1883.

NEW ZEALAND.

LETTERS PATENT AND LETTERS OF REGISTRATION

APPLIED FOR DURING 1882 (LIST OF.)

Presented to both Houses of the General Assembly by Command of His Excellency.

- 576. (L.P.) 4th January. Donald Donald, of Solway, near Masterton, New Zealand, Settler .- A wool-press.
- 577. (L.R.) 4th January. Thomas Alva Edison, of Menlo Park, New Jersey, United States of America, Electrician.—Improvements in electric lights, and fittings and fixtures therefor.
- 578. (L.R.) 4th January. Thomas Alva Edison, of Menlo Park, New Jersey, United States of America, Electrician.—Improvements in electric arc lights.
- THOMAS ALVA EDISON, of Menlo Park, New Jersey, United States of 579. (L.R.) 4th January. America, Electrician.—Improvements in magneto- or dynamo-electric machines or electric engines.
- 580. (L.R.) 4th January. Thomas Alva Edison, of Medlo Park, New Jersey, United States of America, Electrician.—Improvements in magneto- and dynamo-electric machines or motors, and
- means and method for controlling their generative force.

 581. (L.R.) 5th January. Thomas Alva Edison, of Menlo Park, New Jersey, United States of America, Electrician.—Improvements in electric lamps and the manufacture thereof, and in systems therefor.
- 582. (L.P.) 5th January. James Logan Wilson, of Ryal Bush, Invercargill, New Zealand, Settler.— Logan Wilson's Colonial Sheep-dipping Composition. (Not proceeded with.)
 583. (L.P.) 9th January. James Lees, of Oamaru, Otago, New Zealand, Gentleman.—Improvements
- in barbed fencing wire and in the barbs, and for a machine for the manufacture of the same. 584. (L.R.) 9th January. Frederick Charles Rowan, of No. 29, Queen Street, Melbourne,
- Victoria, Gentleman.—An improved method of constructing tramways and light lines of railway.
- 585. (L.P.) 17th January. James Linton, of Palmerston North, New Zealand, Commission Agent.
- An invention for extracting roots and stumps of trees, to be called "The Root Extractor." L.P.) 21st January. Alexander Binnie, Sen., of Dunedin, Otago.—Invention for the 586. (L.P.) 21st January.
- illuminating gas, and the gas-producing machine. 587. (L.R.) 21st January. Joseph Wilson Swan, JOSEPH WILSON SWAN, of Newcastle-on-Tyne, England.—Improvements in electric lamps.
- ALMERIN HUBBELL LIGHTHALL, of San Francisco, California, United 588. (L.R) 21st January. States of America.—A combined heading and threshing machine for harvesting and threshing grain.
- 589. (L.R.) 27th January. ALEXANDER WILLIAM GILLMAN and SAMUEL SPENCER, both of the Castle Brewery, St. George's Road, Southwark, Surrey, England. Improvement in the treatment of grain or cereals to be used in brewing, distilling, and vinegar-making, and in means or apparatus employed therein.
- 590. (L.R.) 27th January. John Naylor and Robert Thornton, both of Stawell, Victoria, Engineers.—Improvements in rock-drills.
- 591. (L.R.) 27th January. Henry William Sharp, of Darlington, Victoria, Machinist.—Improvements in machines for destroying rabbits.
- 592. (L.P.) 3rd February. Alexander Hay Miller, of Kumara, County of Westland, Miner.— Concrete blocks for sluicing purposes. (Not proceeded with.)
 593. (L.P.) 9th February. John Vorbach, of Renwicktown, Marlborough, New Zealand, Engineer.—
- An invention for harvesting peas.

 594. (L.P.) 9th-February. John Kennedy, of Blenheim, New Zealand, Druggist.—A specific for relieving toothache, to be called "Odontia."
- 595. (L.P.) 9th February. King David Sykes, of Mount Eden, near Auckland, Manufacturer of Baths.—"The Portable Hygienic Hot-air Bath," a method by which all the benefits of hot-air baths, either dry or vapourized, plain or medicated, can be obtained by a convenient and portable apparatus.
- 596. (L.P.) 14th February. Henry Jaggers, of Invercargill, New Zealand, Plumber.—Invention for cleansing seeds and grain.

JAMES GUILFORD, Sen., of Wellington, New Zealand, Tanner. 597. (L.P.) 15th February. Invention for curing toothache; for preventing teeth from aching, becoming loose, or decaying; and for cleansing, purifying, whitening, and hardening the teeth and gums; to be called "Guilford's Patent Toothache Lotion."

598. (L.P.) 17th February. Walter Greenshields, of Auckland, New Zealand.—A suspender, known as "The Paragon Suspender."

