

AN  
HISTORICAL DISQUISITION  
CONCERNING  
ANCIENT INDIA.

---

---

SECTION II.

*Intercourse with India, from the Establishment of the Roman Dominion in Egypt, to the Conquest of that Kingdom by the Mahomedans.*

UPON the conquest of Egypt by the Romans, and the reduction of that kingdom to a province of their empire, the trade with India continued to be carried on in the same mode under their powerful protection: Rome, enriched with the spoils and the tribute of almost all the known world, had acquired a taste for luxuries of every kind. Among people of this description, the productions of India have always been held in the highest estimation. The capital of the greatest empire ever established in Europe, filled with citizens who had now no occupation but to enjoy and dissipate the wealth accumulated by their ancestors, demanded every thing elegant, rare, or costly, which that remote region could furnish, in order to support its pomp, or heighten its pleasures. To supply

SECT.

II.

SECT.  
II.

this demand, new and extraordinary efforts became requisite, and the commerce with India increased to a degree, which (as I have observed in another place\*) will appear astonishing even to the present age, in which that branch of trade has been extended far beyond the practice or conception of any former period.

BESIDES the Indian commodities imported into the capital of the empire from Egypt, the Romans received an additional supply of them by another mode of conveyance. From the earliest times, there seems to have been some communication between Mesopotamia, and other provinces on the banks of the Euphrates, and those parts of Syria and Palestine which lay near the Mediterranean. The migration of Abram from Ur of the Chaldees to Sichem in the land of Canaan, is an instance of this.† The journey through the desert which separated these countries, was much facilitated by its affording one station abounding with water, and capable of cultivation. As the intercourse increased, the possession of this station became an object of so much importance, that Solomon, when he turned his attention towards the extension of commerce among his subjects, built a fenced city there.‡ Its Syrian name of Tadmor in the Wilderness, and its Greek one of Palmyra, are both descriptive of its situation in a spot adorned with palm-trees. This is not

---

\* Hist. of America, vol. i. p. 28. † Gen. xi. xii.

‡ 1 Kings, ix. 18. 2 Chron. viii. 4.

only plentifully supplied with water, but surrounded by a portion of fertile land, which (though of no great extent) renders it a delightful habitation in the midst of barren sands and an inhospitable desert. Its happy position, at the distance of eighty-five miles from the river Euphrates, and about one hundred and seventeen miles from the nearest coast of the Mediterranean,\* induced its inhabitants to enter with ardour into the trade of conveying commodities from one of these to the other. As the most valuable productions of India, brought up the Euphrates from the Persian Gulf, are of such small bulk as to bear the expense of a long land carriage, this trade soon became so considerable that the opulence and power of Palmyra increased rapidly. Its government was of the form which is best suited to the genius of a commercial city, republican; and from the peculiar advantages of its situation, as well as the spirit of its inhabitants, it long maintained its independence, though surrounded by powerful and ambitious neighbours. Under the Syrian monarchs descended from Seleucus it attained to its highest degree of splendour and wealth; one great source of which seems to have been, the supplying their

---

\* In a former edition, I stated the distance of Palmyra from the Euphrates at sixty miles, and from the Mediterranean at two hundred and three miles. Into these errors I was led by M. D'Anville, who, in his *Memoire sur l'Euphrate et le Tigris*, a work published in old age, did not retain his wonted accuracy. From information communicated by Major Rennell, I have substituted the true distances.

SECT.  
II.

subjects with Indian commodities. When Syria submitted to the irresistible arms of Rome, Palmyra continued upwards of two centuries a free state, and its friendship was courted with emulation and solicitude by the Romans, and their rivals for empire, the Parthians. That it traded with both, and particularly that from it Rome, as well as other parts of the empire, received the productions of India, we learn from Appian, an author of good credit.\* But in tracing the progress of the commerce of the ancients with the East, I should not have ventured, upon his single testimony, to mention this among the channels of note in which it was carried on, if a singular discovery, for which we are indebted to the liberal curiosity and enterprising spirit of our own countrymen, did not confirm and illustrate what he relates. Towards the close of the last century, some gentlemen of the English factory at Aleppo, incited by what they heard in the East concerning the wonderful ruins of Palmyra, ventured, notwithstanding the fatigue and danger of a journey through the desert, to visit them. To their astonishment they beheld a fertile spot, of some miles in extent, arising like an island out of a vast plain of sand, covered with the remains of temples, porticoes, aqueducts, and other public works, which, in magnificence and splendour, and some of them in elegance, were not unworthy of Athens or of Rome in their most prosperous state. Allured by their description of them, about sixty

---

*Univ\** Appian. de Bello Civil. lib. v. p. 1076. edit. Tollii.

years thereafter, a party of more enlightened travellers, having reviewed the ruins of Palmyra with greater attention and more scientific skill, declared that what they beheld there exceeded the most exalted ideas which they had formed concerning it.\*

FROM both these accounts, as well as from recollecting the extraordinary degree of power to which Palmyra had attained, when Egypt, Syria, Mesopotamia, and a considerable part of Asia Minor were conquered by its arms; when Odenatus, its chief magistrate, was decorated with the imperial purple, and Zenobia contended for the dominion of the East with Rome under one of its most warlike Emperors; it is evident that a state which could derive little importance from its original territory, must have owed its aggrandizement to the opulence acquired by extensive commerce. Of this the Indian trade was undoubtedly the most considerable and most lucrative branch. But it is a cruel mortification, in searching for what is instructive in the history of past times, to find that the exploits of conquerors who have desolated the earth, and the freaks of tyrants who have rendered nations unhappy, are recorded with minute and often disgusting accuracy, while the discovery of useful arts, and the progress of the most beneficial branches of commerce, are passed over in silence, and suffered to sink into oblivion.

---

\* Wood's Ruins of Palmyra, p. 37.

SECT.

II.

AFTER the conquest of Palmyra by Aurelian, trade never revived there. At present, a few miserable huts of beggarly Arabs are scattered in the courts of its stately temples, or deform its elegant porticoes; and exhibit an humiliating contrast to its ancient magnificence.

BUT while the merchants of Egypt and Syria exerted their activity in order to supply the increasing demands of Rome for Indian commodities, and vied with each other in their efforts, the eagerness of gain (as Pliny observes) brought India itself nearer to the rest of the world. In the course of their voyages to that country, the Greek and Egyptian pilots could not fail to observe the regular shifting of the periodical winds or monsoons, and how steadily they continued to blow during one part of the year from the east, and during the other from the west. Encouraged by attending to this circumstance, Hippalus, the commander of a ship engaged in the Indian trade, ventured, about fourscore years after Egypt was annexed to the Roman empire, to relinquish the slow and circuitous course which I have described, and stretching boldly from the mouth of the Arabian Gulf across the ocean, was carried by the western monsoon to Musiris, a harbour in that part of India now known by the name of the Malabar Coast.

THIS route to India was held to be a discovery of such importance, that in order to perpetuate the memory of the inventor, the name of Hippa-

lus was given to the wind which enabled him to perform the voyage.\* As this was one of the greatest efforts of navigation in the ancient world, and opened the best communication by sea between the East and West that was known for fourteen hundred years, it merits a particular description. Fortunately Pliny has enabled us to give it with a degree of accuracy, which can seldom be attained in tracing the naval or commercial operations of the ancients. From Alexandria (he observes) to Juliopolis is two miles; there the cargo destined for India is embarked on the Nile, and is carried to Coptos, which is distant three hundred and three miles, and the voyage is usually accomplished in twelve days. From Coptos goods are conveyed by land carriage to Berenice on the Arabian Gulf, halting at different stations, regulated according to the conveniency of watering. The distance between these cities is two hundred and fifty-eight miles. On account of the heat the caravan travels only during the night, and the journey is finished on the twelfth day. From Berenice ships take their departure about midsummer, and in thirty days reach Ocelis (Gella) at the mouth of the Arabian Gulf, or Cane (Cape Fartaque) on the coast of Arabia Felix. Thence they sail, in forty days, to Musiris, the first emporium in India. They begin their voyage homewards early in the Egyptian month Thibi, which answers to our December: they sail with a north-east wind, and when

---

\* Perip. Mar. Erythr. p. 32.

