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Volume 7

Part 1

The Leichhardt diaries
Early travels in Australia during 1842-1844

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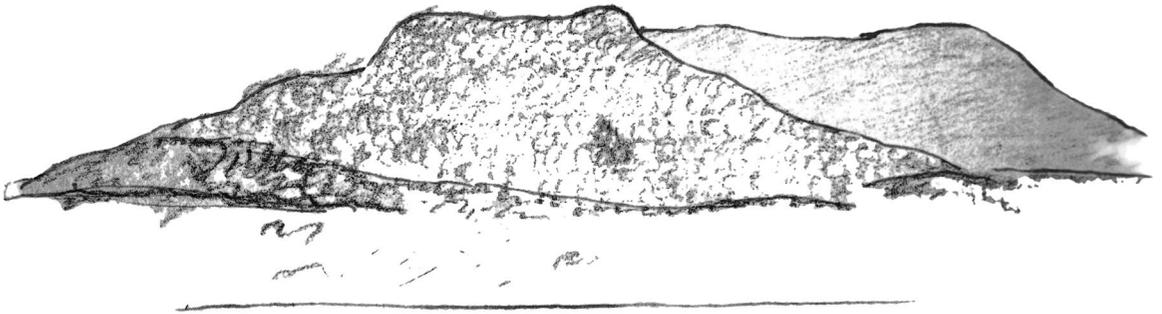


NNW side of the stream on which Mr Bracker lives.

common. I have yet to mention that an almost shrubby *Polygonum* grew abundantly on a subordinate range of hills. The ridge of the highest hill is almost treeless, only here and there an *Acacia*, the subordinate hills covered with open forest, ironbark, apple tree, here and there box and a gum tree different from the manborri of the other side. The soil entirely sandy, the kangaroo grass in widely separated tussocks[?], but the whole region is remarkably suited to sheep raising, as the open forest ground and the slight hill slopes allows a free view over a large flock. Mr Bracker grazed a flock of 4000 head here when he came into the area. [Text of this paragraph written in pencil and the basis for a paragraph on pp. 421 of diary 4.]

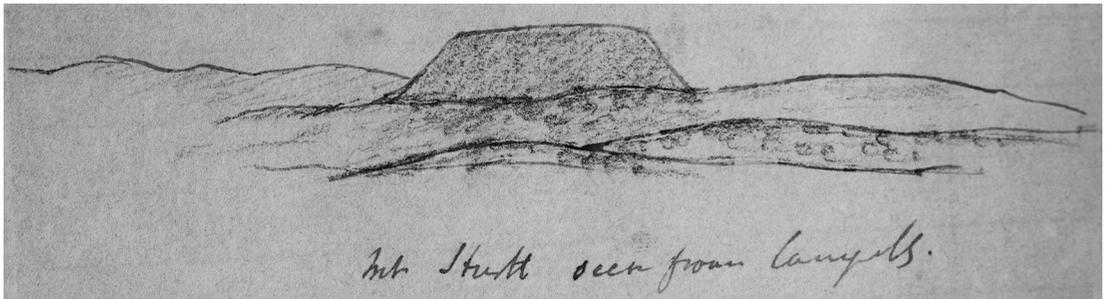
9 April

On the 30th March I began my journey over the Downs with the object of visiting those places, in which fossil bones had been found. Mr Fairholme accompanied me and I must acknowledge that I have never found a better, more agreeable travelling companion. He not only knew the region, but also the various squatters and took a deep interest in my studies, supported me in the discovery of the bones and whiled away the time on the journey with pleasant conversation. He is an amiable young man. Between Leslie's and Campbell's I saw a tree with yellow fruit, unilocular, red angular seeds, the leaves linear-lanceolate, and the bark sharply fissured. I am not certain, but think that it is *Pittosporum linearifolium*. I have too frequently made mention of the surface formation of the Downs, I have here only to mention some examples. Campbell's plain widens more and more towards the Condamine, with whose plains it finally merges. It is flat, accompanied by low ranges that are covered with very open woodland. At Campbell's it is perhaps a mile wide. Mt Sturt and Mt Dumaresq are visible towards the east.



Mt Dumaresq opposite MacDonalds

Mt Dumaresq opposite MacDonalds seen from Campells



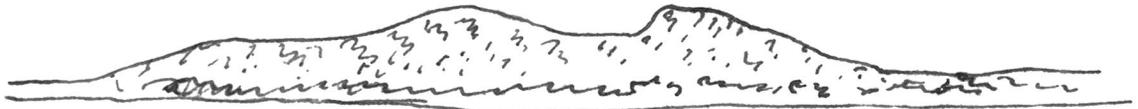
Mt Sturt seen from Campells.

Mt Sturt seen from Campells.

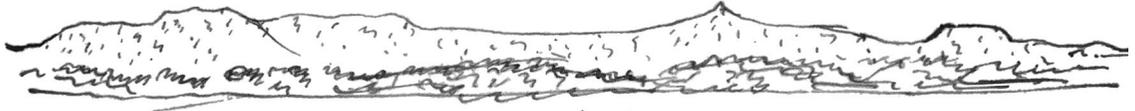
On the left side of the road to Kings Plains a capped hill appears again. Kings Plain shows the various forms of the mountains and the plains perhaps better than any other

locality of the Downs. It is interrupted by a low wooded range, but in its total extent you see characteristic mountain shapes, all belonging to the basalt and phonolite. I have sketched some of them.





N East from Campells Hill, North fr. Alford South fr. Hughs



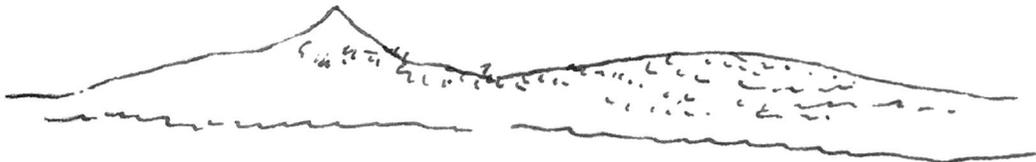
East from Campells Hill



Hodgsons longstretched Hill

The long flat ridges of mountains or hills, the cones that often seem extremely sharp, and the ridges ascending towards one side and then bluntly sloping, are seen here in all directions. The streams are deep, narrow, and alternating with water holes, in which the water remains for some time surrounded by reed banks and

accompanied by scattered grasstrees, which often seem like a herd of cows in the distance and very often deceive the bullock driver searching for his oxen. Hodgsons Plain shows a very similar mountain physiognomy. Between Hodgson's and Isaac's I sketched some mountains.



Isaacs Cone

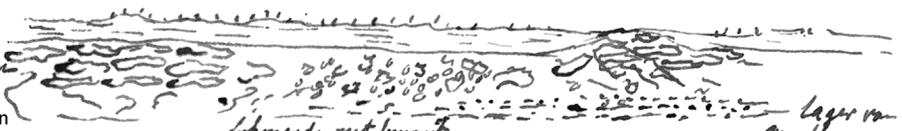


Isaacs One tree hill taken from the Station, where it appears as two hills.

Isaacs One tree hill taken from the Station, where it appears as two hills.

schwarze Erde = black loam

schwarze Erde
Thonige Kalkconcretion
Thonige Kalkconcretion
= Clayey calcareous concretion



Lehmerde mit Limonit
und thonige Kalkconcret.

Lehmerde mit Limonitbohnen
und thonige Kalkconcret. = loamy earth with limonite peas
and clayey calcareous concretions

Lager von
Gerollen

Lager von
Gerollen
= bed of
pebbles

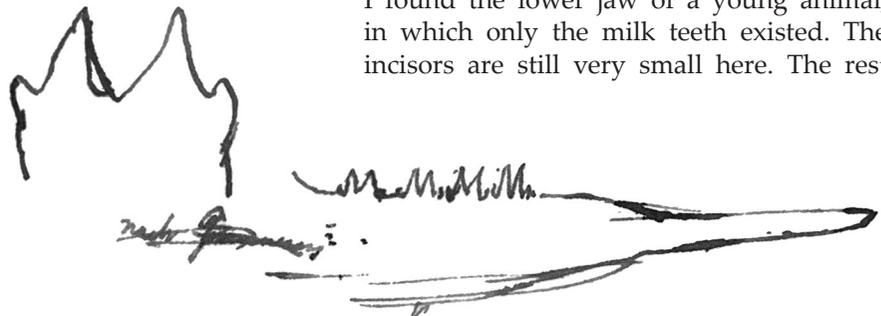
Section of a stream bank on Isaac's Station.

Isaacs Hill is seen very far to the west and is therefore an excellent point for observations, because it also belongs to the characteristic shapes. I sketch it here at the same time with the cone that rises on the right side of the road to Coxen's.

The hills, which lie opposite Isaac's Station on the other side of the stream, are covered with dense scrub, which offers the Blacks secure hiding places. The stream that flows past Isaac's Station and joins five miles further with Campbells Creek and which two miles further falls into Oakey Creek on Hugh Ross's Station contains the most fossil bones. They are, however, also found in Oakey Creek, Campbells Creek and Hodgsons Creek. The fossil bones appear either washed out in the bed of the creek or are found in the steep stream banks. They lie either in a clayey red loam, which contains many small round pea or bean size pieces of limonite and lime concretions of often strange shapes, or in a bed of pebbles, which consist of vesicular trachyte or phonolite

or basalt. They are always found with *Unio* and ? bivalves and a freshwater mollusc like *Cerithium*, the three of which are still presently living in large numbers in the water holes of the streams. These various contemporaneous and alternating strata are covered by the black humus of the plains often three foot deep or deeper. The bones belong mostly to four different animals. The most complete are lower jaws, in which, however, the incisors are usually lacking.

