

4609. To George Thomas Cheetham, of Bradford, in the county of York, Coach Builder, for the invention of "improvements in portable covers for waggonettes."

4611. To John Petrie, junior, of Rochdale, in the county of Lancaster, Machine Maker, for the invention of "improvements in machinery for washing or scouring wool and other such fibrous materials, parts of which are also applicable to washing rags and other materials used in the manufacture of paper."

4613. To William Henry Nevill, of Ferryside, in the county of Caermarthen, for the invention of "improvements in the manufacture of cast steel."

4615. And to William Booth, of Forest-side, Nottingham, for the invention of "improvements in the manufacture of lace in twist lace machines."

On their several petitions, recorded in the Office of the Commissioners on the 5th day of December, 1877.

4617. To Charles John Galloway and John Henry Beckwith, both of Knott Mill Iron Works, Manchester, in the county of Lancaster, for the invention of "improvements in pumps for raising or forcing liquids."

4619. To Robert Holmes Houston, of Greenock, in the county of Renfrew, North Britain, Woollen Manufacturer, for the invention of "improvements in finishing or treating woven fabrics, and in apparatus therefor."

4621. To Count Adolpho Cozza, of Orvieto, in the Kingdom of Italy, residing temporarily at 67, Strand, in the city of Westminster, for the invention of "improvements on air break valves."

4623. To Joseph Underhill, of Aston, near Birmingham, in the county of Warwick, Brass-founder, for the invention of "improvements in tools or apparatus for dressing or finishing metallic hinges."

4625. To Henri Adrien Bonneville, of the British and Foreign Patent Offices, 18, Rue de la Chaussée d'Antin, Paris, France, and 6, Piccadilly, in the county of Middlesex, Patent Agent, for the invention of "a new or improved loom for spinning fibrous materials."—A communication from Charles Ligois, a person resident at Sotteville, France, Machinist.

4627. To Gerard Wenzeslaus von Nawrocki, of the firm of J. Brandt and G. W. v. Nawrocki, of 2, Kochstrasse, Berlin, Germany, Engineers and Patent Agents, for the invention of "improvements in and connected with annealing ovens for the production of very thin iron and steel wire."—A communication to him from Messieurs Asbeck, Osthaus, Eicken, and Company, of Hagen, Germany.

4629. To John Watson, of St. Albans, in the county of Herts, for the invention of "improved boiler or apparatus for heating conservatories, greenhouses, and other horticultural or other structures."

4631. To Richard Cosslett the younger, of Elgin Park, Redland, Bristol, for the invention of "improvements in tiles."

4633. To Edward Davies, of Liverpool, in the county of Lancaster, for the invention of "improvements in and appertaining to granulating, grinding, crushing, or otherwise reducing middlings, pollards, brans, or other 'offals' of wheat, rice, or other grains or seeds."

4635. And to Alexander Melville Clark, of 53, Chancery-lane, in the county of Middlesex, Patent Agent, for the invention of "improvements in the manufacture of bi-carbonate of ammonia and soda."—A communication to him from abroad by Gustave Guillaume Verzyl, of Louvain, in the Kingdom of Belgium.

On their several petitions, recorded in the Office of the Commissioners on the 6th day of December, 1877.

4645. To Stephen Joseph James Kelly and Leonard Chapman, both of Charlotte-street, Shoreditch, in the county of Middlesex, for the invention of "improvements in the manufacture of picture and mirror frames."

4647. To Charles Denton Abel, of Southampton-buildings, in the county of Middlesex, for the invention of "improvements in the manufacture of lump or loaf sugar, and in apparatus employed therefor."—A communication to him from abroad by Eugen Langen, of Cologne, in the German Empire.

4649. To John William Lamb, Manufacturer, and Samuel Lowe, Machinist, both of Nottingham, in the county of Nottingham, for the invention of "improvements in knitting machinery."

4651. To Edward Griffith Brewer, of Chancery-lane, London, for the invention of "improvements in cartouche cases, boxes, or cartridge holders."—A communication to him from abroad by Valentin Sauerbrey, of Basle, Switzerland.

4653. And to Charles Garton, of Hornsey, in the county of Middlesex, Commercial Clerk, for the invention of "improvements in apparatus for fastening purposes, especially applicable to the fastening of railway and other carriage doors."

On their several petitions, recorded in the Office of the Commissioners on the 7th day of December, 1877.

4655. To Henry Crompton Ashlin, of Liverpool, in the county of Lancaster, Engineer, and Moritz Herschell, of the same place, Merchant, for the invention of "improvements in apparatus for sorting, breaking, or cracking earth, palm, and other nuts, and for sifting or separating the kernels from the shells."

4657. To Richard Copley, of Liverpool, in the county of Lancaster, Commercial Traveller, for the invention of "improvements in counter check books, and in apparatus to be used therewith."

4659. To Edgar Breffit, of the city of London, Merchant, for the invention of "improvements in apparatus for charging or filling bottles with aerated liquids."

4661. To Frank Wirth, of the firm of Wirth and Company, Patent Solicitors, at Frankfort on the Main, in the Empire of Germany, for the invention of "improvements in ear-rings."—A communication from Rudolf Speltz, Jeweller, a person resident at Frankfort on the Maine, in the Empire of Germany.

4665. To James Blake, of Manchester, in the county of Lancaster, Boiler-Maker, for the invention of "improvements in steam generators and in safety valves for steam generators, applicable in part in the construction of valves for water and other fluids."

4667. To Thomas Proud, of Birmingham, in the county of Warwick, for the invention of "improvements in flexible valves for preventing the escape of gas when laying, repairing, or connecting gas mains."

4669. To William Henry Stevens, of Wordsley, near Stourbridge, in the county of Worcester, Manager of Works, for the invention of "an improved machine or apparatus for ornamenting articles of glass."