SECT. II. they enter the Arabian Gulf, meet with a south or south-west wind, and thus complete the voyage in less than a year.\*

THE account which Pliny gives of Musiris, and of Barace, another harbour not far distant, which was likewise frequented by the ships from Berenice, as being both so incommodious for trade on account of the shallowness of the ports, that it became necessary to discharge and take in the cargoes in small boats, does not enable us to fix their position with perfect accuracy. This description applies to many ports on the Malabar Coast; but, from two circumstances mentioned by him, one, that they are not far distant from Cottonara, the country which produces pepper in great abundance; and the other, that in sailing towards them, the course lay near Nitrias, the station of the pirates; I adopt the opinion of Major Rennell, that they were situated somewhere between Goa and Tellicherry, and that probably the modern Meerzaw or Merjee is the Musiris of the ancients, and Barcelore their Barace.†

As in these two ports was the principal staple of the trade between Egypt and India, when in its most flourishing state, this seems to be the proper place for inquiring into the nature of the commerce which the ancients, particularly the

\* Plin. Nat. Hist. lib. vi. c. 23. See NOTE XX.

† Intro. p. xxxvii.



Romans, carried on with that country, and for enumerating the commodities most in request which they imported from it. But as the operations of commerce, and the mode of regulating it, were little attended to in those states of antiquity of whose transactions we have any accurate knowledge, their historians hardly enter into any detail concerning a subject of such subordinate importance in their political system; and it is mostly from brief hints, detached facts, and incidental observations, that we can gather information concerning it.\*

SECT.  
II.



IN every age it has been a commerce of luxury, rather than of necessity, which has been carried on between Europe and India. Its elegant manufactures, spices, and precious stones, are neither objects of desire to nations of simple manners, nor are such nations possessed of wealth sufficient to purchase them. But at the time the Romans became masters of the Indian trade, they were not only (as has already been observed) in that stage of society when men are eager to obtain every thing that can render the enjoyment of life more exquisite, or add to its splendour, but they had acquired all the fantastic tastes formed by the caprice and extravagance of wealth. They were, of consequence, highly delighted with those new objects of gratification with which India supplied them in such abundance. The productions of that country, natural as well as arti-

---

\* See NOTE XXI.

SECT.  
II.

facial, seem to have been much the same in that age as in the present. But the taste of the Romans in luxury differed, in many respects, from that of modern times; and, of course, their demands from India differed considerably from ours.

IN order to convey an idea of their demands as complete as possible, I shall, in the first place, make some observations on the three great articles of general importation from India. 1. Spices and aromatics. 2. Precious stones and pearls. 3. Silk. And then I shall give some account (as far as I can venture to do it from authentic information) of the assortment of cargoes, both outward and homeward bound, for the vessels fitted out at Berenice to different ports of India.

I. SPICES and Aromatics. From the mode of religious worship in the heathen world; from the incredible number of their deities, and of the temples consecrated to them, the consumption of frankincense and other aromatics, which were used in every sacred function, must have been very great. But the vanity of men occasioned a greater consumption of these fragrant substances than their piety. It was the custom of the Romans to burn the bodies of their dead; and they deemed it a display of magnificence to cover, not only the body, but the funeral pile on which it was laid, with the most costly spices. At the funeral of Sylla, two hundred and ten burdens of spices were strewed upon the pile. Nero is reported to have burnt a quantity of cinnamon and

cassia at the funeral of Poppœa, greater than the countries from which it was imported produced in one year. We consume in heaps these precious substances with the carcasses of the dead, (says Pliny): We offer them to the gods only in grains.\* It was not from India, I am aware, but from Arabia, that aromatics were first imported into Europe; and some of them, particularly frankincense, were productions of that country. But the Arabians were accustomed, together with spices of native growth, to furnish foreign merchants with others of higher value, which they brought from India, and the regions beyond it. The commercial intercourse of the Arabians with the eastern parts of Asia, was not only early, but considerable. By means of their trading caravans, they conveyed into their own country all the valuable productions of the East, among which spices held a chief place. In every ancient account of Indian commodities, spices and aromatics of various kinds form a principal article.† Some authors assert that the greater part of those purchased in Arabia were not the growth of that country, but brought from India.‡ That this assertion was well founded, appears from what has been observed in modern times. The frankincense of Arabia, though reckoned the peculiar and most precious production of the coun-

---

\* Nat. Hist. lib. xii. c. 18.

† Peripl. Mar. Eryth. p. 22. 28. Strabo, lib. ii. p. 156. A. lib. xv. p. 1018. A.

‡ Strabo, lib. xvii. p. 1129. C.

SECT.  
II.

try, is much inferior in quality to that imported into it from the East; and it is chiefly with the latter that the Arabians at present supply the extensive demands of various provinces of Asia for this commodity.\* It is upon good authority, then, that I have mentioned the importation of spices as one of the most considerable branches of ancient commerce with India. In the Augustan age, an entire street in Rome seems to have been occupied by those who sold frankincense, pepper, and other aromatics.†

II. PRECIOUS stones, together with which pearls may be classed, seem to be the article next in value imported by the Romans from the East. As these have no pretension to be of any real use, their value arises entirely from their beauty and their rarity, and even when estimated most moderately, is always high. But among nations far advanced in luxury, when they are deemed not only ornaments, but marks of distinction, the vain and the opulent vie so eagerly with one another for the possession of them, that they rise in price to an exorbitant and almost incredible height. Diamonds, though the art of cutting them was imperfectly known to the ancients, held an high place in estimation among them, as well as among us. The comparative value of other precious stones varied according to the diversity of tastes and the caprice of fashion. The im-

\* Niebuhr, *Descript. de l'Arabie*, tom. i. p. 126.

† *Hor. lib. ii. epist. 1.*

mense number of them mentioned by Pliny, and the laborious care with which he describes and arranges them,\* will astonish, I should suppose, the most skilful lapidary or jeweller of modern times, and shews the high request in which they were held by the Romans.

SECT.  
II.

BUT among all the articles of luxury, the Romans seem to have given the preference to pearls.† Persons of every rank purchased them with eagerness; they were worn on every part of dress; and there is such a difference, both in size and in value, among pearls, that while such as were large and of superior lustre adorned the wealthy and the great, smaller ones and of inferior quality gratified the vanity of persons in more humble stations of life. Julius Cæsar presented Servilia, the mother of Brutus, with a pearl, for which he paid forty-eight thousand four hundred and fifty-seven pounds. The famous pearl ear-rings of Cleopatra were in value one hundred and sixty-one thousand four hundred and fifty-eight pounds.‡ Precious stones, it is true, as well as pearls, were found not only in India, but in many different countries, and all were ransacked in order to gratify the pride of Rome. India, however, furnished the chief part, and its productions were allowed to be most abundant, diversified, and valuable.

III. ANOTHER production of India in great demand at Rome, was silk; and when we recollect

\* Nat. Hist. lib. xxxvii.

