

metal bars, such as rails, girders, or other bars of various sections."

4532. To Thomas Baxter East, of Longhall, Oxford, in the county of Oxford, for the invention of "improvements in the construction and arrangements of parts of atmospheric or aerating churns."—A communication to him from abroad by Thomas Simmons, of Hartford, Connecticut, United States of America.
4504. To Robert Mudge Marchant, of Kirby-street, Hatton Garden, in the county of Middlesex, Civil Engineer, for the invention of "improvements in pumps and condensers for motive power engines, and other purposes."
4506. To William Blackett Haigh, of Oldham, in the county of Lancaster, for the invention of "improvements in bench sawing machinery."
4508. To John Henry Johnson, of 47, Lincoln's-inn-fields, in the county of Middlesex, Gentleman, for the invention of "improvements in or applicable to armour plates."—A communication to him by the firm of Marrel Brothers, of Rive de Gier (Loire), in the Republic of France, Iron Masters.
4510. To Charles William Batten, Joseph Griffin, and Francisco Prudencio, all of Bristol, Manufacturers of Mineral Water, for the invention of "improvements in bottles for containing aerated liquids, and in the mode or means of stoppering or closing such bottles."
4512. To Robert Henry Ann, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "improvements in boxes for holding matches, pens, needles, pins, and other articles."
4514. To Frank Wirth, of the firm of Wirth and Company, Patent Agency, of Frankfort on the Maine, in the Empire of Germany, for the invention of "improvements in apparatus for drying bricks, cement, pottery, peat, and other materials."—A communication from Johann Matern, Doctor of Philosophy, a person resident of Königsberg, and Julius Matern, a person resident at Görtseid, both in the Empire of Germany.
4516. To Charles Denton Abel, of Southampton-buildings, in the county of Middlesex, for the invention of "improvements in the means of purifying sewage and other foul waters."—A communication to him from abroad by Felix Langlet, of Rheims, Marne, in the Republic of France.
4518. To Frederick Joseph Bird, of Kingsland, in the county of Middlesex, for the invention of "improved valve motion for reversing steam engines."—A communication to him from abroad by Hiram Stevens Maxim, of the city, county, and State of New York, United States of America.
4519. To William Greenhill, of Hampton Court, in the county of Middlesex, Clerk of Works, for the invention of "improvements in connecting service pipes with drains to prevent sewage gases entering buildings."
4522. And to Alexander Melville Clark, of 53, Chancery-lane, in the county of Middlesex, Patent Agent, for the invention of "improved feeding apparatus for nail making machines."—A communication to him from abroad by William Henry Field, of Launton, in the county of Bristol, State of Massachusetts, United States of America.

On their several petitions, recorded in the Office of the Commissioners on the 21st day of November, 1876.

4556. To George Symes, of Oxford-street, Stepney, in the county of Middlesex, Gas Engineer,

for the invention of "improvements in apparatus for manufacturing, purifying, and economizing gas, parts of which improvements are applicable for other purposes."

4532. To John Hamilton Braidwood, of Crewe, in the county of Chester, for the invention of "improvements in the manufacture of wheel tyres and other weldless rings of steel."
4538. To George Somerville Norris, of Baltimore, United States of America, at present of 123, Chancery-lane, in the county of Middlesex, for the invention of "improvements in machinery or apparatus for removing dust or dirt from carpets."
4539. To Edward Archer Wilde, of 15, Lad-broke-gardens, Notting Hill, in the county of Middlesex, for the invention of "improvements in obtaining aluminium and aluminium alloys."

4540. And to John Dewrance, of 176, Great Dover-street, Borough, in the county of Surrey, and James Mallinson, of Welwyn, in the county of Herts, for the invention of "improvements in cocks."

On their several petitions, recorded in the Office of the Commissioners on the 22nd day of November, 1876.

4542. To David Stewart, of the city and county of Aberdeen, North Britain, Master of Arts, for the invention of "improvements in the treatment of horns and hoofs, and in the means employed therefor."
4544. To Robert Motion, of Dundee, in the county of Forfar, North Britain, Engineer, for the invention of "improvements in machinery for winding yarns into cops or upon pirns."
4548. To Samuel Griffin, of Holloway, in the county of Middlesex, for the invention of "improvements in folding chair bedsteads."
4550. To Harwood Wakeman, of the city and State of New York, United States of America, for the invention of "improvement in flexible tubing."

4552. And to Edward Griffith Brewer, of Chancery-lane, in the county of Middlesex, for the invention of "improvements in centrifugal drying machines or extractors."—A communication to him from abroad by Messrs. Bouliet Brothers, and Charlon, of Lyons, France.

On their several petitions, recorded in the Office of the Commissioners on the 23rd day of November, 1876.

4554. To John Paterson, Engineer, 22, South Back of Canongate, Edinburgh, for the invention of "improvements in apparatus for turning and tightening keys in brass and other metal cocks."
4556. To Thomas William Harrison, of the Hollies, Northwood, Hanley, in the county of Stafford, for the invention of "improvements in stationery cases."
4558. To Frederick Barker, of 8, Upper-terrace, Islington, in the county of Middlesex, for the invention of "improvements in the wheels of carriages, cabs, tramway cars, carts, or similar vehicles for common roads."
4560. To Harry Watkins Brookman, of Burton-crescent, in the county of Middlesex, Commercial Traveller, for the invention of "improvements in convertible bedsteads."
4562. And to Robert Hadfield, of Southampton-buildings, Holborn, for the invention of "a new or improved hollow bossed self lubricating wheel for colliery corves, railway trucks, and other similar vehicles."

On their several petitions, recorded in the Office-