

MISCELLANEOUS.

I.—*Expeditions of Discovery in South Australia.* By EDWARD JOHN EYRE, Esq.

UNDER any circumstances, expeditions which have contributed so much to extend our knowledge of the southern regions of the Australian continent, as those performed by Mr. John Eyre, in the years 1839-40-41, would have called for notice in the 'Journal' of the Geographical Society. The propriety of giving an account of them has become a necessity, since one of the gold medals placed at the Society's disposal has been awarded to him.

Mr. Eyre's connexion with the colony of Southern Australia commenced towards the close of 1837, with an undertaking characterised by the same spirit of adventurous hardihood that has enabled him to accomplish so much as a discoverer with comparatively limited resources. The practicability of driving cattle overland westward from New South Wales to Adelaide was at that time considered extremely problematical in Sydney, and few were willing to be the first to risk their property on such an adventure. More daring spirits, however, were willing to take the field, and, amongst others, Mr. Eyre and Messrs. Hawdon and Bonney. Mr. Eyre was the first to start, although the other two gentlemen, owing to the delays he encountered on the road, were the first to reach Adelaide. Mr. Eyre left Sydney with his party on the 8th of November, 1837. He diverged to the S. of the Murray, hoping to strike upon a more direct practicable route to Adelaide; but the country into which he had advanced proving sterile in the extreme, and devoid of water, he was obliged, when within 200 miles of his destination, to retrace his steps to where he quitted the river. Owing to this detention he did not reach Adelaide till the 13th of July, 1838. During this journey of eight months, in part through desert tracts, in part along the courses of rivers, which for Australia are thickly peopled and with warlike tribes, he, with his small party of six men, conducted in safety a herd of 300 cattle and three drays. The delay, therefore, to which his ambition to strike out a new path exposed Mr. Eyre, enabled him on the other hand to prove his possession of the

tact and management so indispensable in the leader of an expedition of discovery.

On the 5th of December, 1838, Mr. Eyre again left New South Wales with 1000 sheep and 600 cattle, and arrived safely in Adelaide on the 23rd of February, 1839. This time he accomplished the journey in a much shorter period, having been less than three months on the road. The vague expressions of the documents from which we derive our information do not enable us to determine whether the interval consumed on this expedition is calculated from the time of his leaving Sydney, or from the time of his leaving the settled districts of the colony of New South Wales. Be that as it may, to Mr. Eyre belongs the honour—without any derogation from the high merits of Messrs. Hawdon and Bonney—of having been the first to undertake, and one of the most persevering in thoroughly opening, the road for the thousands of sheep and cattle which have since been driven overland from Sydney to South Australia, so much to the benefit of the latter colony.

Before quitting this preliminary matter to dwell upon our proper theme—Mr. Eyre's exploits as a discoverer—it may not be altogether irrelevant to notice his successful efforts to extend still further that branch of commerce which he had been mainly instrumental in establishing. On the 30th of January he left Adelaide to open a communication between that settlement and Western Australia by water, for the exportation of sheep. Upon landing his flock at King George's Sound, he undertook a further overland journey with them to Swan River, a distance of 320 miles. Since that time the trade in stock between the colonies of South and Western Australia has continued steadily to increase.

These incidents in the life of Mr. Eyre do not seem to us out of place here. They illustrate the character of the man—explain in some measure how he has been able to accomplish what he has already achieved—and lead us to hope that the material interests of his adopted country, and geographical science, will be yet further benefited by the exertions of so resolute and enterprising a spirit.

During the course of the year 1839, Mr. Eyre engaged in two expeditions of discovery. On the 1st of May he left Adelaide to explore the regions to the north of that settlement. He was absent nine weeks; and, during that time, he travelled about 220 miles, examining the country between Spencer's Gulf and the Murray River to about 36 miles north of Mount Arden. His party had with them ten horses and two drays, and the expedition was fitted out and supported exclusively at his expense.

Mr. Eyre returned to Adelaide on the 29th June, and on the 8th July he started for Port Lincoln. He was absent nine weeks.

This time was occupied by an examination of the line of coast from Port Lincoln to Port Bell—an extent of about 230 miles. From Streaky Bay he crossed to the head of Spencer's Gulf, about 220 miles. He returned to Adelaide on the 15th of October. On this occasion, too, the expenses of the expedition (which was accompanied by ten horses and two drays) were defrayed entirely by Mr. Eyre.

The operations of 1840-41 may be regarded as one continuous expedition. It was commenced under the auspices of the local government, which contributed a donation of 100*l.*, sundry stores, and the loan of two horses. The colonists of South Australia contributed five horses, and the payment of part of the expenses. Seven horses, and the very considerable excess of expenditure over the advances mentioned, were supplied from Mr. Eyre's private funds. All charts and plans of his routes were delivered up by Mr. Eyre to the Colonial government.

Mr. Eyre left Adelaide on the 18th of June, 1840, to attempt to penetrate into the interior of Australia. He advanced to Lake Torrens, and traced its shores for nearly 400 miles; but finding himself, from the anomalous conformation of that huge horseshoe quicksand, entangled in a *cul-de-sac*, and finding the country moreover arid and sterile, he crossed to Port Lincoln. He was thus the first to open a direct line of road to that harbour from the head of Spencer's Gulf, a distance of about 220 miles. From Port Lincoln, he, after being repeatedly baffled, but never discouraged, succeeded in tracing the whole line of coast westerly as far as King George's Sound, a distance of 1300 miles.

Mr. Eyre's tracks, on the various expeditions now recapitulated, will be found laid down from the original tracings on Mr. Arrow-smith's last and excellent map of Australia. As a means of adding something more of interest and detail to this meagre outline, it has been judged advisable to subjoin Mr. Eyre's own accounts of his excursions, as given in his reports to government.

I. OPERATIONS OF THE YEAR 1839.

1. *Excursion from Adelaide to the Murray and eastward as far as Spencer's Gulf.*—"On the 1st of May I left Adelaide with a party of five individuals, exclusive of myself, and two horse teams with supplies calculated to last us nearly three months. For the first few days after leaving Adelaide, we passed through a considerable extent of fine and well watered country, crossing the chains of ponds named by Mr. Hill the Wakefield and the Hutt, to the latitude of about 33° 40', when the country assumed a more open character, presenting to us a considerable extent of high open downs well adapted for sheep, and abundantly watered by chains of ponds to the eastward and N.E. of the Hutt. The latter chain of ponds we traced in a northerly direction to its junction with a large water-course, which I named the 'Broughton,' near the parallel of

