

large quantities of gold into it, and may be said to be still doing so. There is scarcely an acre of ground in the valley of this river that is not auriferous; and, as the bed of the Clutha has been shifted from time to time, wherever any of the ancient beds are found large deposits of gold are obtained. The auriferous drifts in this valley will therefore take a long time to work out.

#### OLD MAN RANGE.

A considerable quantity of gold has been obtained from Campbell's, Potter's, Butchers', and Conroy's Gullies, also from the shallow gullies leading into Bald Hill Flat. The whole of the face of the Old Man Range above the latter place is highly auriferous, and in recent years a rich quartz lode has been discovered and worked by Messrs. Crossan and Gray. There are also two hydraulic elevating plants now working the ground on Bald Hill Flat with payable results.

#### CROMWELL.

There are a number of sluicing claims on the banks and terraces alongside the Clutha and Kawarau Rivers, and also at Bannockburn. In the early days there was very rich ground at the latter place and a large number of miners were employed for a long time. The shallow workings are now all exhausted, and, although there is still a rich layer of auriferous gravel near the bottom, there is a great depth of material to sluice away containing little or no gold, which makes the general average value of the material low. There are still a good number of miners in the locality, but the greater portion of them are making only small wages.

#### CARDRONA AND CRIFFEL.

The number of miners about Cardrona varies very little from year to year. As one portion of the field is worked, another is opened up. Last year some new ground was opened in the face of the range, on a line of quartz drift, which is likely to prove a valuable discovery. The same run of ground extends along Criffel face to the foot of Mount Barker. The ground is, however, at a high elevation, and the supply of water that can be got to command it is consequently limited. The drift does not contain sufficient gold to pay for working by any other method than hydraulic sluicing. Several of the miners combined together and brought in a water-race from the Roaring Meg, and constructed dams on the top of the range: these store the water for about sixteen hours. By this means several parties have each a small supply of water for about eight hours a day.

Last year there were about 1,200oz. gold obtained from Cardrona and 700oz. from Criffel. At the latter place only a few claims are being worked. The whole of the water brought on to the field is in the hands of one party, and sluicing operations can only be carried on for about six months of the year.

#### ARROW AND SHOTOVER.

The rich auriferous drifts obtained at the heads of the Arrow and Shotover Rivers have afforded profitable employment to a large number of miners for many years, and at the present time there are a number of claims which still continue to give good returns. The beds of these rivers have been cut down for some hundreds of feet below where the water originally flowed, causing numerous slides and slips from the sides of the ranges. The atmosphere and the action of the water have disintegrated the material from these slips and allowed the lighter particles to be carried away with the streams, leaving those of greatest density in the beds. No doubt, the action of the stones, and the large quantities of shingle travelling down the streams, ground the gold to such an extent that large quantities of it have been carried away in suspension in the water to the ocean; but, notwithstanding this, heavy deposits of gold have been found both in the wash-drift in the beds of the rivers and in the crevices of the bed-rock, which in places formed gigantic ripples for collecting the precious metal. The large undertaking of Miller Brothers at the Arrow Falls and at Londonderry Terrace on the Shotover, as well as the operations of Davis Brothers on Stony Creek Terrace, are all works where a considerable capital had to be expended in opening up the ground. Unless they were men with sufficient means at their command, they could never enter into mining ventures of this description. There are several other claims—such as Aspinal's at Skipper's Point, Smith's, Monk's, and Gemmel's at the Sandhills, and R. Johnston's on Pleasant Creek Terrace—which give excellent returns, year after year, when there is a good season for water. Some of these claims have been worked for thirty years, and it is said that from one of them over 30,000oz. have been obtained. When we have such large areas