599. (L.P.) 23rd February. James Forsyth, of Dunedin, Otago, New Zealand, Engineer.—An invention for the improvement and in the use and application of a "Rabbit Exterminator" for the destruction of rabbits or other animals in their burrows.

600. (L.P.) 27th February. ROBERT PEARCE GIBBONS, of Taupiri, Auckland, New Zealand, Mech-

anist.—Invention for propelling shallow-draft river steamers.
601. (L.P.) 6th March. Benjamin Goulton, of Kaeo, Whangaroa, Auckland, New Zealand, Settler.

-Invention for fixing handles to saws.

602. (L.P.) 6th March. ALEXANDER HOHN, of Dunedin, Otago, New Zealand, Coachbuilder.—A wheel-making machine, and table-lifting attachment for a jugular or drunken saw.

603. (L.R.) 6th March. Thomas Alva Edison, of Menlo Park, in the State of New Jersey, United States of America, Electrician.—Improvements in commutators for dynamo- or magnetoelectric machines, or electro motors.
604. (L.R.) 6th March. Edward Waters, of No. 87, Bourke Street West, Melbourne, Victoria, Patent

Agent.—Improvements in ploughs and cultivators. (R. B. Smith's.)

- L.R.) 6th March. CLAUDE THEODORE JAMES VAUTIN, of Rae Street, North Fitzroy, near Melbourne, Victoria, Assayer.—Improvements in the refining of impure commercial copper. 605. (L.R.) 6th March.
- 606. (L.P.) 13th March. George Scott, of Vicarage Road, Camberwell, Surrey, England, Gentleman.—The manufacture of the triple alloys, consisting of manganese, the titaniferous steel sands of Taranaki (New Zealand), and carbon.

607. (L.P.) 14th March. HENRY ELEY SHACKLOCK, of Dunedin, Otago, New Zealand, Ironfounder.-

A portable cooking range, to be called "H. E. Shacklock's Orion Cooking Range."
608. (L.P.) 28th March. Edward Kersey Cooper, of Auckland, New Zealand, Mining Manager.— The manufacture of triple alloys of manganese, titaniferous steel sand, and carbon. (Not proceeded with.)

609. (L.P.) 29th March. Waller Cook, of Christchurch, New Zealand.—Improvements in cooking

ranges or stoves, and heating apparatus.

- 610. (L.P.) 31st March. Samuel Perry Clements, of Wellington, New Zealand, Blindmaker.— Improvements in clips for Venetian and roller-blinds, to be called "Clements's Patent Pantagraph Clip."
- 611. (L.R.) 29th March. The Cockerell Implement Company (Limited), of No. 24, Elizabeth Street North, Melbourne, Victoria.—Improvements in cultivators. L.R.) 29th March. Thomas Alva Edison, of Menlo Park, New Jersey, United States of

612. (L.R.) 29th March. America, Electrician.—Improvements in electrical distribution systems.

- 613. (L.R.) 29th March. Thomas Alva Edison, of Menlo Park, New Jersey, United States of America, Electrician.—Improvements in and connected with dynamo- or magneto-electric machines and electro motors.
- 614. (L.R.) 29th March. Thomas Alva Edison, of Menlo Park, New Jersey, United States of América, Electrician.—Improvements in electric lamps and the manufacture thereof.
- 615. (L.P.) 6th April. John Alves, of Dunedin, New Zealand, Engineer.—Improvements in fire bridges, suitable for locomotives and portable engines.
 616. (L.P.) 6th April. James Howard, of Bedford, County of Bedford, Agricultural Engineer, and

EDWARD TENNY BOUSEFIELD, of the same place, Engineer.—Improvements in ploughs.

617. (L.P.) 13th April. Edward Joseph McCaffrey, of Queenstown, Otago, New Zealand, Quarryman.—An invention for giving an enamel to freestone, dressed or undressed, by the action of fire and limestone, the whole to be called and to be known as "The McCaffrey Enamelling Process.'

618. (L.R.) 15th April. MARCELLUS HARTLEY, of New York, United States of America.—Improvements in apparatus for generating electric currents and for producing electric light.

619. (L.R.) 15th April. Marcellus Hartley, of New York, United States of America.—Improvements in and relating to electric-lighting apparatus, and the manufacture of carbonized material to form conductors for the same, and for other purposes.

620. (L.R.) 15th April. Marcellus Hartley, of New York, United States of America.—Improvements in magneto-electric machines.

621. (LR.) 15th April. Marcellus Hartley, of New York, United States of America.—Improvements in magneto-electric machines.

MARCELLUS HARTLEY, of New York, United States of America.—Improve-622. (L.R.) 15th April. ments in electric lighting apparatus.

