33 C.—5.

Homeward Bound Company.—This company was formed in 1883 with a capital of £24,000, of which £12,000 is declared paid up, and £4,118 paid in calls to prospect and open out the mine. Some four years ago this company, in conjunction with six others, constructed a low-level tunnel, but were not successful in finding any payable stone. They are now sinking a shaft in this tunnel with the view of cutting the Welcome reef in their ground. It still seems a question of doubt whether the Welcome reef will go through this company's ground or the Eureka; but if it go through this company's ground, the shaft which is now down 120ft. will yet have to be sunk nearly another 500ft. before the reef will be cut. The winding is done by an engine driven by compressed air, which is supplied from the compressor fixed at the mouth of the tunnel

Specimen Hill United Company.—This company was formed in 1884, with a capital of £20,000, of which £10,000 is declared paid up, and about £6,500 paid in calls, which have been expended on plant and prospecting the mine. The lode of auriferous quartz that is found in this mine is of a very loose and broken character, and so far has not paid for working. Prospecting is still being

carried on, but no stone of any account has yet been found.

OWEN DISTRICT

Gold has been obtained in the bed of the Owen River for many years, but it was not until about two years ago that auriferous-quartz reefs were discovered. Since then different mining companies have taken up ground and commenced to work the reefs. The mining companies that have done any work are the Enterprise, Zealandia, Golden Crown, Wakatu, and Bulmer Creek.

The Owen reefs are situated from seven to nine miles up the Owen River from the Nelson-Lyell

The Owen reets are situated from seven to nine miles up the Owen River from the Nelson-Lyell Road. They occur in the form of segregated veins or lodes following the foliation of the surrounding strata. The claims that have been worked are those in which gold was discovered on the surface in the outcrop of the lode. The character of the lodes in the several claims are similar to each other. They contain a very large percentage of arsenic and sulphur; and, besides, the gold is alloyed with bismuth, which makes it difficult to save by the ordinary crushing-battery process. On the caps or outcrops of the lodes the pyrites found at greater depths are oxidized, and the result is that very good prospects can be got on the outcrops; but as soon as the sulphides appear, very little gold can be obtained. The bismuth also being alloyed with the gold, sickens the quicksilver and renders the present method of treatment almost useless. It would almost be impossible for more than one-fourth of the gold in the stone to be saved by the present process of

treating this refractory ore.

Enterprise Company's Mine.—This company's ground is situated on the western side of the main branch of the Owen River, and about seven miles distant from the junction of the Owen and Buller Rivers. The outcrop of the reef is about 250ft. above the level of the river, on a narrow ridge, which has every appearance of being a portion of a large slip from the main range; but, be that as it may, the surrounding country is greatly broken and tossed about. A little to the northward and westward of this company's mine the granite makes its appearance, which possibly may account for the broken appearance of the surroundings. At the time when the granite was forced up it would naturally bend up and break the surrounding rock, so that slips would be very liable to take place. Where the reef crops out on the surface the gold is got in a free state. In all the pieces I broke no gold could be discerned; but when the veins in the stone containing the oxide of iron were crushed in a mortar a fair prospect could be obtained. The reef, when first found, was about 30ft. in width, having alternating bands of mullock and quartz; but, as previously stated, the reefs are merely segregated veins occurring in different portions of the ground. There are other lodes higher up the range which have never been thoroughly prospected, although all of them have been proved to contain gold.

On my first visit to this district, at the end of June last, from what I saw of the prospects on the cap of the reef they would average from 6dwt. to 10dwt. per ton; but at that time there was no work done to test it at any depth from the surface. On my visit in March last the mine presented quite a different appearance: levels have been constructed at different depths, and although there is a very large body of quartz, the amount of sulphur and arsenic in the stone renders it unfit to be treated by quicksilver in its raw state. Two levels have been constructed, and stoping out was commenced in the upper level; but in the lower level the reef was merely

cut, and scarcely any prospect of gold was got in the stone.

This company has erected 10 heads of stamps and four berdans, which are driven by a Pelton hurdy-gurdy water-wheel; but the tailings from the stamps were considered of too poor a character to treat with the berdans; consequently these were not used. At the time of my visit 720 tons had been crushed, which yielded about 72oz. of retorted gold, or only about 2dwt. of gold per ton.

Wakatu Company's Mine.—This company's mine is situated about half a mile up the Bulmer Creek, and about two miles further up the Owen River than the Enterprise Company's workings. The quartz is of similar character to that found in the Enterprise Company's ground, being extremely friable and full of oxide of iron veins near the outcrop, but contains sulphur and arsenic as the reef goes down. There are three lodes or segregated veins in this company's workings only a short distance apart; but in constructing low adit-levels the stone either cuts out or gets very poor. This company has gone to considerable outlay and erected an aerial tramway to connect the mine with the public crushing-battery, and have everything in good working order; but the quality of the stone with the present method of treatment will never pay the expense of working the mine. At the time of my visit this company had been crushing stone for four weeks, and, on clearing up, it did not yield 4dwt. of gold per ton.

Bulmer Company's Mine.—This mine adjoins the Wakatu Company's ground on the upper side

Bulmer Company's Mine.—This mine adjoins the Wakatu Company's ground on the upper side of the range. The lowest portion of the company's ground is about 2,000ft. above sea-level. Very little work has yet been done on this claim beyond fossicking on and near the surface; still, sufficient has been done to show that the character of the lodes and surrounding country is all of the same nature, and greatly broken up. There is about 100 tons of stone on the surface, stacked at different

5—C. 5.