

GOLD MINING - Crow Mountain.
A DESCRIPTION OF THE FIELD.
(By telegraph from "Nugget.")

BARRABA, Saturday. The gold mines in the Crow Mountain district still continue to make fair progress, considering the many drawbacks to which the mines are subjected. Not the least of these is the lack of a settled claim to some of the properties on Flannagan's line, as while the miners can hold the properties pending the issue of conditional leases, they cannot crush until these leases are granted. The want of machinery has also been sadly felt, but now a 10-head stamper mill, erected by Mr. Underwood, is in running order, and is kept busy crushing stone, the district has also suffered for want of water, but the recent rains have supplied this want to some extent. The geological formation of the district is extremely varied and forms a portion of an immense outcrop of mineral that strikes through the country for a known distance of 150 miles, namely, from Nundle to Bingara. It mainly consists of extensive out crops of

ironstone, serpentine quartzite, &c. For instance, at Crow Mountain, on Mr. C. L. Garland's leases, which consist of three 40-acre blocks, the lode is 200ft wide, and has been ascertained by trenching to run about as follows: Gossan, on the west, 100ft wide; magnesite, 20ft; and kaolin, 24ft.

A little gold and silver permeates all this immense mass, which forms a good ridge of blocks of gossan, &c., standing, perhaps, 200ft above the level of the surrounding country. In places where flood water has cut through the outcrop and formed creeks, alluvial gold has generally been found, and very frequently very rich patches have been found close up to the outcrop. Some ten chains to the east of the main outcrop a smaller outcrop of the same character occurs, and below the two large belts of conglomerate and serpentine occur. Mr. Garland has done a great deal of work by trenching on his leases, and now a shaft has been started with a view to try it at a depth, and is down about 30ft in hard country.

The main strike of this huge outcrop is about north-west, and it carries the same characteristics at Woodsreef and at Bingara, both districts lying northerly from Crow Mountain. A slate belt abuts on the gossan on the west, and on the east it is associated with the serpentine belt already mentioned, and outside of that quartzite or felsite, then perhaps diorite. The most of the gold-bearing reefs at Crow Mountain are situated east of this great gossan outcrop.

The famous Dodger reef is situated on a bold, rocky hill immediately to the east of Garland's leases. This claim is reputed to be very rich, but, as I was not so fortunate as to find any of the owners at home, I can give no details of the mine.

South on the Dodger line Tyrrell and party hold a lease of 10 acres. They have a shaft down 70ft, and have followed the reef a distance of 30ft. The size of the lode is from 3in to 6in, and it prospects well. They have 5 tons of stone at grass. North of the Dodger line Wright and party hold three 4-acre blocks, and have a promising kind of a conglomerate.

They have a shaft down 20ft, and the prospects are good.

A little west of the Dodger line there exists the Daddy line of reef. This property is one of the best known on the field, and is adjacent to the Fletcher reef, which at one time turned out a large quantity of gold—£8000 worth. There is a shaft on the Fletcher 80ft deep, but now contains 40ft of water. The size of the reef is 2ft, and it would undoubtedly pay if the water was pumped out. The Daddy shaft, immediately adjacent, is now down 65ft, on a good east and west reef, which looks very well at the bottom of the shaft, and for a distance of 50ft west. The reef varies considerably in size, but is always continuous. The footwall is what is called mudstone, and the hanging wall felsite. The reef averages throughout 8in or 9in, and goes about 1oz per ton. The owners show some splendid specimens of coarse gold. A level has been driven east from the shaft for a distance of 40ft, and a good north and south reef cuts the property. Taken all round it is one of the most promising on the field.

The Messrs. King Brothers are at work on a mining tenement immediately adjoining, and have a shaft down 38ft on a reef 6in wide. It has the same characteristics as the Daddy, only being near the surface, the country is rather softer. They show some good specimens, Mr. F. Krippener holds a lease of 15 acres in extent, which he has named the Atalanta, south of the Daddy. It is an east and west reef, and is 1ft wide. It has two shafts, one 54ft and another 60ft deep. The reef abuts on the serpentine, and is heavily charged with pyrites.

