treating and purifying crude phosphoric acid, | and in the production of soluble phosphates also for the manufacture of phosphorous and the treatment of certain residues resulting therefrom and phosphate of alumina."—A communication to him from abroad by Herri Storck, Edouard Hentsch, Auguste Hentsch, Andre Lutscher, and Frederic Grininger, constituting the firm of Storck and Company, residing at Asnières, near Paris, France.

On his petition recorded in the Office of the Commissioners, on the 28th day of November,

3609. To Thomas Richardson, John William Richardson, and Adam Spencer, all of West Hartlepool, in the county of Durham, Iron Masters, for the invention of "improvements in refining or puddling iron and steel.'

3612. And to Sebens Culver Maine, of Boston, in the Commonwealth of Massachusetts, one of the United States of America, for the invention of "an improved ventilator for railway cars, dwelling - houses, and other permanent and movable structures."

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

3618. To John Henry Boddy and John Robert Pickering, both of Leeds, in the county of York, for the invention of "improvements in the means or apparatus employed for propelling ships or other vessels afloat."

On their petition, recorded in the Office of the Commissioners on the 2nd day of December,

1872.

- 3632. To William John Cunningham, of New Oxford-street, in the county of Middlesex, for the invention of "improvements in apparatus for printing or endorsing letters, figures, or devices upon wood, paper, stone, or other material."
- 3648. And to Alfred Thornton Crawshaw and William Kenward, both of Hayward's Heath, in the county of Sussex, for the invention of "an improved trap for birds and animals."

On both their petitions, recorded in the Office of the Commissioners on the 3rd day of December, 1872.

- 3649. To Oscar Gilsow, 65, Vauxhall Bridgeroad, Pimlico, London, S.W., Middlesex, for the invention of "an improved sofa or box ottoman.
- 3654. And to Walter Bentley Woodbury, of Greenhithe, in the county of Kent, for the invention of "improvements in photo-mechanical printing, and in apparatus and appliances therefor."

On both their petitions, recorded in the Office of the Commissioners on the 4th day of December, 1872.

3674. To Robert Maynard, of Whittlesford, in the county of Cambridge, Engineer, for the invention of "improvements in machines for elevating straw, hay, and corn."

On his petition, recorded in the Office of the Commissioners on the 5th day of December,

1872.

No. 23932.

3694. To George Spencer, Civil Engineer, of 77, Cannon-street, London, and Uriah Scott, Engineer, of 1, North-street, Fitzroy-square, London, for the invention of "improvements in parts of railway and other carriages."

3704. And to William Tighe Hamilton, of Rathmines, Dublin, Ireland, Esquire, A.M., for the invention of "improved mechanism or apparatus for producing and transmitting reciprocating motions.'

On both their petitions, recorded in the Office of the Commissioners on the 6th day of De-

cember, 1872.

3708. To John Henry Weston, of Lansdownecrescent, Lausdowne-road, South Lambeth, in the county of Surrey, Gas Engineer, for the invention of "an improvement in the con-

struction of vent pegs.

3712. And to William Edward Gedge, of No. 11, Wellington-street, Strand, in the county of Middlesex, Patent Agent, for the invention of "a new or improved kind of waterproof and anti-radiating textile-felt-fabric."-A communication to him from abroad by Charles Gaudefroy, fils, of Nos. 7 and 9, Rue St. Joseph, Paris, France, Merchant.

On both their petitions, recorded in the office of the Commissioners on the 7th day of December,

3730. To William Newzam Nicholson, of the Trent Ironworks, Newark, Agricultural Engineer, for the invention of "improvements in horse rakes, part of which invention may be applied to other agricultural machines.'

3733. And to James Stapleton, of Sidbury, nr. Sidmouth, county of Devon, for the invention of "the improvement of platforms of turrets on

ships of war."

On both their petitions, recorded in the Office of the Commissioners on the 9th day of December,

- 3740. To Joseph Sloper, of Walbrook House, Walbrook, in the city of London, Civil Engineer, for the invention of "improvements in tools or apparatus for producing perforations (grouped to represent marks, letters, figures, or devices upon or) through paper and other materials.
- 3741. And to William Alexander Lyttle, of the Grove, Hammersmith, in the county of Middlesex, Engineer, for the invention of "improvements in candles."

On both their petitions recorded in the Office of the Commissioners on the 10th day of December,

- 3766. To William Edward Gedge, of No. 11, Wellington-street, Strand, in the county of Middlesex, Patent Agent, for the invention of "a new or improved motive power engine actuated by soluble gasses."—A communication to him from abroad by Georges Thomas de Kercado, of No. 64, Faubourg St. Martin, Paris, France.
- 3768. To Michael Heinrich Kernaul, of Berlin, in the Kingdom of Prussia, Mechanical Engineer, for the invention of "improvements in sewing machines."
- 3772. To Thomas Frederick Henley, of 56, Saint George's-square, Pimlico, in the county of Middlesex, Civil Engineer, for the invention of "improved mode and means of warming beds and couches."
- 3774. And to John Bullough, Machinist, and James Leachman, Moulder, both of Accrington, in the county of Lancaster, for the invention of " improvements in machinery for preparing and spinning cotton and other fibres.

On their several petitions, recorded in the Office of the Commissioners on the 12th day of Decem-

ber, 1872.