

à la Bibliothèque nationale, par E. Cortambert (*Author*). The Siege operations in the Campaign against France, 1870-71, by B. von Tiedemann, translated by Major Tyler (*H.M. Secretary of State for War*). 25th Annual Report to the Council of the City of Manchester on the workings of the public free libraries (*The Council*). And the current issue of publications of Corresponding Societies, periodicals, &c.

DONATIONS TO THE MAP-ROOM FROM JANUARY 14TH TO 28TH, 1878.—Map of Madagascar, by William Johnson, published at Antananarivo, 1877 (*W. Rawson, Esq.*). Map of the Sarawak Territory of the Island of Borneo, MS. tracing (*H.H. the Rajah of Sarawak*). 1 sheet Admiralty Charts (*the Hydrographer*).

The PRESIDENT announced that Mr. H. M. Stanley having arrived in England, a deputation of the Council had waited upon him to congratulate him upon his safe return to Europe, and to invite him to appoint an evening on which he could give the Society a Paper or a narrative of his explorations and great discoveries in Central Africa. Mr. Stanley had received the invitation with great courtesy and satisfaction, and the 7th of February had been fixed upon for the Meeting. In order that as many Fellows and friends as possible might be accommodated, the Council had thought it right to take St. James's Hall for the Meeting. That Hall was just large enough to admit the greatest number which could expect to hear what was said. It had been ascertained that about 2000 persons could be comfortably seated there, and therefore 1000 tickets would be issued to Fellows, each of whom would have the privilege of introducing one friend by the same ticket. The Council would take care that in proportion as the number of applications for visitors diminished, the number of tickets supplied to Fellows should be increased. Under Rule 6, Sect. 3, Chap. V., passed at the last Anniversary Meeting, that was all that the Council could do. They had engaged the largest room in which a speaker could be well heard, and the whole of the space would be given up to the Fellows and their visitors, with the exception of eighty seats on the platform for Members of Council and their friends, and fifty which were expressly reserved by the rules for visitors of distinction. Not only would an advertisement be inserted in the papers, but a notice would be sent by post to every Fellow of the Society whose address, in the United Kingdom, was known; and in order that those who resided at a distance might not be placed at a disadvantage—which was certainly not the intention of the Committee that framed the rules, nor of the Council or the Meeting in sanctioning them—the applications for tickets would not be opened until the morning of the 30th instant, by which date the Fellows who resided in the country could send in their applications. As the Society had 3500 Fellows, and each Fellow had the privilege of introducing a visitor, while the Hall would only seat 2000 persons, it was quite clear that if all the Fellows desired to be present and to introduce a visitor, it would be utterly impossible to accommodate half the number. There were, however, many Fellows who were scattered over the world, as it was proper and fit that geographers should be, and no doubt there were many others who would not desire to bring visitors: the Council therefore ventured to hope that 2000 seats would be sufficient to accommodate all, or nearly all, who wished to attend. All he could say was that the President, the Council and the Secretaries would do everything in their power to provide as much

room as possible. Of course those who first applied for tickets would be first supplied, and when 2000 tickets had been issued the only answer that could be given would be that there was no more room, and therefore no more tickets. Although some dissatisfaction had been expressed on former occasions of this exceptional character, he trusted that the Fellows would feel that the Council and himself were desirous to afford the utmost possible accommodation for the Fellows and their visitors.

The President further announced that Mr. Stanley had also been invited by himself and the Council to give them the pleasure of his company at a dinner at Willis's Rooms on Saturday, February the 9th. There would on that occasion be seats for 300, and of course when that number of tickets were issued, the only answer that could be given to any further applications would be that there were no more places.

The special object of the present Meeting was to listen to an account of two journeys by Mr. Erskine in a part of Africa which was daily becoming of more interest. Mr. Erskine had made no less than four journeys there; and Dr. Mann, who for twelve years was officially employed in Natal, and was thoroughly familiar with the country, who was moreover a great physicist and President of the Meteorological Society, would summarise the contents of the papers which had been received from Mr. Erskine. On one of his journeys Mr. Erskine went on a kind of mission from the Government of Natal to Umzila, the chief of the Gaza country, which stretched from King George's River in Delagoa Bay to the Zambesi. That was a part of the continent which was very little known, though there was a great deal of interest connected both with its inhabitants and the physical character of the country. Without any inordinate desire to acquire new territory, Englishmen could not overlook the probability that in the course of time and in the progress of events, British colonies would stretch from the Transvaal to the Zambesi River. In that case the Gaza country would be included. If time permitted, a paper would afterwards be read on Lord Howe's Island. Though probably many persons had never heard of such a place, it had an actual and real existence. It was situated to the south-east of Australia, and was named after Lord Howe. There were a few white colonists there, who supplied whalers and other chance vessels that call. A visit had been lately paid to it, and the Paper described the present state of the colony and the island.

