

He himself was recently in Vienna, when the Austrian people showed great enthusiasm in welcoming back the officers of the Austro-Hungarian Expedition, which had just returned. The letter from the President of the Royal Geographical Society, read at the meeting of the Austrian Geographical Society, was received with the greatest pleasure, and the news that the English Government had decided on sending out a new Expedition would awaken an echo of sincere joy in the Austrian capital. The emulation which existed was without any jealousy, for each nation was only striving how far it could contribute to the one great end. It had been said that the utility of such an Expedition was not very evident, but the truth was that no one could ever tell what would be the final result of scientific discovery. If the undertaking only served to stimulate the courage, daring, and boldness, and to keep up the chivalry that had always distinguished the British navy, that would be quite sufficient to most Englishmen; but when Galvani made his first discoveries in electricity, even the most scientific of that day, certainly never imagined that they would be the source of the marine cable and the telegraphic wire. There could be no doubt that discoveries connected with magnetic science must result from a nearer approach to the Pole, and what those discoveries might lead to, in the way of practical utility, no one could possibly decide. His chief purpose in addressing the meeting, however, was to say that the Society was very much indebted to the President personally for the success of his efforts to bring about a new Polar Expedition. Sir Henry Rawlinson had never been discouraged or disheartened, and had never ceased to take a deep interest in the subject, and, in the end, his courage and perseverance had been rewarded by complete success. He therefore proposed that the thanks and congratulations of this Society be offered to Sir Henry Rawlinson, as President of the Royal Geographical Society, for his successful efforts in obtaining from Her Majesty's Government a favourable consideration of the proposals for another Expedition to the North Pole.

Admiral SHERARD OSBORN seconded the motion. No one connected with the Council of the Royal Geographical Society for the last few years, knew more intimately than he himself did, or appreciated more highly, the exertions, tact, and discretion with which Sir Henry Rawlinson had acted; and he was sure the Fellows of the Society would join him in hoping that, as they were now able to congratulate their President on the result of the efforts of a considerable number of years, and on the going forth of the Expedition, so he might be in the same place to receive their congratulations on its return, which he (Admiral Osborn) believed would be a glorious one.

The PRESIDENT thanked the meeting for their kind vote, and in doing so said that, if any honour were due for what had been done, he must be allowed to share it with his predecessor, Sir Bartle Frere, through whom the matter had been brought exhaustively before the Government.

There were one or two other matters which he wished to notice before proceeding to the business of the evening. News had that day been received from Colonel Gordon, to the effect that he was at Gondokoro on the 5th September, and that he then had the sections of his steamer, destined to navigate Albert Nyanza, at Mount Regia below the Falls, having full confidence of getting them transported to the smooth waters of the Upper Nile beyond the Falls, in a fortnight from that time. A packet had also just been received, containing a journal and map from Mr. Stanley on the East Coast of Africa. It appeared that he had ascended the Rufiji River to a certain distance, and had sent home a map of its delta with a full account of his journey, which would, he believed, be published in the 'Daily Telegraph' of the following morning.

The real business of the evening to which he would now advert related to a subject of very great importance. Her Colonial Empire was one of the chief sources of the greatness and strength and glory of England, and it was im-

possible to overrate the importance to this country of the great continent of Australia. When the Royal Geographical Society was first instituted, forty years ago, nothing was known of Australia except a few square miles in the vicinity of the chief towns; but at the present time scarcely any part of it had not been visited. Of late the great object had been to discover fresh pasture lands for sheep-feeding. It was a most important feat when Macdougall Stuart crossed the continent from the south to the north along the line where the telegraph now runs. This was in 1859, and since then the great desire of explorers had been to traverse the intermediate country between Stuart's route and the West Coast.

