

## GROUP XIII.

## General Machinery.

PRIME MOVERS (Steam Generators, Steam-Engines, Water-Wheels, Turbines, Pressure-Engines, Air, Wind, and Electro-Magnetic Engines, Gas Machines). MACHINES FOR TRANSMITTING POWER (Shafts, Wheels, Pulleys, Bands, &c.). MACHINES FOR WORKING SPECIAL KINDS OF MATERIALS (Machines for Mining, Metallurgy, Metal Work, and Wood Work; Machines for Spinning, Weaving, Knitting Sewing, and Embroidering; Machines for Fulling, Cleansing, Shearing, Dyeing; Machines for Bleaching, Leather-Dressing, &c.; Machines for Paper Manufactures and Bookbinding, for Type-Founding, Printing, Lithography, Copper-Plate Printing, Colour Printing, &c.; Machines and Apparatus for Sugar-Making, Oil Manufacture, Breweries, Distilleries, Stearine, Soup, Candles, Starch, Ice-Making, Match-Making, Corn Mills, and Agricultural Machinery and Apparatus). OTHER MACHINERY NOT BELONGING TO THE ABOVE-MENTIONED (Blast Engines, Fire Engines, Pumps, Ventilators, &c.). MATERIALS AND PARTS OF MACHINERY. RAILWAY MACHINERY (Locomotives, Tenders, Railway Velocipedes and parts of them, Railway Carriages and parts composing them, Special Machinery and Apparatus for Railway Workshops and Railway Contrivances; for making and maintaining Railway Plant; Snow Ploughs, &c.). STEAM GAUGES, DYNAMOMETERS, TRADIOMETERS, &c. ALL SORTS OF VEHICLES NOT CONCERNED WITH RAIL. STATISTICS OF PRODUCTION.

PENN, JOHN, & SONS, *Greenwich*.—Model of Pair of Trunk Engines, of 1,350 horse-power, nominal, as fitted to H.M. iron-clad ships, "Minotaur" and "North-umberland. (440)

POWIS, CHARLES, & CO., *Cyclops Works, Millwall Pier, and 60, Gracechurch-street, London*.—Twenty-horse Power Double Cylinder Steam Engine; Steam Crane; Wood-working Machinery. (441)

HOWARD, J. & F., *Bedford*.—Patent Safety Steam Boiler. (442)

DERHAM, JOHN J., *Blackburn*.—Horizontal High Pressure Expansion Steam Engine of 20-horse power nominal, driving Printing Machinery; Horizontal High-Pressure Patent Expansion Steam Engine of 25-horse power nominal, driving Wood Working Machinery; Patent Atmospheric Hammer. (443)

(See Appendix.)

PATENT GAS COMPANY, 25, *Fenchurch Street, London*.—Apparatus for the Manufacture of Gas, by Eveleigh's Patented Process. (444)

SPICE, R. P., C.E., 21, *Parliament Street, London*.—Working Apparatus for Making Gas for Heating and Illumination. (445)

GALLOWAY, W. J., & SONS, *Knot Mill Iron Works, Manchester*.—Two "Galloway" Steam Boilers, and Steam Engine. (Lent for the use of Her Majesty's Commissioners.) (446)

READING IRON WORKS, (LIMITED), *Reading, Berkshire*.—Steam Engines from 2 to 25-horse power, High Pressure and Condensing. (447)

CLARKSON BROTHERS (per John McNicol), *Glasgow*.—Self-acting Steam Pumping Engines. (392)

CATER & WALKER, *Grove Steam Boiler Works, Southwark, London*.—Patent. Multitubular Steam Boiler, of 50-horse power, with Fittings, at work in British Boiler House, at the Exhibition. (448)

GLOVER, GEORGE, & COMPANY, *Ranelagh Road, Pimlico, London*.—National Standard Gasometers, similar to those supplied to Her Britannic Majesty's Government and to the Government of the Netherlands; Dry Gas Meters; and Gas Apparatus. (449)

ADAMSON, DANIEL, & COMPANY, *Engineering Works, Hyde Junction, near Manchester*.—Steam Boilers—two of 40-horse power each, one with Steel Shell Plates, Solid Welded Flue-rings and Circu-