The following Papers were then read:—

1. *Two Journeys of Mr. ST. VINCENT ERSKINE in Gaza Land, during the years 1873, 1874, and 1875.* Adapted from Mr. ERSKINE'S Journals by R. J. MANN, Esq., M.D.

[ABSTRACT.]*

Dr. MANN reminded the Fellows that the record of two preceding journeys by this explorer in the same territory is already in print in the 'Journal' of the Society.† In the first journey Mr. Erskine, having parted company with Karl Mauch at Lydenberg, in July 1868, made his way down the Oliphant's River to its confluence

* By Dr. Mann.

† See 'Journal of the Royal Geographical Society,' vol. xxxix. page 233; and vol. xlv. page 45.

with the Limpopo, and then, with great resolution and enterprise, explored the main stream downwards, to its mouth, and so identified it with the Inhampura entrance from the sea. His second journey consisted in an embassy from the Government of Natal to Umzila, the paramount chief of the Gaza territory, which extends for a considerable distance along the coast region between the Limpopo and Zambesi Rivers, and was accomplished in the years 1871 and 1872.

The third journey, in 1873, was undertaken in the hope of inducing the chief to allow a passage through his dominions to Umsilikatse's Land, and the interior of the continent in that direction, for purposes of trade. The mercantile firm of Dunlop, Mees, and Co., of Rotterdam, having undertaken to give substantial assistance to the adventure, Mr. Erskine started by sea for Delagoa Bay on the 12th of May, 1873; and made his way thence, first to the Portuguese settlement at Inhambane, and afterwards to the Island of Chilwana, which lies off the delta of the Sabi, with a narrow and sheltered sea-channel between it and the mainland. He found upon the island a mixed population of Europeans, Moors, and half-castes, amounting in all to about 4000. There were two French merchants residing in the settlement, who carried on the trade of the mainland through natives. From this place Mr. Erskine reckoned the distance to Umzila's kraal as not more than 135 miles. He entered the delta in a boat, by a creek named Maluli, and went first to Manama's kraal, and from that to the station of Nonxanga, the Zulu governor, on the Sabi. He again here remarked upon the wretched condition of the aboriginal tribes, who are held in subjection by the conquering Zulus. These subject native tribes are classed together as Tongas, which, it will be remembered, is merely a term of reproach conferred upon them by the Zulus, who are themselves distinguished by the more honourable designation of Umgonis. The Umgonis are, however, indolent and cruel savages, and live pretty well by robbing the Tongas, so long as there is anything to seize. Bearers were, after some delay, furnished by Nonxanga, and a trading party was sent out to barter for ivory, but entirely without success, because a Zulu overseer was attached to this party, and the Tongas took especial care to have no ivory wherever he appeared to assist in the negotiations.

Four donkeys having come up from Inhambane, Mr. Erskine sent off 50 loads of merchandise *en route* towards Umzila's, and followed with 30 hunters. He found the stream of the Sabi 18 inches deep, meandering through a broad sand-bed not less than a mile wide. The donkeys carried him with great comfort, and returned

with him, after a journey of 400 miles, to the coast, and he attributed much of the immunity from sickness, which he enjoyed upon this expedition, to the good service rendered by these animals.