In the course of the last thirty years, on no less than ten different occasions the Society's Gold Medal had been awarded to geographers for explorations in Australia. Mr. Eyre received the medal in 1843; it was next awarded to Count Strzelecki, who was the real discoverer of the gold deposits of Australia; next, to Captain Charles Sturt, to whom geographers were very greatly indebted, and Dr. Leichhardt. Mr. Augustus Gregory received the medal in 1857, and Mr. Macdougall Stuart in 1861, he having been presented with a gold watch for his previous exploration in 1859. The medal was awarded to the unfortunate O'Hara Burke, after his death, in 1862; and Mr. John King, who was with him, received a gold watch. Mr. Frank Gregory received a medal in 1863, and the list was closed with the name of Colonel Warburton, who had been awarded the medal this year, and to whose indomitable energy, perseverance, and capacity for personal endurance, it was mainly owing that his expedition was finally successful.

#### *Journey across the Western Interior of Australia.*

Colonel P. EGERTON WARBURTON spoke as follows:—Mr. President and gentlemen of the Royal Geographical Society: My first duty is to return my sincere thanks to the Society for the honour they have done me in presenting me with their gold medal. I need not dwell upon the gratification which that presentation afforded to me personally and to my numerous circle of friends; but I may say that I think and I hope that it will act as an incentive to others in Australia to do far more than has been already done. Though last on the list of those who have been honoured with the Society's medal, I am, I think, the second from South Australia who has received it, the only one previously being John Macdougall Stuart, of whose name all South Australians are justly proud, for he accomplished a most wonderful feat. In what I have to say I hope I shall not be accused of boasting, when I assure you that the journey we went through was well nigh proving too hard for us. It was by the merciful interposition of Providence alone that our lives were saved—but there was nothing whatever to spare. We got off with our lives, and our lives only; and therefore all boasting or vain-glory would be absurd. We had to start from "Alice Springs," in very near the centre of Australia, and having once started, we were not permitted, nor, I believe, did any of us wish, to look back. We had no fresh horses, no fresh camels, no fresh

What was more, she ran away upon her toes, so that we could not track her much; and though I immediately put as good trackers as any in Australia on her trail, yet we failed to catch her again. The only other native that we succeeded in catching was a terrible old witch—hideous beyond all conception, and noisy enough to do anything. Having been cheated by the young girl, we thought to make quite sure of the old woman, so we tied her thumbs behind her back, and put a rope around her neck; but notwithstanding this, we were obliged to keep watch over her by turns during the whole night. I tell you this to show how excessively cunning they are; and we did not get any good out of any of them.

Perhaps the state of the natives might be a little interesting to you. They are, I think, the very lowest in the scale of humanity, and I cannot conceive how anything could fall much lower. They do not even take the trouble to put a few bushes up to shelter themselves from the sun or the rain—when it does rain, though I don't know when, for I didn't see it—but the sun is hot enough. They get on the shady side of a bush when the sun is too hot for them, and when it rains I suppose they go to the lee side. The gentlemen take the shank bone, about 9 inches long, of the wallabi—a kind of marsupial hare—and when it is lubricated nicely in the mouth they pass it through the cartilage of the nose, and it sticks out; and having done that, they are in full dress. I do not know anything more that is wanted. Of the ladies' dress I say nothing, and for this simple reason, that there is nothing at all to say anything about!

Another subject that perhaps may interest you is to be found in the camels. Most surely no other animal in creation could have carried us across. For hundreds of miles there was not a blade of grass, nothing that any animal, bullock, donkey, horse, could possibly feed upon; nothing but the tops of the bushes which the camels managed to browse. No animal but the camel could have served our turn. I say this with confidence, because every other animal which has been tried has failed, and this is the sixth expedition. These camels are most patient and easily managed, but it is generally requisite to have a master amongst them. There is one master, a bull-camel, who always establishes himself at the head of the party; and so long as he is in good spirits and able to move about, all the younger ones are kept in admirable order; but directly he falls sick, they become exceedingly troublesome. Amongst other misfortunes, we were unlucky enough to have our master-bull eat something that disagreed with him, and we had no medicine

to give him except a chance bottle of mustard. It did not do him any good; but before we ourselves were aware that this master-bull was at all sick, the young bulls were all acquainted with it and were jumping about in most lively style. The necessity of having a controller, a President over the camels, will be apparent when I tell you that the trick the young ones have is to cut off two or three female camels and run them away as hard as they can; so that we were obliged to knee-halter them and tie them as tight as we could, or else we should have left our bones in the sand, because all our camels would have run away from us in little troops. However, they certainly behaved well to us when we did not give them the opportunity of doing the reverse.

