

4671. To John Henry Johnson, of 47, Lincoln's-inn-fields, in the county of Middlesex, Gentleman, for the invention of "improvements in the production of saccharate of lime."—A communication to him from abroad by Doctor Augustus Seyferth, of Brunswick, in the Empire of Germany.

4673. To Edward Griffith Brewer, of Chancery-lane, London, for the invention of "improvements in fire-arms."—A communication to him from abroad by Valentin Sauerbrey, of Basle, Switzerland.

4675. To James Farmer, of Salford, in the county of Lancaster, Engineer, for the invention of "improvements in machinery for folding paper."

4677. And to John Hanson, of Folly Hall, Huddersfield, in the county of York, for the invention of "a new or improved cutter to be employed in machinery for cutting woollen, cotton, and other looped fabrics."

On their several petitions, recorded in the Office of the Commissioners on the 8th day of December, 1877.

4681. To James Newton and John Edward Newton, trading under the style of Henry and John William Lees, at New Royd Mills, Saddleworth, in the county of York, for the invention of "improvements in the woven goods known as cords, and in the method of weaving the same."

4683. To Alexander Browne, of the firm of Browne and Company, Patent Agents, of 5, Southampton-buildings, Holborn, in the county of Middlesex, for the invention of "a new or improved apparatus for heating air in reheating, puddling, and other similar furnaces." A communication to him from abroad by Edouard Fabre, of Paris, France.

4685. To Carl Heinrich Siemens, of No. 12, Queen Anne's-gate, Westminster, in the county of Middlesex, for the invention of "improvements in telephones."—A communication to him from abroad by Dr. Ernst Werner Siemens, of Berlin, in the German Empire.

4687. To John Samuel Smith, of Nos. 85 and 87, Blackman-street, Borough, for the invention of "improvements in bicycles."

4689. To Michael Heinrich Kernaull and Richard Horstmann, both of Berlin, Germany, for the invention of "improved casters for furniture."

4691. To Thomas Minton, of Dudley, in the county of Worcester, for the invention of "a certain compound or linament for the cure of rheumatic, paralytic, and other similar diseases."

4693. And to James Lamb Hancock, of 118, Shacklewell-lane, Dalston, in the county of Middlesex, Engineer, for the invention of "improved means of and apparatus for collecting and supplying gas to and also from beers and wines in casks or vessels for the preservation of the same."

On their several petitions, recorded in the Office of the Commissioners on the 10th day of December, 1877.

4695. To John Henry Johnson, of 47, Lincoln's-inn-fields, in the county of Middlesex, Gentleman, for the invention of "improvements in and connected with apparatus for superheating steam, parts of which improvements are also applicable to other similar purposes."—A communication to him from abroad by Henri Prosper Olivier Lissagaray, of Paris, in the Republic of France.

4697. To Dan Beaumont, of Longwood, near Huddersfield, in the county of York, Manu-

facturer, and John Edward Tate, of Golcar, in the said county, Power Loom Tuner, for the invention of "improvements in looms for weaving."

4699. To John Lacey Davies, of Norwood, in the county of Surrey, Gentleman, for the invention of "improvements in machinery or apparatus for washing and cleansing clothes, woven fabrics, and textile materials, which is also applicable for churning butter, agitating liquids, and sifting powdered substances."

4701. To Jacob Keighley, of Blackpool, in the county of Lancaster, for the invention of "improvements in the manufacture of soles for boots and shoes."

4703. To Adolph Rommel, of Moorgate-street-buildings, in the city of London, Sworn Broker, for the invention of "improvements in oscillating pumps."—A communication to him from abroad by Karl Philipp Heinrich Volkmar, of Williamsport, Lycoming county, Pennsylvania, United States.

4705. To Robert Beecroft, Combing Overlooker, and Frederick Henry Wright, Manager of Albion Mills, Halifax, in the county of York, for the invention of "improvements in machinery for combing wool and other fibrous substances."

4707. To Alexander Melville Clark, of 53, Chancery-lane, in the county of Middlesex, Patent Agent, for the invention of "improvements in machinery for moulding and pressing bricks and tiles."—A communication to him from abroad by Jean Larmanjat, of Paris, France.

4709. And Thomas Longworth, of Blackburn, in the county of Lancaster, Cotton Manufacturer, and John Mercer, of Blackburn aforesaid, Mill Manager, for the invention of "improvements in looms for weaving."

4711. To Elijah Atkins, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "improvements in umbrellas and parasols."

4713. And to Thomas James Smith, of the firm of Robertson, Brooman, and Company, of 166, Fleet-street, in the city of London, Patent Agents, for the invention of "improvements in machines for dressing or finishing felt hats and caps."—A communication to him from abroad by Simon Piron, of 15, Rue des Halles, Paris, France.

On their several petitions, recorded in the Office of the Commissioners on the 11th day of December, 1877.

4715. To William Carr Crofts, of Adel, near Leeds, in the county of York, Architect, for the invention of "improvements in set squares or 'angles' used in architectural or mechanical drawing or measurement."

4717. To Abraham Jay, of Lower Soundwell, Kingswood, in the county of Gloucester, for the invention of "an improved composition or mixture for preventing incrustation in boilers."

4719. To Herbert John Haddan, of the firm of Herbert and Company, Patent Agents, of 67, Strand, in the city of Westminster, Civil Engineer, for the invention of "improvements in the manufacture of small shot."—A communication to him from abroad by Benjamin Fatham, of New York, United States of America, Manufacturer.

4721. To Ernest Rocher, of Brussels, in the Kingdom of Belgium, Civil Engineer, for the invention of "improvements in locks or fastenings for the doors of railway and other carriages, and for other doors."