

on stone averaging 18.9 dwt. over 22 in. ; No. 8 level, winze 1,780 ft. north, sunk 34.5 ft., off reef. On Nos. 6, 7, and 8 levels 50 ft. of crosscutting was also done, all off reef. At the battery 41,362 tons of quartz was crushed for a yield of 17,557 oz. 9 dwt. gold, of which 13,423 oz. 16 dwt. was recovered by amalgamation, 2,859 oz. 17 dwt. by cyanidation, and 1,273 oz. 16 dwt. by treatment of concentrates, the value of the whole recovery being £68,645 3s. 6d. As the quantity crushed exceeded that of the previous year by 1,318 tons, and the total value of the gold showed a decrease of £1,587 7s. 2d. on the same period, it is evident that there was another slight fall in the general values of the quartz treated. During the year the Blackwater Mines Co. acquired the property previously held on its northern boundary by the North Blackwater Mines, Ltd., and most of the development effort has been in the direction of extending Nos. 6, 7, 8, and 9 levels into the North Blackwater ground, and developing the reef there. It is intended to make connection first to the North Blackwater shaft by means of the Blackwater No. 6 level, which is about 50 ft. above the No. 7 level of the North Blackwater Mine. Practically all the stone crushed during the year has come from the extreme north end of the mine, on the levels mentioned. No attempt has yet been made to open out on No. 11 level, although the shaft has been sunk to it for several years.

*Murray Creek Mine.*—The conduct of operations at this mine was taken over during the year by a new company, the Murray Creek Gold-mines, Ltd., a subsidiary of Southern Mines Corporation, Ltd., and a new intermediate level was started at a point 130 ft. above the old No. 2 (battery level) from the rise connecting that level with the old No. 4 Victoria adit. This intermediate was about 54 ft. below that put in by Kremmer and party the previous year from the same rise. To the end of the year it had been extended in a southerly direction for 295 ft. For the first 100 ft. from the rise the intermediate was on reef-track, but solid stone then came in and continued for the rest of the distance driven, the stone varying in width from 1 ft. to 3 ft., and averaging probably about 20 in. At 145 ft. from the old rise, a new rise was put up from the intermediate to connect with Kremmer's intermediate. The stone is said to show gold freely in many places. A good deal of repair work was also done on some of the old levels, the No. 3 Victoria adit being cleaned out and repaired for about 600 ft. in from the portal, and the No. 4 Victoria adit was also cleaned up and repaired for travelling and ventilation purposes for a length of about 435 ft. below the old workings. A good deal of repairing was also done on No. 2 battery level. No stone was crushed.

*New Big River Mine.*—Owing to all the known blocks of ore having been depleted and no satisfactory development having taken place on the bottom level, No. 12, mining operations were suspended at this mine about the middle of the year ; but the company is making an effort to raise further capital for prospecting purposes, and proposes to make some further effort early in the new year to locate payable stone. This work will probably be done in the upper levels of the mine, and mainly from No. 2 level, and the first objective will be to try and pick up the continuation of what is known as Cosgrove's block, which on No. 1 level yielded some rich stone, but was not traced downward. During the year 1,024 tons of quartz was crushed, which yielded 1,038 oz. 16 dw. 14 gr. gold, of which 713 oz. 9 dwt. was recovered by amalgamation, 293 oz. 5 dwt. by cyanidation, and 32 oz. 2 dwt. 14 gr. by treatment of concentrates. The total value of the yield was £3,253 3s. 2d. Fifteen men on an average were employed.

*Keep-it-Dark Mine.*—During the year this property passed into the hands of the Hercules Mines, Ltd., a subsidiary of Southern Mines Corporation, which devoted its attention exclusively to developing the short shoots of stone located last year in the old Hercules (Smith's) line in the Golden Ledge No. 2 adit. The latter adit itself was extended a further 26 ft. without disclosing anything of value. The Keep-it-Dark battery level was then cleaned out and repaired for a distance of 280 ft. from the portal, and at this point a crosscut was put out in north-north-westerly direction to intersect the Hercules line, which was struck at a distance of 357 ft. from the battery level. There was no stone showing on the line where it was intersected, and up to the end of the year the line had been driven on south for 25 ft. without revealing anything. A winze was sunk for 65 ft. from the No. 2 Golden Ledge adit on one of the shoots of stone, and a rise of 35 ft. from the end of the crosscut from the battery level subsequently made connection with this. For 30 ft. down the winze followed stone from 3 ft. to 4 ft. in width, but at this depth appeared to pass through the reef on its pitch. Some 430 tons of stone taken from the winze and from a small stope above No. 2 Golden Ledge adit was crushed for a return of 122 oz. gold, valued at £440 12s. Of this gold, 88 oz. 13 dwt. was recovered by amalgamation, and 33 oz. 7 dwt. by cyanidation. On an average eight men were employed.

