

EXPLORATION IN WESTERN AUSTRALIA.

(WITH MAP.)

By FRANK HANN.

(COMMUNICATED BY MAJOR A. J. BOYD, F.R.G.S.Q.)

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I MADE two journeys to the north-western interior of Western Australia, where it was my intention to take up and stock any good country which I might meet with in the course of the trips, or rather, on my second trip, which I propose to describe more fully than the first, the latter being merely what may be described as a preliminary canter. I left Lawn Hill, on the Gulf of Carpentaria, on the 1st April, 1896, and travelling across to Western Australia without any unusual experiences, crossed the overland telegraph line in South Australia at Newcastle Waters. My party consisted of one white man, six Queensland blacks, and sixty-seven horses, nine of which belonged to my white companion, who went with me as far as Roebourne (W.A.), where we parted company, and from that time I had no white man in the party, but the Queensland black boys behaved well and rendered me many valuable services. After leaving the telegraph line, I made for the Victoria River, and on reaching it I ran it down as far as Victoria Station, which is situated on the banks of the Wickham, a branch or tributary of the Victoria.

At the Victoria Dépôt I was able to get some needed rations, which are regularly brought there by the steamer from Port Darwin. The boat runs up the Victoria River to a point about ninety miles from the coast and eighty from the Station. Leaving the dépôt, I struck the Baines River, a tributary of the Victoria, and followed it till I arrived at Avern Station. On the Victoria I saw a celebrated baobab tree, which was marked by Mr.

A. C. Gregory in 1856. In appearance it somewhat resembles a gigantic bottle tree, the head bulging out into a huge ball-like top, with branches straggling out of it in all directions. This tree was about 100ft. in circumference at the base. After leaving Avern Station, I ran the Baines River to the head. I should have said that Avern is a very well-watered run. A boat can come up the river to within four miles of the head station, and land goods direct from the deck into a dray at the bar crossing the river, the water being there deep enough to allow the boat to lie close to land. My course now lay over the range, and during the day I struck a creek which joined the Negri River about seven miles from its junction with the Ord River, which latter flows into Cambridge Gulf at Wyndham. I followed up the Ord by way of Flora Valley to Hall's Creek, and thence passed by Mt. Dockerell (a deserted gold camp), over sixty miles of poor desert country, where I got water, however. This is in the Kimberley district, in the midst of a gold-producing country. As I stated, I got away 60 miles to the south of Mount Dockerell, where I left most of my horses, and, taking three of my black boys and sixteen horses, I made an attempt to get through the desert to try to find a track to the head of the Oakover. The attempt nearly resulted in fatal disaster. We watered the horses at 1 p.m. on Saturday, and from that time till Tuesday morning we found no water. My one chance of keeping life in the unfortunate animals was to give each a pannikin of water from our precious supply in the water bags. We poured the pannikin of water into a plate, and allowed them to lick it up. It was a pitiful drink; but it wet the poor brutes' mouths, and was the means of saving their lives.

Finding it of no use to persist in my object, I turned back, and on reaching Christmas Creek, after giving the horses a needed spell, I ran the creek down to where it joins the Fitzroy. This is good country, and I found stations all the way down the Fitzroy. The Quamby River flows into King Sound. Mr. E. Rose's station is the first station met with on the Fitzroy. I met with great kindness from the squatters all along the line. I now followed the river down until I struck the telegraph line from Derby to Broome where the cable goes to Banjoewangie. Broome is a beautiful little place, and a great pearling station, much like Thursday Island, and population much the same as of that Island. Then followed the dreary 90 mile beach along an open plain, all sand, where water is obtained from a series of Government wells, which are, on an average,

20ft. deep. The water is fair in many of them, but for want of constant use has become stagnant in a few. However, we got along very well in spite of the eternal red sand and, having passed the 90 mile beach, arrived at Condon, eighteen miles from De Grey's station, on the De Grey River, named by the late F. T. Gregory. Then passed several stations before reaching Roebourne. All the settlers get water out of wells, all worked by blacks. At Roebourne I only remained long enough to replenish the ration bags, and then followed the Fortescue River up to the head, whence I struck north-east to the Narradine gold diggings. Now came another dry trip out into the desert country to the head of the Oakover, after crossing which I met Mr. Rudall, who was out looking for some members of Wells' expedition who were lost. Before I met Rudall, I had named a river, which I had struck about 100 miles north-east of the Oakover, the Rudall. Certainly, I was not the first to see it, but as I knew it had not been named, thought myself entitled to give it a name by which it might be known on the map, and it has since been charted on the official maps under that name.

It is a peculiar stream, rising inland towards the west and losing itself in the desert towards the east. It is remarkable that there are no fish to be found in it. This little deviation completed I returned with my party to the Narradine, crossed the Oakover and went out to Mount McPherson, which was named by the late Mr. F. T. Gregory, who nearly perished in his expedition of 1861, having lost all his horses, had to walk back to their main camp, where he had only three horses left. I then set about erecting a trigonometrical cairn on Mount McPherson.

I had already lost several horses. Some died from poison bush and from other causes, three had their thighs broken owing to being kicked by other horses, one broke its shoulder by a fall, another broke its leg, two got their feet entangled with the spare hobbles round their necks and had killed themselves in their struggles. These were the saddest cases I have ever witnessed. Unable to extricate their feet they had evidently thrown themselves violently about during the night. One of them had torn his eye out and was fearfully lacerated about the head. To make the loss still greater, after leaving Mount McPherson, I came across a small water hole at the head of the Oakover. Thinking to refresh the animals I put them in for a swim, and six were drowned. This event disgusted me with the trip, and I was about to return to Queensland, when at Derby I met Inspector

Ord of the police. He advised me to go out to Mount Broome, at the foot of the Leopold Range, and prospect for gold, where diggers were getting very fair returns.

I left Derby with six Queensland blacks, thirty-one horses, and two dogs, and arrived without any misadventure worth mentioning at Mt. Broome. I crossed the Leopold Range at the west side of the mountain, which I and my party ascended with great difficulty, owing to its steepness and roughness. During the ascent, two of my pack-horses fell and smashed the pack-saddles badly. Whilst we were repairing damages, we suddenly were surprised by hearing cooees from the wild blacks above us. Not wishing them to become acquainted with the smallness of my party, I directed a few rifle shots towards the voices, which had the effect of stopping the approach of the enemy. Arrived at the summit, I found, by my aneroid, that the height was 1,800 feet above the level of my camp at the foot of the mountain, whilst the range is but 1,000 feet above it. As may be seen by the map, the Lennard River or Creek lies at the back of Mt. Broome to the west. It is a splendidly watered creek, and there are a few patches of really good cattle country, averaging about three miles in width, bordering it. In some places, the range comes right down to the Lennard. On the north side of this creek, there is another big range, not quite so high as the Leopold, but nearly as rough. We managed, however, to negotiate it, but our greatest trouble was getting down again on the other side. It was a pretty break-neck descent, but we reached the bottom without casualties.