Perhaps you would like to learn, too, what sort of eating they make. Unfortunately, we had to eat seven of them. I daresay when the animal is fat and well fed on oilcake and other things, it cannot be very bad; but when he has been worked to that extent that he is unable to stand, and is shot only because it would be a pity to leave him to rot, his meat is not very good, and it is interlaced with large sheets of parchment. He looks a very large animal, but there is very little meat on him. He is more bone than anything else; and I can assure you that of all the buckets of meat—for the bucket was our cooking-vessel—that we cooked when a camel was killed, never, in any single instance that I can remember, was there one single bubble of grease on the surface. The head is somewhat of a delicacy, and the feet are really very good, for his condition does not affect his feet very much. In our distress, however, we were obliged to eat him, inside and outside too; and his hide is pretty good when you cannot get anything else: but if anybody here has had the boldness to taste the contents of a carpenter's glue-pot, it comes to very much the same thing. We were compelled, by absolute starvation, to eat our last camel all but the hair—clean through from end to end; and after the bones had been lying in the sand some days, they were broken up to make broth of; and, in the course of a short time, I don't think any of the animal was to be seen. The advantage of the camel is, that he can work until he cannot work any longer, and then you can eat him.

Perhaps one of our greatest misfortunes connected with the camels was, that a good many of them were struck with the land-wind at night in the loins, so that when we got up at three or four o'clock in the morning it was reported that this camel or that camel could not move. Of course every camel we lost was a reduction—and a very considerable one—in the chance of our saving our lives; and, there-

natives were driven off as soon as the camels could come up. The lad, I am happy to say, recovered, and he is now in my house in Australia—or was there—doing exceedingly well. I do not know whether you are aware of it—it may seem a very trifling thing,—but a black fellow's skull is about five times the thickness of a European's. It really is. I do not mean as to his intelligence, for there I dare say he is as sharp as any of us, but I mean in actual thickness; and unless it were so, I do not know how he could possibly sustain the blows with most massive clubs that are administered on his head.

I never had the pleasure of seeing one of the women's skulls; but I imagine that they must be even thicker than the men's, for they have to endure even more blows.

I must not trespass longer upon your time, except to give you a faint description of our miserable condition just at the last. We had succeeded in our object; we had traversed the whole of the unknown country, and were located on Frank Gregory's furthest point, on the Oakover. We had reached that water by a miserable night march, in which I, being somewhat too old for the work, was obliged to be strapped to the back of a camel, because I could neither sit nor stand. We reached that point, but were not able to go any further. We had eaten the greater part of our camels, and had only three left. One could not work at all, and the question with us was how we were to get from that point to a station which we thought existed somewhere on the De Grey, though we did not know where. It turned out that this station was 170 miles away from us. We had no beasts to carry us; we were utterly unable to walk 100 yards; and therefore it was quite clear we could not have got down in the ordinary way. I therefore took the two camels that were tolerably capable of work, and sent the two strongest of our party down the river to look for the station, and to endeavour, as a last resource, to procure some provisions, and beasts to carry us. During their absence we lay there on the bank of the Oakover, which at that time had not a drop of water in it. We had, however, a water-hole separate from the river. We lay there for a great many days, not knowing when our party would come back. Sometimes we caught a bird, and there were plenty of fish in the water-hole close by our side. We had hooks and lines, but they would not bite, and we had no net; so we saw the fish, and knew they were there, whilst we were starving. There were also plenty of ducks about, but they would not settle on that water where we were, and we could not walk after them, though we had powder and shot. Day by day we