Having overtaken his porters, he travelled with them about 12 miles a-day along the Sabi, and finally built a three-roomed store upon the banks of the stream, and deposited the main bulk of his goods there, whilst he pushed on in light marching order with the present destined for Umzila. He passed through the Hlenga and Mandanda tribes. Amongst the Mandandas the women were habitually naked. He was surprised also to find these people eating dogs, which were fattened up for the purpose, and rats; the explanation given him was to the effect that "the Zulus eat goats, but do not eat dogs;" and that therefore the Mandandas had found it convenient "to turn their goats into dogs." They build their huts in the dense bush, away from water, to avoid the unwelcome visits of the Zulus. The route from this lay by a very gentle ascent through dense bush, and over broad plains interspersed with water-pools, until at a distance of 95 miles from the sea the height of 1250 feet was attained. A little further on, the lofty inland mountains were in view, and the party descended to the channel of the Bosi, and afterwards traversed a district termed Umtonto, consisting of forest-covered rocks and hills. Below this the track would have been practicable to waggons. But from this, upward, no waggon could by any possibility have made its way. Mr. Erskine joined his old track of 1871 at Yanda's kraal, where he greeted again with much friendly regard a lemon-tree, which had rendered him good service in sickness on his previous visit.

At this place Umzila's messengers came to him, to invite him to the Royal kraal. He found the chief at one of his gardens celebrating the opening of the hunting season. Umzila asked him to bring his merchandise up. Mr. Erskine declined to do that until the weighty question of further progress was settled. The chief ultimately proved quite obdurate on the matter of passage to Nohengula, Umsilikatse's successor, and to Manica. He told Mr. Erskine he was keeping the gold of Manica for the time when the ivory of his own forests and plains was exhausted, and that he had no intention of letting white men meddle with that.

Mr. Erskine gleaned that Umzila stood in fear of the Dutchmen of the Transvaal, but had no anxiety about the English. He considered the Inyanisi, or Queen, too far away to do him any harm, and that Cetywayo, between him and her, was virtually an efficient protection and screen. This offset of the Zulus did not appear to Mr. Erskine to be very powerful or formidable; they held the

Portuguese, nevertheless, in great contempt, and said that the Portuguese authorities kept near the sea, that they might be always ready to run away. The climate near the kraal, which was called Tshama Tshama, and was situate in 20° 22' 30" south latitude, was apparently very fine, favourable to the growth of wheat and the vine, and for the feeding of cattle, and for the cultivation of tropical produce in the sheltered valleys. The mountain slopes around were covered with forests, with trees in places 4 feet in diameter. There were about 1000 cattle feeding on the pasture, which seemed to have been mainly spoil taken from the Amadumas. But there were amongst them unquestionably some oxen that had been procured in Zoutpansberg some years before. The influence of Umzila amongst the neighbouring tribes depends principally upon his reputation of having several powerful wizards, or magicians, in his service, who are able to work upon his enemies by incantations and sickness.

Mr. Erskine remained with Umzila about two months, and then obtained permission to return to the Sabi. Upon taking leave he received a present of eight tusks of ivory, and authority to hunt the elephants in the district of Magibbi.

The rainy season had fairly set in, at the beginning of the month of December, when Mr. Erskine commenced his return. The Sabi was almost impassable from flood when he first reached it, and occasioned him some troublesome delay. His store further down was, however, all safe, and he there turned his attention for some time to an attempt to establish trade. He went up the river for this purpose as far as the place of the Zulu chief Syngyingu. The river was at that time alternately rising and falling, and indicated its depth by the character of the foam, which drifted along upon its surface. The current was too strong for any boat to have been able to make way against it. The temperature of the air ranged at this season between 74° and 105°. Mr. Erskine enjoyed a considerable reputation as a rain-maker, because it so constantly happened that heavy rain set in immediately after his arrival at a kraal. An old chief, Soudaba, once brought him three fowls as a fee for making rain. He answered that he could not practise so cheaply, and that he must have at least a goat. Soudaba went away, and a thunderstorm occurred almost immediately, followed with a deluge of rain, that continued for three days. Mr. Erskine did not, however, think that his reputation in any way suffered, because the event was interpreted as having indicated that he had relented after his petitioner's departure.

The general result of the enterprise proved that no trade was to be

done. The fear of the Umgonis was too great to permit the natives to produce their marketable stores. As many of the goods were therefore got rid of as could be bartered at any price, and there then still remained about forty loads of merchandise to get back to the coast.