Isaac has a very fine specimen. The lower jaw has four teeth, each tooth with two transverse ridges and with low ledges in front and behind, no longitudinal ridges. The incisors are very long, horizontally lying with oval cross-section. {Fossil bones on Coxen's station two miles from the old place.} Although the teeth differ from the true kangaroo teeth, you do see that they are formed on the same plan and that even these huge incisors correspond to the two incisors of the kangaroo. Another interesting bone was the upper part of the os femoris with distinct articulating surfaces. I found the lower jaw of a young animal, in which only the milk teeth existed. The incisors are still very small here. The rest



of the lower jaws belong unquestionably to true kangaroos and perhaps to species still living. The presence of these and all the still living freshwater molluscs clearly indicates that a gigantic herbivore, formed according to the plan of the Australian animals, lived under conditions very little different from the present day. {Mr Dennis told me that the Blacks chatter about inland lakes and large animals and that these are said to be only two days' journey away from his station.}

Furthermore at that time wide plains must have existed, perhaps covered with lagoons, on the banks of which such an animal found sufficient food. Or perhaps it lived in the scrub that covered the mountains at the source of the streams. This much is certain that absence of food could not be the cause of its disappearance, because herds of cattle and sheep now graze over its fossil remains. No bone showed signs of the teeth of a carnivore. It could be partly possible that long drought killed such a large animal that, as a grass eater, could not exist without an abundant supply of water. It is possible that it is still living now in well-watered parts of the tropics of this continent. We have to give up ideas that these wide plains were covered with salt water. The freshwater molluscs show this. The large number of concretions, whose chemical analysis is very desirable, indicates springs abounding in water. The level of the ground has changed little. The greatest depth of the bones found by me is no more than 12 feet. Therefore let us assume that numerous springs existed in this basaltic region, which supplied extensive lagoons, pools and lakes with water. Grass eating animals with heavy bodies lived on their banks, but causes not yet known made these springs, whose water was rich in lime, dry up; one of the principle vital conditions of these animals disappeared and they died, young and old, or the remainder retreated to more favourable regions.

On Coxen's station the myall (*Acacia pendula*) appears and the bricklow, or at least another species of *Acacia* with yellowish twigs and broadish stiff phyllodes. The myall was in flower. In the evening as we approached this myall scrub, the scent near that of the box tree revealed its presence. Several other trees and shrubs, which I have seen on Otley's station on the Gwydir, appear again.

We crossed the boundless plains of the Condamine between Coxen's and Russell's on 2nd April. I had the misfortune to lose my poor pointer bitch, my lively companion. She remained behind and finally disappeared and when I rode back three miles after her, I called her name in vain. She died either on account of lack of water or she was bitten by a snake, which are very frequent on these plains. She was called Napier, she waved her head wide and flat when she became angry. She was dark olive-greenish, brown, and would hide in the grass when pursued and seemed to live on rats and birds, which inhabit these plains. The rats are extremely numerous and their holes make the going for the horses very hard. Moreover the ground is very unequal with depressions and rises, which the squatters here call melon holes. Of birds the bustard was seen frequently. It usually lives in pairs and permits the rider to come very close. Here the Condamine forms a kind of island. The north branch is separated from it higher up and unites with it 16 miles below Russell's. The Condamine forms the boundary between the plains and forest, between the black soil and the sandy soil. Below Russell's a rock outcrops, which contains quartz grains in a white soft clay. I think that this clay would be very well suited for faience and porcelain, if the quartz grains could be separated from it. An *Acacia* with very long phyllodes was in flower along the bank of the Condamine below Russell's.

In the Russell brothers I believe to have found two men as I would wish for an expedition.



Isolated trees appear in the plains miles apart.

They are excellent bushmen, excellent shots, of active cheerful disposition, and accommodating towards one another. We have discussed a plan repeatedly and I hope to put it into practice as soon as possible. The expedition will consist of both the Russells, the Pfeifer [Fiver], two Black boys and my humble self, each will have 100 lb flour and ammunition on mules or a pack horse. I hope to start in two months.

Mr Pemberton Hodgson gave me a plant collection and two excellent fossil bones, the upper arm and shoulder blade of a gigantic animal. I do not know whether these bones belong to the gigantic kangaroo belonging to Mr Isaac, but should elephant bones really be found on the Downs, which I doubt very much, I would regard them as these with the proviso of a careful comparison. I say I doubt very much that elephants have lived in this region. I think the bones sent to Owen as elephant bones came either from other regions or he made a mistake. Elephants live in woodlands of very different nature and I do not believe, as already mentioned, that the surface of Australia, at the time these gigantic creatures lived, differed much from the present state, with the exception of greater profusion of water. Also no fossil wood is found with these bones. The fossil wood belongs to the sandstone and comes from it where it is found on the surface.

I must also mention that in the banks of Spring Creek, Kings Plains there is a bed of fullers earth.

Mr Fairholme shot a small slate-blue heron with white base of the beak and eyebrows and yellow feet.

The weather was very pleasant over the whole journey. Usually a cool wind blew over the plains. In the evening the east wind was perhaps the sea breeze reaching to the Downs. However, today and yesterday this wind blew on Bracker's station very strongly during the day and afternoon, and in the evening it slackened. The horizon was beset with cumulus clouds. On the Condamine plains even light showers were seen in the distance. When these cumulus clouds float through the sky, the outlines of the distant mountains appear more distinctly and more clearly. With a completely clear sky they disappeared in the hazy atmosphere. The rising of the far mountains above the horizon was frequently observed. Light seemed to penetrate under the base.

Saturday 13 April

On Wednesday I rode with Mr Fairholme to Killarney, about 12 miles east of Leslie's head station. The soil is sandy. Ironbark, box, mountain mangorri and apple tree plains extend to the foot of the mountains, which are accompanied by the north-easterly chains of three valleys. In one of these valleys is the sheep station of Mr Leslie, another, Farm Creek, contains limited pasture for some cattle and Killarney with lagoons in the plain, into which the valley extends, forms the cattle run of Messrs Leslie, Murray and Fairholme. Low hills curve around this plain, which looks very similar to an old river bed. The stream (or Condamine River) is overgrown with swamp oak along its upper end, but becomes a treeless canal as it enters into the plains. However, where it leaves them the *Casuarina* immediately occurs again. Several lagoons on

or in the middle of the hole. In Stoney Creek small pieces of coal were found, but no blue shales. Killarney hut is on loose sandstone, which is visible in the creek in the paddock below the garden.

In the height of the valley a rock wall on the mountain to the right is seen, which reminded me of Cameron's mountain and of its mineralogical nature.

{Water hens.}

The lagoon is covered with many water birds. Twenty black swans float around peaceably on it, many ducks and wild geese (half-webbed feet) visit them. Spoonbills (yellow and black footed) and the ibis come in spring. A flock of spur-winged plovers were running and flying, [with] their peculiar call along the banks and over the plains. On the plains were bustards and emus.

The man, who shot himself in the foot, complained about a rash on the face and on the nose, which he received in Chile after bathing, like Capt. Scott in Bengalla. I advised him to use nitrate of potash.

It was very cold on Wednesday and Thursday, although the wind blew from the east, perhaps southeast. On Friday the sky was overcast and the night was warm again. Mosquitoes made themselves noticeable immediately. A crowd of moths fluttered around the light.

Leslie's herd is not good. The breed is small, the head badly formed.

{*13 April Wind N West very warm.*}

15 April

Strong westerly wind during the night, night calm.

{26 April}

{Europambella

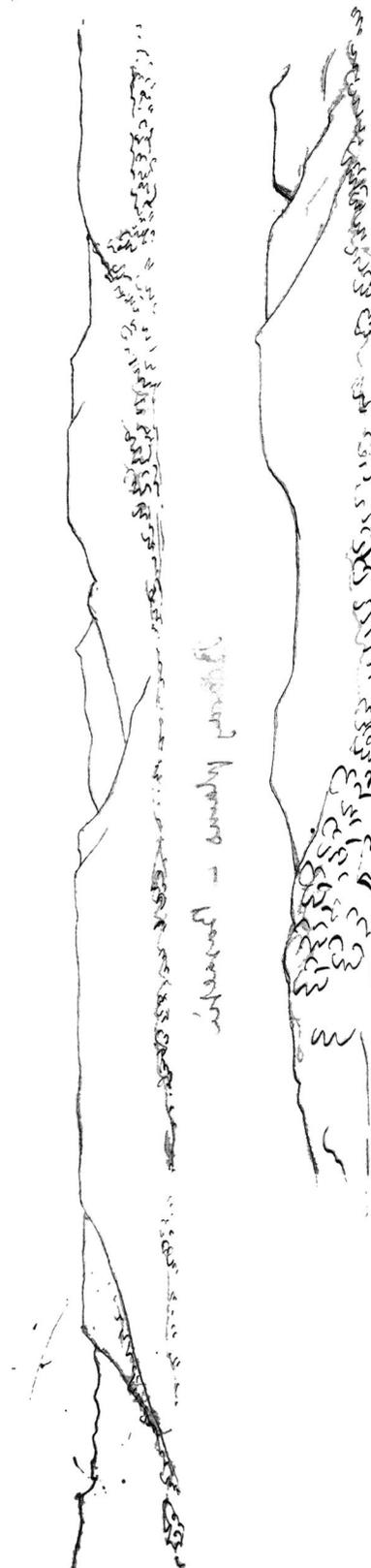
Brackers Perrot 25 Garden 32 Mackenzie (Hurry) 12 Wiseman 10 Windeyer 10 Turner 25 Boyd 8 Master 12 Dumaresq 30 MacDonald 8 The Commissioner 4 Dangar 12 - Cruickshank 16? Rusden 23 Makiva [McIvor] 30}

