

obtaining and applying light and heat by electricity."

As set forth in their respective petitions, all recorded in the said office on the 19th day of May, 1862.

1517. And Marc Antoine François Mennons, of the British and Foreign Patent Offices, 24, Rue du Mont Thabor, Paris, in the Empire of France, has given the like notice in respect of the invention of "improvements in certain descriptions of breech loading firearms."—A communication from Alem Rousseau, a person resident at St. Etienne (Loire), in France."

1523. And James Taylor, of No. 13, Fenchurch-buildings, Fenchurch-street, in the city of London, in the county of Middlesex, has given the like notice in respect of the invention of "improvements in abstracting heat from liquids and aeriform fluids, and in apparatus employed therein, and for other purposes."

As set forth in their respective petitions, both recorded in the said office on the 20th day of May, 1862.

1530. And John Hopkinson, Pianoforte Manufacturer, 235, Regent-street, London, has given the like notice in respect of the invention of "improvements in pianofortes, and in the hammer rails of pianofortes."

1535. And Alfred Giles, of 9, Adelphi-terrace, Strand, in the county of Middlesex, C.E., has given the like notice in respect of the invention of "improvements in constructing floating breakwaters."

As set forth in their respective petitions, both recorded in the said office on the 21st day of May, 1862.

1539. And John Oxley, of the King's Cross Wheel Works, Old St. Pancras-road, in the parish of St. Pancras, N.W., Carriage-builder, has given the like notice in respect of the invention of "improvements in making wheels, and in the machinery to be employed therein."

1540. And Charles William Siemens, of No. 3, Great George-street, Westminster, in the county of Middlesex, has given the like notice in respect of the invention of "improvements in electric telegraph apparatus."—The result partly of a communication made to him from abroad by Dr. Werner Siemens, of Berlin, in the Kingdom of Prussia, and partly of an invention and discovery made by himself.

1542. And Eugene de la Bastida, of 43, Hart-street, Bloomsbury-square, W.C., London, in the county of Middlesex, England, has given the like notice in respect of the invention of "a new process for the production of designs in relieve, and in deepening on sheets of india-rubber of any length whatever."—A communication from abroad to him by Messrs. Albert Cohen and Charles Vaillant, of Harbourg-on-Elbe, Hanover, Manufacturers.

1543. And George Crawford, of Beaumont-street, Portland-place, in the county of Middlesex, Pianoforte Manufacturer, has given the like notice in respect of the invention of "improvements in musical instruments."

1544. And Joseph Needham, of Piccadilly, in the county of Middlesex, Gunmaker, has given the like notice in respect of the invention of "improvements in breech loading fire-arms and in cartridges for such fire-arms."

1550. And Henry Cook, of Manchester, in the county of Lancaster, Gentleman, has given the like notice in respect of the invention of "im-

provements in electric batteries."—A communication to him from abroad by Professor Jean Minotto, of Turin, in the Kingdom of Italy.

1551. And William Roberts and Thomas Greenacre, of Millwall, in the county of Middlesex, has given the like notice in respect of the invention of "improvements in cocks or valves for steam or other fluids."

As set forth in their respective petitions, all recorded in the said office on the 22nd day of May, 1862.

1554. And Peter McGregor, of the city of Manchester, Machine Maker, has given the like notice in respect of the invention of "certain improvements in machinery for spinning and doubling cotton and other fibrous substances."

1557. And William Edward Wiley, of Graham-street, Birmingham, in the county of Warwick, Gold Pen and Pencil Case Manufacturer, has given the like notice in respect of the invention of "improvements in the manufacture of certain kinds of pen holders, which improvements may also be applied to pencil cases and holders for crayons and other solid writing or marking materials."

1560. And Eugène Mouline, of Vals, in the Department of Ardèche, in the Empire of France, Silk Merchant, has given the like notice in respect of the invention of "improvements in apparatus used in weaving."

1562. And Alexander Samuelson, of 28, Cornhill, in the city of London, Engineer and Iron Ship Builder, has given the like notice in respect of the invention of "improvements in the working of hydrostatic presses and in apparatus employed therein."

1563. And William Clark, of 53, Chancery-lane, in the county of Middlesex, Engineer and Patent Agent, has given the like notice in respect of the invention of "a new manufacture of socks and stockings."—A communication to him from abroad by Mr. Jean Jacques Maurer, of 29, Boulevard Saint Martin, Paris, Professor.

As set forth in his petition, recorded in the said office on the 23rd day of May, 1862.

1565. And John Harrison, of the firm of Messieurs Harrison and Sons, of Blackburn, in the county of Lancaster Machine Makers, and Robert Parkinson, of Blackburn aforesaid, Tinsplate Worker, have given the like notice in respect of the invention of "improvements in the manufacture of rollers for preparing, spinning, doubling, sizing, winding, warping, and weaving."

1566. And William Harrison and John Harrison, both of the firm of Messieurs J. Harrison and Sons, of Blackburn, in the county of Lancaster, Machine Makers, and John Oddie and William Parkinson, Foremen, in the employ of the above J. Harrison and Sons, have given the like notice in respect of the invention of "certain improvements in machinery for winding, sizing, and weaving."

1569. And Mark Walls and John Crompton, of Bolton, in the county of Lancaster, Engine Drivers, have given the like notice in respect of the invention of "improvements in railway signals."

1570. And Jacob Taylor, of Oldham, in the county of Lancaster, Cotton Spinner, has given the like notice in respect of the invention of "improvements in machinery or apparatus for preparing cotton or other fibrous materials to be spun."