Here I found another splendid running creek, and the surrounding country much resembled that of the Lennard, but it occupied a greater breadth. On the north side of the creek there is a range so precipitous as to be absolutely impassable. Finding I could not cross it on the east, I skirted it for about five miles in a north-west direction, until I found I was approaching the end of it. Here I was able with difficulty to make the ascent, but I was well repaid for the arduous task of climbing its rocky sides. In the distance, about five miles away I observed a range, not very high, but what might be called a regular "terror." Its sides were entirely composed of large, flat, slippery rocks, on which no horse could have found a footing.

I forgot to say that I named the aforesaid creek the "Bell," after Mr. Bell, of Derby. I could not then ascertain what

river it flowed into. It is certainly not into the Lennard. This point, however, I afterwards cleared up.

From my position on the range, I could see that the country was open to the east. I therefore travelled in that direction, and in six miles came to a fine running stream emerging from the big, rough range. There was some really first-class cattle country here. Two miles further saw us at the end of the first range, but the precipitous one before mentioned, was still on my right and stretching away east-south-east. The spring-like creek where I crossed it, flowed towards the south, and after a meandering course of three miles made a sudden bend, returning again towards the north.

Near the place where I crossed it for the second time was another running spring. The two creeks are not more than two miles apart, and there is no range whatever. I observed that the country opened out and dipped towards the south-east, so I ran the creek towards the north for about ten miles and then camped. All the country round these streams is excellent cattle country, consisting of small plains and open forest. The formation is basaltic, but the country is not stony. The water on which we camped was evidently not permanent.

Looking out towards the east-south-east of my camp, I noticed a high, precipitous, table-topped mountain. On breaking up camp, I travelled towards it for four miles, and then came to a divide. (There is no range whatever on the north-west fall). Riding down the gully, I came upon a fine running spring, with stony basalt hills on each side, splendidly grassed, and no spinifex. Continuing the same course for about two miles, I traversed some rather rough country, after which it opened out again into plains. Seven miles further on I discovered a magnificent running spring, flowing south-south-east, containing a large quantity of fish. The big mountain was still about two miles ahead of me. Being in a favourable position for grass and water, I decided to camp. I then went off to climb the mountain. From the summit I could descry another high, precipitous, table-topped mountain, bearing south-south-east fifteen miles on the left bank of the creek. The creek I named the "Adcock," in compliment to Messrs. Adcock Bros., of Derby, who were very kind to me and proved exceedingly reasonable in the important matter of a supply of rations.

The big isolated mountain I have named "House," after Dr. House, of Derby, to whom I was indebted for much kind-

ness and assistance before I started on my trip. Viewed from any point, it stands out as a prominent mountain.

On the following day, I went in the opposite direction to the creek three miles below my camp. The creek, the head of which I had seen before, I now found to flow into the Adcock, near a range on the west side. This range, although not the actual main precipitous range I have mentioned, forms a spur of it. The surrounding country is very good, being well-grassed and watered. The country along the creek for about a mile, is very rough, but it soon opens out into beautiful small plains, dotted with pink lily lagoons on the western side. The main range lies about two miles to the back.

I now came upon the big mountain I had seen from Mt. House. It descended right into the Adcock on the left bank, and trended thence east by south. It much resembles Mt. House, but is not so isolated. I have named it "Clifton," after the Under Secretary for Lands at Perth. It appears to come very close to the creek on the east side for some distance, and the main range lies four or five miles back from the stream on the west. All between is splendid cattle country. About ten miles from Mt. Clifton, the creek appeared to vanish in a gorge. Crossing the creek above Mt. Clifton, I went back, then crossed again to the west side, where I found a large creek coming in from the north-north-east. It has no running water, but there are some splendid water-holes in the reaches, whilst all the country is magnificent from a squatter's point of view. The main range is distant fifteen miles from this spot.

The creek I have named the Edkins, in remembrance of my excellent good friend Mr. Edkins, of Mount Cornish, North Queensland. Here, and on the Adcock, I met with large numbers of blacks, but they were as wild a lot as I ever saw and were quite unapproachable.

I now travelled to the N.N. West, crossing the Adcock, and after proceeding some 10 miles struck another splendid running creek going south west. It appeared to take its rise in the ranges 10 miles above us. There is magnificent land on either bank. The banks are low, yet the country has no appearance of being subject to floods. The land, grass and timber are good, and in the creek there is an abundance of fine fish. Forming a camp, I went to the top of a hill close by, and obtained a good view of the surrounding country. I saw that the range intercepted the Adcock, and the creek last discovered. I therefore

went back to my previous camp, and next day crossed the creek, tracing it to my present camp. I noted that for the whole distance, the country is of excellent description for stock raising, as indeed is the whole country about here. It was long after dark when I got back to camp. I was quite alone, and must say that it is not quite the safest thing to go out by oneself in blacks' country, even although well armed. Still next day I again set out alone to run the creek down, and sent my party along the north bank whilst I traversed the southern one.

After travelling about eight miles, I found that it ran into the one at the head of which I had camped on a previous occasion. I have named this creek the McLarty, after Mr. McLarty, of Nullagine, in recognition of his many good offices towards me. The big creek I have named the "Isdell," after Mr. Isdell, of the Nullagine, for the same reason. For ten miles the Isdell runs through ideal cattle country, with a few basalt hills. Then it flows into a terrible gorge, which is naturally impassable. Finding a splendid camping ground, I determined to remain here for one day to look round me. The blacks were exceedingly numerous, but whenever one of our party came into view they fled. On the very next night, they came up and made a fire on the slope of Mt. Isdell. My boys declared they saw two blacks walk between us and the fire, but this I doubted for the blacks' camp was too far away for exact observation of their doings. Still I thought it well to be on the safe side, so I had the fire put out and extinguished my lamp, for we formed too good a target for stray spears with these both alight. Having had a good look at the country for several miles round my camp I came to the conclusion that such country was much too good to lie idle as a mere hunting ground for wild blacks, so I packed up and set off for Derby with the intention of taking it up.