† See NOTE XXII.

‡ Plin. Nat. Hist. lib. ix. c. 35.

See NOTE XXIII.

SECT.  
II.

the variety of elegant fabrics into which it may be formed, and how much these have added to the splendour of dress and furniture, we cannot wonder at its being held in such estimation by luxurious people. The price it bore was exorbitant; but it was deemed a dress too expensive and too delicate for men,\* and was appropriated wholly to women of eminent rank and opulence. This, however, did not render the demand for it less eager, especially after the example of the dissolute Elagabalus introduced the use of it among the other sex, and accustomed men to the disgrace (as the severity of ancient ideas accounted it) of wearing this effeminate garb. Two circumstances concerning the traffic of silk among the Romans merit observation. Contrary to what usually takes place in the operations of trade, the more general use of that commodity seems not to have increased the quantity imported, in such proportion as to answer the growing demand for it, and the price of silk was not reduced during the course of two hundred and fifty years from the time of its being first known in Rome. In the reign of Aurelian, it still continued to be valued at its weight in gold. This, it is probable, was owing to the mode in which that commodity was procured by the merchants of Alexandria. They had no direct intercourse with China, the only country in which the silk-worm was then reared, and its labour rendered an article of commerce. All the silk which they purchased in the different

---

\* Tacit. Annal. lib. ii. c. 33.

ports of India that they frequented, was brought thither in ships of the country; and either from some defect of skill in managing the silk-worm, the produce of its ingenious industry among the Chinese was scanty, or the intermediate dealers found greater advantage in furnishing the market of Alexandria with a small quantity at an high price, than to lower its value by increasing the quantity. The other circumstance which I had in view is more extraordinary, and affords a striking proof of the imperfect communication of the ancients with remote nations, and of the slender knowledge which they had of their natural productions or arts. Much as the manufactures of silk were admired, and often as silk is mentioned by the Greek and Roman authors, they had not, for several centuries after the use of it became common, any certain knowledge either of the countries to which they were indebted for this favourite article of elegance, or of the manner in which it was produced. By some, silk was supposed to be a fine down adhering to the leaves of certain trees or flowers; others imagined it to be a delicate species of wool or cotton; and even those who had learned that it was the work of an insect, show, by their descriptions, that they had no distinct idea of the manner in which it was formed.\* It was in consequence of an event that happened in the sixth century of the Christian era, of which I shall hereafter take notice, that the real nature of silk became known in Europe.

---

\* See NOTE XXIV.

SECT.  
II.

THE other commodities usually imported from India will be mentioned in the account, which I now proceed to give, of the cargoes sent out and brought home in the ships employed in the trade with that country. For this we are indebted to the Circumnavigation of the Erythræan Sea, ascribed to Arrian, a curious though short treatise, less known than it deserves to be, and which enters into some details concerning commerce, to which there is nothing similar in any ancient writer. The first place in India, in which the ships from Egypt, while they followed the ancient course of navigation, were accustomed to trade, was Pattala in the river Indus. They imported into it woollen cloth of a slight fabric, linen in chequer-work, some precious stones, and some aromatics unknown in India, coral, storax, glass vessels of different kinds, some wrought silver, money, and wine. In return for these, they received spices of various kinds, sapphires, and other gems, silk stuffs, silk thread, cotton cloths,\* and black pepper. But a far more considerable emporium on the same coast was Barygaza; and on that account the author whom I follow here describes its situation, and the mode of approaching it, with great minuteness and accuracy. Its situation corresponds entirely with that of Baroach, on the great river Nerbuddah, down the stream of which, or by land carriage from the great city of Tagara across high mountains,† all the productions of the interior country were

---

\* See NOTE XXV. † See NOTE XXVI.



conveyed to it. The articles of importation and exportation in this great mart were extensive and various. Besides these already mentioned, our author enumerates among the former, Italian, Greek, and Arabian wines, brass, tin, lead, girdles or sashes of curious texture, melilot, white glass, red arsenic, black lead, gold and silver coin. Among the exports he mentions the onyx, and other gems, ivory, myrrh, various fabrics of cotton, both plain and ornamented with flowers, and long pepper.\* At Musiris, the next emporium of note on that coast, the articles imported were much the same as at Barygaza; but as it lay nearer to the eastern parts of India, and seems to have had much communication with them, the commodities exported from it were more numerous and more valuable. He specifies particularly pearls in great abundance and of extraordinary beauty, a variety of silk stuffs, rich perfumes, tortoise-shell, different kinds of transparent gems, especially diamonds, and pepper in large quantities, and of the best quality.†

THE justness of the account given by this author of the articles imported from India, is confirmed by a Roman law, in which the Indian commodities subject to the payment of duties are enumerated.‡ By comparing these two accounts, we may form an idea tolerably exact of

---

\* Peripl. Mar. Erythr. p. 28.

† Ibid. 31, 32.

‡ Digest. lib. xxxix. tit. 4. § 16. De publicanis et vectigalibus.

SECT. II. the nature and extent of the trade with India in ancient times.

As the state of society and manners among the natives of India, in the earliest period in which they are known, nearly resembled what we observe among their descendants in the present age; their wants and demands were, of course, much the same. The ingenuity of their own artists was so able to supply these, that they stood little in need of foreign manufactures or productions, except some of the useful metals which their own country did not furnish in sufficient quantity; and then, as now, it was mostly with gold and silver that the luxuries of the East were purchased. In two particulars, however, our importations from India differ greatly from those of the ancients. The dress, both of the Greeks and Romans, was almost entirely woollen, which, by their frequent use of the warm bath, was rendered abundantly comfortable. Their consumption of linen and cotton cloths was much inferior to that of modern times, when these are worn by persons in every rank of life. Accordingly, a great branch of modern importation from that part of India with which the ancients were acquainted, is in *piece-goods*; comprehending, under that mercantile term, the immense variety of fabrics which Indian ingenuity has formed of cotton. But as far as I have observed, we have no authority that will justify us in stating the ancient importation of these to be in any degree considerable.

IN modern times, though it continues still to be chiefly a commerce of luxury that is carried on with India, yet, together with the articles that minister to it, we import, to a considerable extent, various commodities which are to be considered merely as the materials of our domestic manufactures. Such are the cotton-wool of Indostan, the silk of China, and the saltpetre of Bengal. But in the accounts of ancient importations from India, raw silk and silk-thread excepted, I find nothing mentioned that could serve as the materials of any home-manufacture. The navigation of the ancients never having extended to China, the quantity of unwrought silk with which they were supplied, by means of the Indian traders, appears to have been so scanty, that the manufacture of it could not make an addition of any moment to their domestic industry.

AFTER this succinct account of the commerce carried on by the ancients in India, I proceed to inquire what knowledge they had of the countries beyond the ports of Musiris and Barace, the utmost boundary towards the east to which I have hitherto traced their progress. The author of the Circumnavigation of the Erythræan Sea, whose accuracy of description justifies the confidence with which I have followed him for some time, seems to have been little acquainted with that part of the coast which stretches from Barace towards the south. He mentions, indeed,

SECT. cursorily, two or three different ports, but gives  
 II. no intimation that any of them were staples of  
 the commerce with Egypt. He hastens to Comar, or Cape Comorin, the southernmost point of the Indian peninsula; and his description of it is so accurate, and so conformable to its real state, as shews his information concerning it to have been perfectly authentic.\* Near to this he places the pearl fishery of Colchos, the modern Kilkare, undoubtedly the same with that now carried on by the Dutch in the strait which separates the island of Ceylon from the continent; as, adjacent to this, he mentions three different ports, which appear to have been situated on the east side of the peninsula, now known by the name of the Coromandel Coast. He describes these as *emporia*, or stations of trade;† but from an attentive consideration of some circumstances in his account of them, I think it probable that the ships from Berenice did not sail to any of these ports, though they were supplied, as he informs us, with the commodities brought from Egypt, as well as with the productions of the opposite coast of the peninsula; but these seem to have been imported in *country ships*.‡ It was likewise in vessels of their own, varying in form and burden, and distinguished by different names, some of which he mentions, that they traded with the Golden Chersonesus, or kingdom of Malacca,

---

\* Peripl. p. 33. D'Anville, Ant. de l'Inde, 118, &c.

