

the arm, and two in the hand. The usual time of stopping under water is from fifty seconds to two and a half minutes. Much has been said of the danger of these fisheries, both from the shark, and another enemy called the Mantá, which crushes its victim. 'But the shark is ever a coward; and so little of a match for an expert diver with a knife, that an accident is hardly known.'

Many individuals in Panamá have made it their occupation for years to collect, in this way, pearls for the formation of necklaces: some of which, after continued changing and labour, are certainly of the most perfect symmetry. But their price is not reckoned according to the marketable value of such articles, but according to the trouble which may have been bestowed in collecting and assorting them; and thus they are often dearer on the spot than in London. Some time ago a diving-bell was sent out by an English company for pearl fishing, but it did not answer their expectation, and several causes may be assigned for its failure. The first and primary was the enormous expense at which the concern was fitted out and supported; after which it was found, that the oysters did not lie in banks, as is generally the case, but were dispersed under rocks and in uneven ground: and that a peculiar ground-swell and motion under the water, with a very strong current, made it almost impossible to place the bell in safety, and to advantage.

IX.—*Memoir on the Voyage of his Majesty's ship Blonde in the Black Sea.* By the Rev. Edmund Goodenough, D.D., F.R.S., &c. Read 28th March, 1831.

OF all the waters of the deep which have been penetrated by the enterprise of British sailors, there are none so little known to us, by actual observation, as the Black Sea. Although it appears, by a memorial presented to the Turkish government on the 1st of September, 1799, by Mr. John Spencer Smith, that both in the times of Queen Elizabeth and of Charles II.*, British merchantmen were permitted to navigate the Euxine throughout its whole extent, for the purposes of commerce; yet the most copious naval histories of our country do not afford a single instance of a ship of war, antecedent to the short excursion made by his Majesty's ship *Blonde*, in November, 1829, having been permitted to navigate the Euxine; and even the multifarious record of the valuable old *Purchas* affords us only two instances (which were pointed out to me by my friend Mr. Barrow) of Englishmen having traversed any

* See Appendix to Dr. Clarke's Travels.

portion of this sea. The one is of 'Master John Newberie,' who embarked at Tarrapea (Therapia) on the 6th of April, 1582; was for some days in the harbour of Siseboli, into which he was driven by stress of weather; anchored again under Cape Emineh; passed Varna, and 'a castle called Caliacca, which standeth upon a cape of land,' manifestly what is called Calagriah upon our charts; and finally entered the Danube by the mouth called Licostoma, where they had only eight feet water; and so proceeded into the interior of the country. The narrative of his voyage is altogether barren of geographical or other useful remarks.

The other instance is that of Captain John Smith, a military adventurer, about the year 1596, whose history is curiously tinged with the romantic spirit of the times. Having been taken prisoner by the Turks, in a victory they obtained against the Christians, and being recognized by his armour as a person of some consideration, he was sold in the market to a bashaw, who sent him to Constantinople, 'as a present to his fair mistress,' for a slave. Upon conversing with him, and trying him in several languages, and finding that he was an Englishman, and a man of various information, 'she took much compassion on him,' but not so as to put him into the dangerous predicament of becoming enamoured of his person; for we are told, that 'having no use for him, lest her mother should sell him, she sent him to her brother, the Tymor bashaw of Nalbrits, in the country of Cambrya in Tartaria;' so he went by land to Varna, and from thence across the Black Sea to the two capes of Taur and Pergillo, the former of which we may suppose, from its name, to have been in the Crimea, and thus extended his adventures into Tartary. Under these circumstances he cannot be expected to give us any great information respecting the sea he crossed; but still we shall have occasion to refer again to his account for one peculiar fact of which he was a witness.

Such, therefore, being the paucity of British adventure in this sea, it may not be deemed improper to put the fact of the Blonde's voyage, which forms so unique a feature in our naval annals, into some more durable shape than that afforded by the daily journals. From the prevalence, indeed, of the plague, and consequent necessity of quarantine wherever she touched, together with the jealousy of the local Russian authorities, who seem to have been sufficiently alarmed at the apparition of this unaccustomed stranger, the account of her voyage presents us with little or nothing of discovery, or interesting adventure; and, in the absence of such exciting topics, I may perhaps be the more readily excused, if I combine with the subject a brief notice of some of the opinions, transactions, and settlements of the ancients, in this sea. Although of comparatively small importance in modern European history, it

was to them a place of much resort, the scene of some of the earliest adventures of their poetical history, an ample field for their favourite practice of colonization, and the emporium from which they procured many of the luxuries and necessaries of life.

Neither the barbarians of the western or northern shores, nor the Asiatic potentates on its southern and eastern banks, could exercise dominion over the Euxine; yet they who have held Constantinople and its canal have at all times, from their geographical position, possessed the greatest influence over its navigation and commerce; and although this very position, and the facility which it afforded of exacting tribute from foreign merchants, have sometimes exposed the city to hostile attacks, yet it has much more frequently, from the same cause, been the object of courteous attention on the part of foreign powers, even when, as at present, the military character of its inhabitants may have sunk below mediocrity. Byzantium, says Polybius, writing about one hundred and fifty years* before Christ, occupies a position as remarkable for its excellence in regard to the sea, as for its badness in respect to the land; and without her will no merchant can sail either to or from the Euxine. The Byzantines are therefore masters of that branch of commerce; and it is through them that the articles, for the supply of which the Euxine is celebrated, are brought into the markets of the Mediterranean; and these he states to be *cattle* † and slaves of the best description, honey, wax, and salt fish. The trade in corn does not appear to have been then, as now, one exclusively of export from the Black Sea; but alternately of import and export, according, no doubt, to the seasons, and the state of demand under the various latitudes. In a fragment of Polybius, quoted by Athenæus (lib. vi. cap. 21.), we find mention again made of the export of salt fish from the Euxine. It was one of the foreign luxuries introduced at Rome which drew down the indignation of Cato the censor, who complained that the Roman citizens would purchase a jar or small barrel of the salted or pickled fish of the Euxine, perhaps our caviare among the rest, at the price of three hundred drachms (something under 10*l.*), and comely youths for slaves at a cost greater than that of an estate.

* His birth could not be earlier than B.C., 210, and his death could not be before the year 129 B.C. He died of a fall from his horse at eighty-two, and appears to have written within the last twenty years of his life.—See *Clinton's Fasti Hellenici*, vol. ii., p. 119.

† *Θεσμματα* and not *δίσματα* is asserted to be the true reading in this passage (lib. iv. cap. 38); and if so, *hides* are not to be reckoned (as they have been by Falconer and others) among the ancient exports, although they are among the modern. Honey and wax are still produced in abundance, and form articles of export as well from the neighbourhood of Trebizond, where Xenophon describes the dangerous effect produced by the honey upon his soldiers, as from Taganrog within the Sea of Azof.—See *Travels by Thomas M'Gill*, 12mo. vol. i. pp. 210, 212.