I took a S.S. East course and travelled along, skirting the high, rough range on our right, which I have called the Isdell Range. After 10 miles of pretty smart travelling I struck the McLarty at a splendid spring, then ran the creek up 3 miles and came across my *outward* tracks. Seeing no other or better way of return, and not wishing to lose time in finding another pass, I retraced my old tracks, intent only on getting to Derby as fast as I could that I might not be forestalled in taking up the grand country by anyone else who might perchance have got wind of it.

I think the Isdell is the head of the Glenelg, and the Adcock either the head of the Fitzroy or a branch of it. We had found the second range so rough on our return journey that I thought I could not go wrong in trying for a better track. As it turned out the old proverb "The longest way round is the shortest way home" once more proved its truth. Here a basalt dyke cuts through the range, so I ran the gully into a fearful looking gorge. I think this is about the strangest part of Australia. On one side, only a few hundred yards back, there is a range over 1000 feet high and as rough as possible, with the creek running through the aforesaid ugly gorge. Then appear rippling streams, lagoons, and small grassy plains as good as any in Australia, and in contrast with these charming spots the rough, wretched ranges surrounding them.

I decided to camp in a pretty spot on the creek, and as soon as all was settled my boys amused themselves by rolling big stones into the gorge, down whose precipitous sides the boulders rushed, bounding into the air, crashing through the brushwood and finally crashing in a thousand pieces on the rocks below. It was great fun for them, but I had to find a way out somewhere. Fortunately there was no sign of any blacks being about, although I saw plenty of their tracks. Perhaps the roar of the rocks rolling into the gorge made them believe that "debbil debbil" was about and they had better keep close. Striking camp early next morning we passed along a stretch of country only a few hundred yards wide, having on one side a range 500 feet high and on the other one of over 1000 feet.

I named the camp we had just left "Eva Camp," after Mrs. Broadhurst, of the Pyramid, Roebourne, and the pass we were then in the "Broadhurst Pass," in recognition of the family's courtesy to me. After we had negotiated some 3 miles of the pass we reached a large running creek coming out of one of the gorges and entering another. Whilst I was examining this I heard a black cooe in the range to our left, a couple of hundred yards off. About a minute afterwards a great number showed themselves, all armed with spears and making a tremendous row, at the same time running towards us. As they looked dangerous, and outnumbered us probably by fifty to one, I let go a few shots to try and stop them, and told the boys to be quick about getting out a supply of cartridges, which were in the pack bags. I could see that the blacks were determined to take advantage of what Julius Cæsar called, "the inferior position." It was certainly a very dangerous

position, for the blacks were high above us, and we were utterly ignorant of the way out of the gorge. The shots I fired had the effect of blocking them for a time, so I went alone down the creek below the second gorge, thinking we could get through there. As it looked feasible, I shouted to the boys to bring on the horses as quickly as possible. We passed under a wall of rocks, where the blacks had all got above us. Had they chosen, they could have either speared or stoned us all to death without our seeing them or being able to retaliate. However, we managed to pass the horses into a clear spot, where they were safe from missiles. All this time the blacks were yelling, and evidently drawing nearer to us. I fired a few more shots on chance, and then went to look for a place where the creek was crossable. Seeing that it entered a third gorge, I tried to cross, and at once got my mare bogged in the mud, amidst reeds which rose high over my head. Dismounting, I succeeded in getting her out. Then I tried another place, with the same result, except that this time I was compelled to leave my mare and struggle out as best I could through the reeds between the rocks. The mare extricated herself at the same time. I saw there was not a moment to lose, as the blacks were closing on us in great numbers, so I shouted to the boys to bring along the horses and put them across the boggy creek as best they could. We got them through all right, but my mare on again trying to carry me over fell, and I got a thorough ducking. At last, however, we were all over in the open country. I did not seem to care much about our danger at the time, but had the blacks got on the rocks above us whilst we were floundering in the creek, some of us or our horses would undoubtedly have been speared.

Our next proceeding was to roll some stones away to enable us to get to the Lennard from the Leopold Range. We had a deal of trouble here, as the horses would not follow, and were continually getting into trouble. However, all things come to an end, and at last we pitched camp on the river, and finally arrived safely at Derby. I then wired to Sir John Forrest, asking that Inspector Ord might accompany me to report on the country I had found. Sir John handed my telegram to the Commissioner of Police, who at once instructed Mr. Ord to accompany me.

There is a very high, bold bluff on the McPherson Range which I have named the "Bold Bluff." It lies seven miles from the west end of Mt. Broome. After passing Bold Bluff, Mt. Broome cannot be seen from any position east of north, for Bold

Bluff shuts it out, and a north-east line from Mt. Broome will pass right through the middle of the good country. My next business, on leaving Derby, was to see if I could find a dray track to a port, and to see if there was any more good country, but found I should not be successful by taking the Leopold Range *en route*, so I determined to try to find one to Secure Bay. I now returned to the west end of Mt. Clifton. For ten miles down the creek the mountain reaches to within one mile of the creek (Adcock) on the north-east side, and the main range to within three miles on the south-west side. All between is good cattle country. There is a most singular mountain commencing here (where Mr. Ord, who had accompanied me from Derby, left me). I have named it Mt. Hamilton, after Mr. Hamilton, who was with Mr. Ord. I also named a big mountain after the latter gentleman.

Looking at Mt. Hamilton one would almost take it to consist of a single mountain. At each end there is an isolated bluff about 600ft. high, precipitous on all sides, and between these lies the main mountain, also very precipitous, about four miles long, but only a quarter mile wide. At the upper end of the range, the Adcock takes sharp turns to the south-west, so that the Hamilton is between the Adcock and Mt. Clifton. I left it on my right. In four miles I came to the south-east end of Mt. Clifton. Here there are two peculiar peaks, which I have named the Estaughs, after Mr. Estaugh, of Derby. The Adcock now runs south-east. The main range, about a mile off, is here quite impassable. Some six miles from Mt. Hamilton I crossed a large creek, one might really term it a small river, flowing from the north-east. This I have named the Throssel, in honor of the Commissioner for Lands, who has written a very sensible, useful little book on "Advice to Selectors."