On the 7th of January, 1874, the stream of the Sabi was a mile and a half wide, and deep enough to have floated a ship of 100 tons' burden. A vast expanse of turbid brown water was rolling down and submerging the islands, and often even the trees. Mr. Erskine descended the rapid stream in a canoe, until approaching the coast, when he turned aside into the Macowa Creek, and then paddled along through inshore creeks and lagoons, at one place having to make a dangerous passage of a gap in the outer defence where the sea-waves rolled in. In this network of channels he found the tide often flowing in both ways at once. The channels were in many places almost choked with mangroves. He finally reached Chilwana on the 22nd of January, after having traversed 100 miles of the mangrove-swamps of the delta in a "dug-out" canoe, and he ascertained that this inshore water-route was the great seat of the traders' operations. At Chilwana he received the first news of his brother Robert's death, which had occurred in the conflict with Langalibalele's people on the mountain frontier of Natal.*

Having made two or three short trips in the delta, and collected the ivory which he had left some little distance up the river, he visited the lagoons towards the mouth of the Sabi; and also examined the mouth of the Gorongosi, which enters the sea, not at Sofala Bay, but at a place marked Boene on the maps. This place is an island in the delta, and is an old Moorish settlement, with a clump of coconut-palms planted by the original possessors. It furnishes a good harbour for small vessels, and has an export of bees-wax. Mr. Erskine remarked that the coast in this district abounds with practicable harbours, from the Inyambesi to the Macococa.

From Chilwana Mr. Erskine made his way by boat to Cape San Sebastian, then travelled overland to Inhambane, and there embarked in a steamer for Delagoa Bay, examining the Usutu River on the passage.

Mr. Erskine believes that the route from Chilwana to Umsilikatze's country and Maschona Land, past Umzila's kraal, would have proved very serviceable and direct, if he had found that chief

* It will be remembered that the 'Athenæum,' and some other journals, erroneously spoke of this incident as applying to Mr. St. Vincent Erskine himself. He, however, is happily still alive in East Griqualand.

favourably inclined to open it out. The distance was certainly not more than 140 nautical miles from Chilwana to Umzila's kraal, and he estimated the distance of Umsilikatze's old kraal, from that, as being about 200 miles further.

Towards the end of 1874, Mr. Erskine again sailed from Natal, to endeavour to turn to account the permission to hunt the elephant, which he had received from Umzila. He engaged 100 native hunters at Lorenzo Marques, in Delagoa Bay, and having landed from Bazaruta, joined them on the Mauhlin coast, in the month of November. He then continued hunting between the 23rd parallel of south latitude and the Sabi, until the following June, living the rude hunter's life during that time. He was destitute entirely of tea, sugar, and crockery, and subsisted chiefly on elephant-meat and water. The hunting, however, by no means proved a success; the game was comparatively scarce. About 90 tusks were secured; but Mr. Erskine found that, for an expedition of this kind, each hunter requires a provision of 15 lbs. of gunpowder, 70 lbs. of lead, and 450 percussion-caps, which would have amounted for his own party to 150 lbs. of gunpowder, 7000 lbs. of lead, and 45,000 caps.

Mr. Erskine intended upon this occasion to escape the necessity of a personal visit to Umzila, by sending him a present of guns up direct from Bazaruta. He, however, received a peremptory summons to go to the chief. He went up to the Royal kraal, again travelling upon a donkey, and crossed the Sabi by a track 40 miles lower down than the one he had travelled before. He found the chief at a new kraal at Sinika, called "Utshani Udi," or "the place of long grass;" and it proved that what the old despot wanted was a silver ring, which was to be engraved with a lion rampant, and with an inscription recording the name and title of Umzila, the paramount Chief of Gaza.

The visit to Umzila was made in March 1875. The interview was brief, and altogether unsatisfactory, and led to no practical results. After his return from the Sabi, and however, Mr. Erskine came into communication with a very interesting and fine tribe, known as the "Marongwes." He characterises these people as being quite the finest specimen of the native races that he had encountered. They are of the same race as the Chobis and Mandandas, and bear a striking resemblance to the Basutos. They carried strong six-foot bows, and were skilful bush-fighters. But the most remarkable peculiarity about them was that they lived in compact communities, clearing and planting large stretches of

ground—sometimes of more than 100 acres in common, and dwelling with their families in huts built round the clearing.

The country was thickly inhabited, and abounded in fowls, corn, beer and honey; and in many places also yielded coco-nuts, bananas, and sugar-canes. Baobab-trees of great beauty commonly spread their shade over the cultivated gardens, festooned with creepers, and furnishing canopies of shade impervious to the rays of the sun.