Many anecdotes, indeed, that rival the wit and *gout* even of the celebrated *Almanach des Gourmands*, may be found in Athenæus, with regard to the salt fish and the tunny of the Euxine; where Archestratus, who made a gastronomic tour of the world*, is made to tell his brother epicures, in the Homeric vein, that, dressed after a particular fashion, they are—

ἀθανάτοισι θεοῖσι φῶν τε καὶ εἶδος ὁμοῖαι·

And, to be serious, the constant recurrence of the figure of a fish on the coins of the Greek cities on this sea †, as well as of a fish-hook on those of Byzantium, is sufficient to show us what a value was set upon this source of wealth.

Under these circumstances, Polybius continues, the Byzantines are looked upon as public benefactors; and not only do they experience the gratitude of Greece, but should danger threaten them from the barbarians, they would with just reason be publicly benefited by her aid. It is singular to observe how something, at the present hour, of the same political feeling towards the possessors of Constantinople, has operated to the preservation of the Turkish empire, so foreign to all the nations of Europe both in religion and in habits. Were it not for their holding the key of the Euxine, and the difficulties that for ever occur in the way of its passing into other hands, they would doubtless have been before now swept from the list of European powers; and, in point of fact, it was the interest that the leading states of Europe could not but take in the affairs of Turkey, that brought our frigate into the harbour of Constantinople, and thence into a sea at other times so constantly sealed against the admission of ships of war.

It was on the 9th of November, 1829, that the Blonde frigate, under the command of Captain Lyons, sailed from Constantinople for the Black Sea, with the permission of the Turkish government. She appears immediately to have experienced the weather so frequently described by the ancient writers to the discredit of this sea, and which probably, as well as the reported cannibalism of its northern Scythian hordes, procured for it the name of ἄξενος, or inhospitable. Ovid baldly enough remarks—

‘Frigida me cohibent *Euxini* littora Ponti
Dictus ab antiquis *Arenus* ille fuit.’

Having had a fair wind, says the master, on the 9th, on the 10th we were taken aback with fresh winds from the northward, accompanied with rain and thick weather. It was doubtless by such a rebuff as this, that the *Argo* in ancient days, or the wretched craft

* ὁ περιπλῆυσας τὴν οἰκουμένην τῆς γαστροδὸς ἕνεκα, &c.—*Athen.* lib. iii. p. 116, f.

† Many such engravings of coins may be seen in Guthrie's *Taurida*.

of the modern Turks, would have been thrown upon those terrors of antiquity the Cyanean* rocks, or Symplegades, in spite of all the aid they might invoke from Jupiter *Urius*, the god of fair winds, whose temple stood upon the Asiatic Cape. But although these rocks could present no danger to a British vessel of any description, there are still some other points in connexion with the ancient opinions respecting this sea which it will be worth our while to examine at its very entrance.

It is remarkable that Polybius, an historian and geographer of no small experience and ability, and one who prided himself upon taking his facts from actual observation rather than from report, hazards the prediction that the Euxine was destined to be choked up, and to become unfit for navigation, if not absolutely dry land; and that too not at a remote or indefinite period, but speedily (*ταχέως*) after the time at which he wrote. The manner in which he arrives at this conclusion is sufficiently curious. Whenever, he says, an infinite cause operates upon a finite object, however small may be the action of the cause, it must at last prevail. Now, the basin of the Black Sea is finite, while the time during which the rivers flow into it, either directly or through the Sea of Azof, bringing with them their alluvial deposit, is infinite; and should it only, therefore, be a little that they bring, the result described must ultimately come to pass. But when we consider how great the accumulation is from the numerous streams that empty themselves into this basin—that is, how powerful and active is the operation of the cause—then it is manifest that not only at some indefinite time, but *speedily*, what has been said will come to pass. He then strengthens his position so assumed, by stating, that according to all tradition, the Palus Mæotis, having been formerly a salt sea, conjoined, as it were, in the same basin (*σύρρηος*) with the Euxine, had then become a fresh water lake, of no greater depth of water than from five to seven fathoms, and no longer, therefore, navigable for large ships without the assistance of a pilot; and he further instances, as an evidence of the progress of his cause, the great bank (*ραβία*) which appears in his time to have existed off the mouths of the Danube, of which we shall afterwards have occasion to speak.

Now, without going back to the question of the flood of Deucalion, or the supposed bursting of the waters through the canal of Constantinople, and the consequent lowering of all above it, we may remark, that with regard to the Palus Mæotis, or Sea

* Olivier, who was on this spot at the close of the eighteenth century, observing on the volcanic appearances in the neighbourhood, says that he found a considerable quantity of a bluish trap, coloured by copper. 'C'est cette dernière sans doute qui a fait donner par les anciens le nom d'isles Cyanées,' &c.—*Voyage dans l'Empire Ottoman*, &c. tome i, p. 122.

of Azof, it certainly appears, from the statement of Captain Jones of the Royal Navy, who was at Taganrog in 1823, that in the neighbourhood of that place—that is, near the mouth of the Don—the water is exceedingly shallow, varying from ten to three feet, according to the direction of the wind; and that although in south-west winds, when the water is highest, it becomes brackish, yet at other times it is drinkable, though of a sweet, and by no means refreshing, flavour*. But upon casting our eyes upon our modern charts, especially upon that complete and excellent one constructed at Paris in 1822, and corrected by observations made in 1820 by M. Gaultier, captain in the French naval service, M. Benoist, of the hydrographical department, and others (for the use of which, as well as of the remarks of Mr. James Turton, the master of the *Blonde*, I am indebted to the liberal kindness of the Admiralty), we are immediately struck with the fact, that all over the rest of the Sea of Azof, the soundings vary from forty French feet in the centre, to an average, perhaps, of seventeen or eighteen close in with the shore; so that in the space of nearly two thousand years, no approximation whatever has been made to that entire choking even of the *Palus Mæotis* which Polybius so confidently and so speedily anticipated, while Captain Jones expressly assures us, that, upon strict inquiry, he ascertained there was not the slightest foundation for the favourite theory of the diminution of the waters of the Sea of Azof†.

In the Cimmerian Bosphorus indeed, the strait leading from the Sea of Azof into the Black Sea, the water is shallow, as it was in the days of Polybius, and as it may always be expected to remain, from the crookedness and extreme intricacy of the passage, which prevents the fair rush of the stream from the northward, and thereby favours the accumulation of deposit. The soundings, in the shallowest part of this, are as low as thirteen French feet; but as soon as we get into the part of the passage which opens into the Euxine, we find the soundings deepening from four fathoms French gradually to twenty or more, when we reach the open water; and although, on the eastern side of the channel, the soundings are on mud, yet they change in the course of five miles to sand and mud, and afterwards rapidly to shells; while down the middle of the passage they are continually upon shells, or sand and shells,—in either case affording a pretty convincing proof that no accumulation is going on in the passage, but that even there, with all its disadvantages, the rush of water from the less sea to the greater is sufficient to keep its own channel clear, and to obviate the inconvenience Polybius apprehended.

But if we look to the southern portion of the Euxine, and the entrance into the Thracian Bosphorus or canal of Constantinople,

* Jones's Travels, vol. ii. p. 143.