On 16 April I left Mr Bracker. The region towards Perrot's is less open, covered with denser shrubs and, as you come onto the granitic soil, unusable for sheep raising. In the rocky stream bed that the road crosses at first, you find pebbles of conglomerate, flint and of a dark siliceous rock, which contains crystals. In the hills along the following or second stream bed, a hard blue rock with blackish spots crops out. High hills of siliceous rock then appear until you enter through a narrow defile into the region of the granite, which extends towards the south without interruption for 114 miles, where the basalt interrupts it. The granite contains much feldspar. In that defile quartz and feldspar are in separated masses with little mica. The consequence of this is that the granite with coarse components easily decomposes and the blocks appear rounded, in one place lying strewn singly over the slopes, in another heaped up on one another in grotesque masses. The soil is formed from coarse granitic sand. If we take a general view of the geology of this region, we see a wide bed of sandstone containing fossil tree trunks spread out around the foot of the granite mountains. That siliceous mountain and the strange grey rock with black spots seem to be the same age as the granite. However, we find at many spots this rock in sharp blocks in confined places surrounded by granite, so that we cannot suppose that it is penetrated by the granite. We have seen rocks with similar siliceous ground mass containing feldspar crystals and we therefore regard it as of igneous origin of similar age to the feldspar porphyry. If we draw a line from Perrot's to Turner's, from north to

south, as already mentioned, it falls entirely in a granitic region, which is interrupted only from time to time by feldspar porphyry, siliceous rock and milk-white quartz. Turner's plains, Boyd's plains, and the whole highland of New England (Ben Lomond Range), which you ascend about 15 miles south of Turner's and leave 21 miles south of Master's (10 miles before Dumaresq's), is phonolitic. Granitic blocks appear here and there, and I regard some as real erratic blocks, as for example in Turner's plain and Boyd's plain.

Before Capt. Dumaresq's station pudding appears, but opposite it granite again. Between the Commissioner and Dangar quartz rock, conglomerate and lydian stone. Behind the sheep station (of the Commissioner) granite. Between Dangar's station and Cruickshank siliceous rock. Between Cruickshank and Jenkins talcschist of Moreton Bay. Between Thompson's and Rusden a rock that looks like talcschist penetrated and indurated by quartz, which has lost its schistose structure, — siliceous rock, phonolite and again that altered talcschist.

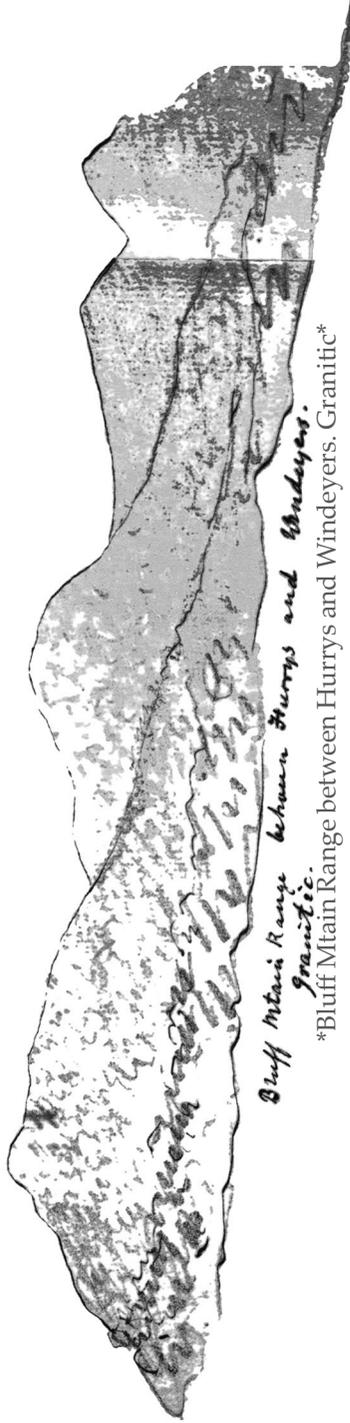
The granitic hills and mountain ranges show rounded outlines, not those bold forms that we are used to on granitic rocks in other regions. This is caused by the abundance of feldspar and by the size of the components, in consequence of which the rock easily crumbles on all sides. The shapes and groupings of the blocks are often very striking. Now huge masses are balanced on a thin base and look like imitations of tables with the table top and the four feet, now there are five and six round blocks one over the other. The phonolite mountains show the same character in their outlines, with which we previously became acquainted in the Darling Downs: conical hills or elongated ridges, almost straight with short, sharp slopes. I drew the outlines of the hills from Beardy Plains just before Boyd's station.



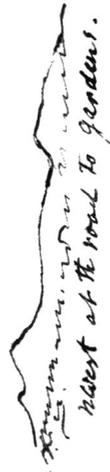
Beardy plains - Basaltic



Low granitic Ranges at the head of the Severn. East between Perrot and Gardens*



Bluff Mtain Range between Hurrys and Windeyers.
Bluff Mtain Range between Hurrys and Windeyers. Granitic



N West at the road to Gardens



Bluff Mtain under which I camped
coming from Hurry's. (Granitic)

Bluff Mtain under which I camped coming from Hurry's (Granitic)

On the granitic regions you can distinguish, first the coarse grained reddish granite in the defile at Perrot's, then whitish granite, harder with fine components, quartz, feldspar and mica evenly distributed, then a kind of pegmatite, as a dyke ¼ mile south of Perrot's, then the black granite of Windeyer's, then some feldspar porphyry.

This journey has shown me that New England is by no means generally basaltic, but is much more granitic. It seems that the basement is granitic and that the highest plateau of New England, the Ben Lomond Range, broke through this basement. In respect to the relative elevation above sea level, I can only follow the statements of some men. It seems that the basement is about 2000', and the plateau of Ben Lomond is 3000' high. There is no doubt that it is the highest table land of the Colony.

If we consider the surface of this granitic region in general, we find firstly flat valleys, low ridges, blocks on the slopes and prominent rounded rock masses. These hills are covered by dense vegetation, which thins towards the south. This is almost a flat land covered with very open forest, but everywhere prominent blocks. Then wide treeless undulating rises and trough-shaped valleys, through which a stream runs in a rocky bed and again those rock blocks together in families, almost like small villages or the circles of huts of the Kaffirs. Patches appear in the forest on the slopes covered with sharp pieces of rock, between which a large number of small trees and shrubs grow, which then look like islands scattered in the open forest. The phonolite heights are accompanied by wide treeless plains, whose soil is formed by the well known black earth but without calcareous concretions. Plains of this kind are Turner's, Boyd's, and perhaps the Commissioner's (Armandale [Armidale]). On Dumaresq's, Dangar's and Rusden's runs the phonolite, siliceous rock, granite, pudding and conglomerate are very irregularly mixed and the surface is formed from rounded hills, which sometimes are covered with very open forest and rich grass growth, but at other times support a denser forest mixed with low shrubs. {The projecting points of the schistose rock are seen everywhere around Rusden's dwelling.

They often do the horses great harm. These points are usually from north to south.} The denser the forest, the poorer the grass growth and the poorer the grass growth, the less the possibility of eradicating this bush by bush fires, as the dry grass is the medium by which the bush fires spread.

The prettiest region that I saw in New England is perhaps Dangar's and Rusden's runs, moderately high rounded hills, richly overgrown by kangaroo grass, and covered with very open forest.

The winter prevented a richer harvest in botany. The so-called peppermint gum seems characteristic of the forest trees. {Manna is collected from it in great abundance.} This tree, which I saw previously at the source of the Gwydir, seems to belong to the highest regions of the colony. Besides this a white-barked shining tree, resembling the manborri is very abundant and box, stringy bark (particularly on hills of siliceous rocks) and the apple tree. Two other *Eucalyptus* were new to me. One with smooth brownish, olive green bark, in bloom, the other with very white bark, of moderate height, with long leaves, and hanging branches (between Boyd's and Master's). {*Casuarina* with disc-like capsules was on sandy soil before Mackenzie's.} There were three species of *Acacia* with pinnate leaves, the grey, the green and that with scanty pinnate leaves. Another *Acacia* with long phyllodes, the young trunks as if covered with white dust, grew together in thickets (between Garden's and Mackenzie's). I noted that the grey *Acacia* particularly grew where a thick trunk lay, but think that this depends more on the moisture and the fertilizer produced by rotting timber.

The names of the Blacks for the various forest trees read as follows:

Nukkur apple tree

Kokiai peppermint

Billun stringybark

Yaban white gum

Birren box

Girball cockatoo

Yappar the tree whose bark they use for nets.

