

about ten sluice-heads of water. The tail-race where the gold is received is 2ft. 6in. wide, paved partly with stone and partly with small iron rails laid longitudinally. The workings can only be carried on for about nine months in the year, and during last year they got about 500oz. of gold, representing a value of £1,925. This claim is worked with five men.

*Johnston's Claim.*—This claim is situate on Pleasant Terrace, being the adjoining terrace higher up the river than that on which Davis Brothers are working. Mr. Johnston has been working this claim for the last twelve years. He has a head-race from Pleasant Creek brought in at a good elevation, but does not utilise the head in working the ground. The water falls down the face of the range for a considerable height, and is stored in a dam constructed on a flat at the foot of the range. From this dam it is again led in an open cut or ditch from the first on to a second terrace, where he is working. The depth of gravel wash-drift at the present workings is only about 30ft., and the water is simply brought over the face, a canvas hose being used for the breaking-down nozzle. Previous to this Mr. Johnston was working a run of very deep ground through this terrace, and sluicing into a creek, but there was not sufficient fall for his tailings. Before commencing operations in this run of ground again, a tail-race tunnel will have to be constructed from the Shotover River. The area of ground worked is about 8 acres, having an average depth of about 81ft. Taking the cubical contents of ground worked, there would be about 1,045,440 cubic yards, or about 87,120 cubic yards sluiced away per annum. This claim has paid, so far, very well.

*Sorrenson's Claim.*—This claim adjoins Johnston's, but there is no available water to work it by hydraulic sluicing. The wash-drift on the bottom is being driven out from a tunnel which is constructed from the side of Pleasant Creek, but this is not found to be a profitable way of working the ground.

*Moody and Davis' Claim.*—This claim is partly situated on Londonderry Terrace and partly on Burke's Terrace, next to Skipper's Point, and comprises an area of 36 acres. It is held by Messrs. Davis, Moody, and Company, of Melbourne, who are represented by Mr. D. Miller. They have constructed a water-race from Skipper's Creek, lifting the water from both branches. The race is constructed on the east side of Skipper's Creek to a point about one mile above its junction with the Shotover River. Up to this point the water is conveyed in an open conduit, excepting at three gullies, which are crossed by siphons 22in. in diameter, and 20 chains of iron pipes 3ft. in diameter laid with the same fall as the open conduit—viz., 1 in 660 over bad ground. The water is conveyed across Skipper's Creek by a siphon 22in. in diameter, its length being 40 chains, and the greatest depth in the centre 250ft.; the pipes in the siphon are made of Nos. 12, 14, and 16 B.W.G., single-riveted, having angle-iron flanges every 18ft. On the west side of Skipper's Creek the water is again conveyed in an open conduit to a gully near Johnston's Hotel, where there is another siphon of the same diameter 1,000ft. in length, having a dip in the centre of 175ft. From this point the water is again conveyed in an open conduit to a small reservoir excavated out of the tolerably level piece of ground at the head of Burke's Terrace, and from this reservoir iron pipes are laid to the ground where sluicing operations are to be commenced. The water is again conveyed in a ditch to Londonderry Creek, where a by-wash will be constructed. The total length of this water-supply is five miles. The open conduit, where not constructed in solid rock, is puddled in the bottom and sides, and lined with sods, and is 2ft. 6in. in the bottom, 3ft. 6in. at the top, and 3ft. deep. All the iron pipes were manufactured on the ground in 18ft. lengths, with angle-iron flanges on each end. The cost of making the pipes was 1s. 9d. per foot, all the material being supplied by the company. The total cost of labour and material, including screw-bolts for joining the pipes, was £3 18s. 6d. for each 18ft. length, or, in round figures, 4s. 6d. per foot. Seeing that all the material had to be taken partly on sleighs and partly on pack-horses from Queenstown to Skipper's Point, a distance of about twenty-three miles, the cost of pipes of this size is very small.

The depth of wash-drift in Burke's Terrace, where the sluicing operations are to be commenced, is about 150ft., and there is plenty of fall for the tailings into the Shotover River. Mr. Miller expected to be ready for work in about ten days from the time of my visit on the 16th April last. The cost of the work to that date was about £8,000.

*Aspinal's Claim.*—This claim is situate on the west side of Skipper's Creek, on the side of the Shotover River. There is still about 2 acres of ground to work, but last year being extremely dry, and having to depend entirely on drainage-water from the side of the range, there was only about fourteen hours' water available during the whole of the season. The ground is said to be extremely rich, averaging about 2oz. of gold to every hour that six sluice-heads of water are used.

*Monk's Claim.*—This claim is situate on the west side of the Shotover River, on a low terrace above Skipper's Creek junction. It is said to be one of the richest claims on the Shotover Valley. The ground is only 25ft. deep, and two men get from 100oz. to 150oz. of gold per annum, and have scarcely any water to work with.

*Smith's Claim.*—This claim is situate on the east side of the Shotover River, below the sand-hills; it has been worked for the last twenty years, paying good wages whenever water is available.

*Schusted and Gemmell's Claim.*—This party took up the sand-hills about three years ago, and brought on water from a small creek, using about 1,500ft. of 7in. pipes. The supply of water is very limited, and in wet weather the pipes are not large enough to carry a sufficient supply; nevertheless the ground pays very well for working.

There are two other parties working terraces above the sand-hills, making fair wages; and several parties are working on the branches, but they complain greatly of the scarcity of water. There is scarcely any terrace on the side of the Shotover that would not pay for working if a good supply of water was available, and most probably the time will come when a large water-supply will be brought from the upper branches of the river to command all the available ground. Some of these terraces are at a good elevation. The one worked by Robertson and party is 450ft.