

ON LOAN FROM MINES DEPT

14 SE

GEOLOGICAL SURVEY OF VICTORIA

PART OF WALMER

PART OF HARCOURT

No 14

**NOTE 1.**  
The numerous breaks and joints in this reef are filled with brown iron ore, containing a great deal of manganese.

**NOTE 2.**  
Basalt dykes about 2 feet 6 inches wide; the portion exposed is of an argillaceous character and appears to be intercalated between beds of slates.

**NOTE 3.**  
Reddish yellow, gritty sandstone in moderately thick beds, one of these contains fragments of slate imbedded in its surface. Succeeding these are blue, white, and cinnamon-colored slates with crystallites.

**NOTE 4.**  
Geological Surveyor sunk four holes, 6 to 13 feet deep, and only found a few specks of gold.

**NOTES 5, 6, & 7.**  
Beds of ironstone cropping out on the surface.

**NOTE 8.**  
**MUCKLEFORD VALLEY.**  
No attempts have yet been made to test the auriferous character of the deposits in the broad alluvial flats constituting the Muckleford Valley, the whole area having long been sold and cultivated. A few wells have been sunk here and there, but, as water is generally struck before reaching the bottom, the full depth of the deposits, and whether auriferous or not, is as yet unascertained. There are good reasons, however, for supposing that rich deposits must be distributed over various portions of this broad valley. At its northern end it receives from the west side the drainage of the Porcupine Flat, one of the richest spots at Ferraragore. On the same side numerous quartz reefs cross the heads of various tributary gullies; some of these, viz. Fentman's and Smith's Reefs have been very rich though the gullies have been hardly prospected at all; while south of the Ferraragore road and the Back Creek the Muckleford Valley receives the drainage of all the rich gullies, drift hills, and quartz reefs, constituting the North Muckleford Gold Field. No payable reefs or alluvial drifts have as yet been found within its eastern drainage area.

**NOTE 9.**  
Quarry; gritty sandstone (micaceous) loosely aggregated. Dip, if any, W.; dip of joints, S. 10, E. 80°.

**NOTE 10.**  
Coarse-grained sandstone cleared in plane of bedding.

**NOTE 11.**  
Coarse-grained sandstone, with a few quartz veins.

**NOTE 12.**  
Brownish yellow coarse-grained sandstone, traversed throughout by quartz veins and cut up by them into a lenticulated ferruginous mass. Strike apparently S. 7, E. Dip not observable (1), E.