Flannagan's Line:—

On this line there are five claims on gold. Jones and party have a shaft 80ft deep, with a reef 12in wide. It goes down nearly vertical, and the footwall is diorite, and the hanging wall iron stone. The stone averages from 2oz to 3oz per ton. The area is 20 acres. Woods and party have a reef immediately adjoining the north area, 400ft by 400ft. It has a shaft down 60ft, and the reef is 3ft wide. It goes down nearly vertical; the hanging wall being a slaty material,

and footwall diorite. It prospects well, and has turned out a large number of splendid specimens.

Jaggers and party join to the north. They have a shaft down 30ft on a reef 18in wide, and the character of the country is the same throughout on the Flannagan line. There are considerable quantities of ore at grass; but the miners complain of being hindered from crushing by the lack of security. Some six miles away easterly there is situated the Trilby claim, owned by Mr. F. J. Cooper. It comprises a 10-acre lease, and has a shaft down on the underlay 70ft. The reef is a little irregular, but is continuous throughout, and the richest stone is at the bottom. The gold is fine, but every piece of stone prospects well, and a small piece I saw dollied out gave a very good prospect. It is in a diorite and slate country.

Some two miles northerly from the Crow Mountain township a group of reefs, known respectively as the Crow King, the Red Flag, and Princess, are situated. The Crow King is owned by Weedman and party. It has a shaft 90ft deep, and the size of

the reef is 11ft 6in. Seventy-two tons of stone crushed yielded 76oz of gold, and there are now 20 tons at grass. The country rock is felsite and serpentine, and the size of the lease is eight acres. The Red Flag is immediately adjoining, and Dyson and Robinson are the owners. It has a shaft on the underlay 120ft deep. The size of the reef is 2ft, and it yielded for a crushing 2oz per 9dwt of gold. It goes down at an angle of about 45deg, and the hanging wall is slate, and the footwall quartzite. It is an east and west reef. The Princess, which is close handy, has a 15in reef, and goes about 1oz per ton; both it and the Crow King are north and south reefs. There are various other properties in the neighborhood which might be mentioned, but the above are the principal, and a fair sample of the field. What is required here, as in so many other localities, is capital to prospect the field at a depth. Considerable work has, of course, been done, but the claim-holders are mostly poor men, and it is quite beyond their means to give the field a fair trial at a depth.

Woodsreef: —

This district is northerly from Crow Mountain, about ten miles, and, geologically, it has precisely the same characteristics as the latter. The face of the country is fairly rough, the mountains rising in bold bluffs. The serpentine widens out here, and forms high bluffs along the bank of the creek. In the early days considerable alluvial gold was got along the banks of the Nangarah, and Ironbark Creeks, and a few parties are still at work among the old workings. Woodsreef is still the principal feature of the field; it is situated on a rather sharp, elevated ridge, and has yielded at one time and another, large quantities of gold. It is what is termed a north and south line; that is, it runs a few degrees west of the true north. Mr. H. Graham now owns a 20-acre block on the old workings. He was so fortunate to strike a new reef alongside the old workings; or a parallel reef to the old true ore body, which has proved to be very rich. He has a shaft down on the new find 80ft deep, and the reef varies in width from 6in to 2ft and averages

about 4oz per ton. The stone from the bottom goes 10oz per ton. The reef is 25ft or 30ft west of the old line, and goes down nearly vertical, and is a true fissure vein.