Going forward another four miles I reached another very fine creek, running strongly, which, in honour of Mrs. Cunningham, relict of the late Mr. E. Cunningham, of Woodhouse, Queensland, I named the "Annie." Another four miles brought me to the junction of the Adcock and the Fitzroy. Half-a-mile below the junction the river enters a gorge, which appears to be fairly open, but terribly stony, with very high ranges on either side. At the head of the gorge there is a splendid water-hole. There is a little very good country between the rivers, but it is very little. A high and impassable range runs north-east and south-west on the south-east side of the Fitzroy. The river looks at this place as large as where I

struck it at its junction with Christmas Creek. The high range I have named the Sir John, in honour of Sir John Forrest, K.C.M.G.

Another high, table-topped mountain, to which I have given the name of Mt. Brennan, after Mr. Brennan, of Derby, lies between the Annie and the Roy. All the country here is very stony. I may mention that, as I went along from mountain to mountain and from river to river, I took bearings by the prismatic compass wherever it was possible to do so, so that their relative positions may be laid down fairly correctly on the map.

As we were descending the slope of Mt. Brennan we heard the blacks cooeing in our immediate vicinity. My packs I had left at Roy Creek, close to the foot of the mountain, which we reached without being molested. But whilst we were at dinner, two blackfellows made their appearance. I knew it would never do to let them see the strength, or, rather, weakness, of my party, for I only had my six Queensland boys (one of whom shortly afterwards died, to my great regret), so I fired a few shots over their heads, and they beat a rapid retreat to the mountain. The blacks appear to be very numerous all through this country, and it behoves the traveller to be constantly on the look out for them.

Ten miles past the gorge I was able to turn the range, and here, about Roy Creek, I found some really good country.

I now directed my course east-south-east, and in six miles came again into the Sir John Gorge. It is a most romantic looking place. You can ride your horse right to the edge and drop a stone plumb, a sheer drop of 200 feet, into a magnificent lagoon, formed by the widening of the river. In shape, this gorge resembles a boomerang. To get completely round the range I had to travel four miles in a north-west direction, having splendid cattle country on my left. Once round, I shaped my course south-east, and after travelling six miles I arrived at a fine river coming from north-north-west. At a distance of about a mile south-east of where I struck it, it forms a junction with the Fitzroy, about half-a-mile above the Sir John Gorge, which at this spot appears to have been cut by the action of water through the solid rock. I now left my camp, and went up the south-east side of the Fitzroy. The Sir John Range I observed to lie at a distance of about a mile from the river all the way. As for the country, it is tolerably good, but fearfully stony, rolling basalt predominating.

I followed the river for ten miles, and found that it came out of another gorge, impassable, but nothing to compare in wildness, ruggedness, and savage grandeur with the Sir John Gorge. To the former I gave the name of Warton Gorge, after Mr. Warton, Resident Magistrate at Broome. The range here I found trending to the north-west. To it, also, I have given the name of Warton. Subject to Sir John Forrest's permission, I have called the high range on the south-west of the Adcock the Lady Forrest Range.

These ranges form three sides of a gigantic square, through which I think it would be possible to pass to the left of the Warton Gorge. Far away up the gorge is a bluff range, and judging by the look of the formation of the hills in that direction, I think that good cattle country is pretty sure to be found there.

On my return I took the opposite side of the river Fitzroy, and I could see in the back country some small plains, splendidly grassed, and not so stony as that last seen. Both these rivers are large and appear to be much of the same size.

At the point where I first struck the river, I found a tree marked "R.B. 44," by Mr. Robert Buttons, the 44 standing for the 44th camp. He has been a great traveller and explorer, and it is a pity he has not published any account of his explorations in these regions, for he is an excellent man for such work.

The river from the north-north-west falling into the Fitzroy, which I had just discovered, I called the Phillips, in recognition of the assistance afforded to me by the Commissioner of Police, and for which my best thanks are due to him.

I now ran the river up, and after going seven miles I dropped on a third river flowing from the Warton Range, and promptly assigned to it the name of Traine, after Mrs. Traine, of Condon, as she was the first native born Western Australian I had ever met, and a very nice, pleasant lady I found her. I ran this river up, and found that, as per usual, it came out of one of those tantalising, impassable gorges, where I also found numbers of blacks, who proved to be exceedingly wild. I then got back, and running the Phillips up, found that at ten miles from its junction with the Fitzroy the Warton Range came down to it, whilst there was a chain of stony hills running along its left bank for about six miles, when they break off. The river at this place is a quarter mile wide, and I doubt if in all Australia there is a river better adapted for watering stock. It is always running with clear water, has low banks, no bogs, the margins solid sand, and the stream opening up every now and then into

large water-holes, all of which are full of crocodiles, a harmless species, about 6 to 8 feet long, which live principally on fish. Travelling about twenty miles up this beautiful stream I saw, about half-a-mile from it, on the left bank, a splendid small lake, about three miles in circumference, nearly round, and very deep. This I have christened the Gladstone Lake, after the late Mr. W. E. Gladstone, Premier of England. On the lake, and on the river, I found geese, ducks, water hen, and many other kinds of game in abundance.

The country about the river is rather sandy, but back from the river, towards the south-west, there are splendidly grassed open plains.

The remarkable thing about Gladstone Lake is that no river runs into it, nor has it any visible outlet. In all probability it is fed from underground sources, and supply and evaporation are probably equal.

This is the most astonishing country for rivers, creeks, and lagoons. They intersect the whole country, and would be an immense boon to the more arid and rainless tracts eastward towards South Australia and Queensland, but it is difficult country to get at, at any event, over the Leopold Range. The Warton Range breaks away a little here, and I think a pass could be found through it by which Hall's Creek could be reached.

We now came to the commencement of another mighty range, running east and west. This I have named the Phillips Range. To a large creek coming out of the Warton and Phillips Ranges I have given the name of M'Namara, after Mr. M'Namara, of Wallal (Ninety Mile Beach). So far the river runs from north-west by north.

By aneroid I found Lake Gladstone to be 750 feet above Derby, the Fitzroy 700 feet, and Phillips Gorge 800 feet.

There is very fine timber on the river for station work. It consists mainly of coolibah, box, plum, gum, and magnificent bloodwood, bauhinia, currajong, and baobabs, which are really splendid. I measured a solid one, which rose perpendicularly to about 100 feet. I found it to be nearly 15 feet in diameter and 45 feet in circumference. On the plains mimosa predominates.

Forty-three miles from its junction with the Fitzroy, the M'Namara River comes out of one of the usual impenetrable gorges in the Phillips Range, which is very high, very rugged, and I think impassable. There is a splendid water-hole at this

gorge, and eight miles below it I found a large creek coming in from the north-east, which I have called the Urquhart, after Mr. Urquhart, of Lagrange Bay.

