

to the south-east, to "Laidlaw's field." Here some were clearing away the superficial drift, and uncovering the quartzite ("whinstone" of the miners); others were blasting the quartzite that covered the quartz-vein (or the "quartz-barrels" of the miners); others were breaking up the "quartz-barrels," removing the quartz, and storing it up for the crushing-machine. The rock exposed on the removal of the quartz is a chloritic slate. On this the quartz lies, nearly horizontal, slightly inclined to the west, somewhat like a stratum. This is composed of the said "barrels," which appear from above to be lying alongside of each other and unconnected; but the captain of the "Victoria Claim" assured me that they were connected at the underside. The shape of the ridges of quartz is irregular, being sometimes angular, sometimes more or less rounded. At the time of my visit the appearance in the "Victoria Claim" was very striking; all the uncovered "barrels" had been removed except one and small fragments of others. There the entire one lay, in length 150 feet, like a gently tapering, branchless tree, inclined at an angle of 1 or 2 degrees, with the butt-end highest. The vein inclines towards Allen's field. Overlying this great and almost horizontal auriferous vein of quartz is the "whinstone" of the miners, a hard quartzite, as I have already stated, or altered siliceous stratum. This quartzite is sometimes very thick, naked, and rugged; and at other times it is covered with drift, presenting, after being uncovered, a scratched surface; it gradually thins until it disappears. Wherever this covering of quartzite is preserved, the horizontal vein, as far as I could observe, was entire. Wherever the glacier has succeeded in removing the quartzite, the vein has disappeared.

A good illustration of this was shown. In the "Victoria Claim" the miners were engaged in removing the remains of a "barrel" which had proved very rich. Hence the miners in the adjoining claim, which belongs to a Company in London, were induced to make immediate search for a continuation of the "barrel." Although only a few feet intervened, they found that the "barrel" had disappeared, together with its quartzite covering; drift and fragments being in its place. The boulders, however, produced by the destructive glacial agent had led to the discovery of the vein itself.

In order to show the relation that appears to exist between these gold-fields and the adjacent rocks exposed in the Railway-sections to which we have already referred, we proceed to review the series in descending order. We have, first, the top or quartzite-rock of Laidlaw's, then the great auriferous quartz-vein, next clay-slate and chloritic-slate; beneath, going in a north-westerly direction, the dark-coloured clay-slate and talcose slate, with veins of auriferous quartz in Allen's gold-field. Proceeding in a straight course to the Railway-junction, we pass over drift with masses and boulders of quartzite, evidently derived from the underlying rock. Before reaching the Railway-junction, at a distance of  $1\frac{1}{2}$  or 2 miles, we descend from elevated ground into a hollow, where large quartzite masses abound. At the junction the cuttings in the quartzite appear. Following the Windsor Line, the ground on either side of the Railway is very un-