From the large extent of ground which he traversed in pursuit of game, Mr. Erskine acquired considerable familiarity with the physical characters of the different districts, which are so distributed in belts as to serve as indications of locality to the hunters. Many of these are designated, and will be found accurately described in the Paper, to be hereafter published in the 'Journal.' Incidentally allusion is also made to edible fruits, the most notable of which are the Simwerbi, which varnishes the moustache with its india-rubber juice when it is eaten; the makwaka, the roasted and pounded testa of the seed of a calabash, which is packed into drums, and the shugutsa, which is the same delicacy prepared green. The plant which yields poison for arrows, a species of *Strephanthus*, is described as being in all probability identical with that met with in the Zambesi districts by Dr. Livingstone.

The Mandowa, who inhabit the hills above Sofala, appear to be of Makalaka blood, and to have submitted to 'Cnaba, the Zulu potentate who first seized this land, without fighting. They still have their own chief living on the Umkine towards the north. The so-called Tongas of the district are in reality Chobi, Basige, Bila-kulu, Mandanda and Mandowa.

In reference to the general question of trade, Mr. Erskine remarks, as a practical deduction from both these journeys, that curiously enough the opportunities for traffic diminish with penetration into the native districts. India-rubber, bees-wax, and ivory are cheaper at the Portuguese stations at Inhambane than they are in the interior, where the articles are produced. The natives take advantage of their opportunity when heavy goods are transported to their doors. They know that the white trader will ultimately dispose of them in such circumstances at any price, rather than have to carry them away again. When, however, they take their india-rubber, wax, and ivory down to the coast settlements, the argument tells in the opposite direction. No trade of any kind is practicable with the Umgonis or Zulu section of the community.

They hold the doctrine that trade means that substantial goods are to be exchanged for empty and never-to-be-fulfilled promises. The most available goods for barter were found to be eight-yard pieces

of blue buftas, thirty-two inches wide, red and white striped salempores, blue-ground prints, and red Umgazi beads about the size of a pea, with a white eye. Muskets, powder, and caps were in quite limited demand. Blankets and fancy goods were unsaleable, and iron picks for the cultivation of the ground were not worth the trouble of transport.

[Mr. Erskine's Paper, as condensed by Dr. Mann, will appear *in extenso* in Vol. xlviii. of the 'Journal.']

MR. GALTON said the readers of the Society's 'Journal' were greatly indebted to Dr. Mann for editing Mr. Erskine's Papers, which reached England in the form of a diary much too voluminous for publication. Dr. Mann very carefully edited one of the Papers referring to Mr. Erskine's previous journeys which had already appeared in the 'Journal,' and in the same way he was about to edit the account of the last two journeys. The interest of the country through which Mr. Erskine had travelled was greatly enhanced by the possibility of part of it hereafter becoming colonised by men of English race, and he wished to ask Dr. Mann some questions concerning its climatic conditions. The northern part of the Transvaal was as near the Equator as Calcutta, but although it was sub-tropical, the interior was high above the sea, and therefore enjoyed a more favoured climate than the low lands of Calcutta. How much more favoured it was, was the question he wished to ask Dr. Mann—how far an Englishman could perform laborious work in those latitudes, or whether agricultural work must not be done for him by the blacks? Could the English race thrive and multiply there? Did the children become sickly? He understood that the Dutch had thriven unexpectedly well in Pretoria, and it would be exceedingly interesting to know if our Anglo-Saxon race was likely to flourish there. Perhaps at the same time Dr. Mann would give them some information with regard to the products of the country, more especially as to its capabilities for growing wool. It was well known that sheep lost their wool in hot countries, and he wished to know if the Merino and other new breeds were likely to flourish and bear wool in the northern part of the Transvaal, between the Limpopo and the Zambesi.