I took a number of bearings from the top of a pretty little mountain situated two miles below the gorge. This I named Mt. Caroline, after my late sister. Here a most splendid creek comes in from the west at the south side of the Phillips Range, with clear, permanent, running water. The country on its south side is by far the best I have yet seen in Western Australia.

Below Mt. Caroline a creek, which, it will be remembered, I called the Edkins on my last trip, rises in the Phillips Range, and flows into the Adcock above Mt. Clifton, a most remarkable circumstance in such high country as this.

I camped on the west branch of the Edkins, eight miles west of the Phillips Gorge, about north-east by east from Mt. Broome. A fine running stream flows out of the Phillips Range, with stony basalt hills all round, which, however, are well-grassed. There must be a great number of blacks about here, for we could see their tracks and camps in every direction, and they were then camped a short way from us up the gorge. A few hundred yards below us was a blacks' graveyard, in which I then counted eight graves, each covered with stones. On two of them there must have been some tons of stones. Wood is placed on top of the stone. I have, in all my travels in unexplored Australia, never seen anything like this before. I must say I think the wild blacks of this country are a far better class than those we have in Queensland.

On the following morning I went down to the graves, and counted thirteen of them. Saddling up, we travelled west along the foot of the Phillips Range, skirting the banks of a fine running creek, bordered by stony, basalt hills, splendidly grassed. I think I saw here struck me as very strange. In a certain locality on the side of the Phillips Range, there are some thousands of tons of basalt overlying the sandstone, looking exactly as if it had been violently thrown there. No other basalt is nearer to it than 100 yards, on the other side of the creek.

That day one of my boys picked up a black's skull in the grass, a strange object to find in such a position. On my return to camp I found they had stuck it on a tree and made a target of it. At night I camped on the Isdell, a splendid running creek which I named on my last trip, when I crossed it thirty miles lower down. It comes out of a gorge two miles above this camp. Mt. Broome from this camp bears 250deg. 50 miles. Of course,

it is a blank on the map, but the bearing fixes its position. The Phillips Range now goes back about six miles south-west from the Isdell, and there joins the Isdell Range, which is a spur of the Leopold. Thus it will be seen that all this country is, so to speak, fenced in by ranges, and there is actually only one pass by which stock may be brought into it from Hall's Creek, and that is down the M'Namara. I never saw better watered country in my life, and such splendid water—better could not be found anywhere. The Isdell flows west from here, and I intended to find out where it went to. At the Divide, which is really a splendid plain, I found the elevation by my aneroid to be 1200 feet above Derby. Mt. Ord, which is one of the Leopold group, is by far the highest mountain about. Mt. House is the most remarkable, as it stands out conspicuously alone in its glory. Mt. Clifton is the largest in extent, having a length of some seventeen miles by a breadth of ten miles, yet, as far as I could see, there is not one single track by which a horse could be taken to the summit. Here I saw more blacks' tracks than I have ever seen in Western Australia before. These tracks were as broad as if made by a mob of cattle. All the country along the range at the head of the Adcock was on fire, set alight no doubt by the blacks for hunting purposes. I could easily have found their camp, but did not wish to attempt it, as I thought they, being so numerous, would show fight, and in that case I should have been compelled to drop some of them, a thing I particularly wished to avoid, so we passed peacefully on our way. It is very cold here now, the thermometer in the morning registering 36deg. Fahr. That night we camped on the Isdell again, having got over the Phillips Range. It was very rough work reaching the top, which the barometer showed to be 1600 feet above Derby. Our camp was situated 1200 feet above that town. In one of the gorges on this side of the range, we got two of our horses bogged, but we took their packs off and they quickly struggled on to dry land. This creek now came from the west, whilst forty miles below us it flowed towards the west, when the country opens out once more. I went by myself down the creek to see what became of it, and after riding for eight miles, I found it entering another gorge, where I saw a number of blacks' fires. As darkness was rapidly coming on, I decided to give them a wide berth, and it was pitch dark as I rode campwards. Riding slowly along, I saw a small fire which I took to be our camp fire, and thought it strange I could hear no horse bells, All at

once I saw the fire disappear, and I became aware that what I had taken for my camp fire, was a black's firestick. I fired a shot, when the blacks shouted and cleared. They must have seen me going down the creek, and went travelling off. I confess this gave me a start, for, as I had seen their fires in the gorge, I certainly never suspected they would be so close to our camp. My boys hearing my shot fired a shot or two in reply. I was glad to get in with a whole skin, and decided that it would not do to go travelling about alone in the dark, with such numbers of apparently noctivagous blacks in the neighbourhood.

This is such a very interesting country that I could write a book on it. It was a perfect revelation to me, and certainly will be to others, especially in the eastern colonies, who believe West Australia to consist mainly of sandy deserts, tireless spinifex plains and salt swamps and lakes. I much regret that Inspector Ord was not with me to see this magnificent country and report on it. I think when it is surveyed, my descriptions and bearings will be found fairly correct, as I have a good idea of surveying and of the country I write about.

On both sides of the Phillips Range there are some very fine pine trees, as well as other useful timber.

I now travelled south-east by south, and after covering ten miles, I struck a splendid running creek or river (I am inclined to call it a river). The divide between the two rivers is quite unnoticeable and consists of open forest country, and small plains splendidly grassed ; there I saw the first iron-bark trees I had seen in West Australia.

The river (which I have called the Barnett, after Mr. Barnett, of the Lennard) runs along the base of a huge mountain which I have also named Mt. Barnett, a branch of the Phillips Range. It runs north and south, and I ran it down for eight miles south-east, and then camped. Leaving the camp in charge of the boys, I went on four miles along the mountain, following the Barnett till it joined the Phillips, which forms here a fine river, running very strong. It appears to come out of a gorge between Mt. Barnett and another big mountain I have called Mt. Harris, after Mr. Harris, of Broome.

One mile below the junction, there is a large creek, coming from the south-east, with clear running water. This I have also named the Harris. A mile further down, the Phillips seeks the inevitable gorge, which appears to have been cut through the solid rock. I think this is the strangest country in Australia for

gorges. I intend, if all goes well, to have the finest of them photographed. No one, without seeing them, would believe that such places exist in the country.

