaur, which latter river the same author seems inclined to think is the branch navigated by Alexander, who would then have passed the Luckput Creek; and it is not impossible that Pattala, of whose identity with Tattah, or Hyderabad, even Colonel Pottinger seems very doubtful, is where the modern town of Jerk is placed; in which case the Macedonian conqueror may have navigated the Punjaree branch which passes by Laiqpoor and Meerpore, which would also have brought him to the Luckput Creek, though neither of these navigable routes is contained in Colonel Pottinger's map.

The rapidity of the stream in the Indus fluctuates with the seasons, whether dry or otherwise; and the nature of the districts it runs through also seems to affect it. Above Tattah, Pottinger estimates it as usually between two and a half and four miles per hour. The waters are regular in their inundation, in their return, departure, and quantity; beginning to rise about the latter end of April, and subside early in September. The breadth of the swell varies according to the nature of the country through which the river passes. In general, Mr. Crow states that it is felt five miles from the banks on either side, and, in many parts, much more, par-

ticularly in the Delta. The Indus, as a river, has few merits except its periodical swell; its stream is foul and muddy, and so full of shoals and shifting sands that flat-bottomed boats alone are safe, and scarcely any others are used. Its course is extremely crooked, and towards the sea is very inconstant, marks of its caprice abounding in the lower country. Tavernier, who wrote in 1690, says the commerce of Tattah was diminished by the mouth of the river always getting worse, the increasing sand and mud scarcely leaving a passage: and how unfortunate, Burnes truly remarks, it is that no one has left an exact account of the distance of Tattah from the Indus in olden time, or even when Nadir Shah visited Sinde, in 1748. The natives assured Colonel Pottinger that there was no bar at the mouth of the river that would prevent even a line-of-battle ship from going up as high as Lahoree Bunder; but it is very evident that they are totally unacquainted with the quantity of water which such vessels draw. The inconstancy of the Indus itself appears to present an insurmountable obstacle to anything like accuracy in the representation of that river; but of its general features the accounts appear to be as satisfactory as anything of the kind can possibly be without actual survey.