623. (L.R.) 15th April. MARCELLUS HARTLEY, of New York, United States of America.—Improvements in electric-lighting apparatus.

624. (L.R.) 15th April. MARCELLUS HARTLEY, of New York, United States of America.—An improved process or method of preparing carbon and other conductors, to be used for electric lighting and other purposes.
625. (L.R.) 15th April. MARCELLUS HARTLEY, of New York, United States of America.—Improve-

ments in electric-lighting apparatus.

MARCELLUS HARTLEY, of New York, United States of America.—Improve-626. (L.R.) 15th April. ments in and relating to dynamo-electric machines.

627. (L.R.) 15th April. HENRY FRANCIS JOEL, of No. 44, Lavender Grove, Dalston, Middlesex, England, Engineer.—Improvements in magneto-electric machines and in electric-light apparatus.

628. (L.R.) 15th April. THOMAS ALVA EDISON, of Menlo Park, New Jersey, United States of -Improvements in meters for measuring electric currents. America, Electrician.–

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- 629. (L.R.) 15th April. Thomas Alva Edison, of Menlo Park, New Jersey, United States of
- America, Electrician.—Improvements in systems of electric lighting.
 630. (L.R.) 15th April. Thomas Alva Edison, of Menlo Park, New Jersey, United States of America, Electrician.—Improvements in the manufacture of carbon conductors for incandescent electric lamps.
- 631. (L.R.) 15th April. Thomas Alva Edison, of Menlo Park, New Jersey, United States of America, Electrician.—Improvements in dynamo- or magneto-electric machines.
- 632. (L.R.) 15th April. Joseph Walter Oakman, of Collins Street East, Melbourne, Victoria, Merchant.—Improved concave vehicle springs.
- 633. (L.R.) 15th April. Alexander Richard Mackenzie, Engineer, and John Frederick McLaren, Auctioneer, both of Mackay, Queensland.—Improvements in the construction of vacuum
- 634. (L.R.) 20th April. WILKINSON WAYMAN and GEORGE KAY, both of Stawell, Victoria, Engineers.—An improved method of constructing engines and machines, in which the motive
- power is applied to either side of the piston alternately.

 635. (L.R.) 20th April. John Alston Wallace, of 52, Bourke Street East, Melbourne, Victoria, a Member of the Legislative Council of Victoria.—An improvement in the construction of blast furnaces.
- ALEXANDER FRASER, of Christchurch.—An invention for the automatical 636. (L.P.) 22nd April. movement of gates and doors on rollers, under the title of "Fraser's Patent Rail and Roller."
- 637. (L.P.) 26th April. ROBERT PEARCE GIBBONS, of Taupiri, Auckland, Mechanist.—An invention for cutting wooden wire-fencing rollers out of the rough block.
- 638. (L.R.) 27th April. John Ambrose Fleming, of University College, Nottingham, England.— Improvements in the preparation of materials, to be employed for the purposes of electric insulation.
- 639. (L.R.) 27th April. John Ambrose Fleming, of University College, Nottingham, England.— Improvements in the preparation of material to be employed for the purposes of electric insulation.
- 640. (L.R.) 6th May. WILLIAM ROBERT LAKE, of Southampton Buildings, London.—Improvements in electric lamps or lighting apparatus.
- 641. (L.R.) 6th May. James Nicholas Douglas, of Dulwich, Surrey, England, Civil Engineer.-Improvements in burners.
- 642. (L.R.) 6th May. John William Janson, of 52, St. Mary-Axe, London, England, Merchant.— Improvements in machinery for unhairing, fleshing, paring, shaving, and setting hides, skins, or pelts.
- 643. (L.P.) 10th May. WILLIAM TAYLOR, of Ohoka, Canterbury, New Zealand.—An improvement of a self-closing gate hinge, to be called "Taylor's Patent Champion Self-closing Gate Hinge."
 (Not proceeded with.)
- 644. (L.P.) 11th May. George Simmons, of Kumara, Westland.—An improvement by the application of material more suitably adapted for manufacturing hydraulic hose, used by gold-miners and others.
- 645. (L.P.) 13th May. Frederick Скоок, of Christchurch. The cutting of shingles by band saw, combined with automatic feeding apparatus. (Not proceeded with.)
- 646. (L.R.) 12th May. FREDERICK ARTHUR PULLEINE, of Adelaide, South Australia, Gentleman .-The automatic fruit evaporator.
- 647. (L.R.) 17th May. FREDERICK SETTLE BARFF, of Kilburn, Middlesex, England, Professor of Chemistry.—A new compound to be employed in the preservation of organic substances.
- 618. (L.R.) 17th May. Joseph Wilson Swan, of Newcastle-on-Tyne, England.—Improvements in secondary batteries or apparatus for storing or conserving electricity.
- 649. (L.R.) 17th May. Jules Louis Morer, of Paris, France.—An improved depilatory process for hides and skins.
- 650. (L.P.) 25th May. ALEXANDER CAIRNS, of Dunedin, New Zealand, Works Inspector.—An improved suspension railway, and over-head tipper for carrying and dispersing materials such as earth, clay, mud, and silt.
- 651. (L.P.) 25th May. ALEXANDER CAIRNS, of Dunedin, New Zealand, Works Inspector.—An improved double-tread rail for making a combined train and drayway.
- 652. (L.P.) 25th May. ALEXANDER CAIRNS, of Dunedin, New Zealand, Works Inspector.—An improved barge for carrying excavating machines, such as steam navvies' boom-dredgers, and material arising from working them.
- 653. (L.P.) 26th May. Joseph Hardcastle Hudson, of Wellington, New Zealand, Engineer.-Invention for securing Venetian blinds in any desired position, and named "Hudson's Blind
- 654. (L.P.) 26th May. SAMUEL PERRY CLEMENTS, of Wellington, New Zealand, Venetian Blindmaker.—An improved clip for Venetian blinds, to be called "Clements's Patent Single-lever Clip."
- 655. (L.R.) 29th May. John Scudamore Sellon, of Hatton Garden, Middlesex, England .-
- Improvements in secondary batteries of magazines of electricity.