Gulla the bag made from bark.

Dilli (dilligrass)

Sterculia was growing abundantly near Mackenzie's. It was one of the trees that strove for moisture between the loose pieces of rocks. Besides the latter a *Pittosporum* with broad leaves, and a tree that showed the medullary rays of the Proteaceae, but obviously belongs to another family. *Exocarpos*, *Eustrephus* with yellow and black fruits, *Asplenium*.

On rocky soil along the creek several Proteaceae (*Hakea*), a prostrate, fine-leaved *Persoonia*, and several Epacridaceae were found. [*Leptospermum*.]

Mr Hurry devotes much attention to botany. The native melon was new to me, a broad-leaved *Campanula* also. A small *Convolvulus* and a small legume flowered in Mackenzie's plain. More southerly I found a new plant, but not in flower (broad opposite prickly leaves). A shrub-like legume grew abundantly from Turner's to the Commissioner's; the flower buds were close to bursting.

With the exception of the swarms of cockatoos, which plague their corn and wheat fields on all stations and a crowd of rosellas, which appear everywhere on the ground or in the trees and the wild dog, which startled me in the camp under Bluff Mountain, nothing further of the indigenous animal world was seen.

The first four days a cutting west wind blew. It was extremely cold and I suffered particularly at sunrise and sunset, then the wind abated, the sky clouded over and it

seemed it was going to rain, but it never came to that. An east wind began to blow and it is now warm again and bearable.

I had pitched my camp in the bush for several nights. The first time it was between Perrot's and Garden's. The grass was very dry and as I made a fire, it spread around and extended for miles. It was extremely picturesque; the dark black ground that remained behind after the fire, the light clouds of smoke, which were dark red towards the bottom, the forms of the trees glimmering and [...] through them. {Fire and masses of smoke from the fallen and dry trees — sparks in the trees were blown up by the wind from the black ashes.} The crackling noise and snapping, the clear starry sky when I stood on the rise opposite and viewed this bush fire — I must admit that I had seldom seen more picturesque scenes of nature. A second time I camped under a steep rocky summit, the third time before Turner's with a Cockney. I had often to regret on my journey that I was not in a position to cloth myself better. Where I came together with the masters of the stations, it was not difficult to assert my claim for genteel treatment, but where, as many times, the masters were absent, I had to abandon myself to the questionable treatment of the hut keepers.

The Blacks I saw on Windeyer's station. They came from a more southerly region. They had wretched forms and were disgustingly attired with tatters and rags. Later I saw them again in Armidale, where the Commissioner lives. The association of the Whites with the Black women is very commonplace. ~~Mr Cruickshank~~ gives his people a good example in this respect.

The Blacks on Cruickshank's station collected the spadix of the *Banksia* to prepare themselves a sweet drink.

The houses of the squatters, which in general are much more comfortable here than on the

Darling Downs, are mostly built of stringy bark timber, roofed with shingles. Mr Rusden's is roofed with straw, the huts of the men with stringy bark and box bark.

I copy here the remarks that I wrote down on the journey.

To Garden's 17 April. A large vein of pegmatite at the other side of Perrots waterhole- 2 varieties of granite at Perrots - flintstone.

A half mile further beautiful feldspar porphyry.

*The small proteaceous shrub frequent - all over New England.

Isopogon and the Peppermint Gum with 2 kinds of leaves, the young ones like those of the short-leaved ironbark- *Calitris*.

An Epacridaceous plant, low — prostrate blossoms full of honey — and *Calytrix* on the broken rock — *Dillwynia*.*

In the creek on the south side of the gap, where I pitched my camp, I found silica-rich feldspar porphyry.

From the camp to Garden's 18 April.

Strange block shapes, white granite, then milk-white quartz in a siliceous rock that seems to me also to contain hornblende.

Between Garden's and Mackenzie's a loose granite, then after the Gap is passed a fine sugar-like quartzite, the latter as veins in a loose granite that in addition shows some different kinds. An earthy granite, a white feldspathic groundmass with mica.

A little further towards Mackenzie's a grey porphyry-like rock appears again. Still closer to Mackenzie's white granite.

The granite under the Bluff Mountain has coarse constituents, with large feldspar crystals, porphyry-like.

An attractive black granite before Windeyer's station.

*From Windeyer's to Wiseman's

In the creek of Windeyers a pillarlike separation of the dark granite

Before the creek of the sheep station 2 miles fr[om] Wind[eyer's] a kind of Lydian.

Behind the second station basaltic rock, farther on a rock with scattered crystals of quartz and feldspar.

Between Wisemans and Turners in a creek a dark rock with sharp edges, quartz and feldspar without mica.

From Turners to Masters

Turners plain and range basaltic, the same outline of the mountains as in Darlingdowns

Perhaps true boulders of granit in Boyds plains.

Between MacDonald and Dumaresq there is a rock traversed by many veins of quartz, which looks like granit. It is surrounded by basaltic rock*

Where you ascend towards Dumaresq's, quartzite, stringy bark hills and a vesicular basalt between them, the quartz alternatively white, and red.

Before Captain Dumaresq pudding appears, attractive granite opposite Dumaresq.

Between the Commissioner and Dangars Quarzrock and Conglomerate and Lydian. Behind the sheepstation conglomerate.

27 April Mr Rusden's station

Today we went over the western hill to the river. This hill consists of quartz rock that outcrops towards the river in large blocks. A little further up the river phonolite seems to have broken through this quartz rock. The formations continue through the river, which has broken or worn through both. The quartz rocks, which are covered by the water, are coated by a thin, shining red layer

of iron. A pudding stone is being formed in the river bank, whose cement is iron. A bed of white clay and yellow ochreous earth is found in the river bank in the region of the phonolite. In the paddock there is a rock that shows loosely bound quartz grains. Behind the house on the hill, a grey rock parts into vertical plates, which seems to me to be talc schist penetrated by quartz. Some of the hills formed by the phonolite show the characteristic mountain shape.

A new broad-leaved proteacean was found in fruit on the bank between quartz blocks. Grey wattle and the remaining forest trees.

30 April

Yesterday I visited the waterfalls of the Apsley six to seven miles from Rusden's. The moderately hilly region does not foreshadow that we are near a 300' deep gorge. We come to the river and stare down an abyss. The other side is a steep almost vertical rock wall of grey slate. This side has ledges and is covered with some vegetation that permits climbing down to the bed. The rocks stand out almost like pillars, dark grey with quartz veins. Quartz has changed the talcschist into a hard sparry rock. On the slope a shrub grew with broad leaves woolly on the underside, a shrubby *Acacia* with aciculate leaves and the flowers in small single heads, *Callitris*, and several other shrubs. At the bottom in damp rock fissures *Senecio* and a large-flowered *Lobelia* were present. Also a strange grey grasshopper was found. The excrement of the rock wallaby was everywhere on the rock ledges. At the actual falls *Leptospermum* grew. Here on the smooth rock bank 3" thick quartz veins were seen running from north to south. It was a whitish-grey quartz with very shining conchoidal fracture. The veins run at an angle of 78° towards the west. This fall is 20 miles distant from the beginning of the actual coastland. The mountains extend without interruption so far and then fall off

quickly and steeply. This slate that seems to supply very good whetstones is covered with quartz pebbles, on which the plants of the sandy and rocky soil are growing; some epacrids, a leafless prostrate shrub with monopetalous five-toothed corolla. On our journey we crossed a woodland, in which there were a large number of dead trees, partly still standing, partly uprooted by the wind. The cause of this death seems to be beetle larvae.

We saw a high mountain with flat peak, which the settlers call Blue Mountain and the Blacks Bulurai. They call the water fall Lomba.

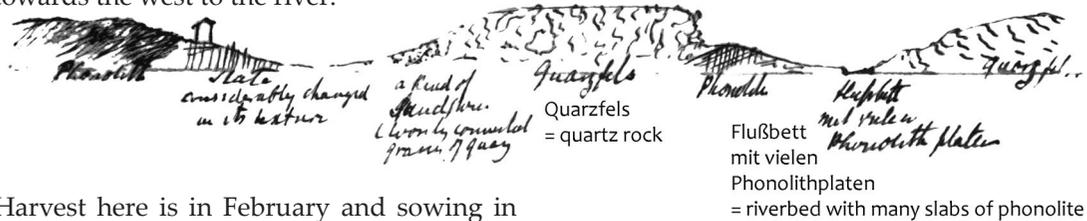
I made the acquaintance of the Commissioner, Mr Macdonald, a versatile educated man, who told me much about the Blacks. We had long discussions about the condition of the colony and about the development of art and science in such a young country. Music seems to follow the emigrant into the new homeland at first, and if he or his children also are not in a position to write new songs and to compose new melodies, they continue to sing the songs of home in the old way. Painting requires rich patrons and architecture and sculpture require significant wealth. The sciences assert themselves, in so far as their practical utility can be demonstrated. Philosophy is perhaps the last that enters into the young country. The mind is too unsettled and all its powers concentrate on the immediately useful and quiet secluded thinking about the exciting data finds neither time and leisure nor patrons, then should a more tranquil mind really seek solitude, mocking companions drive him out like an owl from its dark dwelling.

It was acknowledged that the governor was an active far-sighted man of good intentions, but he was reproached that he was too much slave of the government of the motherland and used his discretionary power too little.