Between the two gorges there are 4 miles of excellent cattle country. Having travelled 10 miles up the Harris I returned to camp, which was then situated at 1150 feet above the level of Derby. Next day I went back under Mount Barnett. This is a most picturesque mountain. All over the summit is a forest of grand pine trees. The red precipitous sides also have all kinds of trees growing on them. For 14 miles I travelled along its base, and the same vegetation was everywhere apparent. The Barnett River I now found left the mountain and crossed to the big range that runs N.E. and S.W. This is a terribly rough range, and I have named it the Caroline after my late sister. Never did I see such country for grass and water as between these ranges. It would need a hand that can wield a pen better than I can to adequately describe it. Right opposite my camp was a magnificent clump of immense pine trees, and behind the pines a beautiful little plain—an ideal place for a homestead. Two miles below this beautiful camp there is a fine, large, running creek coming in from the Caroline Range. This I have dubbed the Manning, in honour of Mr. Manning, of the Lennard. As usual it comes out of another impassable gorge, where the ranges are only 4 miles apart. Getting to camp early I saddled a fresh horse and had a ride round, taking bearings. Thus I saw a good deal of the country. I always do this. I make a point of getting early into camp if possible and then ride out into the surrounding country, getting back at dark. At this camp my boys caught a large quantity of fish. We were then 1200 feet above Derby.

Leaving the Barnett River I travelled along the foot of Mount Barnett on a generally N.E. course for the first 10 miles. The country is everywhere good, and the river runs along the foot of the Caroline Range all the way, coming out of a gorge there. Mount Barnett did not seem so high, but still had the same grand appearance. I travelled on for 12 miles more and then struck a nice looking creek opening into Phillips River. It was not running, but held permanent water. Above us all the country was on fire, but in our fine open camp we were quite safe. For the last 12 miles the country is not so good, stunted tea-trees predominating; but at the divide the timber is grand, consisting of forests of pine, messmate, woolly butt, and grand ironbark. I had now followed round Mount Barnett for 40

miles and had found only one place where a horse could possibly be taken up. The mountain still continues, and not a single creek, not even a spring, comes from it, which is a most strange thing in this land of springs, creeks and rivers. When the country is taken up and stocked the blacks are sure to be troublesome, speaking from my experience of taking up new land in Queensland.

While I was at work plotting my map that day, I had my boots and socks off, with my feet against a tree. Suddenly a long kind of snake, new to me, came crawling over my bare feet. He was a wonderfully quick fellow, and the boys had a job to kill him. According to Dr. Krefft, of Sydney, it was a most deadly one. I counted its labial scales, and found only five, which showed it to be one of a venomous species. It was a kind of slate colour, and about 5 feet long. There was one peculiar circumstance about this adventure. I did not feel the reptile bite me, in fact, it could not have done so, yet on my leg were two small spots of blood, looking exactly as if they had oozed from the punctures made by the venom fangs, but no puncture could I find. At all events, I suffered no inconvenience from his snakeship's visit.

This camp lay about 80 miles north-east by north from Mt. Broome.

I followed the creek above mentioned towards the east for five miles, to where it entered the Phillips River above the Barnett and Harris Gorges. All the way was good cattle country, although somewhat sandy. The river I found to be running stronger than ever. I decided to run it up. For one mile above the gorge it is bordered by Mt. Harris on the left bank, then it takes up the running of Mt. Barnett and trends away to the east. A fine creek comes to it from the north-east, which I have called the Bella. The river flows from the north. The country is sandy, but for six miles is still good cattle country. The river now emerges from a gorge, a low one this time, and by keeping back from the water I managed to get above it, and continued to run the river up. The ranges on both sides were fearfully stony, but by crossing and re-crossing I succeeded in getting along. I pitched my camp nine miles from the gorge. The river was running still stronger, and I wondered where all the water came from. I found this a very bad camp for the horses, but they had to make the best of it.

Taking a boy with me, I got to the top of a big mountain close by. It was terribly rough scrambling, but we got up.

Arrived at the top I found I would have to climb a tree to enable me to take bearings. The most suitable tree had a straight, smooth trunk, and I had a tough job to climb it, as my climbing days were over long ago. But I sent the boy up first, then, with my saddle surcingle, I managed to get up. Well was I repaid for my trouble, as I got a splendid sight. This is by far the biggest mountain in the neighbourhood, as it rises from such high ground, the camp being 1500 feet above Derby and the mountain 600 feet above the camp. I have given it the name of Mount Elizabeth, in memory of my late mother. It will form a most important trigonometrical station when the country comes to be surveyed. I could get no bearing from south-east almost to north, as it happened to be a long, low range all the way; but I got the bearings of five other big mountains, one of which appeared to be about fifty miles away on a bearing of 322 deg. From south-east to north the country did not appear to be very rough.

Next day I shod seven horses and made a start at 8 a.m., and ran the river for 10 miles on a N.W. course. Along the bed of the stream the travelling was fair, but very rough on the land. I found myself confronted here by my old enemy—an impassable gorge, so as the river was coming from N.W. and I wanted to get West I did not attempt to get round the gorge, but turned back for three miles and camped, so as to get time to finish up my plotting. I made this camp to be about 80 miles S.E. from the mouth of Prince Regent River. I had no idea the river would come round as it did, to the West. It looked as if it were going 100 miles more in the same direction. I feel sure there is no other river so good as this in Australia to water stock at. It has high banks, no bogs, is always running, and can be crossed at every few hundred yards. Here there are most splendid cajuput trees.

Three blacks showed up to-day with spears, but a few harmless shots soon sent them to the right-about. I regretted that I had not time to follow this grand river to the head; but I had to get away to the coast for I feared to run short of horseshoe nails. I had only 10lb. weight at starting and 2cwt. of horseshoes. What with shoeing horses every day, owing to rough country, my supplies in this line had dwindled alarmingly.

I went up the range on the W.S.W. side and found the climbing rough; still, it was better than I expected. I travelled 5 miles before reaching the top, which is 1750 feet above Derby.

Then I travelled N.W., 2 miles through very level pine forest, the pines being very high, and struck a gully going in the same direction in open country, where it turned into a fine running creek. Five miles further on a creek came in from N.W. As the country was so level I ran it up for a mile and then concluded I was on the same creek as before, but they junctioned and then ran South. One mile further on it entered a gorge. I climbed a pine tree, and following it as far as I could with my eye it appeared to continue to flow South through the gorge. I believe it to be the head of the Barnett. Here I found a kind of stone charged with mineral. As I was smashing it with a piece of rock one of the stones hit me on the knee and caused me most agonising pain for a time. I had to camp very early and doctor the limb. I considered that I was then 1700 feet above Derby, and that I should soon commence a big descent.