 656. (L.R.) 30th May. George Westinghouse, Jun., of Pittsburg, Pennsylvania, United States of America.—Improved apparatus employed in working railway-brakes by fluid pressure.
- 657. (L.R.) 30th May. EBENEZER FARIE MACGEORGE, of St. James's Park, Hawthorn, near Melbourne, Victoria, Gentleman.—An improved method of and apparatus for ascertaining the gradient of any internal or external surface, together with the magnetic bearing of such
- 658. (L.R.) 30th May. Frederick Sheppard Grimwade, of No. 31, Flinder's Lane West, Melbourne,

Victoria, Wholesale Druggist.-Improvements in the preparation of phosphorized material for the destruction of vermin.

659. (L.R.) 30th May. James Ben Ali Haggin, Attorney and Counsellor-at-law, and William IRELAN, Jun, Mining Engineer, of San Francisco, California, United States of America —A new and useful improvement in sheep-washes.

660. (L.P.) 6th June. John Robinson, of Coromandel, Auckland, Engineer.—An invention for quartz-crushing and amalgamating gold, to be called "Robinson's Cylinder Quartz-crushing

and Amalgamating Machine.

- 661. (L.R.) 5th June. Frederick Flood, of Melbourne, Victoria, Engineer. -- Washing and cleansing clothes, fabrics, or raw materials, to be called "Flood's Sub-aqueous Multiple Jet Washing Machine.
- 662. (L.R.) 7th June. Joseph Wilson Swan, of Newcastle-on-Tyne, England, Chemist.—Improvements in and connected with electric lamps.
- JOSEPH WILSON SWAN, of Newcastle-on-Tyne, England, Chemist.—Improve-663. (L.R.) 7th June. ments in electric lamps, and in the materials employed in their construction.
- 664. (L.R.) 7th June. Camille Alphonse Faure, of 22, Boulevard Voltaire, Republic of France.

-Improvements in galvanic batteries.

665. (L.R.) 7th June. Jonathan Sherman, Jun., of Chicago, United States of America, Manufacturer; James L. Hill, of New York, United States of America, Manufacturer; and Emily S.

- turer; JAMES L. HILL, of New York, United States of America, Manufacturer; and EMILY S. Coursen, of Chicago aforesaid, Chemist.—Preparing tan bark for transportation.

 666. (L.P.) 26th June. Alexander Black, of Dunedin, Otago.—Bending railway or tee iron.

 667. (L.P.) 28th June. Albert Potter, of Hamilton, Auckland, New Zealand, wool-stapler.—An invention for scouring wool in the fleece without breaking up, cotting, felting, or injuring the fibre, to be called "Potter's Machine for scouring Wool in the Fleece."

 668. (L.R.) 30th June. Charles E. Sackett, of Matilda Furnace, County of Mifflin and State of Popper Lapic Hamilton States of America. Combined plough and polygonizing between
- Pennsylvania, United States of America.—Combined plough and pulverizing harrow.

 669. (L.R.) 30th June. Charles E. Sackett, of Matilda Furnace, County of Mifflin and State of Pennsylvania, United States of America.—Combined plough, harrow, and drill.

