ABT. XXI.—Account of the Discovery of New South Shetland, with observations on its importance in a Geographical, Commercial, and Political point of view: with two PLATES*. By Mr J. MIERS. Communicated by Mr Hougskin.

DURING my last visit to Santiago, to convey A- and Lady C- to Valparaiso, I employed my first leisure hours in drawing up the following paper. I shall introduce the detail in regular order, previously hinting my opinion that a large Southern Continent is about to be discovered. The existence of this continent was believed many ages since; the ancient, and many modern philosophers being fully convinced that a vast tract of land must lie within the limits of the Antarctic Circle, to which they gave the name of Terra Australis Incognita. Many were the speculations of the ingenious on this subject, but perhaps none were more highly pictured in imaginative colours than those of Maupertuis (in his Letter to the King of Prussia), who pourtrayed a continent far larger than any of those known to us, where

[.] See Plates XII, and XIII.

the inhabitants, animals, vegetables, indeed the natural productions of every description, differed from all others yet known; and also where objects for commercial traffic might be found that would exceed all the treasures of the known world. Buffon, De Brosses, Campbell, and many others whose works, at this distance from the seats of knowledge, I am unable to consult, treated the subject in lively colours; some even went so far, as to calculate the superficies of this supposed continent at 8 or 10,000,000 square leagues; an extent of territory equal to the amount of all the continents and territorial possessions yet discovered. These speculations led to expeditions of diligent enterprise; but the attempts of the most celebrated navigators, at the head of whom Captain James Cook stands most eminently distinguished for his persevering and bold efforts to determine the question, entirely failed; and all hopes were long since given up of ever being able to ascertain the truth of the old favourite notion of a Southern Thule. Captain Cook, from many reasons, detailed particularly in his description of Sandwich Land, which he conceives might be part of this supposed large continent, says *, " if any one should have resolution and perseverance enough to clear up this point, by proceeding farther to the south than I have done, I shall not envy him the honour of the discovery, but I will be bold to say that the world will not be benefited by it."

He was led to form this conclusion from the intensity of the everlasting frost; the apparent absolute barrenness of Sandwich Land, which lies in latitude 58° south; the dangerous navigation, and the abundance of ice islands about it, erroneously concluding that all land placed in a similar southern latitude must be equally inclement and unapproachable. All hopes of discovery have therefore long since been abandoned, and it will excite no little surprise to hear that a large tract of apparently habitable land has been ascertained to exist to the southward of Cape Horn, by the captain of a British merchant brig, trading between the Rio de la Plata and Chili, who has dis-

[·] Cook's Second Voyage, p. 243.

played a spirit of enterprise that would do honour to a more enlightened navigator.

Independent of any national consideration, the result of this inquiry will clear up an important question in hydrographical

and geographical science.

Mr William Smith, master of the brig Williams of Blythe, in a voyage from Buenos Ayres to Valparaiso, fancying that the passage round Cape Horn might be weathered better by preserving a more than usual southerly course, being on the 19th of February 1819 in Lat. 62° 40′ south, and Long. 60° W. imagined he saw land at the distance of 2 leagues; at that time he observed many fields of ice floating about, but so distinctly different was the appearance alluded to, that he was convinced it must be land. At this time, encountering hard gales of wind, accompanied by flying showers of snow, he thought it prudent to haul off to the northward during the night. Next day (February 20.) he again stood in for his supposed land; at noon his Latitude by observation was 62° 17′ S., Long. 60° 12' W. by an excellent chronometer; the weather was moderate, and the atmosphere clear, when he again made the land. So fine was it, that he could not mistake the appearance. Fearing the return of blowing weather, he was deterred fromapproaching nearer, and being principal owner of the brig, he was unwilling to endanger the validity of his policy of insurance, in case of meeting with any accident in his research. He observed, however, to the westward more land, which he approached to the distance of 10 miles; this, as well as the former, appeared to be an island; both at this time offered the appearance of snow only in very few places: and were almost wholly bare, barren and rocky. The air felt pleasant and temperate, with a fine clear atmosphere, and agreeable sunshine: he observed great abundance of whales and seals. In such a responsible situation with regard to his ship and cargo, he contented himself with this distant survey, and on his arrival at Valparaiso, he related every thing that he had seen to the English there, who all ridiculed the poor man for his fanciful credulity and his deceptive vision; no one, in fact, gave the least credit to his tale, all endeavouring to persuade him that what he had seen was no more than ice-islands. Mr Smith was not, however, to be thus easily laughed out of his