1 May

Sunday magnificent weather, the 29th and 30th April easterly breezes, sky thickly overcast, fine rain that continued today.

Following is the geological section of this station from the mountains behind the house towards the west to the river.



Harvest here is in February and sowing in September. However, this does not seem generally the case.

2 May

The 1st and 2nd May, Scottish mist and no wind. We visited the northern and north-eastern hills, by going around the station in a curve. Talc schist, then phonolite hills, an isolated cone, then northeast a range of hills covered by stringy bark and scrub on whose slopes milk white quartz in blocks crops out everywhere. However, this quartz was united with talc schist in places, which it penetrated in all directions.

Two epacridaceans were found.



[Part of a letter in English to Walker Scott, 10 May 1844. Arousseau, 1968: 746-748]

Newcastle Saturday 11 May

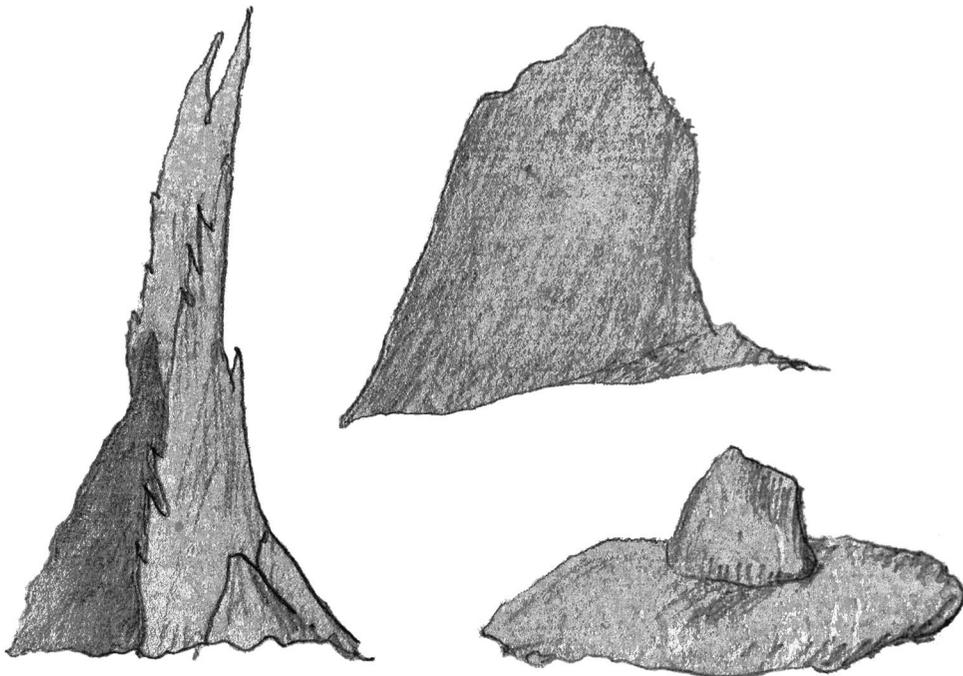
{*from Rusden- Makiva 30 Coxes 28 Ashalls 22 Ashalls Shepherds Gloucester 15 Turnbulls

22 Stroud 20 Raimond Terrace (Boltons) 34 Newcastle 18*}

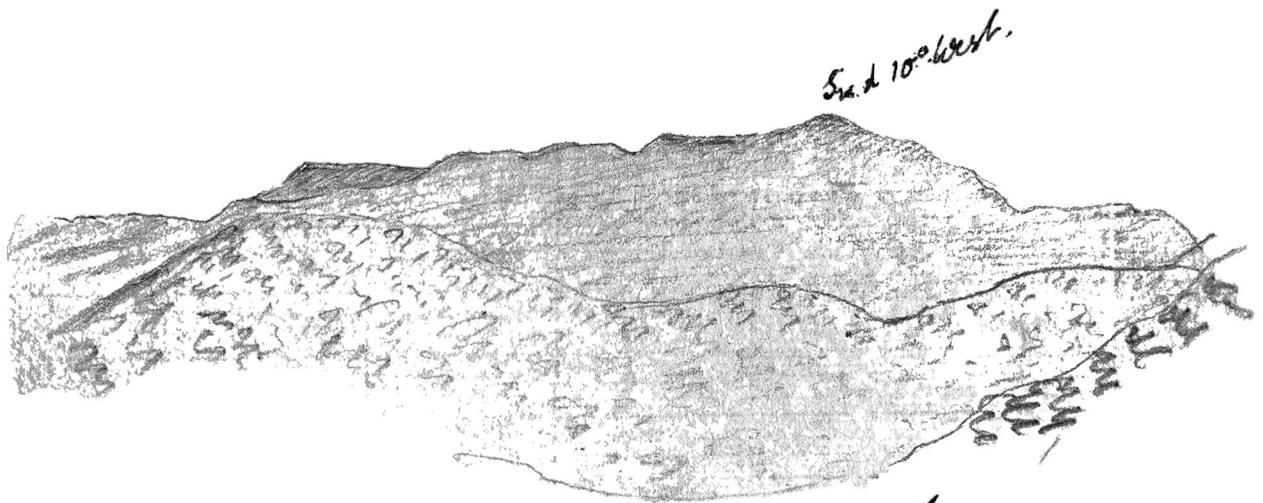
I left Mr Rusden's station on Wednesday. The region was undulating and hilly. The rocks were quartz bearing talc schists, like near Rusden's dwelling, siliceous rocks and phonolite (winstone). The latter was immediately recognised by the large number of loose red rocks, which lay scattered around on the ground. I crossed the Apsley and came to a sheep station of Makiver [McIvor]. From this I tried to find my way through the bush, however, I held myself too easterly and came between high mountain ranges. I had to pass several well-watered rocky streams that flowed towards the east. Because I eventually found it necessary to steer to the south, I came on a sheep station of Mr Bell and by ascending a river I finally reached Makiva's head station. The rock everywhere quartzose talc. The river frequently with small falls and rapids. From Makiva's I climbed over the ridge that lies between the Gloucester, Manning and Hastings Rivers, or from which these rivers receive their waters. The water shed is again formed from

phonolite. Strangely enough on the highland itself along the next stream that flows towards the Gloucester, domite is found, an earthy matrix with feldspar crystals, then again phonolite, which accompanied us to the valley and composes the mountain range that accompanies the valley, in which the first sheep station of the Australian Company lies. The mountain is densely covered with tall majestic trees. These are principally the blue gum, a stringy bark and a species of box. Tall beautiful tree ferns grow between them and frequently they form real groves. The valley into which you descend from this mountain chain is treeless, flat and filled with deep alluvium, through which the stream cuts its singularly meandering course. About one mile from this sheep station a scaly serpentine outcrops. This rock is bounded

by siliceous rock. I pitched my camp some miles further on a sheep station. On Friday morning when I continued my journey about two miles further, I entered upon a new formation that accompanied me almost uninterruptedly far down the Gloucester. This is a conglomerate, sometimes more earthy, sometimes more siliceous in nature and then extremely hard. The conglomerate seems to occupy particularly the higher parts of the mountain, at the bottom, in the river bed, the hard dark blue rock, probably impregnated with silica, contains few inclusions. This rock forms high mountain ranges, often with very steep slopes. The soil is a rich red loam that is visible everywhere in the ant hills. The forest is densely formed by magnificent trees. Several *Acacia* grow here and three species of *Casuarina*.



Hills of the white ants consisting of red loam often constructed in old tree trunks.



*seen from the turn of the road of the foot
of Coxes Range. S*

Seen from the turn of the road of the foot of Coxes Range. S



West-southwest from the road at the foot of Coxes Range.

When I came down from the Coxes highland I saw mighty mountain ranges towards the west and south west and sketched some of them to get the outlines of the conglomerate mountains. All streams that came from those mountains were filled at least with pebbles of that rock.

The region is extremely hilly and is made for the mules, which carry up the stores and provisions to the mountain stations for the Company. Often the narrow path winds along above the deep stream bed on

the mountain, often high ridges have to be crossed and then descended again to the level of the stream. On Ashall's station I made the acquaintance of Mr Turnbull, an agreeable young man in the service of the Company, who was taking mares up to the properties on the Peel. We chatted far into the night and I enjoyed an excellent refreshing night's rest at his fire. The next morning, a Sunday, brought rain and because the track led through just as hilly a region, which often caused me to dismount to lighten my horse, I was completely drenched when I

arrived at the sheep station. I found the hut keeper alone and we had much to speak about the wages. Of course these people see with sorrow that the pay for their work is decreasing significantly and although even now they could still obtain independence easily by thriftiness, yet they prefer to let their money go to the hotel keepers for awful spirituous liquor. In the evening the three shepherds came, who had not yet received their freedom. Their conversation related principally to the rain, their flocks, and some losses, then they slaughtered a sheep and fed their dogs. Often they jokingly made fun of one another. Finally a draught-board was dug out and they began to play. The good understanding and friendliness of these wild men made a fine impression on me. In spite of my presence they spoke freely without ceremony and one of them expressed his deep anxiety that he did not have his black Polly with him, whilst the others derided him about the preference for a Black. This association with Black women is almost general on all stations of the Company. The Black men seem to be reconciled to it and their women begin to bestow the care of White women on their coiffure.

