H.-3.

436. (L.P.) 3rd April, 1880. RICHARD KNUCKEY, Mechanical Engineer, of Cuba Street, Wellington, New Zealand.—An invention for washing personal and household clothes, called the "Cornish Washing Machine."

 $\mathbf{2}$

(L.P.) 16th April, 1880. James Seed, of Rangiora, County of Ashley, New Zealand, Flaxdresser and Rope and Twine Manufacturer .-- An invention for preparing twine or yarn made

from *Phormium tenax*, and used in reaper and binder machines.

438. (L.R.) 26th April, 1880. WILLIAM DENT PRIESTMAN and SAMUEL PRIESTMAN, both of Kingston-upon-Hull, in the County of York, Engineers.—Improvements in the method of working self-acting grapple buckets and forks.

439. (L.R.) 26th April, 1880. ROBERT GRAY FORD, of Union Street, Brighton, Victoria, Engineer.—

- Improvements in boilers for domestic and other purposes.

 440. (L.R.) 28th April, 1880. WILLIAM McIntire Cranston, of No. 36, Worship Street, Finsbury, County of Middlesex.—Improvements in apparatus for automatically binding cut crops into sheaves.
- 441. (L.R.) 28th April, 1880. Samuel Burston, of Flinders Street East, Melbourne, Victoria, Maltster.—Improvements in and relating to kilns for drying malt, grain, and other materials.
- 442. (L.R.) 4th May, 1880. Thomas Alva Edison, of Menlo Park, New Jersey, United States of America, Electrician.—Improvements in electric lamps, and in the method of manufacturing same.
- 443. (L.R.) 5th May, 1880. GOTTLIEB WILHELM DAIMBER, of the Gas Motoren Fabrik, Deutz, at
- Deutz-on-the-Rhine, Germany, Engineer.—Improvements in gas motor engines.

 444. (L.R.) 5th May, 1880. David Johnson, of Wrexham, Wales, Great Britain, Manufacturing and Analytical Chemist.—Improvements in the manufacture of aërated and other beverages for restorative and medicinal purposes.

445. (L.R.) 5th May, 1880. JOHN WARD GIRDLESTONE, of Alderley Lodge, Belvidere, Kent, England, Civil Engineer.—Improvements in dry closets, commodes, and urinals.

446. (L.R.) 5th May, 1880. Lewis Hermann, of Dresden, Germany.—Improvements in floors for malt-kilns.

447. (L.P.) 18th May, 1880. Joseph Piper, of Christchurch, New Zealand, Tinsmith.—An improve-

ment in packing-tins.

- (L.P.) 8th June, 1880. EDWARD THOMAS O'CONNELL, of Dunedin, Otago, and SAMUEL BARMING-HAM and THOMAS McCormack, of Dunedin, Ironfounders, trading as "Barmingham and Co."— Improvements in cooking-ranges, combined with fire-grate, oven, and boiler, the whole to be called 448. (L.P.) 8th June, 1880. and to be known as "The Zealandia."
- 449. (L.R.) 11th June, 1880. Thomas Denny and William Roberts, of Bathurst, New South Wales, Engineers.—An invention for grinding quartz and other tailings, and amalgamating the gold extracted therefrom, to be called "Denny and Roberts's Grinder and Amalgamator."

 450. (L.R.) 11th June, 1880. Henry Yarwood Attrill and William Farmer, of New York,

United States of America, Gas Engineers.—Improvements in the manufacture of gas for heating

and illuminating purposes, and in the means and apparatus connected therewith.

451. (L.R.) 11th June, 1880. Walter Holland, of the Vulcan Iron Works, Worcester, England, Engineer.—Improvements in machinery or apparatus for working and interlocking points and signals on railways.

- 452. (L.R.) 11th June, 1880. Thomas Alva Edison, of Menlo Park, New Jersey, United States of America, Electrician.—Improvements in electric lamps, and in the method of manufacturing the same.
- 453. 14th June, 1880. George Simmons, Sen., of Kumara, Westland.—Improvements in the application of material more suitably adapted for manufacturing hydraulic hose, used by gold-miners and
- others. (Not proceeded with.)
 454. (L.R.) 17th June, 1880. William Humble and Ward Nicholson, both of the Vulcan Foundry, Geelong, Victoria, Ironfounders.—Improvements in binding apparatus for attachment to reaping-machines.
- 455. (L.P) 23rd June, 1880. Joseph Marie Fieurgant, of Dunedin, New Zealand, Stonemason.— A gold and sand extractor.
- 456. (L.P.) 29th June, 1880. John Evans, of Kew, Southland, New Zealand, Builder.—An invention for sawing wood or other materials, whereby labour is saved, to be called "The Kew Double Cross-cut.
- (L.R.) 5th July, 1880. Peter Hevner, of Philadelphia, Pennsylvania, United States of America. -Improvements in railway systems.
- 458. (L.P.) 14th July, 1880. Andrew Smith Hallidie, of Auckland, New Zealand, and of San
- Francisco, California, United States of America, Engineer.—Improvements in wire tramways.
 459. (L.P.) 14th July, 1880. Andrew Smith Hallidie, of Auckland, New Zealand, and of San Francisco, California, United States of America, Engineer.—Improvements in propelling, hauling, and operating cars on tracks, and propelling other vehicles and boats, and in the machinery and apparatus connected therewith. (Not granted, see No. 491.)
- 460. (L.P.) 19th July, 1880. John Puschel and Charles Puschel, of Avonside, Canterbury, Tanners, and Henry Jauncy, of Christchurch, Gentleman.—The manufacture of pulp suitable for making papier-maché felt and other articles from the fibres of the Phormium tenax or New Zealand flax. (Not proceeded with.)
- 461. (L.R.) 16th July, 1880. Thomas Leavitt, of Everett, Massachusetts, United States of America.

 Machinist.—Improvements in machinery for post-marking, cancelling, or obliterating letters, postcards, and other articles.
- 462. (L.R.) 16th July, 1880. OLE O. STORLE and JOHN G. FLINT, Jun., of the City of Milwaukee. State of Wisconsin, United States.—Improvements in knot tiers for grain-binders.
- 463. (L.P.) 21st July, 1880. ROBERT REID and JAMES GRAY, of Dunedin, New Zealand, Engineers, trading under the style or firm of "Reid and Gray."—An invention for making sand moulds for iron, brass, and other castings.