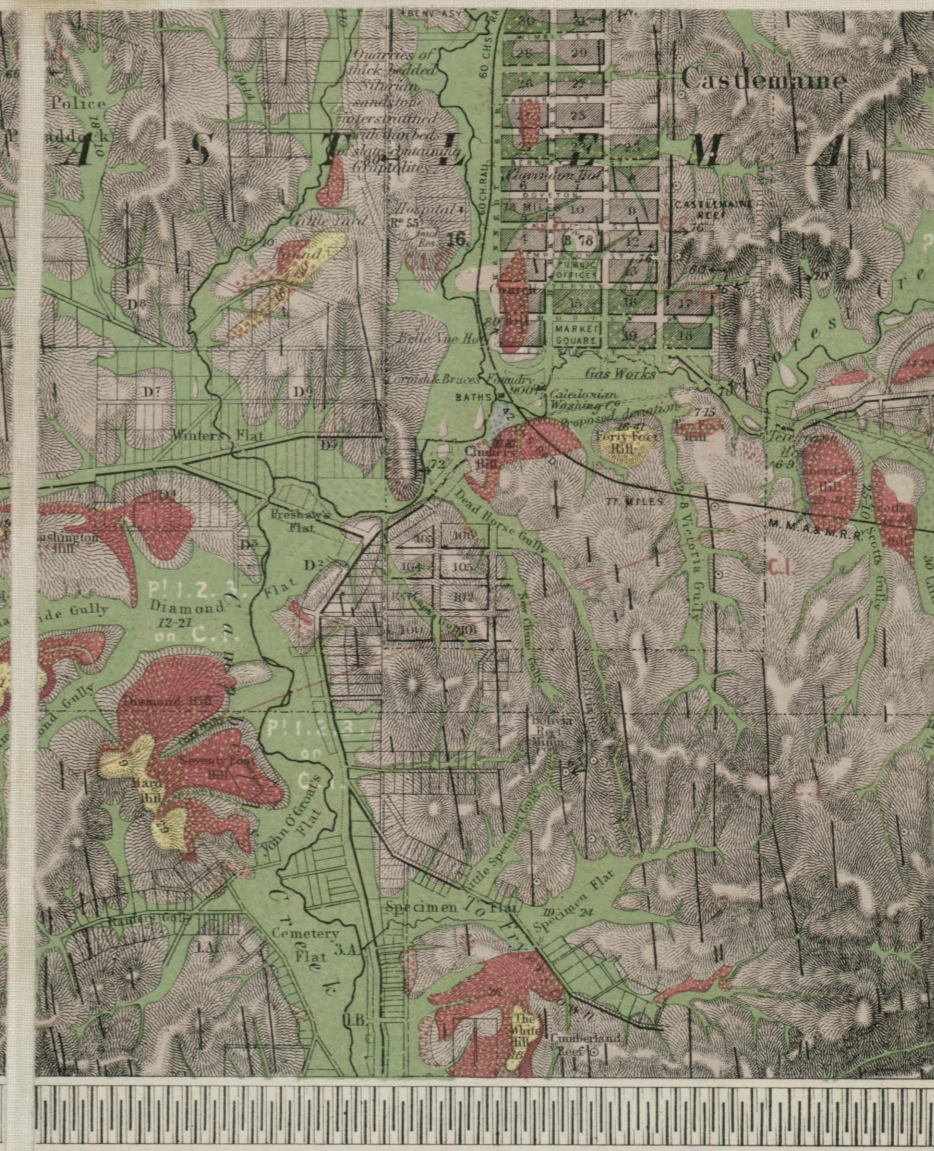
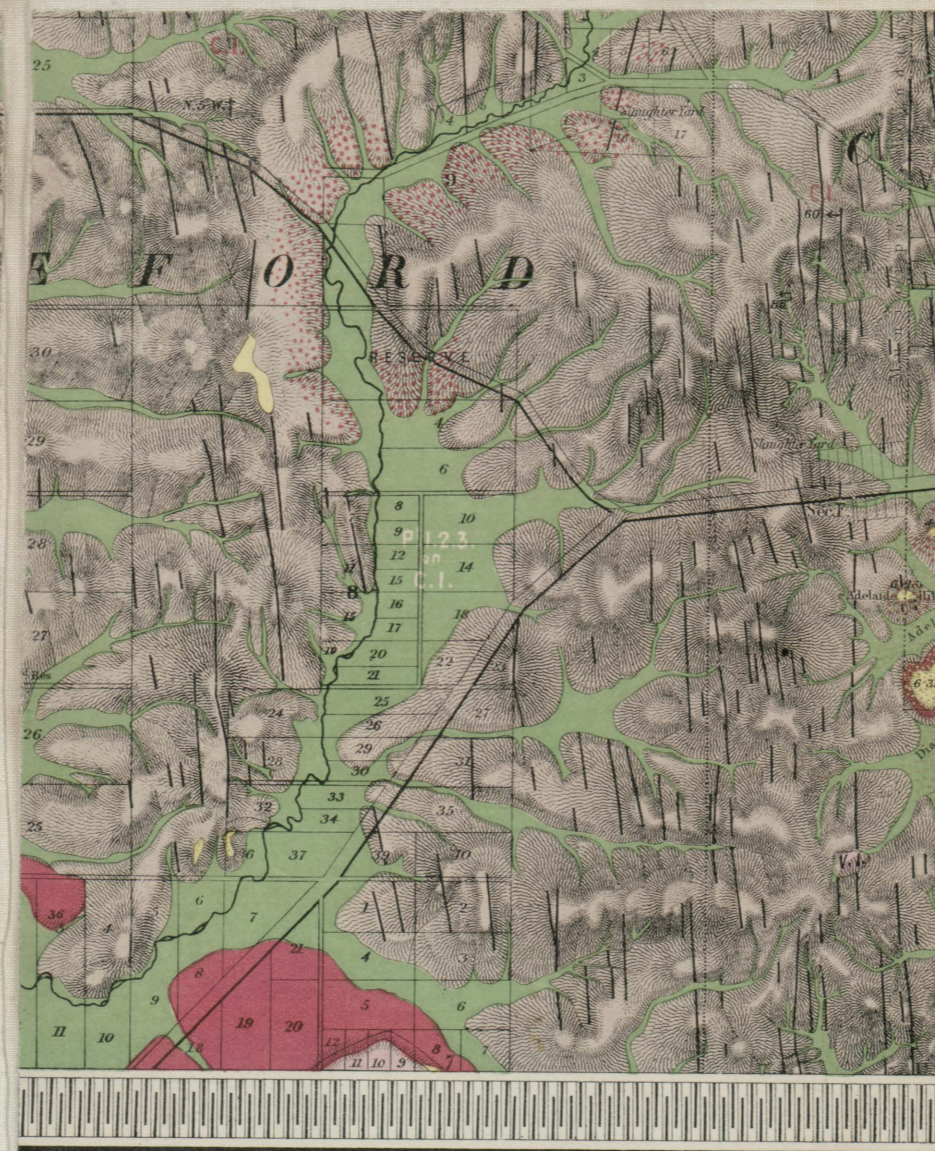
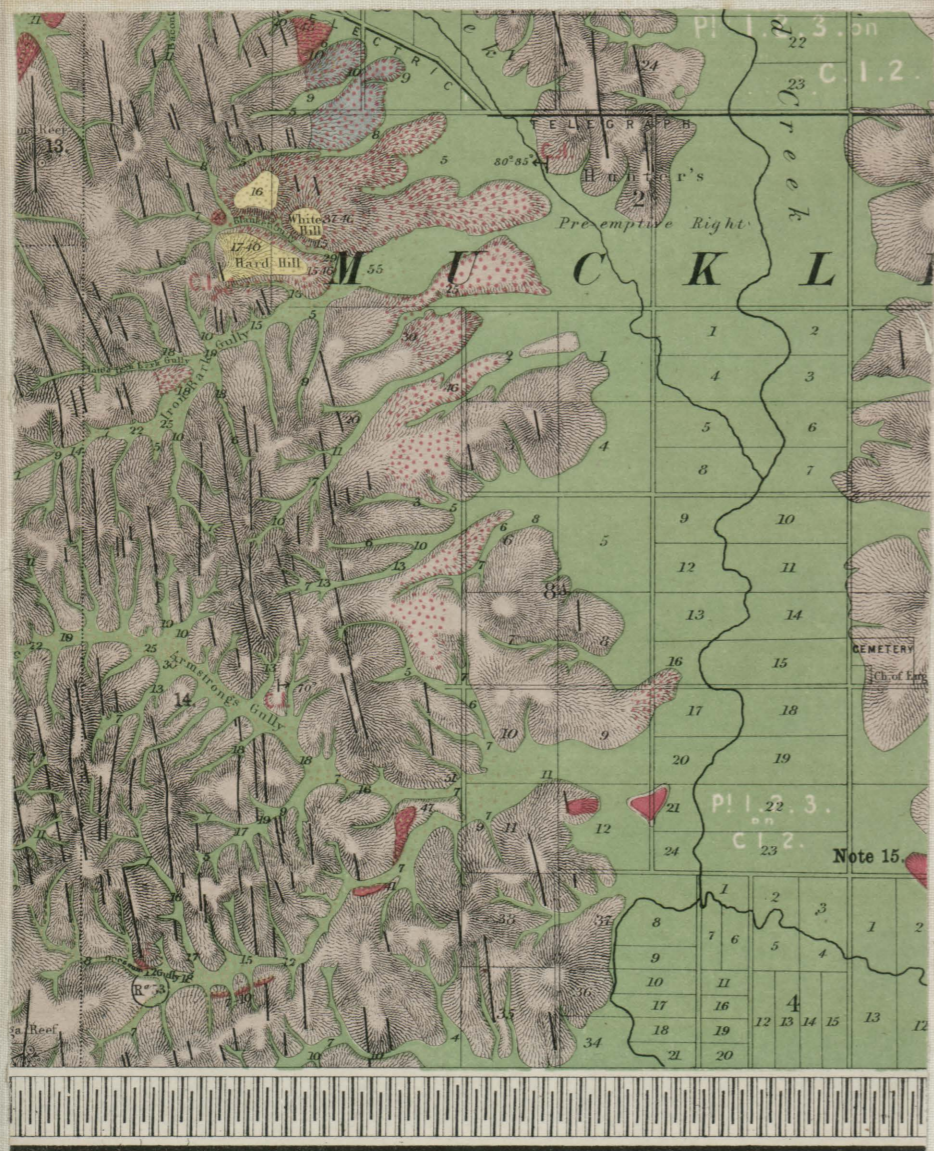