† Peripl. p. 34.

‡ Τοπικα πλοῖα.

and the countries near the Ganges. Not far from the mouth of that river he places an island, which he describes as situated under the rising sun, and as the last region in the East that was inhabited.\* Of all these parts of India, the author of the Circumnavigation appears to have had very slender knowledge, as is manifest, not only from what he mentions concerning this imaginary island, and from his not attempting to describe them, but from his relating, with the credulity and love of the marvellous which always accompany and characterize ignorance, that these remote regions were peopled with cannibals, and men of uncouth and monstrous forms.†

I HAVE been induced to bestow this attention in tracing the course delineated in the Circumnavigation of the Erythræan Sea, because the author of it is the first ancient writer to whom we are indebted for any knowledge of the eastern coast of the great peninsula of India, or of the countries which lie beyond it. To Strabo, who composed his great work on geography in the reign of Augustus, India, particularly the most eastern parts of it, was little known. He begins his description of it with requesting the indulgence of his readers, on account of the scanty information he could obtain with respect to a country so remote, which Europeans had seldom visited, and many of them transiently only, in the functions of military service. He observes, that

---

\* *Peripl.* p. 36. † *Peripl.* p. 35. Digitized by Microsoft®

SECT.  
II.

even commerce had contributed little towards an accurate investigation of the country, as few of the merchants from Egypt and the Arabian Gulf had ever sailed as far as the Ganges; and from men so illiterate, intelligence that merited a full degree of confidence could scarcely be expected. His descriptions of India, particularly its interior provinces, are borrowed almost entirely from the memoirs of Alexander's officers, with some slender additions from more recent accounts, and these so few in number, and sometimes so inaccurate, as to furnish a striking proof of the small progress which the ancients had made, from the time of Alexander, in exploring that country. When an author possessed of such discernment and industry as Strabo, who visited in person several distant regions, that he might be able to describe them with greater accuracy, relates, that the Ganges enters the ocean by one mouth,\* we are warranted in concluding, that in his time there was either no direct navigation carried on to that great river by the traders from the Arabian Gulf, or that this voyage was undertaken so seldom, that science had not then derived much information from it.

THE next author, in order of time, from whom we receive any account of India, is the elder Pliny, who flourished about fifty years later than Strabo. As in the short description of India given in his Natural History, he follows the same guides with

Strabo, and seems to have had no knowledge of the interior country, but what he derived from the memoirs of the officers who served under Alexander and his immediate successors, it is unnecessary to examine his description minutely. He has added, however, two valuable articles, for which he was indebted to more recent discoveries. The one is the account of the new course of navigation from the Arabian Gulf to the Coast of Malabar, the nature and importance of which I have already explained. The other is a description of the island of Taprobana, which I shall consider particularly, after inquiring into what Ptolemy has contributed towards our knowledge of the ancient state of the Indian continent.

THOUGH Ptolemy, who published his works about fourscore years after Pliny, seems to have been distinguished for his persevering industry, and talent for arrangement, rather than for an inventive genius; geography has been more indebted to him for its improvement, than to any other philosopher. Fortunately for that science, in forming his general system of geography, he adopted the ideas, and imitated the practice of Hipparchus, who lived near four hundred years before his time. That great philosopher was the first who attempted to make a catalogue of the stars. In order to ascertain their position in the heavens with accuracy, he measured their distance from certain circles of the spheres, computing it by degrees, either from east to west, or from north to south. The former was denomi-

SECT.  
II.

nated the longitude of the star, the latter its latitude. This mode he found to be of such utility in his astronomical researches, that he applied it with no less happy effect to geography; and it is a circumstance worthy of notice, that it was by observing and describing the heavens, men were first taught to measure and delineate the earth with exactness. This method of fixing the position of places, invented by Hipparchus, though known to the geographers between his time and that of Ptolemy, and mentioned both by Strabo\* and by Pliny,† was not employed by any of them. Of this neglect the most probable account seems to be, that as none of them were astronomers, they did not fully comprehend all the advantages geography might derive from this invention.‡ These Ptolemy, who had devoted a long life to the improvement of astronomy, theoretical as well as practical, perfectly discerned; and as in both Hipparchus was his guide, he, in his famous treatise on geography, described the different parts of the earth according to their longitude and latitude. Geography was thus established upon its proper principles, and intimately connected with astronomical observations and mathematical science. This work of Ptolemy soon rose high in estimation among the ancients.§ During the middle ages, both in Arabia and in Europe, the decisions of Ptolemy, in every thing relating to geography, were submitted to with an assent as implicit as

\* Lib. ii.

† Nat. Hist. lib. ii. c. 12. 26. 70.

‡ See NOTE XXVII.

§ See NOTE XXVIII.



was yielded to those of Aristotle in all other departments of science. On the revival of a more liberal spirit of inquiry in the sixteenth century, the merit of Ptolemy's improvements in geography was examined and recognized; that scientific language which he first rendered general, continues to be used; and the position of places is still ascertained in the same distinct and compendious manner, by specifying their longitude and latitude.

SECT.  
II.

Not satisfied with adopting the general principles of Hipparchus, Ptolemy emulated him in the application of them; and as that philosopher had arranged all the constellations, he ventured upon what was no less arduous, to survey all the regions of the earth which were then known, and with minute and bold decision he fixed the longitude and latitude of the most remarkable places in each of them. All his determinations, however, are not to be considered as the result of actual observation, nor did Ptolemy publish them as such. Astronomical science was confined, at that time, to a few countries. A considerable part of the globe was little visited, and imperfectly described. The position of a small number of places only had been fixed with any degree of accuracy. Ptolemy was therefore obliged to consult the itineraries and surveys of the Roman empire, which the political wisdom of that great state had completed\* with immense labour and

---

\* See NOTE XXIX.

SECT.  
II.

expense. Beyond the precincts of the empire, he had nothing on which he could rely, but the journals and reports of travellers. Upon these all his conclusions were founded; and as he resided in Alexandria at a time when the trade from that city to India was carried on to its utmost extent, this situation might have been expected to afford him the means of procuring ample information concerning it. But either from the imperfect manner in which that country was explored in his time, or from his placing too much confidence in the reports of persons who had visited it with little attention or discernment,\* his general delineation of the form of the Indian continent is the most erroneous that has been transmitted to us from antiquity. By an astonishing mistake, he has made the peninsula of India stretch from the Sinus Barygzenus, or Gulf of Cambay, from west to east, instead of extending, according to its real direction, from north to south.† This error will appear the more unaccountable, when we recollect that Megasthenes had published a measurement of the Indian peninsula, which approaches near to its true dimensions; and that this had been adopted, with some variations, by Eratosthenes, Strabo, Diodorus Siculus, and Pliny, who wrote prior to the age of Ptolemy.‡

\* Geogr. lib. i. c. 17.

† See NOTE XXX.