† *Ib.* vol. ii. p. 145.

we there find a depth of forty-eight fathoms French immediately off its opening, and an equal or greater depth all around, with a bottom of *sand* and *shells*, except on the coast trending towards the north-west and the mouths of the Danube, where the bottom is indeed mud, but the soundings are from forty-five to fifty-five fathoms; while at a distance of about thirty-six miles from the opening, the soundings are marked at one hundred and sixty fathoms, and *no bottom*, upon the French chart; and in the track of the Blonde it appears she sounded in thirty-five fathoms in the mouth of the channel, in fifty fathoms at eighteen miles north-east of the opening, and afterwards six times in her run to Sebastopol with one hundred, one hundred and twenty, and one hundred and forty fathoms of line, and found no bottom,—the last of these soundings being only sixteen miles from the lighthouse on the point of land before making the harbour.

It must fully appear, therefore, that however plausible may be the theory of Polybius, his melancholy anticipation is in no assignable degree likely to be realized in any imaginable time; but that the depth of the Euxine itself, and the constant and vigorous rush of water through the comparatively straight, narrow, and deep passage of Constantinople, even though the surface water may there sometimes be found, in strong southerly winds, to set a little to the northward (as was actually experienced by our enterprising countryman Dr. Clarke, as well as observed by the master of the Blonde), will always be sufficient to contain, or rather to carry off, any deposit however large, which the Danube, the vent of so large a portion of Europe, or the Phasis, the Halys, and other Asiatic streams, or the mighty rivers of the north, can bring down from the countries through which they flow.

The notion, indeed, so confidently stated by Polybius, was not in his own time altogether new. We find recorded in Strabo* the opinion of Strato of Lampsacus to the same effect, who died two hundred and seventy years before Christ, and therefore wrote about one hundred years before Polybius. He says indeed more: that the Euxine is very shallow†; that it was then filling up with mud from the deposit of the rivers; that its water was perfectly fresh‡; that it would shortly be choked up; and that its western side was already nearly in that state. M. Gosselin seems to be of opinion that Polybius derived his facts and inferences altogether from this passage of Strato; but although we cannot pretend to say that he was wholly ignorant of it, since it remained to the days of Strabo§, who wrote long after Polybius, and are of neces-

* Lib. i. pp. 49, 50.

† βραχύτατα μὲν εἶναι τὰ περὶ τὸν Πόντον. . . . ἴλυσι πληροῦσθαι.

‡ γλυκυτάτην εἶναι τὴν Παντικὴν Θάλασσαν.

§ See Mr. Fynes Clinton's elaborate and accurate examination of the date of

sity struck by the resemblance, yet with a writer of so high a character as Polybius, we must necessarily demur to an opinion which goes so far to impugn his general authority, since we find that he makes no mention at all of Strato's name; that he altogether disclaims having taken up his ideas from the tales of voyagers*, and asserts that he has derived them from a careful investigation of natural causes only†.

It is not a little surprising to observe that Dr. Clarke has given this surmise apparently as his own, deducing his inference chiefly from the shallows prevailing about Taganrog, and the mouth of the Don. 'From all this,' he says, 'it may not be unreasonable to conclude, that both the Black Sea and the Sea of Azof, by the diminution their waters hourly sustain, will at some future period become a series of marsh lands, intersected only by the course and junction of the rivers flowing into them!' Now as he professes to have diligently examined, and greatly extols the accuracy of Strabo, particularly in his description of the coasts of the Crimea, it is hardly to be supposed that the passage in question should have escaped his observation, even if he should not have been aware of that of Polybius; and we can only imagine that, finding in his notes a memorandum to this effect, which had been originally inserted in order to recall the passage of Strabo to his recollection, he had forgotten, at the moment of writing, from whence he had derived the hint, and accordingly worked it up inadvertently as a suggestion of his own. His own voyage, at least, from Odessa to Constantinople, and the terrific sea he encountered in the deep waters of the Euxine, might have sufficed to show him that this ancient prophecy was as far as ever from its accomplishment.

To return, however, to our British frigate: on the 13th of November she arrived at Sebastopol, and remained there for the best part of four days; but, partly owing to the quarantine; partly to the jealousy of the Russian authorities, who would barely allow Captain Lyons to pull up the inner harbour in his boat attended by one of the boats of the Russian admiral; and partly from the state of the weather (for it snowed hard during nearly the whole of her stay), little or nothing could be accomplished either in the way of observation or discovery. That, however, is perhaps the less to be regretted, because Sebastopol and the adjacent country was a scene on which Dr. Clarke had bestowed his most particular attention, aided by the talents and experience of Professor Pallas; and because Captain Jones has given us a very copious and exact account of everything belonging to its modern appearance and

Strabo's birth, &c., which he places at from sixty to fifty-four years before Christ, in the second volume of his *Fasti Hellenici*, pp. 552, 3, and 4.

* ἐξ ἐμπορικῶν διηγημάτων.

† ἐκ τῆς κατὰ φύσιν θεωρίας, ἧς ἀκριβεστέρων εὐρεῖν οὐ βῆδιον.

condition ; and while we touch, therefore, upon some few points mentioned by them, we cannot but refer the reader to the more extended discussion and greater store of information contained in their respective works.

The harbour is described by the master of the *Blonde* as being one of the finest in the world ; so far guarded by nature from attack, that there is a reef of rocks on either side of the entrance, with a sunken rock nearly mid-channel, on which is a floating beacon with a flag, as well as on the outer edge of the reef on the southern side of the entrance. Dr. Clarke's chart gives no indication of the sunken rock, which may not, probably, at the period of his visit have been so clearly pointed out by the beacon. By the aid of these beacons the frigate had no difficulty in making her way into the outer harbour, being further assisted in the operation by two lighthouses on the eastern shore, which, brought into one, are the sailing mark for the proper channel. But not being permitted to penetrate any further, she dropped her anchor in nine fathoms water, with a muddy bottom.

With regard to artificial defences, there are many considerable forts which guard the several points of approach, some of which are in decay, while others have been lately repaired and strengthened by the labour of the Turkish prisoners in the late war. Sebastopol itself is exclusively dedicated to the service of the Russian navy, and no other vessels are permitted to enter it except under circumstances of distress : a restriction which existed at the period when the late lamented Bishop Heber visited this port ; and he was informed that it had been occasioned by the peculation of the government officers, who had sold the stores of which they had the custody to the merchants who visited the harbour ; a statement which is also confirmed by the authority of Captain Jones*.

