

GOLDEN CROWN CLAIM.—1 Specimen.

This claim presents similar indications to the Little Wonder.

AURIFEROUS QUARTZ, COLLINGWOOD MINES, NELSON.**PERSEVERANCE MINE.—**

Four rich gold specimens from a reef in tufaceous schist and black slate. Reef where mine is worked lies very flat, and varies from 1 to 7 feet in thickness. Gold is associated with iron and copper pyrites, galena, and zinc-blende.

FROM COLONIAL MUSEUM—**LOGAN'S REEF, Bendigo, Otago—****TURNER'S REEF, Cape Jackson, Marlborough.—2 Specimens.****BRECCIATED QUARTZ REEF (with vein of crystallized quartz), Waipori Bridge, Otago.****SAFFIRED, Collingwood, Nelson—**

Weight 337 grains. Specific gravity, 3.869.

JUNCTION REEF, Moanataiari Creek, Thames—

Specimen containing ores of gold, silver, lead, antimony, copper, and iron.

GOLDEN CROWN REEF, Thames—

Tufanite or Matrix rock traversed by auriferous quartz. 683 oz. of gold per ton.

CALEDONIAN REEF, Thames, Auckland—**HAPE CREEK, Thames—**

Block showing—

- a. Quartz.
- b. Crystals of Quartz.
- c. Mica.
- d. Gold.
- e. Silicate of Copper.
- f. Copper Pyrites.
- g. Oxide of Iron.

AURIFEROUS STIBNITE—Ferruginous sulphide of antimony in auriferous quartz. The pure mineral contains about 72.73 per cent. of antimony, which has a value, when extracted, of about £25 per ton. The specimens from the Thames contain gold in moderate quantity, perhaps sufficient to pay for extraction. The Criterion Claim contains a considerable quantity of this substance, but no regular lode there has yet been announced. This metal is used for compounding several valuable alloys, while some of its compounds have numerous applications in pharmacy.

Stibnite also occurs in the auriferous reefs in Collingwood, at Inangahua, and also as strong lodes in the schist rocks in Otago.

LYELL, Westland—

Gold-bearing quartz.

LYELL REEFS—

Rich gold-bearing quartz (2 specimens).

FERRIFEROUS PLATINUM—**PLATINIFEROUS IRON SAND—**

Colonial Museum. (Orepuke Diggings, North Shore of Foveaux Straits.) Contains about one grain of platina per pound of sand.

Platina separated from above by washing.

Composition.

| | | | |
|--------------------------------|-----|-----|-------|
| Platinum with a little iridium | ... | ... | 85.37 |
| Iron | ... | ... | 13.65 |
| Gold and Quartz | ... | ... | 0.98 |

100.00

MINERALS, ETC., FROM COLONIAL MUSEUM.**MAGNETIC IRON ORES—**

Magnetic Iron Ore, Dun Mountain, Nelson—from a vein 16 inches thick in serpentinous slates.

Magnetic Iron Ore, Wakatipu Lake, Otago—from a vein in mica schists.

Magnetic Iron Ore, Maramara, Frith of Thames—from a vein in ferriferous slates; contains also oxides and titanium of manganese.

Iron Band Ore, Nelson—contains 70 per cent. of iron; also, Wyndham River, Otago, and Manukau, Auckland—formed by the black sand-layers becoming cemented with hematite. This would be a most valuable ore if obtained in large quantities.

Black Iron Sand.—From beach at Taranaki.

Compound of Iron Sand, Ferruginous Earth, and Ground Charcoal.

Iron Sand cemented by heat.

Bloom of Iron.

Bar of crude metal as from the blast furnace.

Bar of crude Titanic Steel.

Bar of Workable Steel.

HÆMATITES—

Specular Iron Ore, Dun Mountain, Nelson—occurs in irregular veins in greenstone rocks; contains 63 per cent. of metallic iron.

