GEOLOGICAL SURVEY OF CANADA.

From shafts Nos. 1, 2, 3, about two thousand tons of ore have been mined

smelting.

and raised, of which the greater part still lies on the ground awaiting treatment. From this pile, however, Mr. Gatling has sent to Mr. Balbeck & Brothers, of Newark, N. J., two barrels of samples, amounting to about 1700 lbs .- one lot, representing ore taken from the east, and the other from the west vein. By smelting, Mr. Balbeek obtained from the former Vield of gold by about \$28.00, and from the latter upwards of \$30.00 per ton, \$4.00 of which was in each case silver. Numerous beautiful shows of gold were found all along the course of the veins on this lot by both Mr. Gatling and Mr. O'Neill, who also panned out considerable quantities of gold from the decomposing ferruginous vein-stuff. Mr. Gatling has made improvements many improvements on the property, having cleared over six acres, and erected a number of substantial and neat frame buildings in proximity to the shafts. Among these, are a dwelling-house, a boarding-house with accommodation for thirty workmen, a work-shop, stable, earriage-house, and smith's forge. A good road has also been constructed, connecting with the main travelled road from Madoe, to th. village of Marmora. Preparations have already been commenced by Mr. Gatling for the creetion of a twentystamp mill and suitable roasting furnace, and there is little doubt but that this mine will be in full working order within a very few months. Followon the strike of these bedded lodes in a northerly direction, we next come to the Hawk-eye Co.'s mine.

The Hawk-eve Company's Mine.

5. The Hawk-eye Co.'s mine is situated on the east quarter of the tenth lot, in the eighth range, and less than one-quarter of a mile north of Mr. Gatling's mine. Here, gold occurs under conditions similar to those Slate. greenstone and felsite bands are interstratified last described. and accompanied with veins or beds of quartz and mispickel. Two shafts have been such on one of these veins by Mr. Jones of Iowa, one to the depth of forty-six feet, and another to thirty feet. From these openings a considerable amount of ore has been raised, but has not yet been milled. During my visit no work was in progress, but I was informed that operations were to be commenced early in the spring of 1872, on the return of the proprietors. Beyond this lot the gold-bearing zones are lost sight of, in the swamp already noted as covering the greater portions of the eleventh, twelfth, and the thirteenth lots, of the ninth range. Proceeding northward we next come to Neill's mine.

Neill's Mine.

6. Neill's Mine is situated on the west half of the fourteenth lot, in the tenth concession of Marmora. I discovered and traced out the vein on this lot in September, 1867, before any mining locations were being worked in Marmora. Specimens of quartz with mispickel, brought down at that time, and subsequently examined, yielded me by assay, in the laboratory of the Geological Survey Office, upwards of \$5.00 to the ton. During the years 1870 and 1871, an opening was made on the vein by Mr.

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