The outward harbour, in which the *Blonde* was moored, is directly exposed to the north-west and west winds, although the heaviness of the sea may in some degree be broken by the reefs at its entrance. Opening from it on the southern side are several bays, and among them the Quarantine Harbour, a wretched establishment, but sheltered from every wind ; and further on to the eastward, the inner harbour, which is also completely sheltered, sloping to the south-west, with eight fathoms water at its entrance, and seven and six fathoms off the arsenal and town upon its western shore. It is four or five miles long, and navigable for first-rate men-of-war for more than half that distance : but it has no docks, and the ships appeared to be suffering materially for want of repair. This may probably be owing to the depredations of the worm

* Vol. ii. p. 252.

called the *Teredo navalis*, or *Calamitas navium*, which Madame Guthrie, who visited Sebastopol in 1795, tells us seemed here to have taken up its favourite abode*. It was up this harbour that Dr. Clarke proceeded in search of antiquities, and he makes the whole of the roads and harbour together to be the *Ctenus* of Strabo, which, from the northern side, meeting the harbour of Balaclava, the ancient *Symbolorum Portus* on the southern†, made what was called the smaller or *Heracleotic Chersonese*, as part of the greater *Chersonesus Taurica* or *Crimea*. It contained within it the cities of *Chersonesus old and new*, of which Dr. Clarke observed that some ruins still remained. They were much more considerable when the Russians first obtained possession of the *Crimea*; the gates even of the town being then in existence; but were speedily destroyed by the use of these ancient materials in the modern buildings. It contained, too, the celebrated *Temple of Diana* on one of two or three promontories in that part of the world, which were all called *Parthenium*, after that goddess; the remains of which name are still to be found in *Parthenit*, on the south-east side of the *Crimea*: all no doubt commemorative of the story of *Iphigenia*, and of the former barbarity of the inhabitants, before a greater degree of civilization and refinement was introduced by the Greeks, as denoted by the inhuman sacrifices attributed to the worship of the goddess. The *Chersonese* was called *Heracleotic*, as well as its town, from having been colonized and built by the people of *Heraclea*, on the southern shore of the *Euxine*. Under the Turks it obtained the name of *Aktiar*, it is said, from its white rocks; and the name of *Sebastopol*, though it sounds of ancient derivation, was not given to it till the reign of the *Empress Cathariné*: a name, we should be disposed to say, singularly ill chosen, because it tends to root out the ancient appellation of the town and district of *Chersonesus*, and may cause some confusion in geography between this place and the real *Sebastopolis* of *Arrian* and others, which, like *Cæsarea* or *Augusta*, was evidently so called from *σεβαστος*, signifying *Augustus*, and therefore an ordinary appellation of the Roman emperors. This real *Sebastopol* was on the *Asiatic coast*, about two-thirds of a degree north of the river *Phasis*, and was still more anciently called *Dioscourias*, from *Castor* and *Pollux* the *Dioscuri*; the memory of which most ancient name is still preserved in the present appellation of *Iskouriah*. There was a time, indeed, when this ancient *Sebastopol*, or *Dioscourias*, was accounted to be part of *Europe* rather

* Guthrie's *Taurida*, p. 91.

† The appellation of *Sinus Portuosus*, found in *Pomponius Mela*, lib. ii. cap. i. § 3, would in sense appear to accord well with the harbour of *Sebastopol*, and has therefore sometimes been identified with it; but the position he assigns to it between *Cape Aia* and the next point to the westward can only accord with *Balaclava*, which is truly *καλὸς λιμὴν*, et *promontoriis duobus includitur*.

than of Asia : for although the Tanais has been long, by common consent, deemed to be the boundary of these two quarters of the globe, we learn from Arrian, as we indeed had before heard from Herodotus*, who clearly adopts the opinion, that the Phasis was once considered in that light ; and this ancient point of geography has been the means of preserving to us a fragment of a lost play of Æschylus †, the Prometheus Released (the sequel of the drama that has come down to us, the Prometheus Bound), which Arrian quotes in order to prove his assertion. The Titans are made to say to Prometheus, ‘ We are come,

τοὺς σοὺς ἄθλους τούτους, Προμηθεῦ,
 δεισμού τε πάδος τοῦδ' ἐποψόμενοι,

and then, in relating what countries they have traversed in their course, they specify

τῆς μὲν διδύμου χθονὸς, Εὐρώπης
 μεγάλης τ' Ἀσίας τεύχμονα Φάσιν ‡.

This true Sebastopol, or Dioscurias, was also a place of the greatest consequence to the commerce of the ancient world, inasmuch as it was the great port from which the produce of the countries in the neighbourhood of Caucasus, and of India itself, was shipped for Europe : and so great was the concourse of merchants there assembled, and so various their tongues, that we are told by Pliny§ the Romans maintained in that city no less than one hundred and thirty interpreters, to facilitate the progress of their traffic with the people of three hundred nations. We cannot, perhaps, better illustrate the facility of mistake between the two Sebastopols, than by saying that Captain Jones has inadvertently applied this statement to the Sebastopol of the Crimea||.

But although Arrian gives us much information upon the locality of places on the south and eastern side of the Euxine, it is

* Melpomene, c. 45.

† As Æschylus and Herodotus were so near each other in point of time, we may infer that this opinion was the common one of their day. It is rather a curious point of chronology, with respect to some of the principal authors who have come down to us, that at the battle of Salamis, B. C. 480, Æschylus was forty-five years old, fought in it as he did at Marathon, and describes it in his Persæ ; Pindar was thirty-eight ; Sophocles was twenty-five ; Herodotus was four ; and Euripides was born on the very day.

‡ I have adopted this emendation of the words of Arrian, which cannot be reconciled with the metre,

τῆ μὲν διδύμου χθονὸς Εὐρώπης
 μέγαν τῆ δ' Ἀσίας τεύχμονα Φάσιν,

from Bp. Blomfield's preface to the Persæ of Æschylus, p. xv., where he points out another geographical fragment of the same play in Strabo.

§ Urbe Colchorum Dioscuriade, juxta fluvium Anthemunta, nunc deserta: quondam adeo clara, ut Timosthenes in eam ccc nationes, quæ dissimilibus linguis uterentur, descendere prodiderit: et postea a nostris cxxx interpretibus negotia ibi gesta.— Plin. lib. vi. cap. 5.

|| Vol. ii. p. 252.

remarkable that he says comparatively little of the country about the modern Sebastopol. From the canal of Constantinople, all the way to Dioscourias, he is copious and exact in giving the names and distances of all the towns, headlands, and rivers on the Asiatic coast; but in going round the northern shores, his intervals become greater, and his measurements less attended to; so much so, as to give great colour to the supposition that this part of his Periplus was not undertaken by himself in person, but that his information, addressed to the Emperor Hadrian, was gathered from such reports as he could obtain from those who asserted their acquaintance with the coast. After leaving Pantacapæum, near the mouth of the Cimmerian Bosphorus, he gives us the names in succession of Cazeca (Καζέικα,) and of Theodosia, an ancient Greek city of the Ionian race, a colony from Miletus the fruitful parent of more than eighty cities of great celebrity in the ancient world, but even in Arrian's time, about one hundred and thirty years, that is, after our Saviour, ruined and deserted.