38° 30'. Here I found very extensive reaches of water connected by a strongly running stream; in this vicinity, too, the Broughton received several chains of ponds from the N. and N.E., and then, taking a course considerably S. of W., it wound through some very broken hills of an open barren nature, after which the stream was lost in the sandy nature of its channel, and we only found water-holes at intervals; proceeding still further, we found its channel quite dry, but very wide and deep, and its course became changed to a north-westerly direction towards Spencer's Gulf, near which I left it, as the surrounding country was of a poor barren appearance. We then passed a tract of high open country, principally covered with prickly grass, and at intervals with small patches of scrub, crossing two running streams emanating from the hills to the northward, but which both became dry in their channels a little west of where we crossed them. After leaving the latter of these in about 33° 18', we passed under the base of some bare hills rising abruptly from the level of the land around, and forming the commencement of the range running to the head of Spencer's Gulf, and in which Mount Brown and Mount Arden are situated. Under these hills we continued our course on the west side, and found that as we advanced to the northward they increased in elevation, at first taking a course somewhat west of north, and afterwards inclining a little to the eastward of that point. For some distance we found numerous creeks taking their rise among the hills, dry generally in the flat country, but with springs and small water holes among the hills; these all fall westerly towards the Gulf, through a country more or less open, and divided by belts of scrub and pine brush, similar to what we met with near the Murray. As we advanced further to the northward the country gradually became more barren, and the intervals between the water much greater and more difficult of access, until we reached the head of Spencer's Gulf, about 16 miles beyond which I encamped my party for seven days, whilst I examined the nature of the surrounding country, as each day's stage had made the appearance of the country less promising, and as our supply of water and grass had become so precarious that I did not consider it prudent to hazard the safety of my party by pushing further until I had ascertained the certainty of our being able to procure a supply of both.

"On the 18th of May I halted the party in latitude 32° 6' at a small creek, where we were enabled to water our horses about two miles up among the hills. From this point we made a careful and laborious examination of the adjacent country, and the result was our finding it impracticable to push any further inland to the N., or round the Gulf to the S.W., in so dry a season as the present. The range of hills we had followed under so long still continued, but as they stretched to the northward they had increased in elevation and in barrenness of appearance, and we rarely found even the dry channel of a water-course emanating from them. The last of these creeks that I found to the northward was about 26 miles from our depôt, and though dry in the plains, had large reaches of very salt water in it among the hills, and in the ledges of rock where the water had evaporated we found a great abundance of pure white salt. We were, however, enabled to obtain a few quarts of tolerable water from a small hole dug by the natives in the gravel. Beyond

this creek we travelled about 12 miles further N. to a high dark looking range, standing by itself, and running in a direction nearly at right angles to the main tier, and as its elevation was considerable, I ascended in hopes of viewing a more cheering prospect. The range was of granite, and from its summit I could see to an immense distance. To the north the ranges rose in lofty broken outline, tier behind tier, of very barren rocky appearance, as far as the eye could reach; to the eastward our view was interrupted by the hills we were travelling under; to the west of these hills the country had gradually changed to a complete sandy desert, interspersed with scrub; further W. and S.W. was seen a low range, flat at the top, and gradually declining to the level of and merging into the sandy country before us; whilst to the N.W., and extending to the N. as far as the eye could reach, was to be seen a very broad glittering stripe of what seemed to be water, but which I am inclined to think was not water, but only the dry and glazed bed of where water had lodged—and of very great extent. Nowhere could we see the least sign of grass or water; the hills before me were high, barren and rocky, and there were no gum trees or other indications of water emanating from them to be seen any where—the whole was barren and arid-looking in the extreme, and as I gazed on the dismal scene before me I felt assured I had approached the vast and dreary desert of the interior, or, it might be, was verging on the confines of some inland water, whose sterile and desolate shores seem to forbid the traveller's approach. Anxious as I was to ascertain the nature of the country before me, I was at one glance convinced that in so unfavourable a season I could not hope to penetrate further. We were already 36 miles from our depôt without finding a place where the horses could water—we had not seen a blade of grass—and the extensive and distant view before us forbade us to hope for either to the northward; we were therefore reluctantly compelled to retrace our steps to the depôt, which we had some difficulty in reaching with our horses, as they were greatly reduced for want of food. Foiled as I was in the first and most important object I had in view, I am still of opinion that the lofty masses of ranges I saw so far away to the northward may, in a more favourable season, afford the means, and I think I may venture to say, the only means, of penetrating far into the interior.

“On rejoining my party at the depôt, I found my overseer just returning from the S.W., in which direction I had sent him, to a high and distant range I had seen from the heights behind the depôt. He reported that he had been out 50 miles to the S.W., to a high, barren, rocky range, from the summit of which he could see another high range, similar in appearance to the one he was upon; and the intervening country, like that he had traversed, was open, level and barren, with the bed of a dried up lake about 10 miles beyond the range he was upon, but neither water-course nor tree of any kind was to be seen, and during his whole journey he had not seen a blade of grass anywhere, or a drop of water; and the miserable condition of the horse he had brought back fully proved the wretched state of the country he had been examining.

“As our riding horses were nearly all knocked up, and the nature of the country so dry and barren, I saw no hopes of succeeding in the second object I had in view, that of opening a line of road to Port Lincoln.

Before, however, I commenced our return, I determined to examine the country more immediately on the west side of the Gulf, though I had little hopes, from its appearance, of obtaining water in that direction; accordingly I proceeded on foot, accompanied by my overseer, about 35 miles from the depôt round the head of the Gulf. We found the land high and flat-topped, gradually declining to the south, and broken by deep gorges into portions resembling hills. The soil was soft sandy red loam, greatly mixed with stones, with here and there a little old withered grass. We could see no timber of any kind but patches of scrubby bushes and a few small pines, but not the least indication of water, and as the country before us bore the same character as that we had traversed, we were under the necessity of returning, and giving up the attempt as impracticable at so unfavourable a season as the present. In our route up the Gulf we had seen very few natives, and those were timid and alarmed at our presence; but to judge from the many and well-beaten tracks leading up the hills to the water, and the numerous fires we saw among the hills at night, I should imagine there were a considerable number in that neighbourhood. We found a singular practice prevail among them here of covering up the springs and water-holes (where there was more than one hole) very thickly with the boughs and branches of trees, as if to protect it from the rays of the sun—a circumstance I had never observed elsewhere, and which would lead me to suppose that they suffer from the scarcity of water in the dry seasons. On the western side of the Gulf we could never see the tracks or fires of the natives in any direction, though we were travelling for a great distance so near the eastern side as to have distinguished fires across the water on the other side had there been any.

“After returning on my outward track as far as $33^{\circ} 18'$, I struck out more to the eastward, making for the north-west angle of the Murray river as the nature of the country and supply of water enabled me to proceed. In my progress I was obliged to go further S. than I intended, and passed through a considerable extent of very fine country, and tolerably well watered, to the hills separating the country to the westward from the course of the Murray. From these hills I found a passage to the river, shorter and better as a route to Adelaide than the one in present use, and communicating at once with the unlocated country to the N. and N.W. I struck the river in $34^{\circ} 16'$, and followed it down to its entrance into the lake. In my progress I examined the alluvial flats in the valley, and have much pleasure in adding my humble testimony to the opinion long ago expressed by Capt. Sturt, of the great extent and rich character of the land they contain, and though nearly all are more or less covered with reeds and are partially subject to inundation, I consider this portion of land to be as rich and valuable as any I have seen, and I have only felt surprise that so few have thought it worth their while to examine the land bordering on such a noble river. After leaving the lake, I found a good pass through the ranges about 15 miles to the southward of Adelaide, and returned to town on the morning of the 29th June.”