own observation; he is a native of Blythe in Northumberland, had been brought up in the Greenland whale-fishery; and had learned to distinguish land from icebergs; though it must be confessed that the most experienced eye is often deceived by the striking similarity. If I mistake not, I informed you thus far of the discovery, in a letter I wrote you soon after my arrival in this country. What I then learned of it was from a young man, who took his passage during this voyage. Mr Smith on his return to the River Plate in June following, was determined, if possible, to verify what he had seen: he steered in the latitude of 62° 12' S., but when he reached the longitude of 67° W. he became so beset with loose pack-ice, that he was alarmed for the safety of his ship and cargo; in a few hours he got clear, and stood off on his course, considering that all attempts in his situation, with the very short days and in the depth of winter, would be extremely indiscreet.

On his arrival at Monte Video, he was again ridiculed for his credulity: his confidence in the observations he had made was certainly shaken; but he could never be led entirely to renounce his former conclusions. On this occasion, Mr Smith conducted himself in a manner becoming an Englishman: His account reached the ears of some American merchants, who endeavoured to obtain from him the true situation of the land; they offered to charter his ship on a voyage of discovery, and to employ it in whaling, making that the apparent object of the enterprize. Copies of articles were drawn up. The Americans now endeavoured to ascertain from him the longitude and latitude of the land; but he, to his credit, refused to disclose it to any but a British born subject: he honourably offered to conduct the vessel there, and, if no land existed, to receive no freight; but that was not the object of the other party: Thus defeated in their manœuvre, the Americans withdrew their contract, and the honest Englishman determined to run the chance of waiting many months for employment of his vessel. At length, having obtained freight a second time to Chili, he set off on his voyage, and on the 15th of October last, at 6 P. M. being then about the same latitude and longitude as before, he discovered the same land, bearing S. E. by E. 3 leagues. The weather was hazy; he bore up for it, and approached within 4 miles of it, when he

proved it to be an island, or rather a large barren rock, inhabited only by innumerable penguins: he sounded, and in 40 fa-thoms found a bottom of fine black sand: he hauled in for the same island, till it bore E. by S.; having sounded when in 60 fathoms, he procured the same bottom of black sand. the night, he hauled off for security to the northward, but at day-light next morning he again stood in for the island: he could now distinguish it perfectly at the distance of 3 leagues; he sounded in 95 fathoms, and brought up fine sand and ooze. At 8 A. M. the weather being very clear, he could plainly distinguish the mainland, bearing S. S. E., the island being distant from it about 3 leagues. The mainland presented itself as a cape, to which the coast tended in a N. E. direction, having peculiar marks, of which he took rough sketches: he stood in, and ran along the land as far as the point, to which he gave the name of North Foreland, A, Pl. XII. Fig. 2. obtaining all the way regular soundings of sand and gravel, lessening gradually from 35 to 20 fathoms; the bottom was good and regular. He now hauled in for the cape, and proceeded, within 3 leagues, more easterly; the island now bearing N. W., distance 7 leagues, and observing the appearance of a good harbour, he sent a boat's crew and his first mate on shore, where they planted a board with the Union-jack, and an appropriate inscription, with three cheers, taking possession in the name of the King of Great Bri-To the mainland was given at first the name of New South Britain; but as that title, it was suggested, might lead to confusion with other places, Mr Smith changed its name to New South Shetland, on account of its lying in about the same latitude as the Shetland Islands. The coast here was barren and rocky, and from the description I could obtain from the mate, I should suspect it to be chlorite-slate or schistose hornblende. The land was high, disposed in strata, offering projecting knots, dipping westerly, the highest points being covered with snow, particularly the peak of a very lofty hill marked E. in the chart, remarkable for a large black spot mid-way up the snowy height. At the place of landing the spot was barren, being stony, not of rounded pebbles, but of bluish-grey slaty pieces, varying in size from very large to very small. The harbour appeared to pro-ceed inland as far as the eye could reach; and to afford