It is generally considered that the modern Caffa stands on or near the site of the ancient Theodosia, which was the boundary between the possessions of the kings of Bosphorus and those of Chersonesus, and a place of vast importance to ancient commerce, as well as to the Genoese, in their occupation of these shores, by whom it was called Krim-Stamboul, or the Constantinople of the Crimea. But Bishop Heber remarks, that after many days search, he could find no vestige on which he could rely as having belonged to the ancient Theodosia; and Dr. Clarke, with greater temerity, expresses himself convinced that it is not at Caffa, but at Stara Crim, the ancient Cimmerium, an inland town, from which the names Krim and Crimea are evidently derived, that we are to look for Theodosia. Be that as it may, the ancient name is still preserved upon the charts, by the appellation of Theodosia given to the Cape immediately to the southward of the town. Arrian then mentions the port of the Scytho-Tauri, which Bishop Heber supposes to be Sudak, where he visited Professor Pallas in his retirement from the *malaria* of Akmetchet; and Halmitis Taurica, which appears to be confounded with Lampas, whose name is still preserved in Lampat, and the port of Symbolum, which we have before said to be Balaclava, a name which Dr. Clarke derives from the Genoese *Bella Clava*, or fair haven, which would then be the translation of *καλὸς λιμὴν*. But if he is right in calling the same place the *Παλακίον* of Strabo, it may more probably be the case that Balac, the first half of the word, is the same with the beginning of that Greek word, and that Balaclava means the harbour of *Παλακίον*. I am informed, indeed, by a Russian authority, that Balaclava has nothing to do with Genoese, but is an ancient Tartar name, and that other places, and those

upon the Caspian, are called by it as well as this : but still Παλακίον may be a Greek version of the ancient name, which the Tartars may have adopted when they became possessed of the country*.

In crossing from this place to the harbour of Sebastopol, Dr. Clarke saw the vestiges of the ancient wall which defended the isthmus of this smaller Chersonesus, and found the distance to be five miles, nearly the same which is assigned by Strabo, who supplies the deficiencies of Arrian upon this coast. For as far as Arrian's account alone is concerned, it is difficult, or rather impossible, to identify the places he thus mentions between Theodosia and Chersonesus; and the more so because he has omitted some of the most striking natural features of the coast. For instance, he does not even vouchsafe a name to the great southern headland of the Crimea, the Criû-Metopon (κριοῦ μετώπον) or Ram Head, so much spoken of by Strabo and others, which, looking across the Euxine to the promontory of Carambis, on the coast of Asia Minor, still called Kerempéh, divides it, as it were, into two parts, by a line which the imagination readily supplies between the thirty-first and thirty-second degrees of longitude; and which, in the estimation of the ancients, gave to the whole sea the shape of the Scythian bow: two points of land, indeed, so remarkable, that many navigators of Strabo's time, as he reports, affirmed that they had, in sailing between them, seen both lands to the northward and southward at once,—an affirmation which Dr. Clarke repeats, without any reference to Strabo, as a matter of fact, although he had himself been in no situation to verify it.

The distance from the one Cape to the other, measured by the compasses on the French chart, is one hundred and forty-four geographical miles, which Strabo calls two thousand five hundred stadia; and even supposing a ship therefore to be placed exactly midway, the distance from either promontory must be seventy-two geographical miles; so that for the land to be seen from the deck of a frigate at that distance, it must be three thousand five hundred feet high, according to strict computation, while some hundreds of feet more must be added to make it really and in practice visible. Major Rennell † states the distance to be one hundred and thirteen geographical miles; and adds, that 'the high land of the Crimea is visible from Carambis,' but does not give his authority for that fact. Of the height of Cape Carambis I can find no statement; and Tournefort, who so diligently traced the whole coast from Constantinople to Trebisonde, gives no estimate of it, although he mentions having doubled it, and calls it Cape Persillo. With respect to the Criû-Metopon, Dr. Clarke, who had been upon it,

* Lady Craven, in her Tour, p. 146, says, that it was before called *Cembals*, but cites no authority. Can this name have any connection with *Symbolorum Fortus*?

† Geography of Herodotus, vol. i. p. 264, 8vo.

gives no estimate of its height; but the master of the Blonde remarks, that 'coming from the south-west the land is very remarkable, forming three capes or headlands; the southernmost (Cape Aia), very high, bluff, bold-looking land, much like the North Foreland, but much higher;' and in a sketch of the coast line it is estimated at about one thousand two hundred feet—the same elevation which is assigned to it by Professor Pallas. 'The next to the northward,' the master continues, 'Cape Fiolente*, is moderately high, with three notches like steps in it, and between these two the harbour of Balaclava. The northernmost' (preserving the ancient name of Cape Kherson) 'is long and low, with a good lighthouse on it, well lighted.'

Whether, therefore, these two capes, or any land higher than themselves, which may be in the rear of Carambis especially, can actually be seen at once, we have no certain authority to determine; and we will therefore close this portion of our subject merely by remarking that the Ram's Head supplied the ancients with the same name of Criû-Metopon for the western promontory of Crete; and that in the comparison of Cape Aia with our North Foreland, we have perhaps in the name of the town of *Ramsgate* the traces of the same fancied resemblance.

On the 16th of November, the Blonde quitted the harbour of Sebastopol, and stood to the northward along the coast, on which neither tree nor bush was to be seen, till she was off the point of Koslof, which Bishop Heber visited, and calls the ancient Eupatoria, but could remember nothing interesting that he had found there.

From Koslof the land was found to be even, and moderately high to the northward, till it terminated in the low point called Cape Tarkhan, which is the westernmost point of the Crimea; from which begins the Cercinetis Sinus, still called the Gulph of Kerkinit, mentioned by both Arrian and Strabo, and leading up to the isthmus which joins the Crimea to the main-land. On this point is an excellent light, which was seen at the distance of eleven or twelve miles.

From hence the frigate stood across for the western shore, which she made near Ackermann, and then went up to Odessa; but she found the distance across to be eleven or twelve miles less than that commonly given to it upon the charts; and in sounding at twenty miles from the coast, she found twenty-two fathoms water, with a bottom of small stones and broken shells. Not even here, therefore, so close off the great estuary formed by the mouths of the Dnieper, the Bug, the Dniester, &c., finding any realization of the dreaded accumulation of alluvial deposit.

On the 17th of November, she anchored in seven fathoms water,

* Called Féling by Le Chevalier, vol. ii. p. 345.

in a bay or roads so open as to render any sailing marks unnecessary, over the whole of which the same depth of water generally prevails. During the two days of her stay the weather was thick, and the ship again under quarantine, so that observation and communication with the shore were again impracticable. The town, however, appeared from the sea to be handsomely built, and the lazaretto and other quarantine establishment far superior to that of Sebastopol*. There were no fortifications, or guns mounted, and the salute fired by the Blonde was returned by a Russian brig, the only vessel of war then at Odessa.

Arrian makes mention of a town called Odessus, somewhere in this neighbourhood, where was a harbour, and makes its distance to be one hundred and forty stadia from Olbia, near the mouth of the Borysthenes. To determine the exact site of Olbia† is not altogether so easy a task; but whether we take it to be very nearly where the modern town of Cherson was established in 1774, at the confluence of the Inguletz with the Dnieper, under an ancient name again falsely applied, and which is very commonly supposed to have been built out of the ruins of the ancient Olbia; or even go the length, which some others have gone, of placing it at Otchakoff, where the lake into which both the Dnieper and Bug empty themselves flows into the open sea, the distance from either place to the modern Odessa so greatly exceeds the distance

* There is a very good account of Odessa, in August, 1804, by J. H. Sievrac, appended to M^r Gill's Travels, vol. ii. p. 192, &c. The lazaretto was then building.