 670. (L.P.) 7th July. Job Osborne, of Doyleston, County of Selwyn, New Zealand, Farmer.—A
- driving apparatus. 671. (L.P.) 8th July.

WALTER GREENSHIELDS, of Auckland.—The hygienic shoulderettes.

672. (L.P.) 14th July. John Turnbull Thomson, of Invercargill, New Zealand, Civil Engineer.—

Improving action in the machinery of windmills.
673. (L.R.) 17th July. Alfred Charles Brown and Henry Alfred Charles Saunders, both of Old Broad Street, London, England.—Improvements in telephonic and telegraphic signalling

apparatus. 674. (L.P.) 21st July. RICHARD KINGSFORD, of Lyttelton, New Zealand. — An invention for

deepening and cleaning rivers and canals.

- 675. (L.R.) 24th July. George Harrisson, of London, England, Gentleman.—Improvements in machines for polishing or burnishing the edges and faces of the soles and heels of boots and shoes.
- 676. (L.P.) 26th July. Charles Hill Pennycork, of Glasgow, County of Lanark, Scotland.— Improvements in glazing bars.

677. (L.P.) 7th August. WILLIAM Ross, of Amberley, County of Ashley, Blacksmith.—Invention

for applying weight evenly on disc harrows.

678. (L.R.) 14th August. Guy H. Gardner, lately of New York, United States of America, but now of Christchurch, New Zealand, Merchant.-Improvements in furnaces for reducing iron ores.

679. (L.R.) 14th August. Guy H. Gardner, lately of New York, United States of America, but now of Christchurch, New Zealand.—Improvements in furnaces for reducing iron ores

WILLIAM RORRISON BUCHAN, of Dunedin, New Zealand. — Buchan's 680. (L.P.) 17th August.

patent amalgamator and gold chloridizer. (Not proceeded with.)
(L.P.) 28th August. Walter Andrew Harper, Surveyor and Engineer, and John William Rock, Mechanical Engineer, both of Oamaru, Otago, New Zealand.—A new gas engine which may be used as a locomotive, especially in propelling tram-cars.
682. (L.R.) 29th August. Edme Augustin Chamerox, of the Faubourg St. Martin, No. 162, Paris,

France, Manufacturer.—An improved registering, controlling, and weighing machine.
683. (L.R.) 6th September. William Henry Masters and Thomas Theophilus Draper, both of Chancery Lane, Melbourne, Victoria, Electricians.—Improvements in contrivances used in telegraphy.

L.R.) 6th September. The Egliston Chemical Company (Limited), of Glasgow, North Britain, and Curistian Heinzerling, Doctor of Philosophy, of Frankfort on-Maine, Germany. 684. (L.R.) 6th September.

-improvements in tawing or converting hides or skins into leather.

685. (L.R.) 6th September. Charles William Maclean, of Melbourne, Victoria, Engineer.—Improvements in self-acting grabs, and in the contrivances used for working same.

686. (L.R.) 6th September. James Fyfe, of 52, Queen Victoria Street, London, England, Merchant.—Improvements in electric lamps and in solenoids applicable for their regulation. (Krizik and Piette.)

LR.) 6th September. THE BRUSH ELECTRIC LIGHT AND POWER COMPANY OF AUSTRALASIA (LIMITED), of London, England.—Improvements in and connected with the distribution and 687. (LR.) 6th September. application of energy by electricity for lighting or other purposes, and in the means or apparatus employed therein. (St. George Lane Fox's.)

688. (L.P.) 9th September. ARTHUR STEELE FORD, of Coromandel, Auckland, New Zealand.—A

crystal engine.

689. (L.R.) 11th September. Thomas Kennedy Park, of Sydney, New South Wales.—The dryblowing ore separator.

690. (L.R.) 11th September. Nicholas Belfield Dennys, of Singapore, in the Straits Settlements, Magistrate and J.P.—A composition for protecting the bottoms of iron vessels, metals, and wood from the action of sea-water, fouling, damp, and atmospheric influence.

