indefinite greyish-brown colour. If some oxide of manganese be fused with carbonate of soda so as to produce a greenish-blue bead or "turquoise enamel," and some baryta or a baryta salt be melted into this, the colour of the bead will remain unchanged; but if strontia be used in place of baryta, a brown or greyish-brown enamel is produced.

NOTE:—Some examples of *Witherite, Barytine, and Baryto-calcite,* contain traces of oxide of manganese. These, after strong ignition, often assume *per se* a pale greenish-blue colour.

---

5. DETECTION OF BARYTA IN THE PRESENCE OF STRONTIA.

[*First published in the Chemical Gazette: August* 1, 1846.]

This test is chiefly applicable to the detection of baryta in the natural sulphate of strontia; but it answers equally for the examination of chemical precipitates, &c., in which baryta and strontia may be present together. The test-matter, in fine powder, is to be melted in a platinum spoon with 3 or 4 volumes of chloride of calcium, and the fused mass treated with boiling water. For this purpose, the spoon may be dropped into a test-tube, or placed (bottom upwards) in a small porcelain capsule. The clear solution, decanted from any residue that may remain, is then to be diluted with 8 or 10 times its volume of water, and tested with a few drops of chromate (or bichromate) of potash. A precipitate, or turbidity, indicates the presence of baryta.

---

6. ACTION OF BARYTA ON TITANIC ACID.

[*First published in Chemical Gazette:* 1852.

Fused with borax in a reducing flame, Titanic acid forms a dark amethystine-blue glass, which becomes light-blue and opaque when subjected to the flaming process. The amethystine colour arises from the presence of Ti^2O^3: the light-blue enamelled surface, from the precipitation of a certain portion of TiO^2. The presence of baryta, even in comparatively small quantity, quite destroys the latter reaction. When exposed to an intermittent flame, the glass (on the addition of