† The chief data for the site of Olbia appear to be in Herodotus, Dio Chrysostom, and Strabo. From the former, (lib. iv., cap. 17, 18, and 53) it appears, that between the Hypanis and the Borysthenes there was a point or tongue of land, *ἔμβολον τῆς χώρας*, and that upon this, near to the Hypanis, lived the Olbiopolitæ, also called Borysthenitæ; the city of Olbia and Borysthenis being one and the same place. From Dio Chrysostom's Thirty-sixth Oration it also appears, that the city of Olbia was on the Hypanis, although it derived its name from the Borysthenes; *ἢ γὰρ πόλις τὸ μὲν ὄνομα ἐλήφεν ἀπὸ τοῦ Βορυσθένους διὰ τὸ κάλλος καὶ τὸ μέγεθος τοῦ ποταμοῦ· κείται δὲ πρὸς τῷ Ῥαίνῳ*. He also describes the tongue of land under the same name with Herodotus, as being *ἔξω καὶ στερεόν, ὡσπερ ἔμβολον, περὶ δὲ συμπίστουσιν οἱ ποταμοί*. Strabo in describing it says, *πλείστασι δὲ τὸν Βορυσθίνην σαθίους διακόσιους, ὁμόνυμος τῷ ποταμῷ πόλις· τί δ' αὐτῇ καὶ Ὀλβία καλεῖται*. And in another place where he has mentioned the Borysthenes (next in order after the Tyras or Dniester, if our present text is perfect,) he adds, *καὶ πλεονάζον ἄλλος ποταμὸς Ῥαίνος*, speaking of it as close and secondary to the Borysthenes. Now, it is usual to call the Hypanis the Bug; and hence arises the difficulty of fixing the site of Olbia, because at the distance of the Bug from the Dnieper it is quite impossible that they can be said to form *ἔμβολον τῆς χώρας*, or that a city on the banks of the one could in any sense or degree be said to be on the other. But if we call the Inguletz the Hypanis, as has been done by Madame Guthrie after Peyssonnel, we have then the *ἔμβολον* formed by the junction of that river with the Dnieper, as described by Herodotus and Dio Chrysostom; and the city of Olbia placed upon it might be said to be on either river, though closer to the one than the other; and it would nearly occupy the position of Cherson, though not on precisely the same spot. We may add, that Hypanis is not an unfrequent name of a river, the Cuban having been so called, or rather now bearing the same name. And if the Bug was called Hypanis, the Inguletz may have been called so too, an idea which is perhaps strengthened by Strabo's expression of *ἄλλος ποταμὸς Ῥαίνος*. This site of Olbia agrees also with its distance from the sea according to Strabo.

assigned by Arrian, as to render it impossible that that town and this ancient Odessus can have anything in common. We have here, therefore, an additional instance of the misapplication of ancient geography under the Empress Catherine; which might lead also to confounding this ancient Odessus, mentioned by Arrian alone, with the Odessus mentioned by both Arrian and Strabo, which is far to the south of the Danube, and in fact the modern Varna.

On the afternoon of the 18th of November, the Blonde again left Odessa, and steered for the Isle of Serpents; still sounding at from ten to fifteen fathoms and more, with a bottom of stones and shells; which agrees generally with the depth and bottom marked upon the French chart. As no other island but the Isle of Serpents is now found to exist in this part of the Euxine, at any distance at least from the shore, and it is difficult, in the first instance, to suppose that one which existed in the time of Strabo and Arrian has now disappeared, it is commonly said that this is the same with the Island Leuce, or Isle of Achilles; the former of which names it obtained, as Arrian says, from its white colour, and, according to Dionysius, from the quantity of white birds by which it was frequented.

λευκήν μιν ἑπανομίην καλοῦσιν
ὄνεκα οἱ τάπειρ ἐστὶ κινώπετα, λευκὰ τέτυκται.

These birds, the Scholiast upon Pindar, who mentions this island as belonging to Achilles,—

ἐν δ' Εὐξείνῳ πελάγει
φαινετὰν Ἀχιλλεύς
ἄσσον· (sc. ἔχει.)—Nem. iv. 79.

when he is interpreting the epithet φαινετὰ to be equivalent to λευκή, says were ἐρωδιοὶ, which we commonly translate storks, from whence we have our common genus of plants, the erodium or stork's-bill; but Dr. Clarke, who refers to this passage, expressly translates the word ἐρωδιοὶ into *pelicans*—not giving, however, any authority for this opinion in ornithology. It is certain that great numbers of pelicans frequent this sea, and perhaps the mouths of the Danube, in company with both storks and cranes; but although Bishop Heber saw an immense quantity of pelicans on the Asiatic side of the Sea of Azof, upon coming into the Crimea, he remarks, 'I saw no more pelicans after landing in Europe,' though he saw plenty of bustards, cranes, and *storks*.

It may be reasonable to suppose, from putting these authorities together, that the surface of the island, as I know from my own observation to be the case in the Fair Islands, and other parts of our own coast, was, in and after the breeding season especially, the time when it was commonly seen by the ancient navigators, covered with the white dung of the countless flocks of sea-birds

that resorted to it. Arrian, indeed, assigns to these birds, which he says were of various species *, and innumerable, a very different office in connection with the name the island bore. It was a present, he says, from Thetis to her son Achilles. He had himself lived upon it; and there was here a temple erected to his honour, with a statue of ancient workmanship, where the goats, the natives of the island, were sacrificed to this demi-god, and many costly offerings adorned his shrine, with inscriptions, Greek and Latin, in various metres, addressed both to Achilles and Patroclus. The birds, he adds, are the guardians of the temple; they fly forth in the morning to the sea, where, having bedewed their plumage with its waters, they hasten back to sprinkle and to cleanse the sacred pavement with their wings!

The classical scholar is here, perhaps, reminded of the beautiful scene described in the opening of the Ion of Euripides, although, as respects the birds, it presents the reverse of the picture which Arrian describes. There we find the young Ion, the nursling of the Temple of Apollo at Delphi, employed at early dawn in sprinkling the water of Castalia, and in brushing away all impurities from the shrine with the branches of the hallowed laurel. The birds come flocking to the sacred scene from their abodes upon Parnassus; but, all poetical as may be their dwelling-place, and well-tutored as such birds of Apollo may be supposed to have been, still, it is the care of the youthful guardian of this temple to chase them from its courts and altars, under the rational apprehension that they would rather defile than purify the offerings and the holy places.