2. *Excursion from Port Lincoln to Streaky Bay, and thence to the head of Spencer's Gulf.*—“I left Port Lincoln with my party (consisting of three men, an overseer, and two native boys), on the 5th of August,

passing over a low barren country, through which were interspersed many salt lakes, to the coast, which I struck in latitude $34^{\circ} 7'$, and following then its general direction, I crossed a succession of low hills wooded with casuarinæ—grassy, but very stony, and destitute of water, except what was left by the late rains in swamps that we met with occasionally behind the sand hummocks of the coast. These stony hills—which are of limestone formation—extend but a few miles inland, and are backed by a perfectly level and scrubby country to the eastward. I found this character of land continue with little variation to about latitude 33° , when we left the stony hills, entering a lower and more sandy region, in which the scrub, consisting of the *eucalyptus dumosa* and *tea tree*, approached much nearer the sea, gradually supplanting the casuarinæ, until in $33^{\circ} 40'$ the latter disappeared altogether, and the whole country, to the water's edge, became one mass of dense and almost impenetrable scrub. During our progress through the low country we had hitherto at intervals met with high bluffs of granite rising to a considerable height, and frequently visible at a very great distance, from the level nature of the surrounding land; these had now ceased, and in no direction could we obtain a view of higher or more promising ground.

“On the 25th August, I arrived with my party at Streaky Bay, and having ascertained, by reconnoitring the country a-head, the impracticability of taking our drays any farther to the westward without first cutting a road through the scrub—a work of great labour and time—I determined to form a depôt at a spring we were fortunate enough to find about two miles S.E. of the most southerly bight of Streaky Bay, and, leaving my party here, to proceed myself on horseback and examine the country along the coast as far as I might find practicable. Being most anxious to have continued this examination to the head of the Great Bight, in longitude 131° E., I went fully prepared for remaining out the necessary length of time, taking with me one of my native boys, and a pack-horse to carry our provisions. I found the country along the coast still continue of the same character—low, barren, sandy, densely covered with scrub, and destitute of water. So close, indeed, and so strong was the nature of the scrub, that we had much difficulty in forcing our way through it, even on horseback. This dreary region extended round Streaky Bay, Smoky Bay, Denial Bay, and as far as the 133rd parallel of longitude, a little beyond Point Bell, this being the most westerly point I could reach, as the scarcity of grass and the absence of all water compelled me to return in spite of my most anxious desire to have continued our route two degrees farther west. During the whole of our course from the lower extremity of Streaky Bay to Point Bell, we had only found water once, a little to the N.E. of Point Brown, and here it was so difficult of access, and in so small a quantity, that we could not obtain a sufficiency for our horses. This, added to the very fatiguing nature of the country, had so exhausted the horses that it was not without difficulty we succeeded in taking them back safely to the depôt. They had been four whole days without a drop of water, and the greater part of that time without food also, during which period we had ridden, at the least, 140 miles over a very heavy country. At the time of our return, the scrub

still continued very dense near the sea ; and the only improvement I had observed in the character of the country was, that the land a few miles back from the coast was gradually becoming more elevated, and the intervals of plains or small openings among the scrub were getting somewhat larger and more numerous than we had met with before ; but no heights were visible, nor were there the least indications of a probability of water being found more to the westward. Having observed from a height to the southward of our depôt a high and very distant peak to the eastward, I had sent my overseer out in that direction to reconnoitre the country during my absence to the westward. On his return he reported that he found water at intervals, but only in small quantities, left by the rains in clefts of rocks, and even this, he stated, was rapidly drying up. This information, added to the unfavourable state of the wind for some days past, and the fact of our supplies being reduced to rather a low ebb, decided me at once to move on the party and push across as rapidly as possible.

“ On the afternoon of the 8th September we evacuated our depôt, and steered easterly, through a barren and scrubby country, very low and level, with occasional heights of granite, in the clefts of which we usually found a little water deposited by the rains. At about longitude $135^{\circ} 25'$ E., we came to a singular mass of lofty ranges extending far to the northward and to the eastward. These ranges were devoid of timber, of a barren appearance, and consisted of granite and porphyritic granite, but principally the latter. There were neither creeks nor springs emanating from them, and the land around, to their very base, was low, barren, and scrubby, the hills themselves being nearly overrun with the prickly grass. I took the liberty of distinguishing this very remarkable range with the name of his Excellency the Governor, as it constitutes the principal feature in this part of the country, and exhibits a succession of lofty rugged ranges, one behind the other, stretching through a vast extent of country, and thus forming a striking and singular contrast to the low and level waste around.

“ In this vicinity, and among the hills, we met with several small salt water lakes, with salsolaceous plants growing around their margins ; but we were entirely dependent on the deposit of water left by the rains among the rocks for our supply of fresh water. The supply was thus very precarious, being only procurable in small quantities at a time, and frequently at very considerable intervals apart—and even this was evidently rapidly disappearing before the rays of a very hot sun, so that I feel assured had we delayed even a few days longer at Streaky Bay, we never could have succeeded in forcing a passage across. On the 29th September we formed a depôt, being anxious, before leaving this vicinity, to see a little more of the interior to the northward. I detained my party in camp for a week, and proceeded on horseback about ninety miles beyond the depôt. In the course of this ride I ascended two or three heights in the ranges under which I was travelling, and from one of them it was evident that a lake of considerable size extended to the N. and N.W. : but as my time was very limited, and the lake at a considerable distance, I was obliged to forego my wish to visit it. I have, how-

ever, no doubt of its being salt, from the nature of the country, and the fact of finding the water very salt in one of the creeks draining into it from the hills. Beyond this lake to the westward was a low flat-topped range, extending north-westerly as far as I could see. The intervening country between Flinders Range and the Lake (which I distinguished with the name of Colonel Torrens), and extending as far as the eye could reach to the northward, consisted of extensive plains of firm red sandy soil destitute of vegetation, and divided by ridges of sand wooded with shrubs and stunted bushes. Through these plains ran many large creeks whose courses were marked by lines of lofty gum trees. These emanated from Flinders Range, and, though dry in their channels below the hills, water might generally be procured by following them up among the ranges. They all fall in a westerly direction, or a little north of west, and drain into Lake Torrens. Flinders Range still continued at the time of my return, and another small detached hill was also visible to the N.W.