‡ Strabo, lib. xv. 1010. B. Arrian. Hist. Indic. c. 3, 4. Diod. Sicul. lib. ii. 148. Plin. Nat. Hist. lib. vi. c. 21. See NOTE XXXI.

ALTHOUGH Ptolemy was led to form such an erroneous opinion concerning the general dimensions of the Indian continent, his information with respect to the country in detail, and the situation of particular places, was more accurate; and he is the first author possessed of such knowledge as enabled him to trace the sea-coast, to mention the most noted places situated upon it, and to specify the longitude and latitude of each from Cape Comorin eastward, to the utmost boundary of ancient navigation. With regard to some districts, particularly along the east side of the peninsula as far as the mouth of the Ganges, the accounts which he had received seem to have been so far exact, as to correspond more nearly perhaps with the actual state of the country, than the descriptions which he gives of any other part of India. M. D'Anville, with his usual industry and discernment, has considered the principal stations as they are fixed by him, and finds that they correspond to Kilkare, Negapatam, the mouth of the river Cauveri, Masulipatam, Point Gordeware, &c. It is foreign to the object of this Disquisition to enter into such a minute detail; but in several instances we may observe, that not only the conformity of position, but the similarity of ancient and modern names, is very striking.\* The great river Cauveri is by Ptolemy named Chaberis; Arcot, in the interior country, is Arcati Regia; and probably the whole coast

---

\* Ptolem. Geogr. lib. vii. c. 1. D'Anville, *Antiq. de l'Inde*, 127, &c.

SECT.  
II.

has received its present name of Coromandel from *Sor Mandulam*, or the kingdom of Soræ, which is situated upon it.

IN the course of one hundred and thirty-six years, which elapsed from the death of Strabo to that of Ptolemy, the commercial intercourse with India was greatly extended: the latter geographer had acquired such an accession of new information concerning the Ganges, that he mentions the names of six different mouths of that river, and describes their positions. His delineation, however, of that part of India which lies beyond the Ganges, is not less erroneous in its general form than that which he gave of the peninsula, and bears as little resemblance to the actual position of those countries. He ventures, nevertheless, upon a survey of them, similar to that which he had made of the other great division of India, which I have already examined. He mentions the places of note along the coast, some of which he distinguishes as *emporia*; but whether that name was given to them on account of their being staples of trade to the natives, in their traffic carried on from one district of India to another, or whether they were ports to which vessels from the Arabian Gulf resorted directly, is not specified. The latter I should think to be the idea which Ptolemy means to convey: but those regions of India were so remote, and, from the timid and slow course of ancient navigation, were probably so little frequented, that his information concerning them is extremely defective,

and his descriptions more obscure, more inaccurate, and less conformable to the real state of the country, than in any part of his geography. That peninsula to which he gives the name of the Golden Chersonesus, he delineates as if it stretched directly from north to south, and fixes the latitude of Sabana Emporium, its southern extremity, three degrees beyond the line. To the east of this peninsula he places what he calls the Great Bay, and in the most remote part of it the station of Catigara, the utmost boundary of navigation in ancient times, to which he assigns no less than eight degrees and a half of southern latitude. Beyond this he declares the earth to be altogether unknown, and asserts that the land turns thence to the westward, and stretches in that direction until it joins the promontory of Prassum in Ethiopia, which, according to his idea, terminated the continent of Africa to the south.\* In consequence of this error, no less unaccountable than enormous, he must have believed the Erythræan Sea, in its whole extent from the coast of Africa to that of Cambodia, to be a vast basin, without any communication with the ocean.†

OUT of the confusion of those wild ideas, in which the accounts of ignorant or fabulous travellers have involved the geography of Ptolemy, M. D'Anville has attempted to bring order; and,

---

\* Ptolem. Geogr. lib. vii. c. 3. 5. D'Anville, Ant. de l'Inde, 187.

† See NOTE XXXII. *Digitized by Microsoft®*

SECT.

II.

with much ingenuity, he has formed opinions with respect to some capital positions, which have the appearance of being well founded. The peninsula of Malacca is, according to him, the Golden Chersonesus of Ptolemy; but instead of the direction which he has given it, we know that it bends some degrees towards the east, and that Cape de Romania, its southern extremity, is more than a degree to the north of the line. The Gulf of Siam he considers as the Great Bay of Ptolemy, but the position on the east side of that Bay, corresponding to Catigara, is actually as many degrees to the north of the equator, as he supposed it to be south of it. Beyond this he mentions an inland city, to which he gives the name of Thinxæ or Sinæ Metropolis. The longitude which he assigns to it, is one hundred and eighty degrees from his first meridian in the Fortunate Island, and is the utmost point towards the east to which the ancients had advanced by sea. Its latitude he calculates to be three degrees south of the line. If, with M. D'Anville, we conclude the situation of Sin-hoa, in the western part of the kingdom of Cochin-China, to be the same with Sinæ Metropolis, Ptolemy has erred in fixing its position no less than fifty degrees of longitude, and twenty degrees of latitude.\*

---

\* Ptolem. Geogr. lib. vii. c. 3. D'Anville, *Limites du Monde connu des Anciens au-dela du Gange*. *Mem. de Litterat.* xxxii. 604, &c. *Ant. de l'Inde*, Supplem. i. 161, &c. See NOTE XXXIII.

THESE errors of Ptolemy concerning the remote parts of Asia, have been rendered more conspicuous by a mistaken opinion of modern times engrafted upon them. Sinæ, the most distant station mentioned in his geography, has such a near resemblance in sound to China, the name by which the greatest and most civilized empire in the East is known to Europeans, that, upon their first acquaintance with it, they hastily concluded them to be the same; and of consequence it was supposed that China was known to the ancients, though no point seems to be more ascertained, than that they never advanced by sea beyond that boundary which I have allotted to their navigation.

HAVING thus traced the discoveries of India which the ancients made by sea, I shall next examine what additional knowledge of that country they acquired from their progress by land. It appears (as I have formerly related) that there was a trade carried on early with India through the provinces that stretch along its northern frontier. Its various productions and manufactures were transported by land carriage into the interior parts of the Persian dominions, or were conveyed, by means of the navigable rivers which flow through the Upper Asia, to the Caspian Sea, and from that to the Euxine. While the successors of Seleucus retained the dominion of the East, this continued to be the mode of supplying their subjects with the commodities of India. When the Romans had extended their

SECT.  
II.

conquests so far that the Euphrates was the eastern limit of their empire, they found this trade still established; and as it opened to them a new communication with the East, by means of which they received an additional supply of luxuries for which they had acquired the highest relish, it became an object of their policy to protect and encourage it. As the progress of the caravans, or companies of merchants, which travelled towards the countries whence they received the most valuable manufactures, particularly those of silk, was often interrupted and rendered dangerous by the Parthians, who had acquired possession of all the provinces which extended from the Caspian Sea to that part of Scythia or Tartary which borders on China, the Romans endeavoured to render this intercourse more secure by a negotiation with one of the monarchs of that great empire. Of this singular transaction there is, indeed, no vestige in the Greek or Roman writers; our knowledge of it is derived entirely from the Chinese historians, by whom we are informed that Antoun, (the Emperor Marcus Antonius), the King of the people of the Western Ocean, sent an embassy with this view to Oun-ti, who reigned over China in the hundred and sixty-sixth year of the Christian era.\* What was the success of this attempt is not known, nor can we say whether it facilitated such an

---

\* *Memoire sur les Liaisons et le Commerce des Romains, avec les Tartares et les Chinois, par M. de Guignes. Mem. de Literat. xxxii. 355, &c.*



intercourse between these two remote nations as contributed towards the supply of their mutual wants. The design certainly was not unworthy of the enlightened Emperor of Rome to whom it is ascribed.

