

[2348]

TAYLOR, WILLIAM J., *5 Church Street, Chelsea.*—Specimen of plastering, for external purposes, in Portland cement.

Improved and patented method of finishing Portland cement for walls of buildings and other erections, without the use of surface colour.

[2349]

THORN & Co., *Grosvenor Row, Pimlico, S.W.*—Atmospheric bells; Trinidad asphalte; specimen stone of old Westminster Bridge.

[2350]

TOD & M'GREGOR, *Clyde Foundry.*—Meadowside building yard and graving-dock, Glasgow. (For Engraving, see page 36.)

Model of private graving dock and basin, showing also the various workshops connected therewith, designed for Messrs. Tod and M'Gregor by Messrs. Bell and Miller, Civil Engineers, Glasgow. The illustration on the following page represents the graving dock, dockyard, and premises. The large tidal basins, with wharves and quays, on the rivers Clyde and Kelvin, adjoining the building yard, have a depth of water sufficient to admit vessels of the largest tonnage for repairs, &c.

The dock is 500 feet long, 80 feet wide, with 20 feet water at spring tides. It is entirely built of squared masonry, freestone, and granite. The gates are of malleable iron, weighing upwards of 60 tons, and are of peculiar construction, hanging on pivots without the support of quadrant rollers. The bearing is not in the usual manner of hollow quoins, but a flat surface on heel-posts of planed cast-iron, shutting upon a polished face of the granite quoin stone—iron to granite, without the intervention of any softer material, and perfectly water-tight.

The tides on the Clyde fall only eight feet at springs, leaving ten to twelve feet water on the dock sill; this

renders necessary a heavy pumping engine of 250 horse-power, working two 52-inch pumps, which empties the dock in two-and-a-half hours, without waiting for the ebb.

The platform is kept clean, by the discharge from the pumping engine through the chambers in the masonry behind the gates.

The tidal basins and wharves have together 1,070 feet of quays constructed along the banks of the Clyde and Kelvin, with room for 650 feet additional. The whole water frontage is 2,400 feet.

The dockyard contains a complete arrangement of buildings and machinery, steam-hammers, &c., for repairing, entirely independent of the works in the building-yard adjoining. The total ground occupied by the building-yard and dockyard is twenty acres. There is sufficient accommodation to admit seven vessels of 3,000 tons each, repairing and fitting out at one time, besides those building on the stocks.

In addition to various cranes from five to twenty tons, there is a moveable steam crane capable of lifting eighty tons, for boilers and heavy machinery.

[2351]

TUPPER & COMPANY, *61A Moorgate Street, London, and Birmingham.*—Galvanized iron manufactures connected with building and architecture.

[2352]

TURNER, W., & GIBSON, J. W., *Dublin.*—Balance rolling bridges for railways over water and public roads; iron roofs, &c.

[2353]

VAVASSEUR, HENRY, & Co., *Sumner Street, Southwark, London.*—Galvanized, corrugated, and plain sheet iron, &c. (See page 37.)

[2354]

VIGNOLES, C., *F.R.S., 21 Duke Street, Westminster.*—Models and drawings of Bilbao railway, Spain. (See pages 40 and 41.)

[2355]

VIEILLE MONTAGNE ZINC COMPANY, *Manchester Buildings, Westminster.* R. G. FISHER, Architect. F. BRABY & Co., Manufacturing Agents, *358-360 Euston Road, London.*—Models showing the use of zinc for roofing purposes. (See page 38.)