went down for bathing, but for nothing else; and we were being cruelly starved to death. To show you what changes are met with in Australia, I may mention that the bed of the Oakover at that point was 300 or 400 yards in width; but there was not a drop of water in it, and probably there had not been for a long time. We went to bed one night, when the channel of the river was quite empty, but at 3 o'clock in the morning it was full to the bank, with plenty of ducks and large trees, borne along by the current, floating on its surface. It was then a splendid river. The party that I had sent down behaved admirably. They reached Messrs. Grant, Harper, and Anderson's station, where they were received with the greatest kindness. Horses and provisions were at once supplied, and to the liberality and promptitude of these gentlemen we entirely owe our lives. Not only did we receive such kindness from individuals, but we were treated in the same manner by every community we passed through. We were regarded by the Government as guests of Western Australia from the moment we set foot on the inhabited parts. We were franked back to our own shores, close to the seaport of Adelaide; and I owe the authorities a very great debt of gratitude, which I take this opportunity of expressing. If there be any point upon which I have failed to make myself understood, I shall be happy to give explanations, if Sir Henry will kindly tell me what the Meeting would most like to hear.

Sir CHARLES NICHOLSON asked Colonel Warburton to give some details as to the vegetation and geology of the country through which he had passed. The region traversed by Macdougall Stuart was of the most unpromising kind, and he was frequently in danger of perishing for want of water. Burke and Wills died of starvation in a country now occupied by sheep-runs, and which possessed all the physical conditions necessary for supplying human wants. He therefore wished to ask Colonel Warburton, if, notwithstanding the barren character of the country which he had passed through, he thought it possible that in time portions of it might not be made available for pasturage?

Colonel EGERTON WARBURTON replied: Unfortunately I am neither a geologist nor a botanist, and therefore cannot give any scientific account of the matter; but certainly a great part of the country which Stuart went over, so far as the south of Alice Springs is concerned, is most excellent pasturage country, with plenty of water and good grass all along the Stephenson. Around Alice Springs there are now cattle-stations, and to the north of the McDonnell ranges the country is fit for stock. That celebrated explorer Sturt had a theory that the centre of Australia was a depressed basin. Unfortunately my barometer—and I had only one—went wrong; and as I did not know when it went wrong, I cannot tell up to what date its readings were to be trusted, though they were taken carefully every day. The foot of the McDonnell Range is about 2700 or 3000 feet above the level of the sea. Neither I nor any of my party was sensible of any descent on the north side, and I think the part I traversed is high sandy tableland, and certainly I

should say that none of that land is likely to be occupied for a great many generations. Nothing but the direst necessity could ever induce a man to go there; for, in the first place, he would have to introduce some kind of grass, and he would have to carry for an immense distance every single article of food that he required, except meat. There are no animals there—not even a wild dog. There is no water. I got the bones of a dog out of one well, but that only showed what a silly dog he was to go there. There is no animal except the wallaby, which can do without water. I can assure you that when we killed a camel there was not a single kite or bird of any kind that had the curiosity to come and see what we were doing. The natives live on this little wallaby. They burn the spinifex grass, and the instant the wallaby comes out they shoot it with a short stick. Besides the wallaby they may catch a snake or lizard.

Mr. BELL asked whether there were any kangaroos?

Colonel EGERTON WARBURTON.—Neither kangaroos nor emus, nor any single animal of any utility. I have seen the wallabies in the hands of the natives, but I never saw one on the ground.

Sir GEORGE CAMPBELL asked what the natives fed on?

Colonel EGERTON WARBURTON.—There is a small acacia-seed, which is very black and as hard as a little bit of granite, and on these the natives feed also—it is their vegetable diet; and we ate them, roasting them on a tin-plate, and then cracking them up, sometimes between two stones, and sometimes with our teeth. There were plenty of casuarina-trees, and a tree called the Leichhardt or walnut-tree; but its fruit is harder than stones, and cannot be eaten.

Mr. FRANCIS GALTON asked Colonel Warburton if the natives had been troublesome on many occasions?