a good anchorage. This place, I. in the chart, he called Shireff's Cove, in honour of the Commanding Officer in the Pacific. The day drawing to a close, the boat pushed off, the master, with the most prudent views, hauling off the shore with his ship. The harbour appeared to abound with the real spermaceti whale, Physeter macrocephalus, which he says exists there in greater abundance than he imagines has ever been elsewhere known: that it was the real spermaceti whale he is certain, having himself been brought up in the whale-fishery. Seals and sea-otters abounded, as also an animal differing from the sea-otter, which I imagine may prove to be a variety of the ornithorynchus. He continued to haul off during the night to the northward, to such a distance that he could just keep the cape in sight to the southward. Next morning at day-break, he could perceive the land marked F in the chart, trend in a S. E. direction. At 11 A. M. the Foreland bore S. E. by E. 5 leagues distant. Keeping his course to southward and westward, still preserving the mainland in view, the several other islands called Nelson's Isles, H, all appeared to be distant from it about 3 leagues. The islands were all alike barren and rocky. To one of the largest, marked G in the chart, he gave the name of Lloyd's Island; the mainland, however, was very considerably higher. The wind chan-ging to the eastward, attended with thick squalls of snow, he thought it prudent (always having the safety of his cargo as his primary consideration) to haul off. The weather moderating, he made the point of land which he called Cape Williams, C; at that time the atmosphere was quite clear, and with a telescope he could most distinctly perceive trees, which bore the resemblance of Norway pine, and which seemed to grow to a tolerable height: Indeed, he describes the whole appearance of the land, the structure and shape of the hills, the quantity of snow, the appearance and quantity of ice about the coast, as being more like the Norwegian coast than any land he ever saw. His course hence was S. W., but the weather becoming thick and squally, he began to abandon all thoughts of exploring the coast farther. He had now clearly ascertained the existence and situation of the land for the length of 150 miles in a W. S. W. direction so satisfactorily, as to remove the doubts of the most sceptical; and considering that no curiosity could justify his

farther delay, consistently with his duty as master of the brig, he shaped his course westerly on his voyage.

The weather at daybreak next day becoming more settled, he was surprised at descrying another headland, B, far higher than any yet seen bearing E. N. E. distance 10 leagues. This point he named Smith's Cape: and the weather being remarkably clear and fine, he proved it by observation to lie in latitude 62° 53'S.; longitude 63° 40' W. From Smith's Cape, the land appeared to extend in a south-westerly direction; but however eager he was to prosecute his search, he concluded that he had fully attained his object, having proved the existence of the coast for the distance of 250 miles. He therefore shaped his course to the northward; and in the month of November reached the Port of Valparaiso, having delayed the vessel six weeks on the voyage, for the mere purpose of prosecuting this interesting object of pursuit. I have omitted to mention, that during a visit on shore at Shireff's Cove, independent of penguins and various sea-fowls, abundance of wild land fowls and fresh water ducks were observed, which were so little shy, that they could be approached very close before they would stir. The existence of these birds augurs well for the adaptation of the place for the habitation of man. The harbour, too, offered an excellent anchorage: it was well protected in all points, but one very small angle,-the island affording a good shelter to the mouth; from this cause, there appeared but very little surf, and the shore seemed very bold. One may judge of the sensation produced in the breast of an Englishman on hearing the relation of Mr Smith; every one became struck with the advantages which a British settlement would offer, not only to our whalefisheries, but to our commercial interests in this part of the globe. Until the political arrangements of these countries (the Spanish colonies) become in some degree settled, the consequences resulting from the animosities that may possibly arise between the many contending parties must necessarily be feared. Those who were here during the affair at Cancharayada, well know the value of any thing like a British settlement, however miserable, to retire to. On the arrival of the Williams in November last, there was a general and simultaneous feeling among the English merchants,