“During my absence to the north, I sent out my overseer to examine the country to the eastward. He reported that Flinders Range, or rather a succession of ranges, continued for about eight miles: that he then crossed a large barren plain through which a creek was running to the northward, and which was probably one of those I had crossed after it had wound through the hills. Beyond this, he found the country consist of alternate ridges and flats of a bare and barren character, with a good deal of the prickly grass, until, at about 60 miles east of the depôt, he obtained a view of the low flat sea of scrub similar to that near the Murray river, and which probably is a continuation of that scrub extending to the northward. From this point he returned to the depôt. After leaving the camp near Mount Arden, I returned to Adelaide, passing through a great extent of fine and valuable country, well watered by numerous running streams, nearly all of which retain water even in the driest seasons.

“In reviewing the result of our labours, I cannot but regret they have not been more productive of interest and utility to the colonists. We have barely succeeded in effecting the object of the expedition by passing through a certain extent of country; and for this unsatisfactory result we are indebted solely, under Providence, to the very favourable season we experienced (and which appears to have extended generally over the colony). During the whole of our course from Port Lincoln along the coast to Point Bell, and across the interior to the head of Spencer's Gulf, a distance of 600 miles through, I believe, an hitherto unexplored country, we never crossed a single creek, river, or chain of ponds, nor did we meet with any permanent water anywhere, with the exception of three solitary springs on the coast, to which the few natives we met with appear to resort when the water left by the rains further inland is dried up.

“The variation of the compass I found to diminish as I advanced to the westward, and again increased as I advanced easterly towards Spencer's Gulf. At Streaky Bay it was only about 2° E., whilst at the head of Spencer's Gulf it was about 7° E.”

II. OPERATIONS OF 1840-41.

1. *Excursions in the Vicinity of Lake Torrens.*—Mr. Eyre left Adelaide on the 18th June, 1840, and arrived at Mount Arden, at the head of Spencer's Gulf, on the 3rd of July. From his depôt there he writes :—

“ On the 6th I proceeded, accompanied by one of my native boys, on horseback, to reconnoitre Lake Torrens and the country to the north of the depôt, leaving the party in camp. I arrived on the shores of Lake Torrens the third day after leaving the depôt, and have ascertained that it is a basin of considerable magnitude, extending certainly over a space varying in width from fifteen to twenty miles, with a length of from forty to fifty from its southern extremity to the most northerly part of it, visible from a high summit in Flinders Range (about ninety miles N. of Mount Arden). The lake is girded with an outer ridge of sand, covered with salsolaceous plants, and with saline crusts appearing above the ground at intervals. Its waters extend over a considerable surface, but they are, apparently, shallow. I could not approach the water from the soft nature of that part of its bed which is uncovered, and which reached from three to four miles from the outer bank to the water's edge. There can be no doubt, however, of its being very salt, as the portion of its bed which lay exposed to our view was thickly coated with pungent particles of salt. There were not any trees or shrubs of any kind near the lake where we made it, nor could either grass or fresh water be procured for our horses. Lake Torrens is bounded on its western side by high land—apparently a continuation of the table-land to the westward of the head of Spencer's Gulf. I should think that it must receive a considerable drainage from that quarter as well as the whole of the waters falling from Flinders Range to the eastward.

“ From the very inhospitable nature of the country around the lake, I could not examine it so carefully or so extensively as I could have wished. My time, too, being very limited, made me hurry away to the northward, to search for a place to which I might bring on my party, as the grass in the neighbourhood of the depôt is very old, and much less abundant than in either of my former visits there. It became, therefore, imperative on me to remove the horses as speedily as possible. Should circumstances permit, I shall, however, endeavour to visit Lake Torrens again, on my return from the northern interior. After leaving the lake I spent many days in examining the country to the northward of our depôt. Its character seemed to vary but little; barren sandy plains still formed the lower level, and the hills constituting the continuation of Flinders Range were still composed of quartz and ironstone. They are, however, gradually becoming less elevated and more detached, with intervals of stony valleys between, and the whole country was, if possible, assuming a more barren aspect, while the springs, which had heretofore been numerous among the hills, were very few in number, difficult to find, and very far in amongst the hills. After a most anxious and laborious search, I at last succeeded in finding a place about ninety miles (of latitude) N. of Mount Arden, to which I can remove my depôt,

and from which I can again penetrate more to the northward. After an absence of sixteen days I rejoined my party under Mount Arden on the evening of the 21st July.

“The high land seen on the opposite side of Lake Torrens appears to be a continuation of the table-land lying to the W. of the head of Spencer's Gulf; and though the fall of the country *appears* to be to the N., I begin to be of opinion now that it is not in reality. Lake Torrens is evidently the basin into which all the waters from Flinders Range fall, and its extent is very considerable; in fact, where I last saw it to the N. it was impossible to say whether it terminated or not, from the very great distance it was off. The country lying between Flinders Range on the one side, and the table-land on the other, and the north of Spencer's Gulf, is of so low and so level a character that the eye alone is not a sufficient guide as to the direction in which the fall may be. On my previous visits I felt convinced it was northerly, but I am now inclined to think the drainage from Lake Torrens, in seasons of wet, is to the S., into the head of the gulf; and I can only account for there not being a larger connecting watercourse than the small shallow one found when crossing from Streaky Bay—and which I did not then imagine extended far above the head of the gulf—by supposing that the seasons have so altered of late years that the overflow of the lake has never been sufficient to cause a run of water to the gulf. Should my present supposition be correct, the idea of a northerly drainage is done away with, and we have yet to come to a ‘division of the waters.’ My uncertainty on this most important point has made me most anxious to get my party removed to a place where they can remain until I can decide so important a point, and one on which our future prospects so much depend. The same causes that prevented my staying a little longer in the neighbourhood of the lake have also prevented, as yet, my extending my researches to the N. for more than about forty miles further than I had been when last in this neighbourhood. The only change I observed was the increasing barren appearance of the country—the decrease in elevation of the ranges—their becoming more detached, with sterile valleys between—and the general absence of springs. The rock of the higher ridges, which were very rugged and abrupt, was still the same, quartz and ironstone, but much more of the latter than I had before seen, and in some cases, with a very great proportion of metal to the stone. The lower ridges and steep banks, when washed away by the rains, presented great quantities of very pungent salt to the eye of the observer, mixed with the clay and sand of which the banks were formed; and in this neighbourhood the creeks were (though dry) all lined with the salt water tea-tree—a shrub we had never before seen under Flinders Range.”