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- 691. (L.P.) 11th September. WILLIAM JAMES DALTON, of Auckland, New Zealand.—United pattern
- 692. (L.P.) 11th September. Albert Walker, of Auckland, New Zealand.—Automaton draught preventer.
- 693. (L.R.) 18th September. Henry Harris Lake, of the firm of Haseltine, Lake, and Co., Patent Agents, Southampton Buildings, London, England.—Improvements in and relating to processes for extracting metals from their ores, and in apparatus therefor. (Nelson Frederick Evans's.)
- 694. (L.R.) 18th September. John Woods, of Melbourne, Victoria, Engineer and M.L.C.—Improvements in railway brakes.
- 695. (L.R.) 18th September. THE CONSOLIDATED TELEPHONE CONSTRUCTION AND MAINTENANCE COMPANY (LIMITED), of Lombard Street, London, England.—Improvements in telephones or (F. A. Gower.) telephonic apparatus.
- 696. (L.P.) 21st September. Peter Duncan and David Duncan, of Christchurch, New Zealand .-An improved centre for skeith or circular coulter for ploughs.
- WILLIAM ISHERWOOD, Engineer, and John Stewart Little, Carpen-697. (L.P.) 21st September. ter, both of Christchurch, New Zealand.—A fire-escape ladder.
- 698. (L.P.) 21st September. George Ross, of Wellington, New Zealand, Mechanical Engineer.—
 An invention for raising sunken vessels of any description, to be called "Ross's Patent Automatic Expansive Air Process for raising Sunken Vessels."
- 699. (L.R.) 22nd September. THE PATENT PORTABLE GAS COMPANY (LIMITED).—A portable pantascope gas light. (F. E. De L. Richards's.)
 700. (L.P.) 25th September. ROBERT WALKER, of Pukerimu, Auckland, New Zealand.—A circular
- revolving skim coulter.
- FRANCIS BLUNDELL WARRE MALET, of Christchurch, New Zealand, 701. (L.P.) 25th September. Accountant.—Affixing a barbed point or points on to a single wire, to be used for fencing and other purposes.
- 702. (L.P.) 28th September. John Alves, of George Street, Dunedin, Engineer.—Improvements in apparatus for the extraction of gold, and the concentration of gold-bearing material, such as pyrites, from finely-divided auriferous material.
- 703. (L.R.) 30th September. Thomas Bladen, of Merville House, 31, Darlinghurst Road, Sydney, Iron Manufacturer.—Bladen's improved rail and guard for tramways.
 704. (L.R.) 3rd October. Edward Waters, of No. 87, Bourke Street West, Melbourne, Victoria,
- Patent Agent.-Improvements in obtaining electric light, and an apparatus to be employed
- therefor (Gatehouse's).
 705. (L.R.) 3rd October. Thomas Brideson Cribb, Accountant, and Daniel Howard Martin, Machinist, both of Ipswich, Queensland.—Improvements in apparatus for the manufacture of air-gas from gasoline.
- 706. (L.R.) 7th October. Charles Vernon Boys, of Wing, near Oakham, County of Rutland, England, Physical Demonstrator.—A new or improved electric meter, or apparatus for
- measuring and registering the quantity of electricity passed through a conductor.

 707. (L.R.) 7th October. Joshua Alexander Kay, of Flinders Lane East, Melbourne, Victoria, Mechanical Engineer.—Improvements in machinery for breaking up and tilling the ground.
- 708. (L.R.) 7th October. George Westinghouse, Jun., of Canal Road, King's Cross, Middlesex, England, Engineer.—Improvements in pneumatic brake apparatus for railway trains.

 709. (L.R.) 7th October. John Cosmo Newberr, Analytical Chemist, John Lister Morley,
- Gentleman, and BARRY CLEVELAND, Gentleman, all of Melbourne, Victoria.—Improvements in furnaces for reducing and smelting certain descriptions of ores.
- GUSTAV LIEDMAN, Gentleman, and CARL BEGER, Mechanician, both of 710. (L.R.) 7th October. Berlin, in the German Empire.—An improved apparatus for giving motion to carriages, vessels, machines, and other moving bodies.
- 711. (L.P.) 14th October. John Lewin Bacon, of Wellington.—Santa fé (an aërated beverage). 712. (L.P.) 16th October. Edward Perry Amesbury, of Wellington.—Amesbury's spring-sic EDWARD PERRY AMESBURY, of Wellington.—Amesbury's spring-sided
- dental plates. 713. (L.P.) 16th October. John Lewin Bacon, of Wellington.—An invention for the prevention of
- sea-sickness, to be named and known under the title of "Anti Mal de Mer."
 714. (L.R.) 16th October. David Anderson, of Fairview, Stawell, Victoria, Gentleman.—Improvements in contrivances for varying the gauge of the wheels of rolling-stock for rail and other permanent ways.
- 715. (L.R.) 16th October. John Jeyes, of Plaistow, Essex, England, Chemist.—Improved antiseptic, preservative, curative, and cleansing compounds for sanitary and other purposes.
- 716. (L.P.) 16th October. James Wilson Mansfield, of Christchurch, Canterbury, Engineer.—
- Cutting and trimming gorse hedges.
 717. (L.P.) 16th October. William Langdown, of Christchurch, New Zealand.—The bending of various kinds of timber into wheel rims, felloes, spring-cart raves, and every description of bent
- wood-work for making carriages and carts, and other purposes.
 718. (L.P.) 13th October. George Rayner, of Auckland, New Zealand.—An electric band.
- 719. (L.P.) 19th October. Josiah Henry Cullimore, of Auckland, New Zealand.—United pattern-
- 720. (L.P.) 24th October. John Smith and Samuel Smith, of Marton, New Zealand, Storekeepers, trading under the firm of "John Smith and Son."—An improved box or package for butter or other materials.
- 721. (L.P.) 21st October. Thomas Danks, of Christchurch, New Zealand.—A new and improved piston for chain-pumps or water-lifters.