DR. MANN said the climate was a most extraordinary one. For nine successive years he had studied the climate of Natal in the most scientific way. He endeavoured to obtain correlative observations in the Transvaal; but, in consequence of the fact that people there did not care much about science, he could get no actual results that he could rely upon. At the same time, he obtained a good deal of information which he could check by what he knew with regard to his own districts. In the highlands of Natal, with a temperature from 95° to 97° in the open air, which was the highest he had ever known there, a person could ride all day long without exhaustion. The children of white people in that district were healthy and strong. On the coast, however, the children were sallow and languid. The same thing no doubt occurred in the Transvaal, where there was almost every variety of climate. He would not advise any Englishman to live north of latitude 25°, for beyond that line the country was subject to fever; and, until the climate was altered by cultivation, no European could safely venture to live there. The central districts, however, were as healthy as Natal, and the children of English parents were as vigorous and red-blooded and healthy as in England. In the district around the Drakenberg Mountains the climate was so good that horses multiplied and sheep flourished admirably in at least two-thirds of the Transvaal. The great drawback to wool-growing was the fact that while during eight months

of the year food for all kinds of animals was produced in abundance, during the other four months there was no food to be had, the land being dry and barren. The old Dutch Boers turned the flank of this difficulty, for they always took care to have warm lands down on the sea and cold lands up in the mountains, and they moved from one place to the other at different seasons of the year, so that they always kept up a certain amount of stock. They considered that each man required 6000 acres on the coast and 6000 acres inland. What was required was that during the season of superabundant growth the products of the earth should be harvested for use in winter. A friend writing to him from that district a short time ago, said, the two things which were chiefly wanted there were sewing-machines for the women and reaping-machines for the men. Hitherto the land had not been cultivated during the summer in such a way as to provide an abundance of food for the winter. He thought that Mr. Trollope, who spoke at the last Meeting, had made a radical mistake with regard to labour. He said that the Transvaal would be a place where the English could do a great deal of good for the natives, but where they could never establish a colony. It might be true that Englishmen might not be able to go there and live from hand to mouth, because of the cheapness of native labour; but the fact was, when an Englishman landed there with half-a-crown in his pocket, he managed in less than twelve months to employ twenty black labourers. Of course that depended on skill and observation. Some men in Natal would fail where others would make little fortunes; and his friends told him that in the Transvaal everything could be done which could be done in Natal. While the coffee crop was failing in Natal, all along the slopes, looking down to the Zoutpans and Rustenburg, it was being successfully grown. The people must, however, learn to insure themselves against loss in the seasons of drought. Within his own memory the whole of Cape Colony was fed by oxen from the Transvaal; and for something like thirty years all the beef consumed in the Cape Colony was obtained from the Transvaal. At that time no lung sickness was known there. In consequence of the scarcity of food in the winter, the staple of the wool became weak and valueless. In order to obtain good wool, the sheep must be well fed. During the period of abundant growth in the Transvaal the wool was splendid; but when the sheep were starved, the fibre was thin and useless. In Natal, where artificial food was given to the sheep, that difficulty was got over, and no doubt a similar result might be obtained in the Transvaal.

MR. HAMILTON said he was rather surprised to hear Dr. Mann state that, in consequence of the sheep not being sufficiently well fed, the wool "broke off." In Natal, sheep were subject to a disease appearing in the form of a mattery incrustation; the animals became very fat, but the wool was perfectly useless.

THE PRESIDENT said Dr. Mann's answers to Mr. Galton's questions had added very much to the interest of the Paper. It appeared that the Zulus had nothing to learn from Englishmen in the way of tricks of trade, for they were perfectly aware that if a person carried his goods a great distance inland, it would not pay him to take them back again. This confirmed what a writer in the 'Edinburgh Review' had lately said with reference to Mr. Stanley's magnificent discoveries on the Congo,—that although there were great water-courses leading into the interior, if there were considerable interruptions, making communication with the coast difficult, that would interfere very much with the development of a large commerce between Europe and the centre of Africa. Although Nature had done very much for all those regions, unless man applied his intellect to their development, so as to provide for the loss in one season by the superabundance in another, the districts could not be cultivated with any great advantage. He thought the evidence proved that the country described by Mr. Erskine was one of splendid promise for the farmer,

and for an agricultural population, though no doubt it would be necessary to combine the cultivation of roots with pasturage. Farmers who went out from England would not, however, take long to learn that.

Dr. MANN said he quite agreed with Mr. Hamilton, that whenever sheep suffered from disease the wool also suffered; and he understood that when sheep were not sufficiently fed the same result was produced. What he had said with regard to the wool was founded on statements made to him by Mr. Joseph Henderson and Mr. Baker of Natal.

