tion of "improvements in washing and wringing machines."

On his petition, recorded in the Office of the Commissioners on the 9th day of April, 1872.

1080. To John James Bodmer, of Hammersmith, in the county of Middlesex, for the invention of "improvements in the manufacture of iron and steel."

On his petition, recorded in the Office of the Commissioners on the 11th day of April, 1872.

1097. To Henry George Keyworth, of Cirencester, in the county of Gloucester, Bookseller and Printer, for the invention of "improvements in cases or receptacles for receiving and retaining letters, papers, or documents, in alphabetical or other order."

On his petition, recorded in the Office of the Commissioners on the 12th day of April, 1872.

1167. To James Campbell, of 4, Founder's-court, in the city of London, Civil Engineer, for the invention of "improvements in the mode of getting at the external bottom of ships and vessels for the purpose of cleaning, repairing, and overhauling them."

On his petition, recorded in the Office of the Commissioners on the 19th day of April, 1872.

1243. To Sidney William Rich, of Chenies-street, in the county of Middlesex, Analytical Chemist, for the invention of "improvements in the manufacture of sulphates."

On his petition, recorded in the Office of the Commissioners on the 25th day of April, 1872.

- 1247. To John Lewis, of Preston, in the county of Lancaster, Engineer and Patent Agent, for the invention of "improved studs for sharpening horse shoes for frosty or slippery roads, likewise applicable to boots and shoes."
- 1248. To John Witty, of Manchester, in the county of Lancaster, for the invention of "improvements in the manufacture of packing material such as is usually employed for lining cases and for packing goods."
- 1249. To Edmund Gardner, of No. 453, West Strand, Charing Cross, in the county of Middlesex, Lamp Manufacturer, for the invention of "improvements in lamps to enable them to burn hydro-carbon oils."
- 1251. To Moise Mayer and Adolphe Victor Deshayes, both of Paris, in the Republic of France, for the invention of "improvements in embroidering machines."
- 1253. To Joseph Oppenheimer, of Manchester, in the county of Lancaster, Merchant, for the invention of "improvements in recording votes, and in apparatus connected therewith."
- 1255. To William Edward Gedge, of No. 11, Wellington-street, Strand, in the county of Middlesex, Patent Agent, for the invention of "an improved draught apparatus for steam engines."—A communication to him from abroad by Anatole Chevallier, of No. 64, Faubourg St. Martin, Paris, France.
- 1257. And to William Robert Lake, of the firm of of Haseltine, Lake, & Co., Patent Agents, Southampton-buildings, London, for the invention of "improved processes of treating phosphatic rock and other phosphatic substances for the extraction of the phosphoric acid or soluble phosphates therefrom." — A communication to him from abroad by George Thompson Lewis, of Philadelphia, Pennsylvania, and Nathaniel A. Pratt, of Charleston, South Carolina, both in the United States of America.

On their several petitions recorded in the Office of the Commissioners on the 26th day of April, 1872.

- 1259. To Paul Prince, of Derby, in the county of Derby, "Civil Engineer," for the invention of self-acting regulator for the variations in the length of metallic wires employed in working signals on railways, &c., when caused by atmospheric temperature."
- 1260. To Benjamin Clark, of Bilston, in the county of Stafford, Hosier and Haberdasher, for the invention of "improvements in connecting cruchet needles or crochet hooks to their handles."
- 1261. To Samuel Chandler, senior, Samuel Chandler, junior, and Joseph Chandler, of Southwark, in the county of Surrey, for the invention of "improvements in apparatus for cleansing water closets."
- 1263. To Thomas Duncombe Eagles, of 23, Fenchurch-street, in the city of London Patent Agent, for the invention of "an improved method of warming or heating rooms, railway and other carriages, and which is also applicable to general domestic use."—A communication to him from abroad by Bartholomew Bergehausen, Joseph Philipps, and Louis Kiesling, all of Cologne, in the Empire of Germany.
- 1265. To Edward Alfred Cowper, of No. 6, Great George-street, Westminster, in the county of Middlesex, for the invention of "improvements in the process of converting wood and other fibrous materials into pulp, and in apparatus therefor."
- 1266. To John Henry Johnson, of 47, Lincoln'sinn-fields, in the county of Middlesex, Gentleman, for the invention of "improvements in apparatus for facilitating the examination and repairs of the submerged parts of ships or vessels."—A communication to him from abroad by John Inglis, of Hong Kong.
- 1267. To Harry John Smith, of Glasgow, in the county of Lanark, North Britain, Analytical Chemist, for the invention of "improvements in extracting metallic oxides, and in precipitating oxides from metallic solutions."
- 1269. To Robertson Clews, of Dundee, in the county of Forfar, North Britain, Manager to the firm of Messrs. Fairweather and Chalmers, of the same place, Manufacturers, for the invention of "improvements in weaving the end borders of rugs and mats."
- 1271. To Joseph Sigisbert Richard, of Paris, in the Republic of France, but at present of 35, Southampton-buildings, in the county of Middlesex, Electrical Engineer and Machinist, for the invention of "improvements applicable to warping or beaming machines, and to other machines in which excessive slackness, breaking, or exhaustion of a thread other than a weft thread necessitates the stopping of such machines, and also to cases where an expanding comb is required."
- 1273. To Robert Atkin, of Crawford-street, Portman-square, in the county of Middlesex, Master Mariner, for the invention of "improvements in the construction of ships and other floating vessels."
- 1275. And to John Garrett Tongue, of the firm of Tongue and Birkbeck, Patent Agents and Engineers, of 34, Southampton-buildings, Chancery-lane, in the county of Middlesex, for the invention of "improvements in the manufacture of cut pile, Brussels, or Wilton and tapestry carpets, and other pile fabrics."—A communication to him from abroad by George Crompton, of Worcester, Massachusetts, United States of America.
- On their several petitions, recorded in the Office

No. 23858.

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