A subsequent despatch from Mr. Eyre, dated the 9th October, gives an account of their further proceedings up to the date of the despatch:—

“Upon leaving our depôt near Mount Arden, the low, arid, and sandy nature of the country between the hills and Lake Torrens compelled us to follow close under the continuation of Flinders Range. Here our progress was necessarily very slow from the rugged nature of

the country, the scarcity of water, and the great difficulty both in finding and obtaining access to it. As we advanced, the hills inclined considerably to the eastward, gradually becoming less elevated, until in latitude $29^{\circ} 20'$ S. they ceased altogether, and we found ourselves in a very low and level country, consisting of large stony plains, varied occasionally by sand; and the whole having evidently been subject to recent and extensive inundation. These plains are destitute of water, grass, and timber, and have only a few salsolaceous plants growing upon them; whilst their surface, whether stony or sandy, is quite smooth and even, as if washed so by the action of the water. Throughout this level tract of country were interspersed, in various directions, many small flat-topped elevations, varying in height from fifty to three hundred feet, and almost invariably exhibiting precipitous banks. These elevations are composed almost wholly of a chalky substance, coated over on the upper surface by stones or a sandy soil, and present the appearance of having formed a table-land that has been washed to pieces by the violent action of water—and of which these fragments now only remain. Upon forcing a way through this dreary region, in three different directions, I found that the whole of the low country round the termination of Flinders Range was completely surrounded by Lake Torrens, which, commencing not far from the head of Spencer's Gulf, takes a circuitous course of fully four hundred miles, with an apparent breadth of from twenty to thirty miles—following the sweep of Flinders Range, and almost encircling it in the form of a horseshoe.

“The greater part of the vast area contained in the bed of this immense lake is certainly dry on the surface, and consists of a mixture of sand and mud, of so soft and yielding a character as to render perfectly ineffective all attempts either to cross it or to reach the edge of the water, which appears to exist at a distance of some miles from the outer margin. On one occasion only was I able to taste of its waters, in a small arm of the lake, near the most north-westerly part of it which I visited, and here the water was as salt as the sea. The lake, on its eastern and southern sides, is bounded by a high sandy ridge, with salsolæ and some brushwood growing upon it, but without any other vegetation. The other shores presented, as far as I could judge, a very similar appearance; and when I ascended Flinders Range, from which the views were very extensive, and the opposite shores of the lake distinctly visible—no rise or hill of any kind could ever be perceived, either to the W., the N., or the E.; the whole region round appeared to be one vast, low, and dreary waste. One very prominent summit in this range I have named Mount Sæle; it is situated in $30^{\circ} 30'$ S. latitude, and about $138^{\circ} 40'$ E. longitude, and is the first point from which I obtained a view of Lake Torrens, to the eastward of Flinders Range, and discovered that I was hemmed in on every side by a barrier it was impossible to pass. I had now no alternative left me, but to conduct my party back to Mount Arden, and then decide what steps I should adopt to carry out the objects of the expedition. It was evident that to avoid Lake Torrens and the low desert by which it is surrounded, I must go very far either to the E. or to the W. before again attempting to penetrate to the interior.

“My party had already been upwards of three months absent from

Adelaide, and our provisions were too much reduced to admit of our renewing the expedition in either direction, without first obtaining additional supplies. The two following were, therefore, the only plans which appeared feasible to me, or likely to promote the intentions of the colonists, and effect the examination of the northern interior:—

“First—to move my party to the southward, to endeavour to procure supplies from the nearest stations N. of Adelaide, and then by crossing to the Darling, to trace that river up until I found high land leading to the N.W.

“Secondly—To cross over to Streaky Bay, send from thence to Port Lincoln for supplies, and then follow the line of coast to the westward, until I met with a tract of country practicable to the N. To the first of these plans were many objections: amongst the principal ones were, the very unfavourable accounts given both by Captain Sturt and Major Mitchell of the country to the W. of the Darling river—the fact of Captain Sturt's having found the waters of that river salt during a continued ride of many days—the numerous tribes of natives likely to be met with, and the very small party I should have with me—lastly, the course of the river itself, which, trending so much to the eastward, would take us from, rather than towards, the centre of this continent. On the other hand, by crossing to the westward, I should have to encounter a country which I knew to be all but destitute of water, and to consist, for a very great distance, of barren sandy ridges and low lands, covered by an almost impenetrable scrub, at a season, too, when but little rain could be expected, and the heat would, in all probability, be intense; still, of the two, the latter appeared to me the least objectionable, as we should at least be going towards the point we wished to reach, and through a country as yet quite unknown.

“After mature and anxious consideration, therefore, I decided upon adopting it, hoping that my decision may meet with the approbation of the committee.

“Previous to our arrival at Mount Arden, we experienced very showery weather for some days (otherwise we could not have attempted a passage to the westward), and as there were no longer any apprehensions of water being found on the route to Streaky Bay, I sent two of my teams across upon our old tracks, in charge of my overseer; whilst I conducted the third myself, in company with Mr. Scott, direct to Port Lincoln, to procure the supplies we required. In crossing from Mount Arden towards Port Lincoln, we travelled generally through a low country, densely covered with brush, among which were scattered, at considerable intervals, a few small patches of grass, with here and there some rocky elevations; in the latter, we were usually able to procure water for ourselves and horses, until we arrived at the districts already explored, in traversing which we passed (to the N.E. of Port Lincoln) some rich, well-watered valleys, bounded by a considerable extent of grassy hills well adapted for sheep or cattle, arriving at Port Lincoln on the 23rd October. As a line of route from Adelaide for the immigration of stock, the course followed, though it cannot be called a good one, is perfectly practicable in the winter season; and I have no doubt, when the country becomes better known, the present track might be considerably improved upon, and both grass and water obtained in the greatest abundance.”

2. *Overland Expedition to King George's Sound.*

Mr. Eyre has narrated the progress of this enterprise in the three despatches here subjoined:—

Mr. Eyre to the Chairman of the Committee for Promoting the Expedition.

"SIR—I have the honour to acquaint you, for the information of his Excellency the Governor and the colonists interested, with the unsuccessful termination of the expedition placed under my command, for the purpose of exploring the northern interior. Since my last report to his Excellency the Governor, containing an account of two most disastrous attempts to head the Great Australian Bight, I have, accompanied by one of my native boys, made a third and more successful one. On this occasion, I with some difficulty advanced about fifty miles beyond the head of the Great Bight, along the line of high cliffs described by Flinders, and which have hitherto been supposed to be composed principally of chalk. I found the country between the head of Fowler's Bay and the head of the Great Bight to consist of a succession of sandy ridges, all of which were more or less covered with a low scrub, and without either grass or water for the last sixty miles. This tract is of so uneven and heavy a nature that it would be quite impossible for me to take a loaded dray across it at this very unfavourable season of the year, and with horses so spiritless and jaded as ours have become, from the incessant and laborious work they have gone through during the last seven months. Upon rounding the head of the Bight, I met with a few friendly natives, who showed me where both grass and water were to be procured, at the same time assuring me that there was no more along the coast for ten of their days' journeys (probably one hundred miles), or where the first break takes place in the long and continuous line of cliffs which extend so far to the westward of the head of the Great Bight.