who instantly set about taking up a vessel, which should be chartered on a voyage of discovery at their own expence. Mr Smith, on his arrival, having transmitted his observations to the commanding officer in the Pacific, Captain Shireff of the Andromache, who was at that time in Santiago, concluding diplomatic arrangements with the Government, prior to his visit to the north-west coast of America,—this excellent officer, ever alive as well to British interests as to the pursuit of objects of science and utility, instantly chartered the same brig Williams on Government account, in order to make an accurate and regular survey of the coasts and harbours, and to ascertain the advantages it might offer to our whalefisheries. So prompt were his measures, that although the vessel was loading to convey my goods to Concan Bay, the moment of his arrival in the port the bargain was concluded. Every article of mine was again transhipped. The Williams was refitted completely with every necessary for the voyage,—and in one week put to sea, being placed under the charge of Mr Edward Bransfield, master of the Andromache, who had under his orders Mr Bone, Mr Blake, and Mr Poynter, three midshipmen of the Andromache, and Mr Young, assistant-surgeon of the Slaney sloop of war. Mr Bone, son of the celebrated enameller, is a good draughts-They were all ordered to observe, collect and preserve, every object of natural science, during the prosecution of the more important objects of the expedition. The Williams got under weigh and quitted Valparaiso on the 19th December, the same day the Andromache left the port for Callao.

It was at first stated by many captains of vessels lying in this harbour, that the discovery of this land was not new;—that it was laid down in several old charts. These I examined, but found in all cases that they were copied from Mr Dalrymple's chart, published in 1770, (See Plate XII. Fig. 1.) in which an extensive tract of country is placed between the latitudes of 54° and 58° S., and of longitude 40° and 53° W. having a large gulf, called Golfo de San Sebastiano. This land was first laid down in a chart published by Mercator in 1569, and subsequently in another by Ortelius in 1586. Its existence was doubted by many, and Captain Furneaux (the coadjutor of the celebrated Captain Cook) visited in 1774, in the Adventure, that tract of the globe, for the pur-

pose of verifying or disproving its existence. He passed over both the western and eastern shores of the Gulf laid down as above mentioned, his tract being,

61°	Lat	89°	W. Long.				
61	49	_		84	1'	-	
61	20			71	50	_	-
60	84	_		57	43	100	
60	20			53	20		-
60	2	2	4	48	25	-	-

But he could neither discover the least indication of land, nor could he obtain any bottom soundings.

"It was proved, therefore," says Dr Forster in his account of the voyage, "that this gulf (and of course the encircling land) does not exist, or that it is not rightly laid down in former charts, and the latter is much more probable, since it can hardly be conceived by what means such a discovery could obtain a place in the old charts."

Captain Cook, next year in the Resolution, sailed over the same tract with similar views, "to ascertain the existence of San Sebastian's Gulf, and the extensive tract of coast laid down in Dalrymple's chart." Leaving Staten's land, he passed to

which is the point assigned by Dalrymple as the S. W. point of the Gulf; but fearing he might miss the land said to have been discovered by Duclos Gayat, in the ship Lyon in 1756, which Dalrymple places in 54° 30′ lat. S. and 45° long. W., yet laid down in D'Anville's chart 9° or 10° more to the westward, he hauled to the north, and passed to

56° 4′ S. Lat. 53° 36′ W. Long. where he sounded in 130 fathoms, without finding any bottom; hence to

which is 3° to the eastward of the N. E. point of the Gulf, as assigned in the charts. His track then was to

> 55° 7' S. Lat. 39° 24′ -

where he found a muddy bottom in 175 fathoms: hence he arrived at Willis's Island and Georgia.