To return, however, to our subject. Arrian goes on to relate several other tales which were current in his days of the wonders of this island, in which he takes care to express his own belief, and, among others, one which shows that the ancient sailors had something of the same superstitions as those which still prevail among our seamen. Some, he says, have affirmed, that when they were off this coast, they have seen Achilles perched upon the mast-head or yard-arm, in the same way that Castor and Pollux are seen by navigators in every sea, and are hailed as the symbols of their safety. It does not, however, seem that Arrian knew much of this island of his own knowledge; for it is pretty clear that he confounds it, in some respects, with a tongue of land in the neighbourhood of the Borysthenes, and to the eastward of that river called Ἀχιλλέως δρόμος, the Course of Achilles, which Strabo, and I believe all other geographers of note, held to be altogether different from the island of Achilles, and which Pliny describes to be in the form of a sword-blade stretched across the sea. Dr.

* *λάροι καὶ αἴθουσαι καὶ πορῶναι αἱ θαλασσιαι*; making no mention of *ἰεῦδα*.

Clarke preserves a portion of an inscription found in the supposed ruins of Olbiopolis, and brought from thence by Mr. Kelsall, of Trinity College, Cambridge, which begins with the very singular title of Ἀχιλλεῖ Πονταρχῆ, to Achilles the Lord of the Sea, a title which may serve to throw some light upon the legend of his being the son of a sea-nymph: and a tongue of land near the mouth of the Borysthenes is still called Kilburn; which, as Burun signifies projecting land, (as in Aia Burun, Cape Aia, and many other places,) is clearly Achill-Burun, or Achilles Point, probably the identical δρόμος Ἀχιλλέως of antiquity. It is curious, indeed, to observe how the name of Achilles is connected with this sea; and we may venture to add to the invaluable work of Major Rennell on the Geography of Herodotus, the reason of the appellation bestowed upon the remarkable tract in question, which he says is not told*. For we call to mind that Iphigenia, to whom Achilles was affianced, or who was rather brought to Aulis under that pretext, according to Euripides, when she was rescued from the impious sacrifice, is represented to have been transported to the temple of the Taurian Diana; and we may imagine these names to have been the vestiges of the subsequent pursuit of her disappointed lover. The Scholiast, indeed, upon Pindar, in the passage to which I have before referred, distinctly gives us this tradition †; and the classical student, who has leisure to toil through the obscurities of Lycophron, will find that this pursuit on the part of Achilles is expressly mentioned by that author; that he names the island and the Dromus as two different places ‡, and says, that the hero was fated to tread the soil of Scythia, through five years of grief, in quest of his betrothed—

χ' ὁ μὲν πατήσσει χῶρον αἰάλων Σκύθην
εἰς πάντε σπου πλειῶνας, ἰμείρων λείχους.—Cassandra, 200.

Dio Chrysostom, too, in his Borysthenitic oration before cited, gives us a curious account of the inhabitants of that place, whom he visited in person, of their extraordinary attachment to the memory of Achilles, and on his account to Homer §, whose poem they all knew by heart, to the exclusion of other literature.

* Vol. i. p. 85, 8vo. ed.

† ἐπειδιώκεν ἱρῶν δ' Ἀχιλλεῖος.

‡ In the Iphig. in Taur. v. 420. Euripides appears to confound the νῆσος and δρόμος—

τὴν πολυόρνιθον ἐπ' αἶαν,
λευκὰν ἀκτῆν, Ἀχιλλῆ-
ος δρόμους καλλιῖσάδιους,
εὐξείνων κατὰ πόντον.

And in the end of the Andromache, v. 1260, Thetis is made to prophesy to Peleus—

τὸν φίλτατόν σοι παιῶν, ἐμοί τ', Ἀχιλλεῖα
ἔψυε δάμους νέοντα νησιωτικούς,
λευκῆ ἐπ' ἀκτῆν εντός Εὐξείνου πόρου.

§ ὅσπερ οὐδὲ ἄκούουσιν ἕτερα οὐδενὸς ἄλλου Σίλουσιν ἢ Ὀμήρου. καὶ τᾶλλα οὐκ εἰσι σαφῶς

With respect, however, to the identity of the Isle of Serpents with Leuce, or the island of Achilles, when we consider the expressions of various ancient writers, denoting that it was close off the northern mouth of the Danube, though fairly out in the sea; and when we find that the Isle of Serpents is in a direct line, half a degree of longitude (by the chart) from the coast as it at present exists, a coast too that, in all probability, as we shall presently have occasion to mention, has, according to the usual progress of all deltas, gained upon the sea, we cannot help hesitating in giving our assent to those who confidently state them to be the same island; and we endeavour to look for Leuce, if it still exists as an island, nearer to the shore.

Dr. Clarke, who saw the island, estimates it at near one mile in length, and less than half a mile in breadth; but, in a very few pages afterwards, he says, that, according to Philostratus, it is 'thirty stadia, or three miles and three quarters in length,' and that 'this account corresponds with its appearance,' as he saw it; although he had so recently estimated it at about a quarter of that length! He says, too, that 'a part of its history, considered by Scymnus Chius as being the most marvellous, was, that the main land could not thence be discerned, although distant only forty stadia, or five miles.' But even if this statement of what Scymnus Chius says were correct*, how, we may ask, does a distance of five miles, even supposing the coast to have remained unaltered, correspond with half a degree of longitude under the latitude of 45° 15', which must involve a distance of more than twenty-four miles?

Perhaps we ought not to lay too great stress upon the fact that the aspect of the Isle of Serpents, as represented by those on board the Blonde, is not strictly such as to entitle it to the appellation of white; being a cliff of moderate height, with the land in the centre, of a somewhat conical shape, and green; because, at the time of year when they were there, or if the birds had altogether

ἑλληνίζοντες, διὰ τὸ ἐν μέσοις οἰκεῖν τοῖς βαρβάροις, ὅμως τὴν γε Ἰλιάδα ὀλίγου (qu. δειν) πόντους ἴσασιν ἀπὸ στόματος.—Orat. xxxvi.

* The passage of Scymnus Chius is at verse 40 of the Fragments in vol. ii. of the Oxford Edition of the Geographers—

—μετ' αὐτὴν (sc. Πύκνυ) εἶτα πελάγῃα κειμένη

Ἀχιλλείως νῆσος·
ἔχει δὲ πλῆθος χειροσίδες ὀρνέων,
θῆαν θ' ἱεροσπορῆ τοῖς ἀφικνουμένοις.
οὐ δυνατὸν εἶναι ἀπὸ ταύτης χώραν ἰδεῖν
καί τις ἀπεχούσης ἀπὸ τῆς ἡπίρου σάδια
τετρακόσι'. ὡς δὴ συγγράφει Δημήτριος.