SECT.  
II.

It is evident, however, that in prosecuting this trade with China, a considerable part of the extensive countries to the east of the Caspian Sea must have been traversed; and though the chief inducement to undertake those distant journeys was gain, yet, in the course of ages, there must have mingled among the adventurers persons of curiosity and abilities, who could turn their attention from commercial objects to those of more general concern. From them such information was procured, and subjected to scientific discussion, as enabled Ptolemy to give a description of those inland and remote regions of Asia,\* fully as accurate as that of several countries, of which, from their vicinity, he may have been supposed to have received more distinct accounts. The farthest point towards the east, to which his knowledge of this part of Asia extended, is Sera Metropolis, which, from various circumstances, appears to have been in the same situation with Kant-cheou, a city of some note in Chen-si, the most westerly province of the Chinese empire. This he places in the longitude of one hundred and seventy-seven degrees fifteen minutes, near three degrees to the west of Sinæ Metropolis,

---

\* Lib. vi. c. 11—18.

SECT.  
II.

which he had described as the utmost limit of Asia discovered by sea. Nor was Ptolemy's knowledge of this district of Asia confined only to that part of it through which the caravans may be supposed to have proceeded directly in their route eastward; he had received likewise some general information concerning various nations towards the north, which, according to the position that he gives them, occupied parts of the great plain of Tartary, extending considerably beyond Lassa, the capital of Thibet, and the residence of the Dalai Lama.

THE latitudes of several places in this part of Asia are fixed by Ptolemy with such uncommon precision, that we can hardly doubt of their having been ascertained by actual observation. Out of many instances of this, I shall select three, of places situated in very different parts of the country under review. The latitude of Nagara, on the river Cophenes, (the modern Attock), is, according to Ptolemy, thirty-two degrees and thirty minutes; which coincides precisely with the observation of an eastern geographer quoted by M. D'Anville.\* The latitude of Maracanda, or Samarcand, as fixed by him, is thirty-nine degrees fifteen minutes. According to the Astronomical Tables of Ulug Beg, the grandson of Timur, whose royal residence was in that city, it is thirty-nine degrees thirty-seven minutes.†

\* Eclaircissements, &c. English Translation, p. 10.

† Tab. Geogr. ap. Hudson, Geogr. Minores, iii. 145.

The latitude of Sera Metropolis, in Ptolemy, is thirty-eight degrees fifteen minutes; that of Kant-cheou, as determined by the Jesuit missionaries, is thirty-nine degrees. I have enumerated these striking examples of the coincidence of his calculations with those established by modern observations, for two reasons: One, because they clearly prove that these remote parts of Asia had been examined with some considerable degree of attention; the other, because I feel great satisfaction, after having been obliged to mention several errors and defects in Ptolemy's geography, in rendering justice to a philosopher, who has contributed so much towards the improvement of that science. The facts which I have produced afford the strongest evidence of the extent of his information, as well as the justness of his conclusions concerning countries, with which, from their remote situation, we might have supposed him to be least acquainted.

SECT.  
II.

HITHERTO I have confined my researches concerning the knowledge which the ancients had of India, to the continent; I return now to consider the discoveries which they had made of the islands situated in various parts of the ocean with which it is surrounded, and begin, as I proposed, with Taprobane, the greatest and most valuable of them. This island lay so directly in the course of navigators who ventured beyond Cape Comorin, especially when, according to the ancient mode of sailing, they seldom ventured

SECT.  
II.

far from the coast, that its position, one should have thought, must have been determined with the utmost precision. There is, however, hardly any point in the geography of the ancients more undecided and uncertain. Prior to the age of Alexander the Great, the name of Taprobane was unknown in Europe. In consequence of the active curiosity with which he explored every country that he subdued or visited, some information concerning it seems to have been obtained. From his time almost every writer on geography has mentioned it; but their accounts of it are so various, and often so contradictory, that we can scarcely believe them to be describing the same island. Strabo, the earliest writer now extant from whom we have any particular account of it, affirms that it was as large as Britain, and situated at the distance of seven days, according to some reports, and according to others, of twenty days' sailing from the southern extremity of the Indian peninsula; from which, contrary to what is known to be its real position, he describes it as stretching towards the west above five hundred stadia.\* Pomponius Mela, the author next in order of time, is uncertain whether he should consider Taprobane as an island, or as the beginning of another world; but as no person, he says, had ever sailed round it, he seems to incline towards the latter opinion.† Pliny gives a more ample description of Taprobane,

\* Strabo, lib. ii. 124. B. 180. B. 192. A. lib. xv. 1012. B.

† De Situ Orbis, lib. iii. c. 7.

which, instead of bringing any accession of light, involves every thing relating to it in additional obscurity. After enumerating the various and discordant opinions of the Greek writers, he informs us, that ambassadors were sent by a King of that island to the Emperor Claudius, from whom the Romans learned several things concerning it which were formerly unknown, particularly that there were five hundred towns in the island, and that in the centre of it there was a lake three hundred and seventy-five miles in circumference. These ambassadors were astonished at the sight of the Great Bear and the Pleiades, being constellations which did not appear in their sky; and were still more amazed when they beheld their shadows point towards the north, and the sun rise on their left hand, and set on their right. They affirmed, too, that in their country the moon was never seen until the eighth day after the change, and continued to be visible only to the sixteenth.\* It is surprising to find an author so intelligent as Pliny relating all these circumstances without animadversion, and particularly that he does not take notice, that what the ambassadors reported concerning the appearance of the moon could not take place in any region of the earth.

PTOLEMY, though so near to the age of Pliny, seems to have been altogether unacquainted with his description of Taprobane, or with the embassy

SECT. II. to the Emperor Claudius. He places that island opposite to Cape Comorin, at no great distance from the continent, and delineates it as stretching from north to south no less than fifteen degrees, two of which he supposes to be south of the equator; and, if his representation of its dimensions had been just, it was well entitled, from its magnitude, to be compared with Britain.\* Agathemerus, who wrote after Ptolemy, and was well acquainted with his geography, considers Taprobane as the largest of all islands, and assigns to Britain only the second place.†

FROM this diversity of the descriptions given by ancient writers, it is not surprising that the moderns should have entertained very different sentiments with respect to the island in the Indian Ocean, which was to be considered as the same with the Taprobane of the Greeks and Romans. As both Pliny and Ptolemy describe it as lying in part to the south of the equator, some learned men maintain Sumatra to be the island which corresponds to this description. But the great distance of Sumatra from the peninsula of India does not accord with any account which the Greek or Roman writers have given of the situation of Taprobane, and we have no evidence that the navigation of the ancients ever extended so far as Sumatra. The opinion more generally received is, that the Taprobane of the ancients

\* Ptol. lib. vii. c. 4. D'Anville, *Ant. de l'Inde*, p. 142.

† Lib. ii. c. 8. apud Hudson. *Geogr. Minor*, vol. ii.

is the island of Ceylon; and not only its vicinity to the continent of India, but the general form of the island, as delineated by Ptolemy, as well as the position of several places in it mentioned by him, establish this opinion (notwithstanding some extraordinary mistakes, of which I shall afterwards take notice,) with a great degree of certainty.

SECT.  
II.

THE other islands, to the east of Taprobane, mentioned by Ptolemy, might be shewn (if such a detail were necessary) to be the Andaman and Nicobar islands in the Gulf of Bengal.