The following Paper was taken as read:—

2. *A Visit to Lord Howe Island.* By ALFRED T. CORRIE CORRIE,
Surgeon, R.N.*

ON the 16th of March, 1876, a fine autumnal day in the southern hemisphere, we sailed out of Sydney harbour—that harbour about which much has deservedly been written, and which is, I suppose, one of the finest in the world.

On the 21st, at 5 P.M., having made a very fair passage under canvas, we anchored off Lord Howe Island on the south-west side. The following morning, not being satisfied with our position, we weighed anchor at 9:30 A.M., and proceeded under steam to the N.E. roadstead, and anchored in 13 fath. Lord Howe Island is the southernmost of the outlying islands off the East Coast of Australia, in lat. $31^{\circ} 36' S.$; long. $159^{\circ} 5' E.$ It was discovered by Lieut. Henry Ball, then in command of his Majesty's ship *Supply*, on the 17th of February, 1788, while on a voyage to Norfolk Island from Port Jackson (New South Wales). He named the island after the hero of the "glorious 1st of June," the Right Hon. Lord Howe. It is some 400 miles N.E. from Sydney, and about 300 miles E. from the nearest land, Port Macquarie (New South Wales), and about 500 miles from Norfolk Island; of a somewhat peculiar shape, an irregular curve trending rather to the eastward, it is about 6 or 7 miles in length, and 2 or 3 miles in width in the widest part. On the east side are a number of bays, and the west is protected by a coral-reef in which are 3 or 4 passages for boats, and between it and the shore are shallow lagoons.

Off the north end of the island are the Admiralty Islets, about 2 miles distant; on the east side nearer the shore are the Sugar Loaf and Mutton Bird Islands; and on the west is Goat Island. Some 12 or 13 miles from Lord Howe Island is plainly seen a very strange-looking peak, called Ball's Pyramid, estimated to be 1800 feet high. The island is mountainous; the highest parts of the land are Mount Gower, rising from the south end at an elevation of some 2800 feet, and Mount Lidgbird some 2400 feet.

* Communicated by the author, by permission of the Lords Commissioners of the Admiralty.

The geological formation of the volcanic island appears to be disintegrated trap-rock and coral. The soil in parts is very rich indeed, and covered with dense vegetation, the undergrowth being kept comparatively clear by the goats and pigs; the grasses are couch and tuft grass. Four kinds of palms are found on the island, some reaching a great height, the Thatch-palm (so called by the settlers because they use it to thatch their houses), the Cabbage and Umbrella Palms. The Pandanus or Screw-pine (*Pandanus Forsteri*), located chiefly on the mountain-sides, attains a height of some 30 or 40 feet. It is called by the inhabitants the "Tent-tree," on account of the strange arrangement of its roots, which take their rise from the main trunk at different heights, and gradually extend forwards and downwards, and become fixed in the ground, forming a rough sort of tent.

The most conspicuous tree on the island is, perhaps, a species of *Ficus*, a gigantic banyan, attaining a great height, and spreading out its branches in all directions, which fall in a most graceful manner, covering large spaces of ground.

My friend, Mr. Moore, of the Botanic Gardens, Sydney, writes thus of it:—"The most remarkable plant, however, upon the island is a species of *Ficus*, the only one of the genus found there along the whole extent of the flat and richest ground on the south-west side. This noble tree grows in large numbers, very rarely in exposed situations. It possesses to an extraordinary degree the branch-rooting characteristics of the famous "Banyan" of India (*Ficus Indica*). From its high, wide-spreading branches adventitious roots are produced, which descend to the ground, then rapidly enlarge, and become in course of time huge stems, drawing nourishment from the earth for the support and increase of the parent-branch, which, as it extends, produces similar root-stems. This interesting tree appears to be new, and confined to the island, its column-like stems suggesting the specific name *colummaris*, proposed to be given to it."

The Lichens, Fungi, Algæ, and Filices, are numerous, especially the latter, represented by *Trichomanes*, *Asplenium*, two or three species of *Polypodium*, and a few others.

A few parasitical plants were noticed, and a strange kind of plant, called by the settlers the "Stink-plant," was pointed out to us; a most appropriate name, for, when its leaves are bruised or its branches broken, it emits a most sickening and offensive odour.

The fruit-trees and culinary vegetables growing on the island (all introduced) are oranges, water-melons, pomegranates, onions, potatoes, Indian corn, pumpkins, and tobacco.