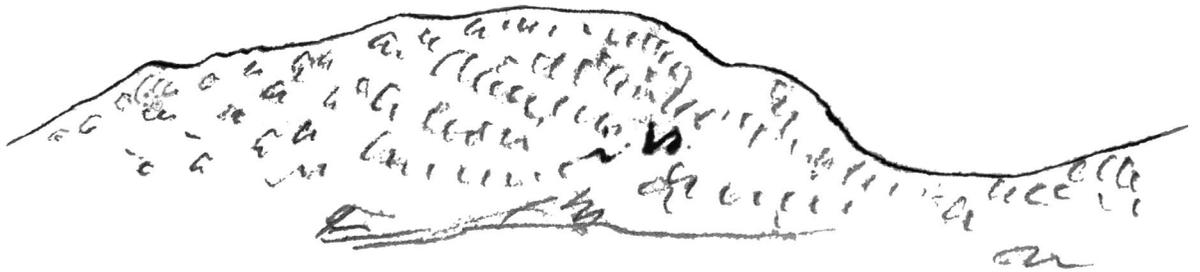
Before you come to the cattle station of the Company (to Gloucester), the rock seems to change and becomes really primitive. Gloucester is magnificently situated. A plain spreads out at the foot of a bold mountain range. This range seems formed of primitive rocks.

In detritus of a stream at the foot of Coxes Range, I found granite pebbles enclosed in the siliceous conglomerate.

From the mountain range which divides Makivas Creek from Gloucester, I frequently saw the deep wide underground home of the wombat, although I never got to see the animal itself. The woodland was very dense here like on Coxes Range and even further downstream the open woodland of New

England was missing. As the eye can no longer range so freely through the forest, and everywhere returns from the thicket to the road, it tires and the traveller, whom the open vista attracts and encourages, sinks drowsily in the saddle. As I rode past a brush between Gloucester and Stroud, the well known forest trees appeared, which I did not expect here, thus bunnah (the bloodwood), dambirri (the grey gum) and tabilpillah or tangpalang (the worm-barked gum). Bunah accompanied me even further to Stroud, Raymond Terrace and almost to Newcastle. Manderoljam also appeared from Raymond Terrace and several of the stringy bark species are probably also here. Several *Acacia* were in flower, thus the one with large pinnae and large red-edged glands, another with simple somewhat sickle-shaped, but short parenchymatic phyllodes. The prickly-leaved *Acacia* was in flower before Stroud and shortly before Stroud many epacridaceans and *Banksia* appeared on sandy soil. We also see that the coastal belt of Sydney, Port Stephens and Moreton Bay is not quite so different, although some fundamental traits diverge. Thus for example the beautiful cypress pine that adorns the sandy Nynga Nynga shoreline is absent. The wangä gum, which occurred there so abundantly up to the seashore is completely absent here. Where is the majestic banban and the various smaller trees that are so abundant there? The forest between Hexham and Newcastle is extremely dense, because the cattle keep the grass short and so prevent bush fires, which thin the forest almost exclusively. That dried up woodland, which I saw with Rusden and Commissioner Macdonald and of which Mr Eales has spoken, seems to me not to result from the drought, but from eating by caterpillars or beetle larvae.

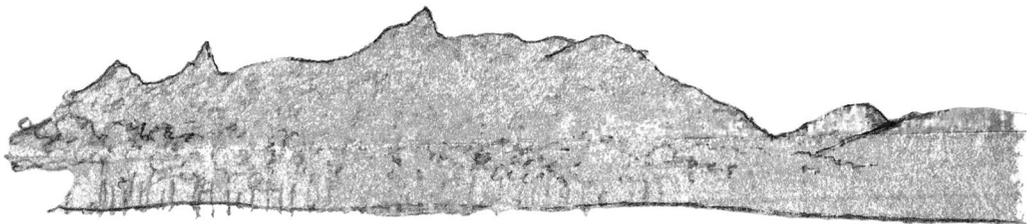
Couch grass had covered the track, the forest and the hills and has of course smothered and dislodged all the native grasses.



Mountain formed from quartz conglomerate.



distant from Gloucester probably porphyry mountains



Bergmasse zwischen den ferneren Kruppen und dem Gebirge von Gloucester dessen wilde Umrisse es zeigt.

Mountain mass between the distant summit and the mountains of Gloucester whose wild outline it shows.



The mountains from the Gloucester paddock.



A mountain which lies to the right between the Ten Mile Station and Stroud.

Between Turnbull's and the Ten Mile Station sandstone appears in a stream. Then the rich black soil of the whinstone (phonolite) appears between a porphyry, but these porphyries seem to change. At one place the crystals of feldspar and quartz within a very hard ground mass are very distinct, at another it is a reddish phonolite without visible crystals, and at another it is veined masses of feldspar distributed through an almost porous rock. These remind me of the reddish vesicular rock of Cunninghams Gap. I know from Port Stephens that the basaltic rock had broken through the porphyries, but I don't know how the red crystalline rock relates to the porphyries. Some parts of the Company's lands consist of an attractive dark almost crystalline limestone with crinoid columns. Where this limestone occurs, caves appear and in these caves fossil bones are found according to Mr Turnbull's account. He called the place The Buckets. Pebbles of porphyry and of an almost syenitic rock appear in the streams between Stroud and Raymond Terrace. {Pebbles of syenite in the stream which the Romah follows.}

Further on a dark green earthy rock and finally the sandstone and the pudding, which appears south of the Hunter. {In another stream a probable igneous rock in sharp edges, joints dip perhaps southeast, south and north, others southwest and northeast.}

The Blacks on Ashall's station had the following names for the various forest trees: *Gundii Appletree, Tamboa Whitegum, Burrin Stringybark, Tikkarra Ironbark, Birri Box, Tarrami blue gum. Garragar wood of which they make the spear. Gukkang a tree of which they make the heliman Mandik the tree of which they make the wommerong. Uallai u [and?] Burrangir two sorts of wood of which the blackfellows make kangaroo sticks.*

The more aberrant the conditions of life into which we enter are from those that we

leave, the quicker the memory of them is suppressed by the present. Like the ship's furrow filling quickly with water, and for a short time barely indicating the course by a light streak, so the last 18 months of my bush life sink like a dream, like a double vision, and the present feelings are tied directly to those, which excited me on leaving this house 18 months ago. Even the changed clothing seems to alienate me from the feelings, and the exertions of the wandering life, which for the moment I contemplate with great, almost luxurious, trepidation. The bush was an unknown wilderness when I began my journey. At present I know that the industrious, enterprising settler ploughs through it in all directions with his wagons, and that his sheep and herds of cattle pass through and graze it everywhere. But nevertheless the thought does not please me, at least for the moment, to saddle my mare again and to begin my journeying anew. However, with feelings as it is with eager desires, they will satiate themselves and soon the pleasant flashes of light of my travelling life will become more perceptible and I will also begin to long for them again. The striving after new things, and after the unknown will follow more pressingly and will force me out once more into the solitude of the bush to speak there with the trees, the rocks and the birds and to meditate on the working of nature. Were it possible to have all the individual observations acquired in the course of many months always at hand, to understand them immediately and to extract more general ideas from them, such a continued travelling life would be less one-sided, be more deeply inspiring and accord a rich yield more quickly, but the traveller is in many respects only a collector. He makes his observations, dries his plants without determining them, and breaks his rocks without always immediately noticing the finer differences. So it happens that his eyes indeed get accustomed to discovering

the diversity of forms immediately or more easily, but when he investigates again closely, also deriving instruction from books, the forms remain separate and his mind remains in an unsatisfactory twilight, from which he hopes to come when the time of quiet arrives, in which partly close investigation and partly books or teachers make him more familiar with the nature of his observations, his plants and his rock specimens. It follows that the mind is never so deeply, nor so universally occupied on these travels, than when you properly focus on your work in peaceful study in your room, and that impulses and passions and images of fantasy hold their own against sound judgement far longer in the bush as if the change of occupation and can only be overcome when they are matched.

*Timber Trees

- Eucalyptus robusta* Mahogany? Redgum
(of no use —
- “ “ “ “ *piperitata* the blue gum
(sometimes peppermint)
reddish brown
- the blackbutt (dull straw
coloured timber, for
boarding
- the box
- the stringy bark
- Cedrela australis* (Red Cedar, Cedr. Toona
Box.
- Seaforthia elegans* Cabbage palm? - not right
- Araucaria cunninghami* Moretonbay pine
- Flindersia australis* the capsules containing the
seed are remarkable for their rough surface
- Callitris arenosa* } Cypress pine
- Callitris pyramidalis* }

- Oxleyia xanthoxylon* M.B.
- Castanospermum australis*
- Bauhinia macrophylla* (Mt Ebony NWest.)
- Ziziphus australis* (Australian jujube NWest)
- Exocarpos latifolia* tropical native cherry
- “ “ “ “ *cupressiformis*
- Xanthorrhoea* grass tree
- Casuarina stricta* (She oak
- “ “ “ “ *torulosa* forest oak } beefwood or
- “ “ “ “ *paludosa* Swamp } Bot. B. Wood
- oak
- Melia azedarach* (*Melia* fitness for making
spears)
- Trichelia glandulosa* Australian Rosewood
{Meliaceae}
- Acacia melanoxylon* black wattle
- “ “ “ *decurrens* green wattle
- Dacrydium* Huon Pine (V.D. Land)
- Dacrydium* (Br.) the Adventure Bay pine (East
of Bruni Isld V.D.L.
- Melaleuca* Teatree
- The Mangrove
- The Turpentine tree (*Tristania albicans*)
- Weinmannia arbutifolia* (Large leaved
whitewood)
- Ironbark *Eucalyptus resinifera* (Spec. gr. 1128)
- Ceratopetalum gummiferum* Narrowleaved
Lightwood
- Banksia integrifolia* Honeysuckle
- Xylomelum pyriforme* Peartree
- The Blood tree
- The apple on the tropical coast belongs to the
same genus as the Malay apple (*Eugenia*) - the
Coal River apple (*Achras australis*) Sapotean

The Moretonbay Lime *Limonea? australis*.

