45. To Alexander Angus Croll, of Coleman-street, in the city of London, Civil Engineer, for the invention of "improvements in means or apparatus for the distillation of ammoniacal liquors, which improvements are also applicable in the distillation of other liquids, and in the concentration of soluble salts.'

46. To Thomas Leeming and Richard Ray, both of Manchester, in the county of Lancaster, Lithographers, and Francis Gascoigne Lynde, of Kirkby Stephen, in the county of Westmoreland, Civil Engineer, for the invention of "improvements in machinery for bronzing, coloring, or otherwise ornamenting paper and other

materials."

47. To Peter Burton, of Kensington, in the county of Middlesex, for the invention of "improved means and apparatus for opening, closing, and securing the doorways of railway trains.

49. To Thomas Aitken, of Manchester, in the county of Lancaster, for the invention of "improvements in printing calico and other textile

fabrics."

50. To Peter Spence, of Newton Heath, Manchester, in the county of Lancaster, Manufacturing Chemist, for the invention of "improvements in obtaining valuable substances derivable from residual liquors produced in the manufacture of alum from natural phosphates of alumina."

51. To Edward John Cowling Welch, of Liverpool, in the county of Lancaster, Engineer, for the invention of "an improved locked safety valve arrangement for marine and other pur-

52. To William Alexander Lyttle, of The Grove, Hammersmith, in the county of Middlesex, Engineer, for the invention of "improvements in roofs, partly applicable also to floors and pavements.

53. To Henry Kesterton, of Park - road, Mosely, near Birmingham, for the invention of "improvements in the manufacture of rolled tubes,

bars, and plates."

54. To Henry Kesterton, of Park-road, Mosely, near Birmingham, for the invention of "improvements in the construction of metal tele-

graph posts."

56. And to Edward Umbers, of Weston Hall, near Leamington Spa, in the county of Warwick, Farmer, and Arthur George Fenn, of Beccles, in the county of Suffolk, Engineer, and William Thomas Whiteman, of No. 35, Maitland Parkroad, in the county of Middlesex, Gentleman, for the invention of "improvements in and apparatus for signalling on railways.'

On their several petitions, recorded in the Office of the Commissioners on the 4th day of January,

1873.

57. To John Uther Burt, of Willow-row, Goswellroad, in the county of Middlesex, Coach Maker, for the invention of "improvements in the mechanical arrangements for opening and closing carriage heads."
58. To Andrew Walker the younger, of Hartwood,

in the county of Mid Lothian, North Britain, for the invention of "improvements in steam

boilers."

- 59. To William Foulis, of Glasgow, in the county of Lanark, North Britain, Civil Engineer, for the invention of "improvements in charging and drawing retorts, and in the machinery or apparatus employed therefor."
- 60. To George Turner, of Handsworth, in the county of Stafford, Commercial Traveller, for the invention of "improvements in venetian blinds."

61. To Cornelius Bremerkamp, of 706, Old Kentroad, in the county of Surrey, for the invention of "an improved method of removing by steam the bark from osier, willow, or any kind of rods, and also of improving their colour, and in the apparatus for effecting the same."

62. To Frederick Garon, of Southend, in the county of Essex, Builder, for the invention of "an improved stove for heating conservatories,

baths, and similar purposes."

63. To Edward Thomas Hughes, of the firm of Hughes and Son, Patent Agents, 123, Chancery-lane, London, for the invention of "an improved system and arrangements for towing canal boats."—A communication to him from abroad by Floris Van Loo Wauters, of Brussels, in the Kingdom of Belgium, Gentle-

- 64. To Aaron White Cook Williams, of Paris, France, now of No. 8, Southampton-buildings, London, Merchant and Manufacturer, for the invention of "an improved apparatus for extracting nails."—A communication to him from abroad, by George J. Capewell, of Cheshire, Connecticut, United States of Ame-
- 65. And to John Fletcher Wiles, of Sun-court, Cornhill, in the city of London, for the invention of "improvements in means or apparatus for securing the doors of railway carriages whilst a train is in motion."

On their several petitions, recorded in the Office of the Commissioners on the 6th day of January,

68. To John Argall, of Adderbury, in the county of Oxford, Mining Engineer, for the invention of "improvements in the manufacture of oil paints.

69. To William Anyon, Yarn Agent, of No. 82, Waterloo-road, Manchester, for the invention of "improvements in construction and fixing of fire-grates for domestic and heating purposes

in dwelling houses."

71. To James Law and Samuel Law, of the firm of Samuel Law and Sons, of Cleckheaton, in the county of York, Card Manufacturers, for the invention of "improvements in cards for carding woollen, cotton, silk, and other fibres, and in the machinery or apparatus to be em-ployed in the manufacture of the wire for such cards."

72. To Henry Carmichael, of Leeds, in the county of York, Bleacher, for the invention of "an improved process and apparatus for bleaching, dyeing, and washing linen cotton and other yarns

and fabrics."

73. To John William Lamb, Manufacturer, and Samuel Lowe, Machinist, both of Nottingham, in the county of Nottingham, for the invention of "improvements in apparatus for transferring knitted fabrics to circular knitting machinery."

74. To Charles Henry Adames, of Birmingham, in the county of Warwick, Manufacturer, for the invention of "an improvement or improvements in the manufacture of tea kettles.

75. To Hiram Codd, of Grove-lane, Camberwell, in the county of Surrey, for the invention of "improvements in the manufacture of glass" bottles and in apparatus employed therein.

76. And to William Wilson, of Newcastle-upon-Tyne, Hat Manufacturer, for the invention of "improvements in apparatus for the manufacture of hats."—A communication to him from abroad by Rudolph Eickemeyer, of Yonkers, in the United States of America.

On their several petitions, recorded in the Office