We crossed the Caroline Range at 2,000 feet above Derby. The travelling was very rough, but still it might easily have been worse. We then camped on a creek running west, surrounded by mountains. One of my blacks shot a kind of parrot that I had never seen before. I had it skinned for the purpose of future identification. I then reckoned that I was about 60 miles from the mouth of the Prince Regent River. Although we were still in a wonderful country for water, the creeks contain no black bream, such as we caught in abundance on the other side of the range. We crossed several running creeks, and I found that the creek we had camped on the previous night was the head of the Isdell. Climbing a rocky mountain, I got a number of sights, getting even Mt. Ord and Mt. Bold Bluff. The former must be a very high mountain, as it showed up splendidly. The latter I could make out with my glass. It is on a bearing of 45 from Mt. Broome, Mt. Ord bearing 85, Mt. Ord from Mt. Bold Bluff $111\frac{1}{8}$, Mt. Ord from Rocky Mountain 196, Bold Bluff 205, so if so wished the position may be fixed. The creek runs north-west, and the country it passes through is fearfully rough. The water, on the other hand, is splendid.

Owing to the interposition of gorges, I was unable to run the creek down, so I travelled north-west, and striking a gully running in that direction, I followed it for five miles. On this creek I saw the finest Leichhardt tree I have ever seen. I followed the creek till it entered a larger one coming from the east. I ran it to the west for two miles and then found that it junctioned with the creek we had camped on. I ran it down

north-west over four miles of splendid cattle country. Going to the top of another rocky mountain, I succeeded in getting some bearings of a number of high mountains to the west of north. The creek then went into a gorge and for twelve miles we had fearfully rough country, nearly breaking the legs of two horses amongst the rocks. One horse had a bad fall. In the gorge the blacks' fires were visible.

It would require a man greedy of trouble who would want rougher country to travel over. We went down the range, and struck the creek again. It had now assumed the dimensions of young river, a large creek from the south-west having joined it. The plains here have plenty of mimosa but the grass is coarse, and the surrounding ridges are all basaltic, causing the horses to lose a great many shoes.

I now moved the camp four miles down the river where I found good country but the ranges came down rather close. Another large creek came in here from the east, which I have named the Charnley, after Mr. Wallace Charnley, of the Nullagine. The big creek I called the Maudie. Here my boys caught ninety black bream. There must be a great number of blacks about here, as I saw several of their fires towards the south, one of them quite close to our camp. There was still a big range to descend, as my aneroid showed this camp to be 1000 feet above Derby.

Running the river down for 4 miles I found another nice little river coming in from N.N.E. Judging from the amount of water that came down it in a flood it must run a long distance. This I named the James, after Mr. James, of the Cable Station, Petang. Another river comes in from the North, 8 miles below the James through a fearful looking gorge. On the N.E. side of the river the range continues for the whole distance, and there are basalt ridges on the opposite side. I called this river the Pearson, after the Police-Sergeant at Derby. The grass here was very plentiful, but coarse, and there are many high mountains which I believe I have placed fairly correctly. One I named after my late brother, Mount William, the other Mount Grosser. This is a most remarkable hill rising like a castle. I doubt if anyone could reach the top even on foot. Twenty miles back from the river rises a hill which I named Mount Shadforth, after Mr. Robert Shadforth, of Queensland, who helped me in the hour of need. Another I entitled Mount Kerr, in honour of Mr. Kerr, of the Nullagine. Mount Nicholson and Mount Blythe were also named

by me after Mr. Nicholson, of the Derby police, who was with me for some years, and Mr. Blythe respectively. I then had to shoe twenty horses, and in the evening I put shoes on four more.

The river now came round to the S.W. for four miles, after which its course was generally West. For 8 miles the country is good, but fearfully stony. I now had to leave the river as its banks were too rough to travel over. By keeping South I hoped to get down the range. The shoes were being lost wholesale, the nails were nearly all gone, and there seemed to be a bad time looming ahead for unshod horses. The flood marks here were very high. As we rode along the country was something fearful for stones, and the river had cut clean through a big range. To look along that range it would appear incredible that any river could cut its way through it, yet it has done so. The range is covered with immense stones, slippery as glass, affording no footing for a horse. I never saw basalt hills so high before. They are covered with splendid grass, and spinifex does not appear. Needless to say that the country is splendidly watered. I at last ran out of horseshoe nails and had lost a number of shoes which I could not replace. Here the big range appears to end. I noticed thousands of a new kind of palm growing on the range, and my boys cut a number down to get at the succulent head which forms a splendid vegetable, something like cabbage. This range I have named the Edkins, in remembrance of my partner in Queensland. To the South there was a very high tableland, of which I had seen but 20 miles, and have called it the Synott Tableland, after Mr. Synott, of Queensland, who helped me on my trip out to Western Australia. A high mountain I named the Kennie, after Mr. Kennie, of the Cable Station, Broome. I noticed blacks' tracks all about us, and we were unfortunately camped in a very bad place, 450 feet above Derby.

The following day's travelling was much the same as I had lately experienced, fair but stony, with grand grass and springs everywhere. In years to come this will be grand cattle country. I left the river, hoping to get round the range. There is only one way to get on to this river from Hall's Creek, and that is down the James River.

Next day I ran the creek down in a west-south-west direction, but had to keep out, as the country was so fearfully stony. The creek I found to pass into one of the worst gorges I had seen on the trip. I camped on a fine spring, having crossed three running streams in six miles, and meeting with