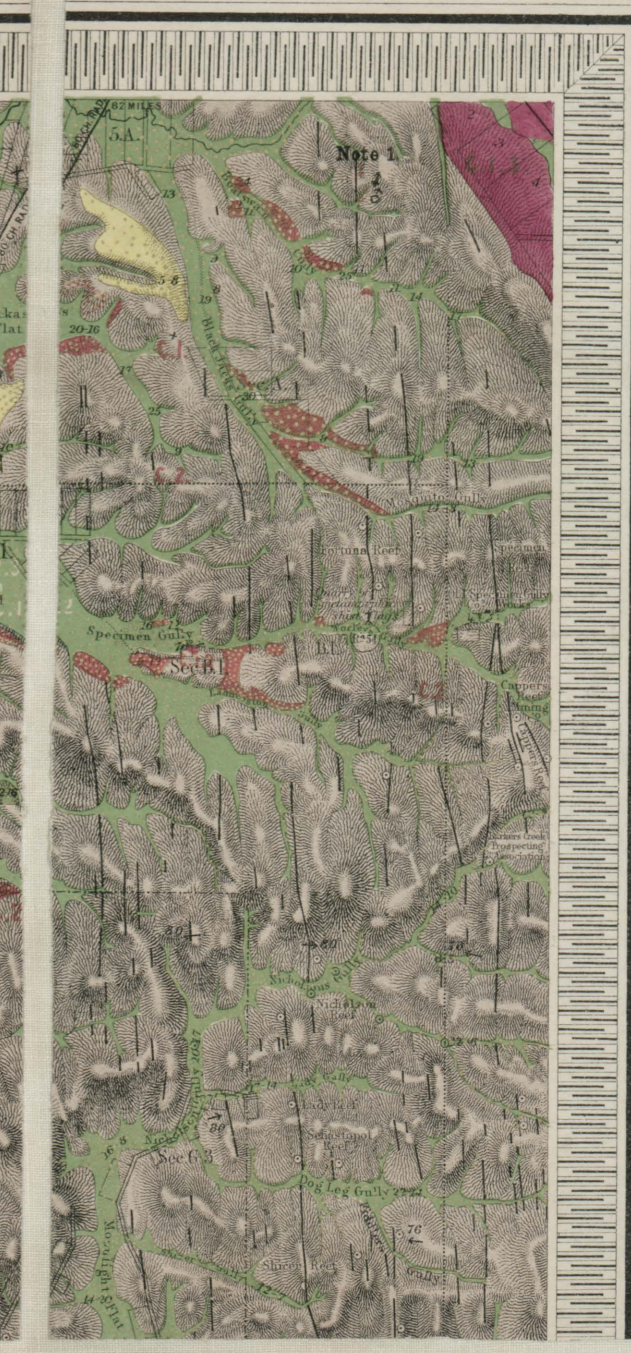
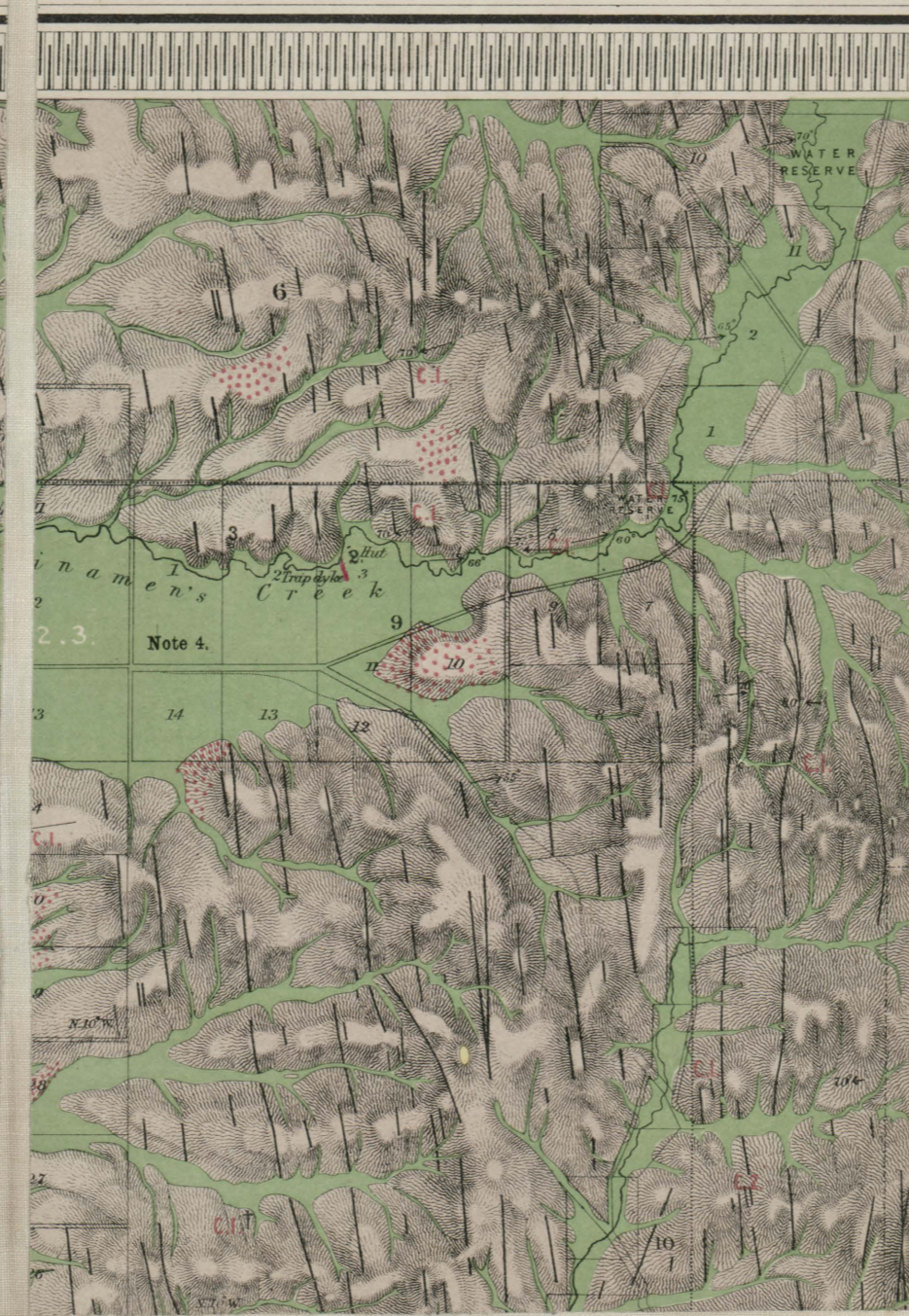
**NOTE 13.**  
**Dunn's Reef.**  
Dunn's Reef is 33 feet thick at a depth of 100 feet; gold on both faces. Dip W. 65°; yielded 10 ounces to the ton on the top.

