accompanying such petition was at the same time filed in the said Office.

Patent Law Amendment Act, 1852. Office of the Commissioners of Patents for 3439. Inventions.

OTICE is hereby given, that the petition of James Clifford, Morgan Henry Macaulay, and Francis William Waide, all of Bath Works, Rotherham, in the county of York, Stove Grate Manufacturers and Ironfounders, praying for letters patent for the invention of "improvements in water-waste preventers," was deposited and recorded in the Office of the Commissioners, on the 18th day of November, 1872, and a complete specification accompanying such petition was at the same time filed in the said Office.

Patent Law Amendment Act, 1852.

Office of the Commissioners of Patents for Inventions.

**TOTICE** is hereby given, that provisional protection has been allowed-

. 2604. To Edward Alexander Rippingille, of Holborn-hill, in the county of Middlesex, Lamp Manufacturer, for the invention of "improvements in lamps for burning mineral oils."

On- his petition, recorded in the Office of the Commissioners on the 2nd day of September, 1872.

2924. To Leander Wolcott Boynton, of the city and State of New York, United States of America, now of No. 8, Southampton-buildings, London, for the invention of "improvements in the manufacture of blocks or cubical or other shaped pieces of coal, sugar, clay, peat, manure, and other materials, and in machinery therefor. On his petition, recorded in the Office of the Commissioners on the 3rd day of October, 1872.

2990. To Richard Bagley, of Birmingham, in the county of Warwick, Machinist, for the invention of "improvements in holders or galleries for the shades or globes and chimneys of gas and other lamps, which improvements are also applicable to candle holders."

On his petition, recorded in the Office of the Commissioners on the 10th day of October, 1872.

3032. To James Hargreaves, of Widnes, in the county of Lancaster, Chemist, and Thomas Robinson, of the same place, Iron founder, for the invention of "improvements in treating sulphides, and in obtaining products therefrom."

3042. And to James Sims and Charles Holmes, both of 214, Great Portland-street, Regents Park, in the county of Middlesex, Gas Engineers, for the invention of "a new or improved process for heating conservatories, places of worship, public buildings, and other structures and places, and apparatus for such

On both their petitions, recorded in the Office of the Commissioners on the 15th day of October,

3058. To James Forster Shedlock, of 27, Harrowroad, Paddington-green, in the county of Middlesex, for the invention of "an improved rymer and counter bore or pin drill."-A communication to him from abroad by Alfred Shedlock, of New York, in the United States of America.

On his petition, recorded in the Office of the Commissioners on the 16th day of October, 1872.

3067. To William Morgan-Brown, of the firm of Brandon and Morgan-Brown, Engineers and I

Patent Agents, of 38, Southampton-buildings, London, and 13, Rue Gaillon, Paris, for the invention of "an improved composition for preserving wood, metal, stone, brick, paper, textile and felted fabrics, cordage, and cables." -A communication to him from abroad by Frédéric-Oscar Möller, of 22, Rue Lavoisier,

On his petition, recorded in the Office of the Commissioners on the 17th day of October, 1872.

3136. To Fairfax Oddy, of Bradford, in the county of York, Engineer, for the invention of "improved apparatus to be employed for utilizing exhaust steam for warming buildings and railway carriages, heating air, and other like uses."

On his petition, recorded in the Office of the Commissioners on the 23rd day of October, 1872.

3210. To John Henry Johnson, of 47, Lincoln'sinn-fields, in the county of Middlesex, Gentleman, for the invention of "improvements in umbrellas and parasols, and in apparatus or appliances for effecting the same."—A communication to him from abroad by Abram Herzberg and Isaac Herzberg, both of Philadelphia, Pennsylvania, United States of America.

3211. And to William Henry Gold, of No. 44, Knowle-road, Brixton, in the county of Surrey, for the invention of "a new and improved self-

supplying reservoir pen cap."

On both their petitions, recorded in the Office of the Commissioners on the 30th day of October, 1872.

3258. To Joseph Numa Gateuil, of Bordeaux, in the Republic of France, but temporarily residing at 37, Finsbury-square, in the county of Mid-dlesex, Architect, for the invention of "improved apparatus for effecting calculations."

On his petition, recorded in the Office of the Commissioners on the 2nd day of November, 1872.

3280. To Martyn John Roberts, of the city of Bath, Esquire, for the invention of "improvements in, or a new or improved material for, packing, stuffing boxes and pistons, and making pipe joints."

3284. And to Julien François Belleville, of Saint Denis (France), Manufacturer, for the invention of "improvements in steam boilers and furnaces, and in parts connected herewith."

On both their petitions, recorded in the Office of the Commissioners on the 5th day of November, 1872.

3286. To Thomas Rogers Horton, of Glasgow, in the county of Lanark, North Britain, Engineer, for the invention of "improvements in converters, moulds, and other apparatus to be used in the manufacture of Bessemer and other steel, some of which improvements are also applicable in other operations requiring lifting apparatus." On his petition, recorded in the Office of the Commissioners on the 6th day of November, 1872.

3299. To William Robert Lake, of the firm of Haseltine, Lake, & Co., Patent Agents, Southampton-buildings, London, for the invention of "improvements in electric torches for lighting gas."-A communication to him from abroad by William Washington Batchelder, of the city and State of New York, United States of America, Gentleman.

3300. To George Henry Carne Hedley, William Smith, and Tom Abercrombie Hedley, all of No. 19, Salisbury-street, Strand, London, for the invention of "improvements in the manu-