Colonel EGERTON WARBURTON.—Only on one occasion: I was on foot, and got out of the track. The camels were coming behind me, and hearing a little noise I looked round, and found nine natives with spears close to me. Two of them, young men, in order to show their zeal for the work, had their spears poised to throw at me; but, as reports travel great distances out there, I suppose they had heard of the wonderful effects of firearms, and when I advanced on them with my pistol they lowered their spears. There were a few old men amongst them, and by dint of passing our hands over each other's grey beards, to see that they were not tied on, we got on amicably. That was the only time I met them. They were afraid of us, and ran away from us. We caught an urchin once; but it was by chasing a mother, who had this child and an infant on her back. The camel, not liking to be separated from its fellows, bellowed frightfully, and this alarmed her so that she dropped the big child and ran off with the little one.

Mr. WOODS asked what were the physical and geological features of the country passed through, and if a sandy desert prevailed for the greater part?

Colonel EGERTON WARBURTON.—I think the last water we passed was about Ethel Creek. There are no mountains, only high sand-ridges, varying in height from 40 to 50 and even 100 feet, running in parallel lines, so that when you are riding between them you can see nothing at all. When you get to the top of them you can only see the next sand-ridge.

Mr. RUSDEN asked what was the height of the casuarina and other trees, and, if they were so numerous that, when looked at from the distance, they had the appearance of forests? In looking from one hill to the trees on another, for instance, did the hill looked at present the appearance of a wood or forest?

Colonel WARBURTON.—We passed through several what I may call casuarina forests, but they were all on the low ground. I should think the trees must have been about 30 feet high, with straight stems without branches,

admirably adapted for telegraph-posts, if there were any means of getting at them.

The PRESIDENT said that he had omitted any reference to Mr. Hamilton Hume, whose services the Society greatly appreciated, because he was not a gold medallist, and in the list he had given he only referred to those who had received the Society's medal. The Society ought also to take notice of the liberality of the two gentlemen, the Hon. Mr. Elder and Mr. Hughes, private citizens of Australia, who organised the expedition at their own expense. The cause of geography was very much indebted to them. It was important, too, to remember that, wherever the central region had been tapped, the same results had been obtained. Mr. Gosse, Mr. Giles, and the Forrests had all arrived at just the same conclusion as Colonel Warburton, that the country was absolutely uninhabitable. Colonel Warburton richly deserved the medal which had been awarded him. He had displayed extraordinary personal energy and endurance, and, in the name of the Society, he (the President) thanked him for the pleasure he had afforded the Meeting by his description of his journey, wishing him at the same time health and happiness when he returned to Australia.

Mention was made by the President of the various other Expeditions to the Interior of Western Australia, of which the following brief accounts have been communicated to the Society.

*Mr. W. C. Gosse's Explorations, 1873.*

Mr. Gosse gives the following summary of his Journey, in the introduction to his Report and Diary addressed to the Surveyor-General of South Australia:—

"SIR,

"February 1st, 1874.

"I have the honour to enclose, for the information of the Honourable the Commissioner of Crown Lands and Immigration, the diary and map of my exploration; also to report that, leaving the Alice Springs, April 21st, with a party consisting of four white men, three Affghans, and a black boy, I travelled along the telegraph line to latitude 22° 28' s., about forty miles south of Central Mount Stuart.

"From this point I followed the Reynolds Range about w.n.w. for forty-five miles; I was then obliged to turn s.w., passing a high bluff, piled by Major Warburton, and on to the western extremity of the MacDonnell Ranges (Giles's Mount Liebig).

"Here I was compelled to turn south, crossing Mr. Giles's track several times, the eastern arm of his Lake Amadeus, and on to a high hill, east of Mount Olga, which I named Ayers's Rock (I have given a full account of this wonderful feature, in my diary). The country to this point is chiefly sandy soil, densely timbered with mulga (a name given to small trees found numerous in the interior of Australia, a species of genus acacia, belonging to the natural