Australian cranberry *Lissanthe sapida*

Cargellia arborea (the plum)

Leptomeria acerba the currant

Capparis

Myristica insipida wild nutmeg on the tropical shores {perhaps the Coconut grows on the shores.}

Pteris esculenta

The seeds of *Sterculia*

Caladium macrorrhizum (Buckra yam)

Calamus caryotoides the ground rattan which on many parts of the east coast climbs to the top of the tallest trees is used by the natives for sewing thin canoes and for making baskets.

Eucalyptus mannifera in the cold and elevated parts of the colony (peppermint of New Engl. {*Curcubita lagenaria* the calabash)

Urtica gigas the nettle tree

Doryanthes excelsa

Kingia australis the treegrass King Georges Sound - the flower stalk covered with a succession of sheaths

{*Celestrina* the cedar of the colonists in Illawarra}

Cephalotus follicularis the pitcher plant (pitchers upon separate leaves)

Pandanus spiralis the screw pine

This is taken from a book which has the title: *The picture of Australia exhibiting New Holland Van Diemensland and all the settlements from the first at Sydney to the last at the Swan River*. London, Whittaker Treacher and Co. Ave Maria Lane 1829.¹

This book contains many good remarks and seems to be written by a careful man.*

The distant heavy roaring of the sea forms a pleasant background to our thoughts. When we lose the path, we are carried over its intervening spaces. Also the refreshing sea air recalls pleasant circumstances and the body itself is in a comfortable freshness, while the mind plays aimlessly over present and past. Everywhere sounds, everywhere reverberation. However, in such a situation there are no false sounds, no dissonance. I have had moments enough, where the mind also lets itself go into a dreamy thinking, but there were few pleasant notes! Alarm in the present, fear and despair for the future! And that was on the sea and the waves just as heavy around the keel of the continually striving ship. The dreams go and come, now a spring shimmer, now pale and yellow like the loose leaves of autumn. We are seldom conscious that this colour, so often in ourselves, lies in the existing condition of our body.

[Letter in German to his brother-in-law. Arousseau, 1968: 748-754.]

15 May

The solitary thinking in the bush almost brought me to Hegel's views of the immortality of the soul, if I understand them correctly, that it is not an individual and conscious immortality, but that the soul becomes free as a new combination like the simple matter, which composes the body. I think that the soul is somewhat material, somewhat similar to light, to warmth, to electricity, and I have long believed that. It seems to me that nature in its action always must describe a circle, the matter must go and come, like the waters rising to the sky and falling again as dew, snow and rain. An accumulation of immortal souls in paradise seems to me to be positively unnatural.

I received letters from William, from Schmalfuß and from Hilgenfelds. William was brief and reported that he had sent me a

fine microscope. Schmalfuß gave me family news of the change in my father's house. Strange change! Hilgenfeld and particularly his wife wrote me an affectionate letter. They ask me to return back home quickly! Their arguments strike the tenderest fibres of my heart. I would like to see mother and my brothers and sisters again, but then I must return again to my work, to which I am always closer here than in Europe.

John Archer visited me. He is going to Port Macquarie with his brother David to take 3000 head of cattle to Moreton Bay. I am pleased that they have been so fortunate to get cattle and I am convinced that they will be more fortunate with them than with the sheep.

What is better than a comfortable solitude? No person disturbs me in my thinking, a host of dumb friends stand there in the cupboard and as I open it, I chose now this, now that one and let them speak to me just as it pleases me!

11 July

I put the box to Owen on the ship Ocean Queen on the 9th July.

On 12 July it began to rain, which lasted about 8 to 14 days without break. Singular agreement with the last year in Moreton Bay.

Mr Lynd told me that ants will not walk over pieces of chalk and that they are easily killed by potash and soda, the formic acid combining with the alkali. We must perform some trials.

17 July

Since my arrival in Sydney I have been so interminably, so incessantly busy, that it was impossible for me to enter any kind of remark in my diary. And what could I have even entered? I was occupied from 7 o'clock

in the morning to 3 o'clock (midday dinner) with the arranging of my plant collection. After dinner until nightfall as well and in the evening I wrote my contributions to the geology of Australia, which I have now sent to William. I thought to be able to keep my fossil bones for myself, but because no one wanted to support me on my forthcoming expedition, I feel obliged to send them to the Museum in Paris and to bring together a respectable collection. I have now sent a wood collection, a collection of rare plants, a collection of ferns from Newcastle, the fossil shells from Harpers Hill and Glendon and a collection of geological specimens to the Museum of the botanical garden. I also sent a collection of woods to Berlin and curiosities to William.

My expedition has then fallen back on me alone. Dr Nicholson, who brought it before the Legislative Council to confer the leadership of it on Sir Thomas Mitchell, denied me his help, although my rationale, that of the advancing squatters, is better than his. Mr Dawson was helpful, but he is too poor to be able to support me with money. Mrs Chisholm was inclined to help, but more through her influence than otherwise and money is now so scarce in the colony, that no one has any spare for such an enterprise. So I am then again alone with my good William Nicholson, who probably will also criticise me that I come back to him for monetary support. And here in Sydney Mr Lynd, the magnificent fellow helps, saving me any expense.

The superintendent of the Botanical Garden, Mr Robertson died and Dr Nicholson asked me whether I would apply for the position. But the Macleays have made little effort to approach me and my head is so full of the forthcoming expedition that I am not inclined to accept the position. I would do it, however, if they offered me the position, but I see that they always hold up before me

a nightmare in the far-fetched phraseology, that Sir William Hooker intends to send a botanist here. That seems a far-fetched phraseology, because Robertson was here for two years and no botanist came. The thing is that no well-educated botanist would accept such a position, unless his science drove him to it.

Continuation of the Catalogue of wood specimens

144. **Acacia* from Durval, on a sandy soil, a small tree $\frac{3}{4}$ " in diameter.
145. Gallabi a small tree about 15' high rather irregular in its growth, with a black heartwood (*Sida?* Puntume[?] Tiliacea
146. Beir the Mangrove, remarkable for the interleaving layers of wood.
147. High tree growing in Mr Mackenzies, Bigges, Camerons Mt. brush (in Camerons it was the principal tree beyond the Rosewood belt) it splits very freely.
148. Dadangba a gumtree which grew near the swampy flats of Waiamurru.
149. Ammungura a middling tree growing with the cypress pine at Durval.
150. The cypress pine Kulluloi (*Callitris arenosa*)
151. A tree with a very thick white corky epidermis from Durval a thick grainy bark, white sapwood.
152. Nonda N. epidermis thick and very irregular, bark thick cellular, red with white of the fibres scattered, wood reddish light, with short fibre.
153. Dangan the large figtree of Durval.
154. Dullinbill N[jicky]. *Dodonaea* from Durval.
155. Gnamo a small tree at the foot of the sandstone hills Durval
156. Worarbii *Myoporum* Durval
157. A small tree with dark fissured bark, with yellowish close-grained wood, probably Nimgo (the small tree with yellow fruit)
158. *Pandanus spiralis*
159. Yappar a high tree of the wood of which the Nynga Nyngas made little vessels.
160. Barabara Coll. This is probably the little tree with ruf[?] fruit forming afterwards a red berry of considerable size like the gooseberry crowned with the remnants of the calyx.
161. Tanguirir c. 10. Small tree from Ashalls blackfellow
162. A vine with distinct layers in the 2'''-3''' broad bark. Epidermis a little corky, wood porous, no rays - Gum white transparent.
163. Vine with soft, scaly longfissured whitish bark, dense wood with rays or rings W[ide] Bay.
164. Vine with grey bark, transversal lentilli, red juice, turning blackish, wood reddish, porous, without rays or rings. Tecoma.
165. Vine half herbaceous, compartments of woody fibre with pores separated by much cellular tissue, surrounded by a translucent continuous smooth epidermis. Wide Bay.
166. Vine with thick smooth lenticular bark, medullary rays porous, without juice. Kinnindir. Bunya B[unya]. brush.
167. Yurro, vine white smooth outside, no rays nor rings, but porous, yellow sap.
168. The corky vine remarkable for the corky excrescences of the bark, compound leaf, red eatable fruit.
169. Vine of the native melon? fissured bark, compartments of the woody tissue, porous, separated by medullary rays of little breadth - the blackfellows rope.
170. Bundarr. Monopetalous vine (*Rhipogonum*) with smooth bark, with prickly scattered excrescences.