"Upon reaching these cliffs I felt much disappointed, as I had long looked forward to some considerable and important change in the character of the country. There was, however, nothing very remarkable in their appearance, nor did the features of the country around undergo any material change. The cliffs themselves struck me as merely exhibiting the precipitous banks of an almost level country of moderate elevation (three or four hundred feet), which the violent lash of the whole of the Southern Ocean was always acting upon and undermining. Their rock formation consisted of various strata, the upper crust or surface being an oolitic limestone; below this is an indented concrete mixture of sand, soil, small pebbles, and shells; beneath this appear immense masses of a coarse greyish limestone, of which by far the greater portion of the cliffs are composed; and immediately below these again is a narrow stripe of a whitish, or rather of a cream-coloured substance, lying in horizontal strata, but which the impracticable nature of the cliffs did not permit me to examine. After riding for 45 miles along their summits, I was in no instance able to descend; their brinks were perfectly steep and overhanging, and in many places enormous masses appeared severed by deep cracks from the main land, and requiring but a slight touch to plunge them into the abyss below. As far as I have

been along these cliffs I have seen nothing in their appearance to lead me to suppose that any portion of them is composed of chalk. Immediately along their summits, and for a few hundred yards back, very numerous pieces of pure flint are lying loosely scattered upon the surface of the limestone. How they obtained so elevated a position, or whence they are from, may admit, perhaps, of some speculation. Back from the sea, and as far as the eye could reach, the country was level and generally open, with some low prickly bushes and salsolaceous plants growing upon it; here and there patches of the gum scrub showed themselves, among which a few small grassy openings were interspersed. The whole of this tract was thickly covered by small land shells, about the size of snail shells—and some of them somewhat resembling those in shape. There were no sudden depressions or abrupt elevations anywhere; neither hills, trees, nor water, were to be observed; nor was there the least indication of improvement or change in the general character of this desolate and forbidding region. The natives we met with at the head of the Bight were very friendly, and readily afforded us every information we required—as far as we could make them comprehend our wishes.

“ We most distinctly understood from them that there was no water along the coast, westerly, for ten days’ journeys; and that, inland, there was neither fresh nor salt water, hills or timber, as far as they had ever been; an account which but too well agreed with the opinion I had myself formed, upon ascertaining that the same dreary, barren region I had been traversing so long still continued at a point where I had ever looked forward to some great and important change taking place in the features of the country, and from which I had hoped I might eventually have accomplished the object for which the expedition was fitted out. Such, however, was not the case; there was not any improvement in the appearance of the country, or the least indication that there might be a change for the better, within any practicable distance. I had already examined the tract of country from the longitude of Adelaide to the parallel of almost 130° E. longitude—an extent comprising nearly $8\frac{1}{2}$ degrees of longitude—without my having found a single point from which it was possible to penetrate far into the interior; and I now found myself in circumstances of so embarrassing and hopeless a character, that I have most reluctantly been compelled to give up all further idea of contending with obstacles which there is no reasonable hope of ever overcoming. I have now, therefore, with much regret, completely broken up my small but devoted party. Two of my men returned to Adelaide, in the *Waterwitch*, five weeks ago.

“ Mr. Scott and another of my men proceed on Monday in the *Hero*; whilst myself, my native boys, and the overseer (who has chosen to accompany me) proceed hence overland to King George’s Sound, as soon as our horses are a little recruited by the abundant supply of forage we received by the *Hero*.

“ EDWARD JOHN EYRE.

“ Fowler’s Bay, 30th Jan., 1841.”

Mr. Eyre to the Colonial Secretary of South Australia.

“ Having left Fowler’s Bay on the 26th February, 1841, I arrived at the head of the Great Australian Bight, on the 3rd March. Here we halted four days to rest our horses, as they had been three days without water previous to our arrival at the head of the Bight. From this point we had 135 miles to travel without water, until we had passed the first of the remarkable line of cliffs mentioned by Captain Flinders. In effecting this passage, our horses were five days without water, and were consequently much reduced in strength and condition. The line of cliffs now receded some miles from the coast, but still continued running nearly parallel to it inland, and forming a perfectly level bank, visible beyond the low and barren country intervening between it and the sea; until, as we advanced, the whole merged in a succession of high sandy or stony ridges, covered by a dense and impenetrable scrub, and reaching to the very borders of the sea. To attempt a passage through such a tract of country was quite out of the question, and we were consequently obliged to keep very near the coast, and frequently to trace round its shores for many days, thus considerably increasing the distance we should otherwise have had to traverse. For four days we continued to travel steadily without finding water; on the fifth our horses were much exhausted, and one by one, three of our best dropped behind, and we were compelled to leave them to their miserable fate. The other poor animals still continued to advance with us, although suffering much from the almost total want of food as well as water. This dreadful state of suspense and anxiety continued until the afternoon of the seventh day, when, by God’s blessing, we were once more enabled to procure water by digging among the sand drifts of the coast,—after having accomplished a distance of fully 160 miles; throughout which not a drop of water could be procured, even by digging.

“ We had now seven horses left, but they were barely alive. For eight months previous to our leaving Fowler’s Bay, they had almost incessantly been occupied in the labours of the expedition to the northward; and in that space of time had travelled over a distance almost incredible; and it required far more than the short month we were able to afford them at Fowler’s Bay, to recruit their exhausted strength, or renew a spirit that was almost broken by incessant toil. It may readily, therefore, be imagined that the severe privations they endured in rounding the Great Bight had reduced them to perfect skeletons, without either strength or spirit. To me it was only a matter of surprise that a single horse should have survived such extremity of suffering. We were now at a place where we could procure abundance of water, but there was scarcely any grass for our poor horses, and the little they could find was coarse, sapless, and withered. To add to our difficulties, we were almost without provisions. In the early part of this journey, we were obliged to abandon the heavy part of our baggage; water-kegs, ropes, buckets, horseshoes, tools, medicines, pack-saddles, clothes, great-coats, and part of the ammunition, were all left behind. As we advanced, and our horses became weaker, it was necessary to leave even the provisions, instruments, and the remainder of our ammunition, light though they were; while we hurried on with the wretched animals, scarcely daring

to hope that it might yet be possible to save their lives. Having arrived at the water, and rested there during six days, I sent my overseer and one of the native boys (with the three strongest of the horses driven loose) to try to recover the things we had last left, and which were about 50 miles from the water; those abandoned earlier on the journey were too far distant for us to attempt their recovery. On the fifth day they returned, after a most painful journey; one of the horses had perished, the other two almost dead, and the party had only succeeded in bringing a portion of the baggage they were sent for. As there were many things among those they had not brought which we could ill afford to spare, I left the overseer in charge of the party, and the day following his return I proceeded myself, accompanied by one of the elder boys, but without horses, to make a second attempt for their recovery; this I effected, and on the fourth day rejoined my party at the water. Our horses were now reduced in number to five, and the whole were so thoroughly jaded and worn out, that it was evident we could not attempt to move from our present position for some time to come, especially as we had the gloomy prospect of a vast extent of country before us in which there was not the least hope of water being found. In the meantime our provisions were rapidly disappearing. From the very commencement of the journey our weekly allowance had been very limited—gradually it had been further reduced—and now that a long delay was unavoidable, I found it necessary to kill one of the horses to enable us to husband the little flour we had remaining.

