

Samson's Colliery.—During the past year the work in this mine has been devoted to the extension of the south level about 4 chains, three headings having been broken off the rise, with bords or rooms at the proper distances apart, in a similar manner to those shown on the plans of last year. The wrought area, which was noted as extending below the railway, has not been in any way interfered with during the past year.

Freeman's Colliery.—During the past year the incline plane has been extended about 70 feet further to the dip, four new bords or rooms being broken off, and driven north and south respectively along the plane of the coal, whilst those rooms which were commenced before the survey was made last year have been further wrought during the past year. Mr. Denniston drew attention last year to the fact that some of these rooms were being driven from 16 feet to 18 feet in width, with a comparatively small thickness of wall between each room (Geological Reports, 1876-77, page 145), and pointed out that waste was likely to result from this.

During the past year four rooms have been lost by the roof giving way, fortunately without injuring any of the men employed. and the proprietor, Mr. Freeman, has determined in future to drive all his rooms 14 feet in width, which, if the rances be in proportion, will secure a safer and more lasting workings.

The Lawrence Colliery, Otago.—This colliery is situated in the Township of Lawrence, on a reserve of fifty acres leased from the Otago Waste Lands Board. In the early days of this mine the coal was wrought open cast in the bed of a small creek along the west side of the area. This system, which necessitated surface stripping, soon proved too costly, besides which the water became troublesome, and the proprietors, Messrs. Gunn and Spence, then placed a small shaft, 11 feet by 4 feet, about three chains to the dip of the crop-workings, the strata passed through being loose shingle, with 12 feet of shale overlying the coal, which was struck at a depth of 95 feet.

This shaft has been successfully employed for the past 16 months, working out, as a room-and-rance workings, 7 feet of the lower part of the seam, until, in April last, the workings were lost by the falling-in of the shaft, which happening when no men were in the workings did not result in either loss of life or accident to any of the miners. The circumstances to which the accident is attributable appear to be that the water which had accumulated in the crop-workings, gradually draining through the shingle and shale, weakened and undermined the shaft, which eventually fell in. It was impossible to gain access to the workings when this mine was visited on the 1st June.

The proprietors are at present engaged in sinking a new shaft, 9 feet by 4 feet, about four chains to the dip of shaft No. 1, and on the 1st June a depth of 84 feet had been reached, the strata passed through being the same as in the former shaft. The depth of the coal is estimated at 150 feet.

The timbers now being used are 9 inches by 4 inches, black pine, against 9 inches by 2 inches in No. 1 shaft, which will allow of stronger lining, and, if puddled well from the shale to the roof of the coal, should form a substantial piece of work; but even then the soft nature of the overlying beds will render the workings of the mine unsafe and at any time liable to be flooded out, if some means be not devised to drain the water from the original crop-workings, and also those around the old shaft. If this is not attended to an accident will occur sooner or later, very probably resulting in loss of life, and certainly in considerable destruction of property.

I have, &c.,

S. HERBERT COX, F.G.S.,
Inspector of Coal Mines.

The Director of the Geological Survey.