In latitude 60° S. and long. 31' W. Captain Cook met with a heavy swell from the westward, "a strong indication," says he, " that there was no land in that direction; so that I think I may venture to assert, that the extensive coast laid down in Dalrymple's chart of the ocean between Africa and America, and the Gulf of San Sebastian, does not exist."

It is difficult to conceive how so extensive a tract could obtain a place in the old charts, unless some authority had been offered for it. We are, however, ignorant of the authority, though, from the name of the Golfo de San Sebastiano, it may be presumed to have originated in the accounts of the Spaniards. The particular formation of the land,-the existence of an island within the Gulf, called La Isla de Cressalina,offer additional reasons for believing it had been seen. These considerations led Dr Forster, who in the Adventure had satisfactorily disproved its existence, as laid down in the charts, to draw a similar conclusion. He adds, " I am inclined to believe that Sandwich Land has been discovered by those early navigators, who furnished the geographers with the Gulf of San Sebastian, and the Island of Cressalina,"-an observation now more applicable to the land seen by Mr Smith. In support of this opinion, it is worthy of remark, that the shape of the land, as described by Smith, bears a striking resemblance to that tract of coast laid down in the old charts. The islands in the latter bearing the same situation in regard to the mainland as Smith's and Nelson's Isles, the direction of the coast of the mainland bearing as well a W. S. W. direction in both instances; the headlands, too, of the old charts, strongly resembling the North Foreland, Williams's and Smith's Capes. The existence of a gulf in New Shetland, similar to that of San Sebas- . tian, is yet undetermined: it is, however, to be remarked, that Smith could not observe the land in the same relative situation,

the weather being at that time extremely hazy,—indeed he had concluded that he had lost sight of the land altogether. Should a gulf be hereafter ascertained to exist there, it would place it beyond doubt that this newly discovered land has been before noticed by the earliest navigators of those parts, but incorrectly laid down in the old charts. However this may be, it would seem that this land was seen subsequently to the dates both of Mercator's and Ortelius's charts, by a Dutch captain; but the exertions of our indefatigable circumnavigators, had taught us to place little reliance upon the accounts of the old navigators. In the present instance, however, we have this circumstance in its favour, that it is stated to exist in about the same latitude as laid down by Smith *.

"Theodore Gerrards, one of the first Dutch who attempted to voyage into the South Sea, after passing the Straits of Magalhaens, being carried by tempests into 64° of south latitude, says the country was mountainous, and covered with snow, looking like Norway, and seemed to extend to the islands of Salomon,"—that is to the Cape of New Holland.

It is also worthy of remark, that the observation of Mr Smith, of the great similarity in the appearance of the land_to Norway, exactly coincides with the observations of Gerrards.

As yet it remains an interesting topic of conversation, whether New Shetland be an island of considerable size, or if it be part of a continent. It is by no means an improbable supposition that it is connected with Southern Thule, the most southerly point of Sandwich Land seen by Captain Cook in 1775, and situated in 59° 30′ lat. S., and 27° 30′ W. long. The observations of Captain Cook seem to favour this conclusion. He says: "I conclude that Sandwich Land is either a group of islands, or else a point of a continent; for I firmly believe that there is a tract of land toward the Pole, which is the source of the ice spread over this vast ocean. I think it also probable, that it extends farther to the north, opposite to the Southern Atlantic and Indian Oceans, because ice was always found by

See Dalrymple's Collection of Voyages to the Southern Atlantic and Pacific,
vol. i. I could not obtain the 2d volume, where I believe he has collected some
other authorities in proof of land having been seen to the south.