“Hitherto my labours had been comparatively light—for in the midst of all the cares and anxieties by which I was surrounded, my overseer had placed the most implicit confidence in my guidance, and had cheerfully gone through the duties that fell to his share. This support I no longer experienced, and it was with the greatest pain I discovered that my fellow traveller had become disheartened and dispirited, foreboding evils that might not occur; and though he still exerted himself readily and strenuously on every occasion, I could readily perceive that (although the greatest difficulties of the undertaking were over) he was disinclined to continue the expedition, and would rather have attempted to re-cross the fearful country behind us in the vain hope of being able to return to Fowler’s Bay, where we had left a considerable depôt of provisions. This dispiriting impression became, unfortunately, conveyed to all the native boys, and eventually became the cause of an occurrence as frightful as it was fatal to the poor fellow with whom it had originated. In the earlier stages of the expedition the three native boys had behaved well, and been very serviceable; but, as we advanced, this good conduct gradually disappeared, and, added to our other annoyances, not long after leaving Fowler’s Bay, it became necessary for the whole party to walk, and though the native boys were allowed to ride long after myself and the overseer had given it up, it at last became imperative, from the state of the horses, they should be dismounted. This, added to the insufficient quantity of food which our low state of provisions allowed to each individual, made the three boys gloomy and sulky, and we had frequently much trouble in getting them to assist in any way; and then the little they performed was rarely done with cheerfulness and good humour. It

was impossible to make them understand the necessity of the case. As long as ever a horse could walk, they considered it a hardship not to ride, and as long as there was an ounce of provisions left they considered themselves ill-used if not allowed to eat to excess. It was of no avail telling them that, if the horses were ridden they could never get through the journey, and that we should have to carry everything ourselves—or, that, if we consumed the little stock of provisions we had all at once, we must starve afterwards. The fact of myself and overseer walking and living on the same allowance of food as themselves was no argument to them; and we could not dissipate a sullen discontented humour. This sullenness of disposition became much augmented, when they perceived that the overseer himself was doubtful and disheartened at our future prospects, and I really think their impression was, that we could never accomplish the journey we had undertaken. In this frame of mind it was they deserted from the party (April 22nd), after being detected stealing the provisions during the night—a practice they had continued some days before they were found out. After an absence of four days they returned, and begged to be forgiven, stating that they were unable to procure food of any kind for themselves. As they were freely received again, I had strong hopes that their future conduct would be better, but it would appear from the sequel that they were still unwilling to continue to prosecute the journey, that they still looked back with longing to the provisions left at Fowler's Bay, and that they had only rejoined the party again with the view of plundering the camp of provisions at the first favourable opportunity, and then endeavouring to retrace their steps to a place where they knew plenty had been left, and from thence (should they succeed in arriving there) they might eventually make their way to Port Lincoln, or get away in some of the vessels whaling along the coast. This scheme was unhappily but too successfully executed during the night of the 29th April, whilst I was absent from the camp, engaged in watching the horses to prevent them straying. After plundering the stores of provisions and fire-arms, it would appear they were preparing to depart, when the unfortunate overseer awoke, and in his attempt to prevent their purpose fell a victim to these ruthless murderers.

“A copy of the depositions of myself and the boy Wylie (who did not accompany the other two), relative to this melancholy occurrence, is herewith enclosed for the information of his Excellency.

“I was now deprived of my only aid, and felt bitterly the loss of a man whose fidelity and good conduct had retained him in my service for many years, and whose unwillingness to leave me, when I commenced this perilous journey, has been the unconscious means of his own destruction. At a distance of fully 450 miles from Fowler's Bay, and nearly 600 from King George's Sound, I was now in a position but little to be envied. Left alone with a single native, whose fidelity I could place no dependence upon, with but little provisions, and almost without arms, whilst my jaded horses had already been three days without water. I had no time for deliberation. To attempt to retrace my steps to Fowler's Bay I knew would be certain destruction—it would have been impossible for us to re-cross that fearful country—and I had, therefore, no alternative but to push on for King George's Sound, humbly trusting

in the merciful protection of that Almighty Being, who alone may guide the wanderer on his way in safety.

“ Hurrying away from the fatal scene, I advanced with the native boy four days longer without finding water, during which we travelled with but little intermission almost night and day. On the fourth day we again procured water by digging, but as this made the seventh day that the horses had been (for the second time) without water, and during which they could not have travelled less than 150 miles, they were much exhausted by fatigue and privation; and it again became necessary to make a long delay to afford them a temporary rest.

“ Our stock of flour was now reduced to sixteen pounds, and we had still nearly 500 miles to travel before we could hope to obtain relief, so I was again under the necessity of killing one of our remaining horses, to enable us to halt and afford to the other four that rest which they so much required. This supply, together with a couple of kangaroos and a few fish we were lucky enough to procure, lasted us nearly a month, and we were steadily advancing on our journey, towards the promontory of Cape le Grand, where my intention was to have killed another horse, and halted again for a few days' rest. Fortunately we were spared the necessity of doing this, for on approaching the Cape on the east side, we were overjoyed to discern, on the 2nd June, a large vessel lying at anchor in a bay, immediately east of Lucky Bay, and which I have named Rossiter Bay. She proved to be a French whaler, the *Mississippi*, of Havre, commanded by Captain Rossiter. Having made known our situation to the captain, both myself and the native boy were most hospitably treated on board his vessel, and received every attention and kindness during the twelve days we remained. Upon our leaving to proceed on our route, we were most liberally furnished with everything we could wish for; and I am happy to have it in my power to record publicly the great obligations I am under to Captain Rossiter for his kindness and attention.

“ After leaving Rossiter Bay, on the 15th June, we advanced steadily towards King George's Sound, arriving there, with four horses still left, on the 7th July; and thus, by God's blessing, terminating a journey that, from circumstances, had been peculiarly harassing, and which, from unforeseen difficulties, had been protracted to a period far beyond what had been at first anticipated.

“ Albany, 26th July, 1841.”

Mr. Eyre to the Colonial Secretary of Swan River.

“ SIR,—I have the honour to report to you, for the information of his Excellency the Governor, my arrival in the colony of Western Australia overland from Adelaide, and though I regret extremely that my labours have not been productive of any discovery likely to prove beneficial to either colony, I am induced to hope that a slight outline of my route, and of the character of the country I have been traversing, may not prove uninteresting to his Excellency in a geographical point of view.