AFTER this long, and, I am afraid, tedious investigation of the progress made by the ancients in exploring the different parts of India, and after tracing them as far as they advanced towards the east either by sea or land, I shall offer some general remarks concerning the mode in which their discoveries were conducted, and the degree of confidence with which we may rely on the accounts of them, which could not have been offered with the same advantage until this investigation was finished.

THE art of delineating maps, exhibiting either the figure of the whole earth, as far as it had been explored, or that of particular countries, was known to the ancients; and without the use of them to assist the imagination, it was impossible to have formed a distinct idea either of the one or of the other. Some of these maps are

SECT.  
II.

mentioned by Herodotus and other early Greek writers. But no maps prior to those which were formed in order to illustrate the geography of Ptolemy, have reached our times, in consequence of which it is very difficult to conceive what was the relative situation of the different places mentioned by the ancient geographers, unless when it is precisely ascertained by measurement.\* As soon, however, as the mode of marking the situation of each place, by specifying its longitude and latitude, was introduced, and came to be generally adopted, every position could be described in compendious and scientific terms. But still the accuracy of this new method, and the improvement which geography derived from it, depends upon the mode in which the ancients estimated the latitude and longitude of places.

THOUGH the ancients proceeded in determining the latitude and longitude of places upon the same principles with the moderns, yet it was by means of instruments very inferior in their construction to those now used, and without the same minute attention to every circumstance that may affect the accuracy of an observation, an attention of which long experience only can demonstrate the necessity. In order to ascertain the latitude of any place, the ancients observed the meridian altitude of the sun, either by means of the shadow of a perpendicular gnomon, or by means of an astrolabe, from which it was easy to compute

---

\* See NOTE XXXIV.



how many degrees and minutes the place of observation was distant from the equator. When neither of these methods could be employed, they inferred the latitude of any place from the best accounts which they could procure of the length of its longest day.

SECT.  
II.

WITH respect to determining the longitude of any place, they were much more at a loss, as there was only one set of celestial phenomena to which they could have recourse. These were the eclipses of the moon, (for those of the sun were not then so well understood as to be subservient to the purposes of geography); the difference between the time at which an eclipse was observed to begin or to end at two different places, gave immediately the difference between the meridians of those places. But the difficulty of making those observations with accuracy, and the impossibility of repeating them often, rendered them of so little use in geography, that the ancients, in determining longitudes, were obliged, for the most part, to have recourse to actual surveys, or to the vague information which was to be obtained from the reckonings of sailors, or the itineraries of travellers.

BUT though the ancients, by means of the operations which I have mentioned, could determine the position of places with a considerable degree of accuracy at land, it is very uncertain whether or not they had any proper mode of determining this at sea. The navigators of antiquity seem

SECT.  
II.

rarely to have had recourse to astronomical observation. They had no instruments suited to a moveable and unsteady observatory; and though, by their practice of landing frequently, they might, in some measure, have supplied that defect, yet no ancient author, as far as I know, has given an account of any astronomical observation made by them during the course of their voyages. It seems to be evident from Ptolemy, who employs some chapters in shewing how geography may be improved, and its errors may be rectified, from the reports of navigators,\* that all their calculations were founded solely upon reckoning, and were not the result of observation. Even after all the improvements which the moderns have made in the science of navigation, this mode of computing by reckoning is known to be so loose and uncertain, that from it alone no conclusion can be deduced with any great degree of precision. Among the ancients, this inaccuracy must have been greatly augmented, as they were accustomed in their voyages, instead of steering a direct course, which might have been more easily measured, to a circuitous navigation along the coast; and were unacquainted with the compass, or any other instrument by which its bearings might have been ascertained. We find, accordingly, the position of many places which we may suppose to have been determined at sea, fixed with little exactness. When, in consequence of an active trade, the ports of any country were

---

\* Lib. i. c. 7—14.

much frequented, the reckonings of different navigators may have served, in some measure, to correct each other, and may have enabled geographers to form their conclusions with a nearer approximation to truth. But in remote countries, which have neither been the seat of military operations, nor explored by caravans travelling frequently through them, every thing is more vague and undefined, and the resemblance between the ancient descriptions of them, and their actual figure, is often so faint that it can hardly be traced. The latitude of places, too, as might be expected, was in general much more accurately known by the ancients than their longitude. The observations by which the former was determined are simple, made with ease, and are not liable to much error. The other cannot be ascertained precisely, without more complex operations, and the use of instruments much more perfect than any that the ancients seem to have possessed.\* Among the vast number of places, the position of which is fixed by Ptolemy, I know not if he approaches as near to truth in the longitude of any one, as he has done in fixing the latitude of the three cities which I formerly mentioned as a striking, though not singular instance of his exactness.

THESE observations induce me to adhere to an opinion which I proposed in another place,† that the Greeks and Romans, in their commercial in-

---

\* See NOTE XXXV.

† Hist. of America, vol. i, p. 27.

SECT.  
II.

tercourse with India, were seldom led, either by curiosity or the love of gain, to visit the more eastern parts of it. A variety of particulars occur to confirm this opinion. Though Ptolemy bestows the appellation of *Emporia* on several places situated on the coast which stretches from the eastern mouth of the Ganges to the extremity of the Golden Chersonesus, it is uncertain whether, from his having given them this name, we are to consider them as harbours frequented by ships from Egypt, or merely by vessels of the country. Beyond the Golden Chersonesus, it is remarkable that he mentions one *Emporium* only,\* which plainly indicates the intercourse with this region of India to have been very inconsiderable. Had voyages from the Arabian Gulf to those countries of India been as frequent as to have entitled Ptolemy to specify so minutely the longitude and latitude of the great number of places which he mentions, he must, in consequence of this, have acquired such information as would have prevented several great errors into which he has fallen. Had it been usual to double Cape Comorin, and to sail up the Bay of Bengal to the mouth of the Ganges, some of the ancient geographers would not have been so uncertain, and others so widely mistaken, with respect to the situation and magnitude of the island of Ceylon. If the merchants of Alexandria had often visited the ports of the Golden Chersonesus, and of the Great Bay, Ptolemy's descriptions of them must

have been rendered more correspondent to their real form ; nor could he have believed several places to lie beyond the Line, which are in truth some degrees on this side of it.

SECT.  
II.

BUT though the navigation of the ancients may not have extended to the Farther India, we are certain that various commodities of that country were imported into Egypt, and thence were conveyed to Rome, and to other parts of the empire. From circumstances which I have already enumerated, we are warranted in concluding, that these were brought in vessels of the country to Musiris, and to the other ports on the Malabar Coast, which were, at that period, the staples of trade with Egypt. In a country of such extent as India, where the natural productions are various, and greatly diversified by art and industry, an active domestic commerce, both by sea and by land, must have early taken place among its different provinces. Of this we have some hints in ancient authors ; and where the sources of information are so few and so scanty, we must rest satisfied with hints. Among the different classes, or casts, into which the people of India were divided, merchants are mentioned as one ;\* from which we may conclude trade to have been one of the established occupations of men in that country. From the author of the Circumnavigation of the Erythræan Sea we learn, that the inhabitants of the Coromandel Coast

---

\* Plin. Nat. Hist. lib. vi. c. 22.

SECT.  
II.

traded in vessels of their own with those of Malabar; that the interior trade of Barygaza was considerable; and that there was, at all seasons, a number of country ships to be found in the harbour of Musiris.\* By Strabo we are informed, that the most valuable productions of Taprobane were carried to different *Emporia* of India.† In this way the traders from Egypt might be supplied with them, and thus could finish their voyages within the year, which must have been protracted much longer if they had extended as far towards the east as is generally supposed.