722. (L.P.) 25th October. Thomas Danks, of Christchurch, New Zealand, Engineer.—A tube-boiler for cooking ranges, hot-water apparatus, &c.

723. (L.P.) 27th October. Walter Andrew Harper and Thomas Crawford Dennison, Civil Engineers and Surveyors, both of Oamaru, New Zealand.—An improved method of laying

tramways and light rallways.

724. (L.P.) 30th October. Edgar Chichester Jones, of Wellington, New Zealand, Engineer.—An improvement in the clips or clamps for fastening the carriages, boxes, buckets, or other vessels containing loads to the wire or other rope employed in wire or other rope tramways used for transporting loads from one point to another by gravitation or by any other motive power. Also of guide bars or whiskers, placed at the intermediate points of support of the said rope, to prevent said carriages, boxes, buckets, or other vessels from being driven into contact with the said points of support by the action of the wind or from any other cause. Also of an improvement in the drum-wheel or sheave fixed at each end or terminus of the said rope. And also of a movable carriage upon which the drum-wheel or sheave of the lower terminus is fixed. The said invention to be called "Jones's Patent for Improvements in Wire or other Rope Tramways."

725. (L.P.) 30th October. WILLIAM JAMES DALTON, of Auckland, New Zealand, Civil Engineer.—

An ornator.

- 726. (L.P.) 6th November. James Lees, of Oamaru, New Zealand, Sheepfarmer, and John William Rock, of Oamaru, New Zealand, Mechanical Engineer.—A novel steam boiler and furnace.
 727. (L.P.) 7th November. John Edward Hayes, of Wellington, Plumber, and Thomas Clarke Jenkins, of the said City of Wellington, New Zealand, Bookkeeper.—An automatic reversing registrator.

728. (L.P.) 7th November. Donald Donald, of Masterton, New Zealand, Sheepfarmer.—An improved wool-press.

L.P.) 8th November. David Thompson, of Wanganui, New Zealand.—An invention for a self-regulating turbine wind mill, for pumping and machine power, called "The Simplex." 729. (L.P.) 8th November.

730. (L.P.) 4th November. WILLIAM SOLLOWAY LANE, of Auckland, New Zealand, Master Mariner.

-A reefing and furling apparatus. P.) 6th November. William Vickery, of Auckland, New Zealand, Millwright and Engineer. 731. (L.P.) 6th November.

—Vickery's patent guide.

732. (L.P.) 10th November. Adam Werner, of Doyleston, in the County of Selwyn, New Zealand.

—A lifting and holding apparatus.

733. (L.P.) 15th November. James Miller Brown and Caleb Fraggatt, both of Invercargill, New Zealand, Merchants.—An invention for a mixture of wheaten meal and a baking powder, to be called "Patent Cornina."

734. (L.R.) 20th November. The Anglo-American Brush Electric Light Corporation (Limited),

of Lambeth, in the County of Surrey, England.—Improvements in reflectors.
735. (L.R.) 20th November. The Anglo-American Brush Electric Light Corporation (Limited), of Lambeth, in the County of Surrey, England. - Improvements in current governors for dynamoelectric machines.

736. (L.P.) 21st November. George Lyman Sise, of Dunedin, in the Colony of New Zealand, Merchant.—Improvements in disc harrows.

- 737. (L.P.) 24th November. Benjamin Dickson, of the City of Dunedin, New Zealand.—An invention for exterminating rabbits or other vermin, to be called "Dickson's Bi-sulphate of Carbon Rabbit Exterminator."
- 738. (L.P.) 13th November. Robert Martin, of Dunedin, in the Colony of New Zealand.—An invention for guiding and leading a rope or cable round a curve, and called a "Cable Curve Pulley."
- 739. (L.P.) 24th November. ALEXANDER WILLIAM BICKERTON, of Christchurch, in the County of Selwyn, New Zealand.—An invention for a model to illustrate the motions, the kinetics, and the phenomena of the earth, and the laws of resultant motion.

