

CONTENTS.

CHAPTER I.

REMARKS ON THE REDUCTION AND AMALGAMATION OF GOLD ORES.

I. SYSTEM WITH AMALGAMATION IN THE BATTERY.

- 1.—Quantity of Mercury to be used in the Battery.
- 2.—Wire net Troughs.

II. SYSTEM WITHOUT AMALGAMATION IN THE BATTERY.

- 3.—Brief description of the California process.
- 4.—Blankets.
- 5.—Treatment of Blanket Sands.
- 6.—Treatment of Blanket stuff containing Arsenical Ores, Sulphurets, etc.
- 7.—Cleaning of Blanket stuff containing Arsenical Ores previously to roasting.
- 8.—Value of Pyrites in the Tailings; fineness of native Gold; loss in smelting amalgam.

CHAPTER II.

THE CHLORINATION PROCESS.

- 1.—Plattner's Chlorination Process.
- 2.—Manufacture of Chlorine.
- 3.—The Chlorination Vat.
- 4.—The Precipitation of the Gold.
- 5.—Extracting Gold from Arsenical Ores.
- 6.—Dr. Cress Culvert's Method.
- 7.—Importance of the Pyrites, Mispickel, &c.
- 8.—Detection of Gold by means of Iodine and Bromine.

CHAPTER III.

DISTRIBUTION OF THE GOLD IN LODES.

'Pay Chimneys'—'The Gold Streak.'

Pay Chimneys in California—Gold Streak at Tangier, Mount Uniacke, Wine Harbor, Montagu, Sherbrooke, Isaac's Harbor, Lawrencetown, Waverley.

CHAPTER IV.

AURIFEROUS SLATE BELTS AND LOW GRADE ORES.

1. Slate Belts.
- 2.—Examples of the working of low grade Quartz.
- 3.—Mixed vein stone in Nova Scotia—Tangier—The Forest lode—The Burlington Mine—Indian Path.
- 4.—Character of Quartz lodes in California.
- 5.—Auriferous Slate in California—Gold in Granite, Scotland.