171. A small tree, with verticillate prickly leaves, red berries like beads united.
172. The Jasmin of Archers first creek
173. Nimgo the tree with smelling leaves 4 capsular, monosperm fruits. Taylors Range and Bunya Bunya.
174. Aromatic tree of Brackers Scrub and Sassafras of Maconnels.
175. Dananbar N. (Damdam Ch[arley]) Thick yellow cellular bark with a greyish slightly fissured epidermis, wood yellow, soft.
176. Tatta N. Bubulberil Paddy. Grey thick corky epidermis cellular bark, wood fine grained, no rays, and concentric rings little visible. This tree belongs to those of 142 Ona
177. Tree with grey originally smooth epidermis, thick grainy yellow bark, yellowish wood, with very visible concentric rings and open pores. Young tree with a large pinnatifid leaf.
178. Vine with thin bark, with thick round or transversely oblong lentilli, wood yellow, dense, with fine concentric rings and fine pores (Balläl Ch[arley]. Billa J[acky]. Bas. Simon).
179. Tallangal W[ide]B[ay]. Epidermis smooth, surface of the bark red - bark about 2''' thick, lines converging in pyramids towards the circumference. The interstices of the pyramids filled with cellular tissue, concentric rings distinct, pores open.
180. Epidermis coming off in small scales, bark when dry getting horny, no concentric rings visible, no rays, pores very open, cordate and ovate leaf - Umber.
181. Stem of *Smilax australis*.
182. Mayann. I have only a young shoot, with ovate scars of the leafstalk. It smells like an umbelliferan plant.
183. Climber, grey, smooth epidermis, bark thin, fine rays separated by cellular tissue - open pores.
184. Birrwi. A leguminous climber, epidermis comes off in membranous smooth scales, wood dense, concentric rings and rays, little visible, pores scattered open - red juice.
185. New Zealand Pine.
186. *Flagellaria* of Mor[eton] Bay - Baran - Dei Jacky.
187. Coryline from Mor[eton] Bay red berries.
188. The Rose wood of Mor[eton] Bay.
189. Palengbin B[unya] Bunya brush, bark rough fissured, dark, section brown, wood slightly brown, rays very fine and numerous, some very large, pores fine and numerous.
190. Koba. Surface of the bark irregularly rough, section red grainy, wood brownish, medullary rays distinct, numerous pores very open.
191. *Rubus* climbing, Archers brush, bark coming off in small corky scales, section with visible rays, wood with thin rays, very porous, dense medullary sheath, pith very large.
192. Dunbadoran - Owaigunda - Dunbata. Epidermis white, section of the bark cellular red, medullary rays very distinct, pores though large, not very open.
193. Vine used for climbing, (Jindill) with long tendrils bark with lentilli, wood with large pith, dense medullary sheath, pores very open.
194. Vine Archers brush bark smooth covered with broad lentilli wood with cracks in the distraction of the medullary rays, pore numerous and open.
195. *Acacia* blackwattle from the Mission Mor[eton] Bay and all over the district.
196. *Acacia* Kirarallo from Mackenzies brush.

197. Birrigam, a wood which the blackfellows use for waddies.
198. Burrawam a tree whose bark resembles much that of Gnauar - it is a *Melaleuca*.
199. A malvaceous shrub from Biroa with the remarkable marks of the dry bark - lentilli - wood yellowish, light - fine grained.
200. *Seaforthia*.
201. Dinangurmubin, a proteaceous tree with bipinnatilobed long stiff leaves, silvery at the lower surface.
202. Cinnamom tree (a young shoot) the wood seems to have a very fine grain, if it ever attains a considerable size. (Though I cannot identify it with any species of 142, I think it is nearly allied and probably lauraceous.
203. Kallabill. *Buttneria* from Biroa.
204. Deie Mountain *Acacia* Mor[eton] Bay.
205. Bon broad lanceolate leaves with [...] of white showy flowers. Bark dark, shallow longit. fissures, section thick cellular white, wood yellowish, light, with fine medullary lines.
206. Bum Abel. Bumbungall, bark grey, smooth, cellular wood with close fibre, with white dots all over, a bark which seems allied to it, is called Burroi Burroi.
207. The Kulu Myrtle.
208. Girkan Girkan, epidermis thick, corky, bark lilac, in fine fibres, the wood soft but fine grained, slightly reddish slight aromatic smell, nearly allied to 202 - is nothing like 36. { af. 36.}
209. Kidnabalam N. Gumul[?] - Ginnah Paddy. Bark grey, almost smooth, coming off in light scale, section of the bark reddish (not black as in Gnurrir) wood seems light, with fine grain Ketinelpin. Mor[eton] B[ay]. seems the same or nearly allied, but the bark is much stiffer. If this wood corresponds to the branch and leaves called Kidnabalam, it is a *Podocarpus*, no way different from that of Ash island.
210. *Leptospermum*.
211. *Pimelea* from Piri.
212. *Acacia* from Piri.
213. A small shrub probably malvaceous at Archers.
214. Sassafras (*Laurus*) from Piribrush.
215. *Sterculia*.
216. The bottle tree of Camerons.
217. Brother to Bom, Mr Mackenzies brush, bark dense longitudinally fissured, cellular, wood white or slightly yellowish - light, short, grain open.
218. Tree from Brackers scrub with 3 capsular fruit, epidermis covered with white ticking[?], bark in fine layers under the epidermis dark wood white, light but close grained.
219. Tree with stiff toothed leaves from Brackers. Epidermis white, coming off in thin sharp, stiff scales, bark cellular, white below the epidermis fine green - wood white light, close grained.
220. *Pittosporum tenuifolium*, epidermis smooth grey with scattered transversally oblong lentilli, bark cellular, below the epidermis green, wood light with fine waving lines, resembling no 22.
221. A thick vine, with alternating rings of porous open fibres and layers without pores.
222. A small tree from Tibburah creek dioecious, probably belonging to the Euphorbiaceae - a bitter nasty taste and a turpentine smell.
223. The Myall *Acacia*, only a chip.
224. *Hovea* from Moretonbay.
225. *Aegiceras fragrans* M[oreton] Bay.
226. *Loranthus*.
227. Hazellike little shrub near Archers Creek.

228. Mangel Simon. Nirra J[acky]. Mingarr Br. smooth epidermis, large transversal lentilli, transparent juice. Pores large and open.
229. Climber from Nurrum Nurrum. Epidermis white, corky with big round scattered lentilli, bark fibrous - rays fine, visible, pores numerous.
230. Vine with yellow blossoms. Epidermis tubercular (warty) bark cellular, wood with distinct rays and numerous not very open pores.
231. Dungurri. Epid[er]mis soft, corky, fine scaly bark below the epidermis green - towards the wood white cellular - wood yellow with fine large white medullary rays.
232. *Myoporum* with big flowers from Mor[eton] Bay.
233. Small tree with prickly leaf from Brackers - bark rough in layers.
234. Gngängä. Bark smooth, in fine layers, wood light close grain.
235. Gundil. Archers Station. Epidermis corky, bursting longitudinally and swelling into corky excrescences, coming off and leaving a smooth white bark. Bark lamellar lamina very consistent.
236. A big tree with epidermis grey, with slight fissures filled with lentilli, bark thick red, granular, particularly corresponding to the fissures, wood with a reddish cast - rather light and short, grain open.
237. A big tree with epidermis grey smooth very thin, coming off in soft pieces. The section red, distinct layers of white woody tissue and red cellular tissue. Very probably this tree is allied to 234, the epidermis of which is however not powdery - wood has a yellowish cast, is soft, light, fine medullary lines and open pores.
238. A high tree near Archers Creek. The bark dark rough, roughly grainy, wood soft turning into fine yellow.
239. Bark of an high tree, near Archers Creek, grainy but the grain rather transversal.
240. A tree with almost smooth dark epidermis, bark reddish, corky fine waving layers, the wood seems close grained, but it is not heavy. It is very similar if not identick with 37.
241. A piece of bark with rough surface, red section, cellular with indistinct whitish rays, shining particles of gum. The specimen from Mackenzies brush has a light rather close wood, petals 4, stamens 4 - alternate, small stipuli.
242. A dark bark with well defined fissures, section of epidermis almost black, bark itself red cellular, without any visible design (internal surface with prominent ridges corresponding to the medullary rays).
243. A dark bark, slightly rough, section of the epidermis dark, bark red with indistinct waving lines. The wood seems of an open grain and of a tolerably tough fibre.
244. Pieces of bark, epidermis densely warty, corky, section red, with white and red lines from the wood.
245. Epidermis rough warty corky, section of the bark red with small white points of woody fibre scattered regularly through them.
246. The articulate climber.
247. Pubescent palmate vine of Mr Bigges brush.*

*The Soldiers Tear.

Upon the hill he turned to take a last fond look
Of the valley and the village church and the cottage by the brook
He listened to the sounds so familiar to his ear
And the soldier leant upon his sword and wiped away a tear

Beside yon cottage porch a girl was on her knees
She held aloft a snowy scarf that fluttered in the breeze
She breathed a prayer for him, a prayer he could not hear
But he paused to bless her as she knelt and wiped away a tear

He turned and left the spot – O do not deem him weak
For dauntless was the soldiers heart tho tears were on his cheek
Go watch the foremost rank in dangers dark career
Be sure the hand most daring there has wiped away a tear*²

[signature upside down on the page Frances V Jones August 4 1843 and various attempts at signing Fanny Jones, written either over or under the poem]

□ ENDNOTES

1. The author was Robert Mudie
2. Song by Thomas Haynes Bayly (1797-1839) written in 1830.