FROM all this it appears to be probable, that Ptolemy derived the information concerning the eastern parts of India, upon which he founds his calculations, not so much from any direct and regular intercourse between Egypt and these countries, as from the reports of a few adventurers, whom an enterprising spirit, or the love of gain, prompted to proceed beyond the usual limits of navigation.

THOUGH, from the age of Ptolemy, the trade with India continued to be carried on in its former channel, and both Rome, the ancient capital of the empire, and Constantinople, the new seat of government, were supplied with the precious commodities of that country by the merchants of Alexandria, yet, until the reign of the Em-

\* Perip. Mar. Erythr. 34.

† Lib. ii. 124. B.

peror Justinian, we have no new information concerning the intercourse with the East by sea, or the progress which was made in the discovery of its remote regions. Under Justinian, Cosmas, an Egyptian merchant, in the course of his traffic, made some voyages to India, whence he acquired the surname of Indicopleustes; but afterwards, by a transition not uncommon in that superstitious age, he renounced all the concerns of this life, and assumed the monastic character. In the solitude and leisure of a cell, he composed several works, one of which, dignified by him with the name of *Christian Topography*, has reached us. The main design of it is to combat the opinion of those philosophers who assert the earth to be of a spherical figure, and to prove that it is an oblong plane, of twelve thousand miles in length from east to west, and of six thousand miles in breadth from north to south, surrounded by high walls, covered by the firmament as with a canopy or vault; that the vicissitude of day and night was occasioned by a mountain of prodigious height, situated in the extremities of the north, round which the sun moved; that when it appeared on one side of this mountain, the earth was illuminated; when concealed on the other side, the earth was left involved in darkness.\* But amidst those wild reveries, more suited to the credulity of his new profession than to the sound sense characteristic of that in which

---

\* Cosmas, ap. Montfaucon Collect. Patrum, ii. 113, &c. 138.

SECT.  
II.

he was formerly engaged, Cosmas seems to relate what he himself had observed in his travels, or what he had learned from others, with great simplicity and regard for truth.

HE appears to have been well acquainted with the west coast of the Indian peninsula, and names several places situated upon it; he describes it as the chief seat of the pepper trade, and mentions Male, in particular, as one of the most frequented ports on that account.\* From Male, it is probable that this side of the continent has derived its modern name of Malabar; and the cluster of islands contiguous to it, that of the Maldives. From him too we learn, that the island of Taprobane, which he supposes to lie at an equal distance from the Persian Gulf on the west, and the country of the Sinæ on the east, had become, in consequence of this commodious situation, a great staple of trade; that into it were imported the silk of the Sinæ, and the precious spices of the eastern countries, which were conveyed thence to all parts of India, to Persia, and to the Arabian Gulf. To this island he gives the name of Sielediba,† nearly the same with that of Selandib, or Serendib, by which it is still known all over the East.

To Cosmas we are also indebted for the first information of a new rival to the Romans in trade having appeared in the Indian seas. The Per-

\* Cosm. lib. ii. p. 138. lib. xi. 337.

† Lib. xi. 336.



sians, after having overturned the empire of the Parthians, and re-established the line of their ancient monarchs, seem to have surmounted entirely the aversion of their ancestors to maritime exertion, and made early and vigorous efforts in order to acquire a share in the lucrative commerce with India. All its considerable ports were frequented by traders from Persia, who, in return for some productions of their own country in request among the Indians, received the precious commodities, which they conveyed up the Persian Gulf, and by means of the great rivers Euphrates and Tigris, distributed them through every province of their empire. As the voyage from Persia to India was much shorter than that from Egypt, and attended with less expense and danger, the intercourse between the two countries increased rapidly. A circumstance is mentioned by Cosmas which is a striking proof of this:—In most of the cities of any note in India he found Christian churches established, in which the functions of religion were performed by priests ordained by the Archbishop of Seleucia, the capital of the Persian empire, and who continued subject to his jurisdiction.\* India appears to have been more thoroughly explored at this period than it was in the age of Ptolemy, and a greater number of strangers seem to have been settled there. It is remarkable, however, that according to the account of Cosmas, none of these strangers were accustomed to visit the eastern regions

---

\* Cosm. lib. iii. 178.

SECT. II. of Asia, but rested satisfied with receiving their silk, their spices, and other valuable productions, as they were imported into Ceylon, and conveyed thence to the various marts of India.\*

THE frequency of open hostilities between the emperors of Constantinople and the monarchs of Persia, together with the increasing rivalship of their subjects in the trade with India, gave rise to an event which produced a considerable change in the nature of that commerce. As the use of silk, both in dress and furniture, became gradually more general in the court of the Greek emperors, who imitated and surpassed the sovereigns of Asia in splendour and magnificence; and as China, in which, according to the concurring testimony of Oriental writers, the culture of silk was originally known,† still continued to be the only country which produced that valuable commodity; the Persians, improving the advantages which their situation gave them over the merchants from the Arabian Gulf, supplanted them in all the marts of India to which silk was brought by sea from the East. Having it likewise in their power to molest or to cut off the caravans, which, in order to procure a supply for the Greek empire, travelled by land to China through the northern provinces of their kingdom, they entirely engrossed that branch of commerce. Constantinople was obliged to depend on the rival power for an article which

\* Lib. xi. 337. † Herbelot, Biblioth. Orient. art. *Harir*.

luxury viewed and desired as essential to elegance. The Persians, with the usual rapacity of monopolists, raised the price of silk to such an exorbitant height,\* that Justinian, eager not only to obtain a full and certain supply of a commodity which was become of indispensable use, but solicitous to deliver the commerce of his subjects from the exactions of his enemies, endeavoured, by means of his ally, the Christian monarch of Abyssinia, to wrest some portion of the silk trade from the Persians. In this attempt he failed; but when he least expected it, he, by an unforeseen event, attained, in some measure, the object which he had in view. Two Persian monks having been employed as missionaries in some of the Christian churches, which were established (as we are informed by Cosmas) in different parts of India, had penetrated into the country of the Seres, or China. There they observed the labours of the silk-worm, and became acquainted with all the arts of man in working up its productions into such a variety of elegant fabrics. The prospect of gain, or perhaps an indignant zeal excited by seeing this lucrative branch of commerce engrossed by unbelieving nations, prompted them to repair to Constantinople. There they explained to the Emperor the origin of silk, as well as the various modes of preparing and manufacturing it, mysteries hitherto unknown, or very imperfectly understood in Europe; and encouraged by

A. D. 55.

\* Procop. Hist. Arcan. c. 25.

SECT.  
II.

his liberal promises, they undertook to bring to the capital a sufficient number of those wonderful insects, to whose labours man is so much indebted. This they accomplished by conveying the eggs of the silk-worm in a hollow cane. They were hatched by the heat of a dunghill, fed with the leaves of a wild mulberry-tree, and they multiplied and worked in the same manner as in those climates where they first became objects of human attention and care.\* Vast numbers of these insects were soon reared in different parts of Greece, particularly in the Peloponnesus. Sicily afterwards undertook to breed silk-worms with equal success, and was imitated from time to time in several towns of Italy. In all these places, extensive manufactures were established and carried on with silk of domestic production. The demand for silk from the East diminished of course; the subjects of the Greek emperors were no longer obliged to have recourse to the Persians for a supply of it, and a considerable change took place in the nature of the commercial intercourse between Europe and India.†

---

\*.Procop. de Bello Gothic. lib. iv. c. 17.

† See NOTE XXXVI.