UR 1861-1920/130-132

State Mining Engineers' Office.

Zeehan,

20th February, 1913.

ITINERARIUM 2.

TRACK FROM DARWIN DOWN THE ANDREW RIVER.

This track originally started from a point at "Gara's Siding" on the North Lyell Railway near the crossing of the Andrew River and followed the river down to the East. The siding is between Darwin and Crotty stations and is not a convenient starting point. Darwin township at about the 13½ mile from Kelly Basin was chosen in preference since there is a Station there and some huts are still standing.

The track leaves the railway near the station and follows the formation of the old branch line to a limestone quarry about 5 chains East of the line. Leaving the quarry on the South it follows a logging track for about 5 chains till it branches and then follows the Southern branch. This brings it to where the low hills narrow in and a small bridge spans a gully. The track then leads to a river flat from which Huon pine has been dragged and is marked here by blazes on the trees. At about one mile out the Crotty township is reached. This river does not come from Crotty township but is a Southern branch of the Andrew river carrying almost as much water and about 30 feet wide. After crossing this river the track follows down the South bank till in about 14 chains the junction with the Andrew is reached. About 10 chains below the junction is the place where Moore's track crossed the river from North to South and from this point his track was followed and cleared out.

The track keeps closely to the river and until 2¼ miles are reached. Here to avoid a bend in the river it branches Southwards and comes out into open country, the spot being marked by a post 10 feet East of the entrance into the scrub. Some low sandstone hills are scaled and then the track drops down again, crosses a small creek at the 3 mile, passes into the scrub again and reaches the river at about 3¼ miles.

From here on it keeps close to the river following the flats where possible, where it is liable to be flooded, and passing round the steep sidlings that occur where the spurs of the hills run down to the river. At 6¾ miles a considerable stream comes in from the South which appears to drain a large basin running back flat for a considerable distance.

At about 7 miles the track leaves the river again to scale some quartzite hills to the South. Passing

over a ridge here it drops down again and finally runs through a large swampy flat which appears to extend to where the track ends at the 9 mile. The track was not followed beyond the 8 mile.

Opposite the spot where the track leaves the Andrew river at the 2¼ miles the Wright river comes in from the North and joins the Andrew; this river drains the Western slopes of the Engineer Range.

Physiography.

The country here is dominated by the Engineer Range. This Range is terminated at the North by Mt. Fincham and the new track to the Frenchman's Cap passes round its Northern slopes. The main axis of the Range comes nearly due South for a distance of about 3 miles and then turns off at an angle to about S40E. On the East side the Franklin river runs right into the angle of the range and then turns back sharply and winds away eastwards. The mountains on this side show an abrupt escarpment which under Mt. Fincham itself extends right down to the Franklin River about 2,000ft below. In other parts the Range is lower and the escarpment extends down some 900ft to a broken plateau through which the river has cut a tortuous course with deep gorges.

On the Western side of the Range the Wright river flows down and joins the Andrew river at the point where the course of the Range bends round. The distance between the Franklin and Andrew rivers here can only be about two miles. The Andrew river then flows about SE along the foot of the Range which terminates in a series of desceding hills and allows the Andrew to merge in the Franklin River at about 15 miles from Darwin township.

Geology.

The influence of the geology on the physiography of the district has been very marked. The country consists for the most part of ancient slates and sandstones, converted in places to quartzites, with interbedded limestone. Many of the more recent rocks on the West Coast have been highly mineralised and the waters from these rocks become strongly acid. Their corrosive power on the limestone is great; at an exposure below Gormanstown where tiny streamlets trickle from the hillside on to limestone rock it is most interesting to observe the miniature gullies and ravines a few inches high that have been cut clearly out where the drops of water have been made their channels.

This action on a large scale has cut out the valley of the Andrew river. In a cutting about 1/2 mile North of Darwin station a bed of limestone shows with strike about South East and dip about 75° to the SW. This limestone does not appear on any

of the hillsides; the strata to the North of the river consist of quartzites and schist and have near the river a dip of about 60° to the SW which gradually flattens out till the summit of the range is reached; here the anticlines is broken off by the escarpment which dominates the Franklin valley. On the South side of the river sandstones and schist again show on the hills that rise up here with strike and dip similar. Between these two exposures comes the bed of the river which for the whole extent examined shows solid limestone rock. The loose stones of the river are practically all sandstone and it seems clear that the river has been formed by the decay of a comparatively narrow band of limestone in the encompassing sandstone.

The strike of the rocks was very regular throughout being from S40E to S55E while the dip also was consistent to the South West at angles varying between 30° and 80°.

Only one irregularity was met with close to the 6½ mile on the track. Here at one point a small cliff of sandstone with irregular strike shows on the South side of the river while opposite it running steeply up the side of the Range is an outcrop of finegrained conglomerate. The strike of this is N70E and dip 35-70° E. It lies conformably on some beds of quartzite exactly similar to those forming the other parts of the Range and carries fossil tubules such as are found in our West Coast conglomerates. It is difficult to interpret this occurrence until further exploration has been carried out here.

General.

For prospecting purposes the country has proved disappointing. The quartzites and sandstones are very barren of mineral and so far the granite has not been located. Further, the track does not offer itself for improvement, so that it could not be of permanent utility; it traverses for the most part river flats liable to flooding or steep spurs difficult to negotiate. If an outlet in this direction from the Franklin is desired it would be advisable to examine the country direct East of the 7 mile on this track as far as the North Lyell Railway. The country is broken by several ridges but none of them appear to be high and the distance should be shorter by this course. For the present it would appear preferable to prospect Southerly from the new track to the Frenchman's Cap and Northerly from the Gordon River. If any promising results were met with in these directions the question of a shorter route to the large area of intervening country could then be dealt with.