us farther to the north in these oceans than any where else, which I judge could not be, if there were not land to the south; I mean a land of considerable extent." About the longitude of 27° W., Cape Montagio, the most northerly point of Sandwich Land, lies in the latitude of 58° 25', and icebergs are found hereabout in the latitude of 48°. In the longitude of 57° 80', North Foreland, the most northerly point of New Shetland exists in the latitude of 62°; and in the longitude of 67° W. the same land appears to fall off to the latitude of 64° S. Fewer icebergs are met with still more to the westward; for noticing the Adventure's track in 1774, it was observed, that in longitude 106° 54' W. icebergs were not met with till the latitude of 71° 10′ S. In long. W. 142° 54′, he was beset with icebergs in the latitude of 67° 31′ S., and in long. 172° W. he found them numerous in the latitude of 62° 10' S. Cook remarks, that between the meridians of 40° W. and 60° E. ice is invariably encountered in the latitude of 51° S. Modern researches have proved that icebergs always derive their origin from adjacent land. Between the meridians of 40° and 60° W. icebergs are invariably encountered in a somewhat lower latitude, from which we may infer, that land exists along one continued tract to the southward within these meridians, and it is by no means unfair to conclude, that New South Shetland and Sandwich Land form two points of one large continent.

There exists, too, some similarity between the appearance of Sandwich Land and South Shetland. "Approaching the former," says Dr Forster, "within half a mile, the rocks were black, cavernous, and perpendicular to a vast height; thick clouds veiled the upper parts of the mountains," &c. Hence, proceeding to Southern Thule, "the mountains appeared to be of vast height, their summits being constantly wrapped in clouds, and the lower part covered with snow down to the water's edge, so that it would have been difficult to pronounce whether we saw land or ice, if some hollow rocks had not shewn their black and naked caverns in several places." Precisely similar were the appearances of the mountains of the North Foreland in South Shetland, where the uninterrupted white surfaces of the higher hills were in parts broken by black spots: one very large one on the high peak of land marked E in the chart, was probably the

effect of a cavern in the mountain,—an occurrence very common in mountains of hornblende-slate, of which I am inclined to believe the hills of both countries are chiefly composed.

The climate of New Shetland would seem to be very temperate, considering its latitude; and should the expedition now sent out bring assurances that the land is capable of supporting population,—an assumption which the appearance of trees renders very probable, the place may become a colony of considerable importance. So little advanced as the season must be in October, the atmosphere was by no means cold: it was pleasantly temperate, like that felt in the north of Scotland at a similar season. Even in June, the very depth of winter, nothing like excessive cold was experienced.

The prompt measures adopted by the Naval Commander on the station merit the warmest praise, for having availed himself of every means he could attain for arranging the survey. Those who are aware of the extent to which the whale-fishery may be carried on in this hemisphere, must be immediately struck with the immense benefit which the acquisition of New Shetland might offer as a British settlement. We have only to call to view the chance we stand of being outrivalled by another maritime nation, there being at this time upwards of 200 American whale-ships lucratively employed in the Pacific, when Great Britain cannot boast of more than 30 or 40. We have only to state this fact, to exhibit the advantage of this settlement as connected with that branch of trade; but if we take into view the whole mercantile trade with Buenos Ayres, Chili, Peru, and the immensely extensive provinces of the interior, which is increasing with strides unknown, and establishing a demand for articles of British manufacture that must eventually prove the channel for the consumption of British produce, and the employment of British capital; if we consider, too, that these places must eventually become established as places of barter and entrepôt to our India and China trades,—then must the importance of the situation, if it can admit of a settlement, be strikingly apparent. Comparing this spot with the Cape of Good Hope and New Holland, it will be seen that these three places form equidistant depôts in the Southern Hemisphere, respectively situated so as to defend, if not to command, a superiority of trade with more extensive markets than were ever offered to any commercial nation at any former period of the world; and this, too, at a time when the late eventful circumstances in the history of Europe have turned in no small degree British commerce out of those channels in which it has flowed uninterruptedly for so many years.

No one can deny that the want of a British settlement contiguous to the coast of South America is seriously felt; for since the abandonment of the Falkland Isles, we have no possession, —not even a watering-place,—nearer than the Cape of Good Hope or New Holland; and no one can calculate upon the absolute necessity Great Britain may one day feel for such a possession. Under every point of view, as well national, commercial, and scientific, must the discovery of New South Shetland be valued; and without doubt the results of the present expedition will be anxiously looked for by every wellwisher to his country *.

VALPARAISO, January 1820.

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