McLaurin and Vincent hold a very good claim south from Graham. It is quite a new find, and stands disclosed in an open cut which has been made in a bluff on the crown of the hill. This cut is in about 50ft, and a shaft a short distance ahead of it is down 18ft. The first crushing of 6 tons from the stuff that came out of the shaft went 23dwt per ton, and 25 tons went 24dwt per ton. The reef is well defined, and goes down beautifully even, and has every appearance of being a permanent and valuable property. Some old shafts on the hill must have been within a few feet of this valuable find. It is in a little saddle at the head of the famous Garryowen Gully, which yielded so much alluvial gold in times past, and is near the old reef of the same name.

O'Brien's claim adjoins to the south. The reef in both claims underlay to wards the east, and the

strike is north and south. Sixteen tons from O'Brien's yielded 14oz of gold. All these claims are on the east of the serpentine belt and the hanging or eastern wall is quartz, sometimes called black rock and other names.

On Nangarah Creek there are two quartz mills, — one of eight head of stamps, and one of four heads, the latter belonging to Mr. Graham. On the eastern side these main fissure veins all going down nearly vertical, or some of them at an angle of 75deg, there occurs a series of little reefs, generally termed east and west reefs. On Addison Hill one of these occurs, and also a number of others in various localities. In various places on the eastern side very rich patches have been got, some of them alluvial and some mere pockets. About eighteen months ago a patch of this kind yielded about £700, and various localities are pointed out where rich finds have been made. In none of the workings on the Woods line has any depth been attained, and what the ore body may turn out at a depth is a sealed book at present.

Some four miles away, on Ironbark Creek, there is the Barney Barnato claim, a lease of 6 acres, quite a new find, and owned by Tyrrell and Rosenthal. It occurs on the side of a rather steep level of the creek, and the hill has an elevation above the find of, say, 500ft. It is rather a flat reef of an average size of 1ft, and is exceedingly rich in specimens. It has a footwall of quartzite and a hanging wall of soft magnesian slate. The gold is exceedingly coarse, and shows freely in the reef in the face. It has been driven on for some distance, and it makes stronger and is better defined as depth into the hill is gained. It has been pricked along the outcrop some 200ft, and is all round a very promising property, and well situated for working, there being plenty of elevation and plenty of wood and water handy. It occurs on the western bank of the creek, and to the east of the great serpentine belt, and if it was a parallel line it would be half a mile to the west of the Woods line.

King Solomon's Mine. —

On the same hill as the Barney Barnato there is situated the property known as the King Solomon Mine, and owned by Tempest, Arnold, and Quint. To strike the reef a tunnel was driven in 200ft, and a rise up from the tunnel of 27ft, also a crosscut of 40ft. On the reef a level was driven in 70ft, and the reef cut shows all along. On this portion of the vein it takes on in some cases a lenticular formation. From the tunnel, a winze has been sunk on the reef for a distance of 60ft, which shows a magnificent reef at the bottom. The reef under lays west at an angle of about 75deg, and in the winze the so-called western slates, or indicator veins come in. These are small veins in the country rock, sometimes mere ironstone fissures, sometimes black slate, and sometimes more clayey. In the present case they abut on the reef at right angles, and frequently carry nice pockets of gold, particularly so when they carry down in the small, thread-like quartz veins which run parallel to the main vein. When these indicator veins pierce the quartz lode,

and enter the footwall, rich gold occurs. The reef at the bottom of the winze is now 3ft of solid stone, carrying good gold. A crushing of 14 tons from this claim taken from the winze went 22dwt per ton. These indicator veins are worthy of the attention of the miners, and in another article I will deal further with, them.

The King Solomon looks very well, and is in a remarkably good position for working, having plenty of backs, and a good elevation above the bed of the creek. The same may be said of the Barney Barnato. On the top of the mountain on which these mines are situated there is a huge outcrop of ironstone of the character occurring at Crow Mountain and elsewhere. On the same hill are various other leases, some of them with very good prospects. Taken all through, the district is well worthy of the inspection of capitalists, and there is every indication of vast bodies of ore being hidden in the hills. Up to the present mere surface working has been the order of the day, and the field has been famous for its rich patches.