Specular Iron Ore, Maori Point, Shotover, Otago—a six-foot vein in mica schist, equally rich with the above; extent unknown. This ore forms the large heavy pebbles known as Black Maori in the auriferous gravels of the diggers.

Compact Iron Ore, D'Urville Island, Nelson—vein, thickness unknown, in diorite slate, with serpentine and chrome, yields 63 per cent. of iron.

Concretionary Hematite or Limonite, Mongonui, Auckland—occurs strewn on the surface from the decomposition of clays, associated with lignite seams; a common ore.

Hematite (about 40 per cent. of iron) Collingwood, Nelson—occurs intermixed with quartz pebbles in a stratum 100 feet thick, exposed over several acres.

Hematite—exhibited by W. Lodder, Auckland.

Hematite, Collingwood—exhibited by Johnston and Louison, Nelson.

Hematite Pigment—exhibited by Johnston and Louison, Nelson.

Ironstone (2 specimens)—exhibited by E. Ford, Christchurch, Canterbury.

Ironstone, Malvern, Canterbury—exhibited by W. Wilson, Christchurch, Canterbury.

Bog Iron Ore, Spring Swamps, Auckland—forms thick layers at the bottom of swamps. Though rich in iron, the ore is inferior, on account of the sulphur and phosphorus it usually contains.

Reniform Iron Ore, Hydrous Hematite, Mongonui.

Carbonaceous Iron Ore with Coal Seams.

CHROME ORES—The pure ore contains 50 per cent. of the chrome oxide, and is worth from £11 to £20 per ton, according to the state of the market. Used for manufacture of pigments and dye salts.

Massive Chromic Iron.

Crystallized Chromic Iron—from irregular lodes in serpentine bands, Dun Mountain, Nelson.

Dunite, interspersed with crystals of Chrome Ore, Dun Mountain, Nelson.

COPPER ORES—

Copper Pyrites.—Mixture of sulphides of copper and iron.

From a lode 3 to 5 feet thick in mica schist, Moke Creek, Wakatipu Lake. The ore is very pure, and contains from 11 to 55 per cent. of metallic copper; the usual average of such ore in Cornwall being only 5 per cent. There is limestone in close vicinity to the lode; so that there would be no difficulty in reducing the ore to a "regulus," in which state it would save cost in shipment.

Grey Sulphide, Wangapeka, Nelson—contains 65 per cent. of copper, together with a little silver and gold.

Cupreous Iron Ore.—In Serpentine, Dun Mountain. Interesting from its being slightly auriferous.

The present value of crude (unrefined) copper is £30 per ton.

Copper Ore.—Decimal Company's Mine, Collingwood, Nelson.

Graphite.—Collingwood, Nelson.

LEAD ORES—

Galena, Wangapeka, Nelson—Sulphide of lead, with quartz that contains also sulphides of iron, and antimony with gold, in veins in felspathic schist. The Galena contains 26 oz. of silver per ton. The gold is only in those parts of the ore that contain pyrites.

Galena, with Zinc Blende, Perseverance Mine, Collingwood, Nelson—occurs in a band 2 to 5 feet thick, parallel with the auriferous quartz veins. These two ores are both pure, but so intermixed in the lode that they could not be reduced separately; 100 tons is being sent to Great Britain to test the value of this ore.

ZINC ORE (Yellow or Horn Blende)—

This ore occurs in the Perseverance Mine, Collingwood, Nelson, and in small quantity in Tararua Creek, Thames, in white cement with auriferous veins. It contains 60 per cent. of metallic zinc, which is worth about £15 per ton.

MANGANESE ORES—

Uses: For generation of chlorine for bleaching purposes; also for calico printing, &c. The value of these common ores is £3 to £4 per ton.

Rhodonite (silicate of manganese), Dunstan, Otago; as rolled masses. Percentage of manganese about 40.

Wad (hydrous oxide), Port Hardy, D'Urville Island, Nelson—Percentage of manganese about 45.

Braunite or Manganese on Malvern Hills, Canterbury—exhibited by E. Ford, Christchurch, Canterbury.