**NOTE 14.**  
Ferruginous and brecciated, sandstone or quartzite ironstone.

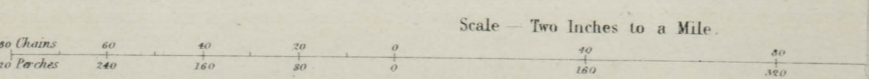
**NOTE 15.**  
Geological Surveyor's prospecting hole, 36 feet deep. A few specks of gold found.

**NOTE 16.**  
**QUARRY GALE RESERVE.**  
Exhibits between beds of hard grey sandstone soft silty layers in which concentric balls of sandstone are imbedded. These balls, occasionally mistaken for fossil organisms, are from 2 inches to 1 foot in diameter and consist of concentric (more or less) ferruginous layers round a nucleus of loose sand.

**NOTE 17.**  
**WATTLE GULLY REEFS.**  
Numerous leaders of highly auriferous quartz traverse the soft yellowish white and bluish slate in all directions more or less faulting each other; at a depth of about 60 feet eastward they seem to unite to a solid reef. Iron and arsenical pyrites crystals are very frequent in the quartz and slate.



|               |                        |                       |         |               |                                   |                |                     |                                  |                 |                 |                                     |                |                     |                                |                 |                 |                                     |                |              |                              |                 |              |                   |              |         |                                |         |             |   |            |                                    |                |  |
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| Post Pliocene | Recent beds & Alluvial | Estuary sand & drifts | P1 Sand | P2 Clay & Mud | P3 Gravel & Conglomerate (Cement) | Newer Pliocene | Marine & Freshwater | Flemington & Upper Division beds | T P1 Sandy loam | T P2 Clay Shale | T P3 Gravel & Conglomerate (Cement) | Older Pliocene | Marine & Freshwater | Brighton beds Lower Gold drift | T P1 Sandy loam | T P2 Clay Shale | T P3 Gravel & Conglomerate (Cement) | Lower Silurian | C1 Sandstone | C2 Slates, Flags & Mafstones | C3 Conglomerate | Upper Eocene | V1 Basalt Diorite | V2 Anorthite | V3 Lava | V4 Ash Conglomerate Breccia &c | Granite | G1 Tertiary | Quartz & mica in Hornblende or Quartz Mica & Feldspar | G2 Biotite | Quartz & mica or Quartz & Feldspar | G3 Quarternary | Quartz Mica Feldspar & Hornblende or Schorle |
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PART OF FARADAY SECTION LINE