some patches of splendid country. Leaving camp, according to my usual custom, I went out to look for tracks, and found a splendid sandy stretch between two high ranges, where I thought I was going to get through, but a spring blocked me. However, I managed it, partly, and in spite of the long reeds. I had to lead my horses, and as I went along I burnt a track to make my return easier. Then my mare got bogged, and the grass was over my head, and I fully expected she and I were going to be burnt to death, and would have been had there been any wind, as the flames were as high as 20 feet, but by great exertion I got her out on the burnt land. I consider I was in a very dangerous position on that occasion. After all, I found I could not get through, so I returned to camp, got a fresh horse, and tried another place, which also proved quite impassable. There was nothing left but to go back and try a place I saw from a hill out towards the east. I intended to find a way to the sea if it was at all possible, for some day this will turn out a grand country. It will grow anything, I believe. We were then nearly out of flour, and had neither sugar nor beef, and could find nothing to shoot. The horses were in a fearful state, and things wore a very unpleasant appearance. Still, I had to find a way out, so I had all the horses put over the creek, which was a most troublesome job. I went ahead, with the pack following me. At sundown I camped, and whilst making the camp fire I heard the wild blacks close by, so I went over a low ridge 300 yards away, and there saw a great mob camped. I got right on to them before they saw me, when they all bolted, some catching up their spears. I got some fine spear heads in that camp. When the packs came up I moved half-a-mile back, and camped on the open, where I thought we should be safe. I should state that I left a tomahawk and some other things in the blacks' camp in place of the spear heads I had taken. There are two running creeks here, and the range I have named the Artesian Range, as it is so full of water. We had now only four days' flour rations left, and the horses were in a woeful plight owing to the want of shoes. The blacks we saw here are not nearly so modest as those we saw in the desert east of the Oakover; they could not possibly be wilder, but the gins all had a covering about 3 inches by 3 inches, made of booty's wool, and the tie round their bodies was made of gins' hair. The former had nothing whatever in their camps which had been got from the whites. Their knives and tomahawks were all of stone. But here the blacks use no

covering of any kind ; they had a piece of a horseshoe rasp and some iron they had made into tomahawks, and I fancy they had half a horseshoe made into the same weapon.

Next day I went to the blacks' camp and left some knives there, but the people had not returned. Then, with a boy, I followed the Artesian Range, and finding a creek coming out of it, ran it up and pitched on a spot for a camp. I sent the boy back to bring the camp on, and I went on up the creek. Getting into a spur of the Edkin Range, I saw a place where I thought I could get through on to the river. I determined that on the following day I would leave the camp where it was, take one boy and try to get over. Finding next day that I could not take horses up the Edkin Range, I walked four miles to the top before coming to the gorge. The range I found to be 1000 feet above Derby, and it was 400 feet to the bottom of the gorge. The river appeared to run through a continuous gorge and to turn afterwards towards the north. A high table-land mountain loomed up some ten miles away, which appeared to run north and south. There was evidently no possible way of getting to the sea in this direction at least, so I had to get back and try to the southward.

Nature has been a wonderful engineer here. She has made the ranges terribly rough, and forgot to leave any room for the rivers to pass, so she set to work to cut a passage for them through the ranges.

Having struck my old tracks on a south-west course, I followed them for eight miles, then changed the course to south-south-west for two miles and camped, having crossed two running creeks. This country I have already described. I now went ahead and got on to a divide, and then saw that the country beyond was terribly rough. One big mountain I saw, I named Mt. Philp, after the Hon. R. Philp, Premier of Queensland, who has proved a true friend to me at all times. It is a very remarkable and prominent object. Another big mountain which I have had in sight for several days, I called Mt. Smith in honour of the Governor of West Australia.

The horses were now in a dreadful state for want of shoes ; however, I had to go on at all hazards. I ran the creek up to the southward, leaving the big table-topped range close on my left. For ten days this range has been on my left hand with no apparent break in it. This is the Synott Range I mentioned previously. To the right were very high stony basalt cliffs. I now struck the head of a creek going south and ran it down for

six miles, where a large creek came out of the Synott Range. Here I camped and went on to a hill, whence I saw the creek cut through the range and running north-north-west. After dinner I tried for a way out to the south-east, and in four miles struck a nice river, which I have called the Sprigg, coming out of the same range. It does not appear to be a long one, but evidently by the flood marks, it brings down a vast quantity of water. I now made a grand discovery, for I found I had 50lbs. of flour in one of the packs that I knew nothing of, so I was well off for rations of that description for a week or more. On the whole of this trip I saw no auriferous country.

My pack horses had so far travelled 679 miles since leaving Derby, but I think I must have actually travelled over 1000 miles, taking deviations and side journeys into consideration.

Sending my horses over my previous day's track to camp on the river, I took one boy with me, and went up the range to Mt. Phillip. It was a very tough job to get up. On reaching the top, where I went over five miles of basalt country, with a creek running through it, I then went on to Mt. Philp, 1600 feet above Derby. On the way back, I ran down a creek, over rough country. Here I think a dray track could be made for a few hundred pounds. The road would pass under a high bluff about 400ft. in height, with two miles of very rough range to cross. On reaching my camp, I found that my party had killed a kangaroo and five wild ducks. They also had caught a lot of fish and one craw fish, and had gathered a quantity of lilies. Five pups had been presented to the party by our remaining dog—these, however, were not eatable.

There is here a fine patch of good country, but only about twenty four square miles in extent. The ranges close in, and the water is excellent. Since leaving Mt. Broome I had travelled over 590 miles of country, and in no place was water more than ten miles apart.

Having burnt the grass, I then found an easier track up the range, and also saw that a dray track could be made. Followed willingly by the poor horses, I succeeded in getting a good camp at the foot of Mt. Philp, which bears 146 deg. from Mt. Broome and 120 deg. from Mt. Ord.

I now tried to find a track through the other part of the range, and discovered a most wonderful pass, where the creek goes through a deep gorge. Away back from this gorge there is a pass going up one gully and down another. As I was alone, and it was getting late, I deferred trying to go through till next

day, when I was entirely successful, getting through wonderfully well. A really good dray road could be made over this pass. It is about eleven miles from one side to the other, and if so inclined a person could travel only a mile a day and get permanent water at every camp. Standing on a range four miles from the gorge after getting through, it was difficult to make out the exit, as it looked like a perfect steep bluff, with no break in it.

As soon as we left the range we found the country changed rapidly for the worse. I have not seen the Barker, but I think this must be the same river, judging by the course and the strong running. Next day I ran the creek down, and camped to the right of some granite hills in a gorge. It was the worst camp I had yet had on the trip, as far as the horses were concerned. The creek here does not run, and the water is bad. Running the creek down for four miles, we at last got out of the gorges. Then came twenty miles of very sandy country. I never saw such immense granite hills; some of them were hundreds of feet high, and all solid rock. That night we had to dig holes in the sand to water our horses. What a change from the country we had just passed through! We were camped on one of the strangest formations in the world, I should think. There is a line of very hard, sharp limestone, only 100 yards wide in places, and here and there from 200 to 300 feet high. It rises out of the level, sandy country, and runs generally north-north-west and south-south-east for, I believe, about 150 miles. I should like to hear Mr. Maitland's opinion of it when he sees it some day.

At last I arrived at Mr. Blythe's place, on the Lennard, and my troubles were over.



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