

of the cross-cuts, drifts, winzes, rises, etc., showing the values, sizes and structure of the different veins opened up. Such plans would show the distribution of the workable ore-bodies within the area developed, and also assist in defining the direction and extent of the pay-zone and in laying out the development work.

It is believed that the Government should have a competent officer, especially appointed to superintend the sinking of the three proposed shafts, to make surveys and to keep plans of the underground workings in order to determine what cross-cuts, drifts, etc., should be made so as to properly develop the pay-ground.

E. R. FARIBAULT,
Geologist to the Geological Survey.

Ottawa, 24th July, 1903.

APPENDIX (A)

The following observations and plans are taken from the Summary Report of the Geological Survey of Canada, 1902, by E. R. Faribault (to be published this month) on the important development recently made on the arch-core of the anticlinal folds at the Bluenose, Dufferin, Richardson and Dolliver Mountain mines :

GOLDENVILLE.

BLUENOSE MINE.

Much credit is due to the late Mr. Simson A. Fraser for having first undertaken, and Messrs. Thos. Cantley and A. G. McNaughton for having executed so successfully at the Bluenose mine, a new system of mining development on the Goldenville anticlinal fold, which should be an object lesson for the gold miners of the province.

Transverse Section.

A detailed survey was made on October 15th last of the new developments, and a transverse section was prepared which is here reproduced on a reduced scale. The section is made through the main shaft on the Springfield belt, and along two cross-cuts driven north, one above the other, at the depths of 280 and 364 feet, and at a distance of 30 feet west of the main shaft. The upper cross-cut is 230 feet and the lower 250 feet long. They show the structure of the Goldenville anticlinal fold, with a subordinate small flexure on the north leg, and disclose the recurrence of large auriferous saddle-veins, from the surface to below 364 feet.