So that the distance is called four hundred stadia, instead of forty, as Dr. C. quotes it. Of Demetrius, Scymnus Chius elsewhere says—

μετὰ ταῦτα δ' ἐστ' ὁ Πόντος, οὗ δὴ τὴν θῆαν
Ὁ Καλλατιανὸς συγγράφεις Δημήτριος
ἵπικεν ἐπιμειλιεστάως πιπυυμένους.—v. 717.

forsaken the spot, the probable cause of its whiteness would have vanished with them; but, bearing in mind what we have said of the dimensions of the island, and its distance from the shore, and examining the coast nearer to the actual mouths of the river, we find the town of Kilia still existing a short way up the stream, and an older Kilia at its mouth, while the northern mouth of the Danube is called, upon the French chart, the ‘bouche Kilia;’ and as we found the memory of the *Dromus Achillis* preserved in the modern name of Kilburun, so, without any great stretch of the imagination, we may here trace the ancient name of Achillea, denoting that the real island so called was either one of those now found lying close off that mouth; or that, in the alteration of the line of coast, it may now form part of the main land, and have ceased to exist as an island at all. At all events, it is a desideratum, which has not to my knowledge been accomplished by any person competent to the task, to ascertain, by actual inspection, whether there exist or no upon the Isle of Serpents any remains at all which can be ascribed to the ancient Temple of Achilles.

After passing Serpent’s Island, which is of that degree of height as to remain in sight during a run of twelve miles only from it, the Blonde stood in towards the mouths of the Danube and the lighthouse at its principal entrance; having regular soundings still on shells and small stones, till at only three miles and a half from the lighthouse, in ten fathoms water, the strength of the breeze, accompanied by a snow-storm, compelled her to haul off to a greater distance. What then must, we ask, have become of the great bank, the *ραβία*, which Polybius describes as having been one thousand stadia long, more therefore, at least, than one hundred miles, and at one day’s sail from the mouth of the river? Upon which, he states it as a well known fact, the sailors, while they thought themselves still out at sea, very often ran aground by night, and which was familiarly called by them *σῆμα*, or the breast; as in Latin, the term *dorsum*, or the back, was applied to the same formation. It is clear, from the French chart, and from our own frigate’s track and soundings, that no vestige of it now remains in that sea. Polybius ascribes its existence to what we see continually taking place upon a small scale in a mill-stream; namely, that the impetus of the water carries out the alluvium, which it brings down from the interior of the country, to a certain distance into the sea; and that when that impetus begins to slacken, the deposit of sediment commences, and forms a bank, not continuous with the land at the mouth of the river, but at a certain distance from it, according to the propelling force of the stream. Nor is the notice of this bank confined to Polybius alone: Strabo also mentions it by the name of *σῆμα*, as a thing publicly and familiarly known to his readers; although Arrian, who enumerates the mouths

of the rivers, makes no allusion to it. We cannot doubt, then, that it did exist, and yet we can now find no traces of it; and we must either therefore suppose that the weight of water has been sufficient at some time or other to disperse this accumulation altogether, which it had before assisted to form, or that the land at the mouth of the river has so increased since Polybius and Strabo wrote, that what was in their days a bank, at a distance of thirty-five or forty miles, upon a very moderate computation for a day's sail, has now become an integral part of the continent of Europe. In the account of Captain J. Smith's voyage from Varna to the Crimea, before quoted from Purchas, he gives us a lively picture of the process by which such an event was then going on, though it does not appear exactly where. He saw what appeared like high black rocks, but which were, in fact, only trees, weeds, and mud, brought down the river, 'of which as they sailed they saw many *without sight of land*, seeming like high rocks or low islands, which are only great 'flats of osier-quagmire, where infinite heaps of trees do stick, 'and by their weight, time, and multitudes, though the boughs 'rot, the bodies they say have made many of these osier-flats firm 'land in many places.' This is from an eye-witness; and whoever looks upon the great map of the Russian dominions belonging to this society will see, that while the coast north and south of the Danube seems to show what was the original line throughout, there is a very considerable projection beyond that line all about the mouths of the river, which would appear to favour the latter supposition; but in the absence of the authority of any modern geographer or traveller who has visited the spot, it is difficult to form any certain opinion upon the subject; and we must again class the accurate solution of this question among our desiderata.

Dr. Clarke, though willing to appear conversant with the ancient authors, makes no allusion to the former existence of this bank. In one passage of his work he considers the discharge of water from the Danube as small; but, in another, he finds its colour and freshness extending above three leagues out to sea; and says again, that at one league the water was fit for use, and at five leagues and a half very little brackish; indications, one would imagine, that should have made him expunge from his work the former opinion of the smallness of the discharge of fresh water from this great drain of Europe.

On the 20th of November, the Blonde arrived at Varna, which we have before said to be the ancient Odessus of this latitude; and which was another offspring of Miletus so fruitful in colonies. She there found excellent anchorage in nine fathoms water, in a gulph easy of access, and yet sheltered from every quarter but the east and south-east; from which, however, the wind is there said never to blow home. But there was no more opportunity for observation here than at other places; and on the 23d, she proceeded on

her voyage, passing Cape Emineh, the extremity of the ancient range of Hæmus, which projects into the sea, evidently the same name with Hæmoni; which, as well as Emona, a small town or fort, once standing at the extremity of the range, retains the traces of the classical appellation of the Balkan.

Standing on from thence towards the gulph of Bourgas, she passed the town of Missembri, the ancient *Μεσημβρία* of Arrian and Strabo, &c., and which Herodotus* says was founded by the Byzantines, who, at the approach of the invading forces of Darius, fled from their native city, and took refuge in the Euxine. Arrian says, there was here a harbour, and that its distance from Cape Emineh was ninety stadia; which same space, measured upon the chart, is now about nine geographical miles. From Mesembria to Anchialus, he says, are seventy stadia more; and at seven geographical miles we now find the town of Ahiouli, preserving, no doubt, the remnant of its ancient name; and, in both instances, we have a result of ten stadia to the geographical mile, or six hundred to a degree.

At Bourgas, the frigate again anchored; but as the plague was raging there, had no communication with the shore, and only remained during a single night. From thence she passed Siseboli, the ancient Apollonia, and another colony of Miletus, where was a temple of Apollo, from which, as we learn from Pliny†, in a chapter upon ancient and colossal sculpture, Lucullus carried off to Rome a statue of the god, which he afterwards erected in the Capitol, whose height was thirty cubits, and its cost one hundred and fifty talents, or, as some read the place, five hundred talents. The modern name of Siseboli retains nothing apparently of the ancient Apollonia; but we recognize in it, without any difficulty, the traces of a name it is said by D'Anville to have borne in after times, Sozopolis. The Blonde here entered the harbour in fifteen fathoms water, where she found two Russian two-deckers, a frigate, and other vessels; but, without letting go her anchor, she proceeded on her return; and, after passing Cape Naida, she saw nothing more of the land until she again reached the Bosphorus.

The facts of her voyage are few, and of themselves uninteresting; except always that, simple as they are, they form a feature in our naval history which we cannot elsewhere find throughout its range. In the paucity, however, of our information, relative to the actual state of the shores of the Black Sea, they are worth recording; and, taken in connexion with the different periods of the Greek and Roman settlements in this sea, they cannot but possess a very considerable interest for the geographer, however imperfectly I may have succeeded in illustrating them.

* *οἰχοντο ἀπολίποντες τὴν σφετέρην, ἕως ἐς τὸν Εὐξείνιον πόντον καὶ ἐνθαῦτα πόλιν Μεσημβρίην οἰκησαν.*—Herodot. vi. 33.

† Lib. xxxiv. cap. 7.