*North Big River Mine.*—At this mine a little crosscutting was done in the early part of the year, but no stone of any value was located, and operations were suspended.

*South Blackwater Mine.*—The new main shaft being sunk at this mine was continued down in the early part of the year for a further 16½ ft., making a total depth of 332½ ft. from the brace. At 295 ft. a chamber was cut. At this juncture the company's funds gave out, when further operations were suspended, and there was no resumption up to the end of the year.

*Wealth of Nations Mine.*—This company was again unfortunate during the year, in having its main shaft collapse in September, this time the break occurring between Nos. 4 and 6 levels. Repairing-work had been started in this section, but only a few sets of timber had been replaced when some of the framing higher up gave way. Fortunately no stopping was in progress at the time, and no men were in the shaft at the time, so no one was injured. For a full 100 ft. below No. 4 level the shaft was entirely stripped of timber, and there is no saying what damage was done below that and No. 6 level, but the falling timber and rock is certain to have seriously affected this part of the shaft. Prior to the collapse a certain amount of development in the way of rising and driving on No. 12 level had been done in the north end of the mine, and a shoot of ore carrying fair gold had been proved for 60 ft. below No. 11. None of this ore had been stoped, and it was estimated that sufficient gold was in it to have given a profit of from £2,000 to £3,000. The only other work done was confined to stoping on the big block of stone in No. 13 level south, about 400 ft. from the shaft. This block was practically worked out, only about 200 to 300 tons remaining to be stoped immediately under No. 12 level. Up to the time when the collapse of the shaft brought about a complete cessation of mining operations 1,924 tons of ore had been won, which yielded 1,516 oz. 2 dwt. of gold, valued at £5,876 9s. 2d. Owing to the great cost of putting the shaft in working-order again, it is unlikely further operations will ever be resumed in the lower part of the mine.

*Alexander River Reefs.*—Work was carried on steadily at this mine, an average of seventeen men being employed. Unfortunately, the developments have not been as satisfactory as could be desired. No. 1 level was extended 51 ft. on stone of an average width of 20 in., when the drive passed through the reef, and the face now only shows reef-track. This work showed the full length of the McVicar block on this level to be 152 ft. No. 2 level was driven on stone for a further 71 ft., the average width being 4 ft., and the total length of the block 181 ft. No. 2 level winze, started the previous year, was connected by rising with No. 3 level, and at 50 ft. down it an intermediate level (No. 2A) was driven north for 98 ft. No solid stone was got, however, the only quartz seen consisting of odd small boulders. This work made it evident that the McVicar block did not live down to this level. Two rises were put up from the level, one of which found the stone at 12 ft. up, and the other at 18 ft. No. 3 level was driven south for 156 ft. from the crosscut adit, and two blocks of stone were cut averaging from 20 in. to 24 in. in width, but of very poor grade. At Mullocky Creek, about 2,000 ft. north of the McVicar block, and at some 500 ft. lower elevation, an adit was driven south on stone which at first was only a few inches wide, but shortly opened out to 18 in. and continued at this width for about 60 ft., when it cut out in a fault-plane. Drag-stone was followed for a further 100 ft. without recovering the lode. A crosscut was then started from the end of the drive with a view to intersecting the downward continuation of a reef, known as the Loftus, which outcropped on the surface. This reef was intersected after crosscutting east for 68 ft., and up to the end of the year had been driven on south for 18 ft. It averaged about 30 in. in width, and carried good values. During the year crushing was continued with the small five-head battery whenever sufficient water was available. Owing to the high cost of driving the battery by means of it, the company decided to throw out the petrol-engine and see what could be done in the way of driving the mill by water-power. Being situated at so high an elevation, however, it was not found possible to get enough water to permit of more than intermittent crushing. In all, 628 tons of stone was crushed during the period, for a yield of 1,176 oz. 13 dwt. gold, valued at £4,525 18s., equal to a return of 1 oz. 17 dwt. per ton. Of the gold, 929 oz. 14 dwt. was won by amalgamation, and 246 oz. 19 dwt. by cyanidation.

The *Progress*, *New Millerton*, and *South Big River* mines were all idle during the year.