tures."—A communication to him from abroad by Reginald Bright, of Me'bourne, Victoria, Australia, Merchant, and John Cosmo Newbery, of the same place, Analytical Chemist.

bery, of the same place, Analytical Chemist. 692. To Horatio William Cracknell, of 36, Spring-street, Paddington, in the county of Middlesex, House Decorator, for the invention

of "an improved sash fastener."

693. To Isaac Brown, of Elm Croft Grange, Edinburgh, North Britain, for the invention of "improvements in the construction and arrangement of pipes for watering streets or roads, and for the purposes of irrigation."

694. To Joseph Timothy Hopkinson, of 110, Newington-causeway, in the county of Surrey, Tool Maker, for the invention of "improve-

ments in window sash fastenings.'

695. To John Keighley, Plumber, of Bradford, in the county of York, for the invention of "improvements in pickers used in weaving and

apparatus therefor."

696. To Sidney Emsley, Agent, of Bradford, in the county of York, for the invention of "improvements in apparatus for spinning and twisting wool, cotton, silk, and other fibrous substances."

- 697. To James Francis Braidwood, of the Phœnix Gas Works, 69, Bankside, Blackfriars-road, in the county of Surrey. Gas Engineer, for the invention of "improvements in apparatus for securing the lids or covers of gas and other retorts."
- 698. To Isaac Merritt Singer, of New York, in the United States of America, but now residing at Oldway House, Paignton, in the county of Devon, Gentleman, for the invention of "improvements in sewing machines."

699. To Edward Pilkington, of Rishton, and George Addison, junior, of Clayton-le-Moors, both in the county of Lancaster, for the invention of "improved apparatus for locking 'safety

lamps' used by miners."

700. To Edmund Hunt, of Glasgow, in the county of Lanark, North Britain, Patent Agent, for the invention of "improvements in bottles and stoppers for aerated liquids."—A communication to him from abroad by George Gledhill, residing at Auckland, New Zealand.

702. And to John Henry Weston, of No. 5, Lansdowne-crescent, Lansdowne-road, in the county of Surrey, Gas Engineer, for the invention of "improved means of and apparatus for purifying, carburetting, and increasing the illuminating power of coal gas."

On their several petitions, recorded in the Office of the Commissioners on the 24th day of February,

1874.

- 704. To Edward Hulme, of Liverpool, in the county of Lancaster, Engineer, and John Hulme, and William Hulme, of Bradford, in the county of York, Engineers, for the invention of "improvements in appliances for controlling the admission of steam and other elastic fluids to motive power engines."
- 705. To John Davey, of Crofthole, in the parish of Sheviock, in the county of Cornwall, Agricultural Engineer and Implement Maker, for the invention of "improvements in ploughs, such improvements being applicable to single-furrow, double-furrow, and triple-furrow turnwrest ploughs."
- 706. To George Alexander Teulon, of 7, Haver-stock-terrace, Hampstead, in the county of Middlesex, for the invention of "improvements in rotary engines for operating propeller and other shafts, where counter-thrust is required."

707. To Albert Jackson, Weaver, George Jackson, Foreman Twister, of Saltaire, near Bradford, and John Smith, Engineer, of Bradford, in the county of York, for the invention of "improvements in looms for weaving, and in apparatus connected therewith."

708. To Ramsay Cooke, of Beaufort-villas, North End, Fulham, in the county of Middlesex, Gentleman, for the invention of "improvement in button hole stitching attachments for sewing machines."—A communication to him from abroad by William Cooke, of Galt, in the Province of Ontario, and Dominion of Canada, Gentleman.

710. To Charles Llewellyn Light, of No. 5, Great Winchester-street-buildings, in the city of London, Civit Engineer, for the invention of "improvements in the construction of railway and

other wheels."

711. To Charles Edward David Morris, of the Vernon Iron and Tin Plate Works, Briton Ferry, in the county of Glamorgan, Tin Plate Manufacturer, for the invention of "improvements in apparatus used in coating metal plates with tin or with other metals or alloys."

with tin or with other metals or alloys."
712. To William Middleditch Scott, of the firm of W. and C. Scott and Son, of Birmingham, in the county of Warwick, Gun Manufacturers, for the invention of "improvements in breech

loading small arms."

- 713. To William Cotton, of Loughborough, in the county of Leicester, Manufacturer, for the invention of "improvements in means or apparatus for the manufacture of knitted fabrics,"
- 714. To Robert Stone, of Liverpool, in the county of Lancaster, for the invention of "improvements in the manufacture of and mode of heating iron, and in apparatus employed therefor."
- 715. To William Bown, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "improvements in horse clippers."
- 716. To Marshall Henry Pearson and Joseph Thomas Pearson, of Little Neville-street, Leeds, in the county of York, for the invention of "improvements in sewing machines."
- 718. To John Carter Ramsden, of Smith House, Lightcliffe, in the county of York, Silk Manufacturer, for the invention of "improvements in machinery for spinning, doubling, twisting, or winding wool, silk, cotton, flax, or other fibres."
- 719. To William Robert Lake, of the firm of Haseltine, Lake, & Co., Patent Agents, Southampton-buildings, London, for the invention of "improvements in loom-harness, and in machinery for manufacturing the same."—A communication to him from abroad by Joseph Sladdin, of Lawrence, Massachusetts, United States of America.

720. To John Woodcock, of Plymouth, in the county of Devon, Brassfounder, for the invention of "improvements in valves for regulating the supply of water to cisterns or tanks."

721. And to Henry Baggeley, of No. 18, Gearve's-road, Crown-road, Fulham, in the county of Middlesex, for the invention of "improvements in the manufacture of earthenware.."

On their several petitions, recorded in the Office of the Commissioners on the 25th day of February, 1874.

722. To Jonas Haley, of the firm of Samuel Haley and Son, of Cleckheaton, in the county of York, Card Manufacturers, for the invention of "improvements in wire cards and in the