

for the invention of "improvements in the method of lettering, figuring, and ornamenting the surface of enamel used for dials and other purposes."

As set forth in his petition, recorded in the said office on the 5th day of January, 1853.

80. And James Fletcher, of Facit, near Rochdale, in the county of Lancaster, Manager, has given the like notice in respect of the invention of "certain improvements in machinery applicable to spinning, doubling, and winding of cotton, wool, flax, silk, and other fibrous materials."

As set forth in his petition, recorded in the said office on the 12th day of January, 1853.

105. And Edward Tasker, of South Hackney, in the county of Middlesex, has given the like notice in respect of an invention for "the purposes of writing and drawing, called the writing and drawing tube."

As set forth in his petition, recorded in the said office on the 15th day of January, 1853.

And notice is hereby further given, that all persons having an interest in opposing any one of such applications, are at liberty to leave particulars in writing of their objections to such application, at the said Office of the Commissioners, within twenty-one days after the date of the Gazette in which this notice is issued.

Patent Law Amendment Act, 1852.

Office of the Commissioners of Patents for Inventions.

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

905. To Thomas Haigh, of Skircoat, in the parish of Halifax, in the West Riding of the county of York, for an invention for "the cleansing of pans and other culinary utensils."

On his petition, recorded in the Office of the Commissioners on the 14th day of April, 1853.

943. To Frederick Henry Smith, of 264, Borough of Southwark, for the invention of "improvements in apparatus for cleansing the interior of tubular boilers and other hollow articles."

On his petition, recorded in the Office of the Commissioners on the 19th day of April, 1853.

959. To Thomas Dunn, of Windsor Bridge Iron Works, Pendleton, near Manchester, in the county of Lancaster, Engineer, for the invention of "certain improvements in and applicable to boilers or apparatus for generating steam, and in apparatus connected therewith."

On his petition, recorded in the Office of the Commissioners on the 21st day of April, 1853.

981. To Henry Houldsworth, of the city of Manchester, in the county of Lancaster, Cotton Spinner, for the invention of "improvements in machinery used for combing cotton, silk, silk waste, flax, tow, wool, and other fibrous substances."

On his petition, recorded in the Office of the Commissioners on the 23rd day of April, 1853.

1029. To John Hetherington, of the city of Manchester, in the county of Lancaster, Machine Maker, for the invention of "certain improvements in machinery for combing cotton, wool, silk waste, flax, tow, and other fibrous substances."

On his petition, recorded in the Office of the Commissioners on the 28th day of April, 1853.

1113. To Thomas Murray, of Marygold, in the county of Berwick, Scotland, Farmer, for the invention of "a new machine or implement for

hoeing, cutting, and otherwise operating upon turnips or other agricultural produce."

On his petition, recorded in the Office of the Commissioners on the 6th day of May, 1853.

1155. To Jacob Brett, of Hanover-square, in the county of Middlesex, Gentleman, for the invention of "improvements in electric telegraph apparatus."—Partly a communication.

1157. To Samuel Cunliffe Lister, of Manningham, in the county of York, Machine Wool Comber, for the invention of "improvements in treating and preparing before being spun, wool, cotton, and other fibrous materials."

1159. To Henry Potter Burt, of No. 2, Charlotte-row, in the city of London, Civil Engineer, for the invention of "improvements in portable houses."

1161. To John Mottram, of the firm of Anne Robinson and Company, of Liverpool, in the county of Lancaster, Ironmongers, for the invention of "improvements in machinery for washing ores, and separating metals from earth or other compounds."

1163. To John Bottomley, of Bradford, in the county of York, Manufacturer, for the invention of "improvements in the manufacture of textile fabrics."

1165. To Alfred Bird, of 15, Worcester-street, Birmingham, Experimental Chemist, for the invention of "improvements in the means of communicating between guards or persons and the engine-driver of a railway train."

1167. To Edmund Whitaker, of Rochdale, Engineer, and James Walmsley the younger, of Smithy Bridge, near Rochdale, Earthenware Manufacturer, for the invention of "improvements in the manufacture of pipes, tiles, bricks, and slabs from clay."

1169. To George Bell, of Powell-street, Goswell-street, in the county of Middlesex, Gentleman, for the invention of "improvements in obtaining liquid cement and pigments or paints."

1170. To Abraham Matthews, of Denby-street, Pimlico, in the county of Middlesex, Civil Engineer, for the invention of "improvements in disengaging boats from ships or other vessels."

1171. And to William Bull, of Battersea, in the county of Surrey, Civil Engineer, for the invention of "improvements in direct acting steam engines with fixed cylinders."

On their several petitions, recorded in the Office of the Commissioners on the 11th day of May, 1853.

1173. To James Parkes, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "a new or improved stop-cock for regulating the flow of gases."

1175. To Joseph Denton, of Prestwich, in the county of Lancaster, Gentleman, for the invention of "improvements in machinery or apparatus for manufacturing looped terry or other similar fabrics."

1177. And to Julian Bernard, of Guilford-street, Russell-square, in the county of Middlesex, Gentleman, and Edward Taylor Bellhouse, of the Eagle Foundry, Manchester, in the county of Lancaster, Engineer, for the invention of "improvements in pressing and in extracting fluids."

On their several petitions, recorded in the Office of the Commissioners on the 12th day of May, 1853.

1178. To Charles Pooley, of Manchester, in the county of Lancaster, Cotton Spinner, for the invention of "an improved mode of feeding machines for opening, cleaning, blowing, and scutching cotton, and other fibrous substances."