740. (L.P.) 28th November. Frederick Alfred Moore, of Wellington, New Zealand, Cook.— Moore's patent skin-packing portable condensed soups.
741. (L.P.) 25th November. Joseph Burnett Moir, of Dunedin, in the Colony of New Zealand,

Tinsmith.—Improved portable furnace-frame for laundry and other boilers.

742. (L.P.) 23rd November. George Rayner, of Auckland, in the Colony of New Zealand, Electrician.—Rayner's patent gold-saver.

L.P.) 6th December. John Aspinall, of Skipper's Point, Upper Shotover, Lake County, New Zealand, Miner, and Joseph Johnston, of Invercargill, New Zealand, Ironfounder and 743. (L.P.) 6th December.

744. (L.P.) 1st December.

Engineer.—An invention for a new grating ripple for gold-saving purposes.

L.P.) 1st December. Edmund Winder Otway, of Wynyard Street, Auckland, in the Colony of New Zealand, Civil Engineer.—The permanent-way of railways and tramways.

L.P.) 8th December. Walter Andrew Harper, Civil Engineer and Surveyor, and John 745. (L.P.) 8th December. WILLIAM ROCK, Mechanical Engineer, both of Oamaru, New Zealand.—A machine for cutting and quarrying stone.

746. (L.P.) 9th December. JOB OSBORNE and ADAM WERNER, both of Doyleston, in the County of Selwyn and Colony of New Zealand.—A slow motive gorse-cutting machine.

747. (L.P.) 14th December. WILLIAM WOODCOCK, of Oamaru, New Zealand.—An invention for barbing fencing wire.

748. (L.P.) 14th December. WILLIAM VICKERY, of Auckland, New Zealand, Engineer.—The housewife's washing machine.

749. (L.P.) 20th December. Joseph Armishaw and Abiel Gifford Howland, both of Christchurch, New Zealand.—An invention for deodorizing or disinfecting purposes.

750. (L.P.) 20th December. BERNARD KEANE and GEORE CARDER, of Auckland, in the Colony of New Zealand, Brick and Tile Manufacturers.—The Ponsonby kiln.

751. (L.R.) 27th December. Charles Sebastian Smith, of Leicester, in the County of Leicester, England, Land Agent and Solicitor; Alfred Edward Miller Mundy, of Shipley, in the County of Derby, England, Esq.; and Paget Perloe Mosley, of 81, Warwick Road, Earls Court, in the County of Middlesex, England, Esq.—An improved method of, and apparatus for, breaking down or getting coal, and other minerals, in mining, quarrying, or tunnelling operations. (Smith and Moore's.)

752. (L.R.) 27th December. WILLIAM CROOKES, F.R.S., of Boy Court, Ludgate Hill, in the City

of London, England.—Improvements in the construction and manufacture of electric lamps.
753. (L.R.) 27th December. John Chambers, of Te Mata, Napier, New Zealand, at present residing in Manchester, in the County of Lancaster, England.—Improvements in refrigerating and freezing, and in apparatus employed for such purposes.
754. (L.R.) 27th December. Antonio Buzolich, of Nicholson Street, North Carlton, in the Colony

of Victoria, Decorator, and Thomas King Smith, of Hoddle Street, Prahran, in the said colony, Manufacturing Chemist.—An improved composition to be used as a substitute for paint, cement, varnish, and such like purposes.

755. (L.R.) 29th December. RAPHAEL JOSIA, of Certaldo, in the Kingdom of Italy.—Improvements

in the manufacture of artificial stone and marble, and colouring the same.

756. (LR.) 29th December. John Evelyn Liardet, of Brockley, in the County of Kent, England, and Thomas Donnithorne, of 30, Gracechurch Street, in the City of London, England.—Improvements in the means of, and in the apparatus for, storing electrical energy, and in the preparation of the materials to be employed.

757. (L.R.) 29th December. The Patent Victoria Hydraulic Freestone Company (Limited), of No. 56, Queen Street, in the City of Melbourne and Colony of Victoria.—An improvement in

the process of manufacturing artificial stone. (R. H. Stone's.)

Application for Letters Patent lapsed after Publication of List for 1881.

571. W. Douslin.—Sockets for candlesticks, and extinguishers.

N.B.—The fees for Letters Patent are now, if unopposed—on depositing Specification, 10s.; on obtaining Letters Patent, £2; and at or before the expiration of the fifth year, £7. Full particulars as to forms, mode of procedure, &c., are contained in a Digest of the Patents Acts, with extracts from the Regulations and Table of Fees, which can be obtained of the Government Printer, or through any bookseller, price 6d.

Patent Office, Wellington, January, 1883.

C. J. A. HASELDEN, Registrar of Patents.

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