recorded in the Office of the Commissioners on the 30th day of June, 1873, 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 2270. Inventions.

N OTICE is hereby given, that the petition of George Haseltine, of the "International Patent Office," Southampton - buildings, London, Doctor of Laws, praying for letters patent for the invention of "improvements in wateringcolumns for railway water-tanks,"—a communication to him from abroad by John Newton Poage, of Cincinnati, Ohio, United States of America, Gentleman,—was deposited and recorded in the Office of the Commissioners on the 30th day of June, 1873, 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 2281. Inventions.

Inventions. N OTICE is hereby given, that the petition of Luke Chapman, of Collinsville, Connecticut, United States of America, Machinist, praying for letters patent for the invention of "improvements in rotary pumps," was deposited and recorded in the Office of the Commissioners on the 1st day of July, 1873, 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.

NOTICE is hereby given, that provisional protection has been allowed—

- 1920. To Michael Burke, of Liverpool, in the county of Lancaster, for the invention of "improvements in and applicable to ships-davits."
- 1922. And to William Robert Lake, of the firm of Haseltine, Lake, & Co., Patent Agents, Southampton-buildings, London, for the invention of "an improved method of and apparatus for generating vapour from bi-sulphide of carbon."—A communication to him from abroad by William Wells, of Salem, Massachusetts, United States of America.

On their several petitions, both recorded in the Office of the Commissioners on the 28th day of May, 1873.

1935. To Edward Humphries, of Pershore, in the county of Worcester, Machinist, and Matthew Ridley, of the same place, Machinist, for the invention of "improvements in the construction and arrangement of 'strawshakers,' to be used in connection with thrashing machines."

On their petition, recorded in the Office of the Commissioners on the 29th day of May, 1873.

1966. To Joseph Lamb, of the city of Manchester, in the county of Lancaster, Mill Owner, for the invention of "improvements in apparatus or arrangements for feeding, heating, and circulating water in steam boilers, and for burning liquid and gaseous fuels in combination with solid fuels in steam boiler and other furnaces, and thereby economising fuel and preventing smoke."

On his petition, recorded in the Office of the Commissioners on the 31st day of May, 1873.

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No. 23995.

2093. To Samuel James Ditchfield, of Seaham Harbour, in the county of Durham, Coal Fitter, George Watson, of the same place, Oil Manufacturer, and John Childs, of Seaham Harbour aforesaid, Engineer, for the invention of "improvements in the construction of heating apparatus, and in the application of hydro carbon or other volatile oils or spirits for heating purposes and generating steam."

On their petition, recorded in the Office of the Commissioners on the 13th day of June, 1873.

2111. To William Nisbet, of Newgate-street, in the city of London, for the invention of "improvements in, or connected with, the manufacture of India-rubber waterproof fabrics, applicable to sponge bags and other articles."

On his petition, recorded in the Office of the Commissioners on the 14th day of June, 1873.

2115. To Joseph Rodney Croskey, F.S.A., F.R.G.S., of No. 43, Portsdown-road, Maida Hill, London, for the invention of "improvements in pavements."

On his petition, recorded in the Office of the Commissioners on the 16th day of June, 1873.

- 2126. To Benjamin Joseph Barnard Mills, of the firm of Harris and Mills, of 35, Southamptonbuildings, in the county of Middlesex, Patent Agent, for the invention of "a new or improved vulcanizable waterproof gum and process for producing the same."—A communication to him from abroad by Daniel Martin Lamb, of Strathroy, in the county of Middlesex, Province of Ontario, and Dominion of Canada, Machinist.
- 2132. And to Robert Arber Ray, of Brigg, in the county of Lincoln, for the invention of "an improved composition for removing and preventing scale or incrustation in steam boilers."

On their several petitions, both recorded in the Office of the Commissioners on the 17th day of June, 1873.

2138. To John Whitfield Thompson, of Prestwich, in the county of Lancaster, Salesman, for the invention of "improvements in the manufacture of lining-bands for hats and caps, and of material for the use of upholsterers, and for other purposes."

On his petition, recorded in the Office of the Commissioners on the 18th day of June, 1873.

- 2149. To Edward Easton, of Southwark-street, in the borough of Southwark, Engineer, William Pole, of Storey's Gate, in the city of Westminster, Engineer, and John Whichcord, of Walbrook, in the city of London, Architect, for the invention of "improved means for opening, closing, and securing the doors of strong rooms and safes."
- 2151. To Alexander Parkes, of Gravelly-hill, near Birmingham, in the county of Warwick, for the invention of "improvements in the manufacture of metallic alloys, and in apparatus to be used for this purpose."
- 2153. To William Mort, of 155, Fenchurch-street, in the city of London, for the invention of "improvements in cooling and freezing machines."—A communication to him from abroad by Eugene Dominique Nicolle and Thomas Sutcliffe Mort, both of Sydney, in the Colony of New South Wales.
- 2155. And to Henry Joseph West, of the firm of Siebe and West, of Mason street, Lambeth, in the county of Surrey, Engineer, for the invention of "an instrument or apparatus for removing air from the interiors of casks or other vessels, and filling them up with beer or