“ On the 25th February I left Fowler's Bay with a party consisting of an overseer and three native boys. I was provided with ten horses,

and provisions calculated for nine weeks. Upon entering within the limits of Western Australia, I found the country extending around the Great Australian Bight, for upwards of five hundred miles, to consist entirely of the fossil formation, with a considerable elevation above the level of the sea, varying, perhaps, from two hundred to three hundred feet, and forming for the most part a country which presented the appearance of an elevated and almost level table-land. This extensive region is of the most desolate and barren character imaginable; almost entirely without grass, destitute of timber, and in many parts densely covered with an impenetrable scrub. There was no surface water, neither were there creeks or water-courses of any description. The only supply of water procured by the party through this dreary waste was obtained by digging in the drifts of pure white sand found along the coast at places where the great fossil bank receded a little from the immediate margin of the sea. The supply thus obtained was very precarious; and, during the progress of our journey, we crossed over, at various times, intervals of sixty, one hundred and thirty-six, and one hundred and fifty miles in extent, throughout which it was impossible to procure a drop of water in any way. In this fearful country our horses suffered most severely, and on two different occasions were seven days without any water, and almost without food also. From this cause we lost many valuable animals; and our progress was impeded by the frequent and long delays necessary to recruit those that were still left alive. Our journey thus became protracted to a period far beyond what had been calculated upon; and it became imperative, not merely to economise the provisions we had brought with us, but, eventually, to destroy two of our horses as an additional supply of food to the party. In the midst of these difficulties, and then barely half-way across the Great Bight, my very small party was broken up by an event as distressing as it was tragical, and I was left alone with a native of King George's Sound. This melancholy occurrence, added to the weak and jaded condition of the few remaining horses, effectually prevented my examination of the country beyond the line of my immediate route; in fact, from the time of our entering the colony of Western Australia, such was the dreadful nature of the country, that the whole party were obliged to walk; and it was not until our arrival at East Mount Barren that myself and the native boy could venture to ride. The first improvement observed in the face of the country was the finding a narrow strip of grassy land immediately to the eastward of Point Malcolm; but it was not until we had passed Cape Arid that we met with the first permanent surface water, in the shape of a small fresh-water lake. The character of the country was now changed, and consisted of open, elevated, sandy downs, covered with shrubs and underwood, and generally based upon an oolitic foundation, with here and there a few granite bluffs. We now crossed on our route many salt-water creeks or inlets, most of which received drainage of either brackish or fresh-water from the interior. The first of these occurs immediately E. of Cape Arid; but it is very small, and separated from the sea by a bar of sand. Others, as we advanced farther to the westward, were of a more considerable size, and bore the appearance of being connected with the sea. These might,

possibly, afford secure harbours for boats, but the circumstances under which I was travelling did not admit of my delaying to examine them, and, for the convenience of crossing, I usually kept so far inland as to intercept them above the termination of the salt-water reaches. The high downs among which these water-courses wind are, as I remarked before, sandy, and covered with shrubs, and the soil poor, and destitute of grass; but in the valleys themselves, and in small portions of the slopes immediately above them, we found some patches of good and, occasionally, of rich soil, upon which the herbage was abundant and luxuriant. These tracts, however, as far as I could judge, were of very limited extent; nor was there any timber in their vicinity, beyond the few small stunted tea-trees growing along the banks of the water-courses. At intervals between these various creeks, we met with many holes—sometimes of salt, at other times of fresh, water. A few tea-trees, and occasionally a few straggling eucalypti, grew around their margins; but I seldom succeeded in finding any grass.

“Passing behind Lucky Bay to the lagoons W. of Esperance Bay, I traversed a considerable extent of grassy land, consisting principally of sandy undulations, but with many patches of rich soil in the flats and valleys. Water appeared to be abundant; but there was still a total absence of all timber but the tea-tree. From the salt lagoons we crossed over a very barren country, and had much difficulty in procuring any grass for our horses. The water is generally very brackish, and there is much scrub. The rock formation was principally quartz, ironstone, and sandstone, with much grit on the surface. About sixteen miles N.E. of Cape Riche, we fell in with a considerable salt-water river from the W.N.W., which appeared to join the sea at a gap left by Flinders in the coast line, and marked as ‘a sandy bight, not perfectly seen.’ We found several permanent pools of fresh-water not very far distant, in deep narrow gullies, by which the country hereabouts is much intersected. From the depth of the river, and boggy nature of its bed, we were obliged to trace its course for about ten miles from the sea before we could cross. Here the water-course was obstructed by a ledge of rocks, and its channel appeared to become more contracted and rocky, whilst the soil, for the most part, is of an inferior description. Along its immediate banks there was a little grass, and more wood than we had previously seen anywhere; the trees are, casuarina, tea-tree, and eucalypti. Beyond the point at which I crossed the river, the country (as far as I was enabled to judge from a distant view) appeared to improve somewhat; many clear and seemingly grassy patches were seen on the slopes towards the river: and good runs, for either sheep or cattle, might probably be found in this direction. After crossing the river, we met, for the first time, with stunted trees of the kind called the mahogany; but it was not until we had passed some miles to the westward of Cape Riche that we saw any large trees, or got into a country that could properly be called a timber one. Here the mahogany, red gum, casuarinae, and other trees common at King George’s Sound, abounded, and formed a tolerably dense forest nearly all the way to that settlement. From the head of Doubtful Island Bay, I had kept some distance from the coast, cutting off the various corners as circumstances admitted, and cannot, therefore, give an opi-

nion of the country immediately upon the coast line. That portion of it, however, which lies between Cape Riche and King George's Sound is, I believe, already too well known to require any further examination.

"On the 2nd June we had met with a French whaler, the *Mississippi*, of Havre, commanded by Captain Rossiter. To this gentleman I am much indebted for the very kind and hospitable reception I experienced during a residence of twelve days on board, whilst my horses were recruiting after their severe toils, and for the very liberal manner in which I was furnished with supplies for prosecuting my journey to King George's Sound. At the latter place I arrived on the 7th July instant, after having travelled over an extent of country which, from sinuosities of the coast line and other obstructions, has exceeded upwards of 1040 miles in distance from Fowler's Bay; and for the last 590 miles of which I was unaccompanied by any but a native of King George's Sound, known by the name of Wylie, and whom I would respectfully recommend to his Excellency the Governor, as deserving of the favour of the Government, for services rendered under circumstances of a peculiarly trying nature. I have omitted to state that, during the progress of our journey, we met with very few natives, and these, for the most part, are timid but well disposed. The language spoken by them is exactly similar to that of the natives of King George's Sound as far as the promontory of Cape le Grand; and this similarity may probably extend to the commencement of the Great Cliffs, in about longitude $124\frac{1}{2}$ E. A little beyond this point the language is totally different, and the boy Wylie could not understand one word of it.

“EDWARD JOHN EYRE.

“Albany, July 26th, 1841.”

II.—*Map of the Route from Tajurrah to Ankóber: Letter from Dr. BEKE.*

To Colonel Jackson.

DEAR SIR,—In my letter of the 3rd of March, 1841, to your predecessor, Captain Washington, announcing my arrival in Shwa, as published in the last volume of the Society's Journal (vol. xii., p. 84), appears the following passage:—“I flatter myself that the Map of Captain Harris, and the Table of Observations I now forward you, will be allowed to be a valuable addition to the geography of Africa. When I get my notes in order you shall have a number of bearings, and also, perhaps, some slight alterations and additions to the map; but I apprehend it is on the whole pretty correct.” To which passage is appended the following note by the Editor of the Journal:—“Along with Dr. Beke's letter was received a copy, made in the Chief Engineer's Office,