SUPPLEMENT

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CONTENTS.

Patent Office Agent appointed.

Department of Justice,
Wellington, 29th April, 1902.

HIS Excellency the Governor has been pleased to appoint

JOHN TERRY

to be Patent Office Agent at Blenheim.

JAS. McGOWAN.

Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 30th April, 1902.

COMPLETE specifications relating to the undermentioned applications for Letters Patent have been accepted, and are open to public inspection at this office. Any person may, at any time within two months from the date of this *Gazette*, give me notice in writing of opposition to the grant of any such patent. Such notice must set forth the particular grounds of objection, and be in duplicate. A fee of 10s. is payable thereon.

No. 13659.—30th May, 1901.—RICHARD WILLIAM JONES, of Invercargill, New Zealand, Engineer and Machinist. Improvements in knife-cleaners.*

Claims.—(1.) In knife-cleaners, a pair of polishing-surfaces imposed one upon the other within a frame, and provided with air-pads beneath the polishing-surfaces, as specified. (2.) In knife-cleaners, a pair of polishing-surfaces imposed one upon the other, and mounted between brackets so as to be capable of being reversed, as set forth. (3.) The general arrangement, construction, and combination of parts in my improvements in knife-cleaners, as described and explained, and for the several purposes set forth.

(Specification, 2s. 9d.; drawings, 1s.)

No. 13710.—13th June, 1901.—JOHN THOMAS THOMPSON, of Waikaia, New Zealand, Baker. Improvements in apparatus for suspending garments and exposing the same to the air.*

Claims.—(1.) The improvements in apparatus for suspending garments and exposing same to the air consisting of arms attached to a sleeve slidable on a pole, lines attached to the ends of said arms, a pulley at the top of the pole, a windlass at the foot of the pole, and a rope reaching from said sleeve round said pulley to said windlass, substantially as and for the purposes set forth. (2.) In apparatus for suspending garments and exposing the same to the air, arms united at a centre by means of a sleeve sliding on a pole, stays upwardly extending from said arms and united at a centre by a similar sleeve, a line extending from said stays or sleeve over a pulley at the top of the pole and adapted to be wound by a windlass, substantially as described. (3.) The general construction, arrangement, and combination of parts composing my improvements in apparatus for suspending garments and exposing the same to the air, all substantially as and for the purposes described with reference to the drawings.

(Specification, 2s.; drawings, 1s.)

No. 13796.—6th July, 1901.—JOHN JOSEPH LEAHY, of 106, Barnard Street, North Adelaide, South Australia, Contractor, and ARTHUR PARMITER, of 5, Selby Street, Adelaide aforesaid, Carpenter. Improved method of and means for transferring travelling belts from one pulley to another.*

Claims.—(1.) The method of transferring a belt from one pulley to another consisting in lifting the outer part of the belt from the pulley by means of a rockable roller so that as the belt travels down the inclined face of the roller it passes from the one to the other pulley, substantially as described. (2.) In a device for transferring a belt from one pulley to another, a roller so supported in a suitable frame that it is normally adjacent to and clear of the inner face of the belt, but capable of being rockably adjusted to lift the outer end of the belt outwards from the pulley, substantially as described and for the purpose set forth. (3.) In a device for transferring a belt from one pulley to another, a roller journalled in a carrier supported in a suitable frame and adapted to be rocked on a central pivot so that either end of the roller may be lifted, substantially as described and for the purpose set forth. (4.) In a device for transferring a belt from one pulley to another, a roller 10, a carrier 14, centrally pivoted on a pin 15, and provided with actuating-cords 19 and 20, and also provided with a cam or projection 16 on its under-side, engaging a spring 17 supported by the

stationary frame, substantially as described and for the purposes set forth. (5.) In a device for transferring a belt from one pulley to another, a frame comprising a bar 1 with central box 2 and end sockets 3, a roller 10 mounted on a spindle 11, a carrier 14 centrally supported on a pivot 15 and having a cam or projection 16 on its under-side, actuating-cords 19 and 20, and a spring 17 supported in the said box 2, all substantially as described and for the purposes set forth.

(Specification, 5s.; drawings, 2s.)

No. 13798.—9th July, 1901.—PETER ROBERT RUSSELL, of 17, Scarborough Terrace, Wellington, New Zealand, Saddler. Improved means of shaping leggings and blocking out leggings.*

Claims.—(1.) In blocks for shaping leggings, forming the block in two parts which are adjustably secured together, as specified. (2.) A block for shaping leggings, consisting of two parts adjustably secured together by means of screws or bolts screwing through one part and loosely secured within the other, as set forth.

(Specification, 1s. 6d.; drawings, 1s.)

No. 13803.—10th July, 1901.—ISAAC HARRISON, of Wellington, New Zealand, Condiment-manufacturer. Improved means for filtering and drawing off the contents of beer and other barrels.*

Claims.—(1.) In means for drawing off liquids from the receptacles containing the same, a casting secured within a hole made in the receptacle and formed with a threaded recess on its outer end and with an opening leading therefrom into the inside of the receptacle, a valve fitting over and closing such opening, and means whereby such valve may be forced from its seat and replaced thereon as a tap is screwed into or out of the threaded recess in the casting, as specified. (2.) A casting secured within a hole made in a cask, such casting being formed with a threaded recess on its outer end and with an opening leading therefrom to the inside of the cask, a valve fitting over the inner end of the opening and formed with a stem projecting outwards into the recess, a spindle secured to the back of the valve, and a helical spring surrounding such spindle, in combination with a tap adapted to be screwed into the threaded recess, such tap being formed with a bearing-surface for engaging with the projecting stem of the valve, as and for the purposes set forth. (3.) In means for filtering beer and other liquids, a casting secured within a hole in the receptacle containing the same, such casting being provided with an opening into the receptacle, a valve normally closing it, and with means for operating such valve, in combination with a filtering-chamber surrounding the inner end of the valve-opening, and through which the contents must pass before passing through the valve-opening, as specified. (4.) In means for filtering beer and other liquids, an exit-opening leading from the receptacle containing the liquid, such opening being provided with a valve and with means for operating it, a filtering-chamber surrounding the inner end of the opening, such filtering-chamber consisting of two annular cylinders of gauze or other perforated material, which are arranged with an annular space between them adapted to contain a filtering-medium, the inner ends of such cylinders being closed while the outer ends fit over the exit-opening, as set forth. (5.) In means for filtering and drawing off liquids, a casting secured within a hole made in the receptacle, such casting being formed with a threaded recess upon its outer end and with an opening leading therefrom to the inside of the receptacle, a filtering-chamber surrounding such opening, a valve fitting over the inner end of the opening and formed with a stem projecting outwards into the recess, a spindle secured to the back of the valve, and a helical spring surrounding such spindle, the ends of which bear against the valve and the inner end of the filtering-chamber, in combination with a tap adapted to be screwed into the threaded recess and formed with a bearing-surface for engaging with the projecting stem of the valve, as specified. (6.) The general arrangement, construction, and combination of parts of my improvements in means for filtering and drawing off the contents of beer and other barrels, as described and explained, as illustrated in the drawings, and for the several purposes set forth.

(Specification, 5s.; drawings, 1s.)

No. 14484.—21st January, 1902.—JOHN FREDERICK ROSE, of Takaka, Nelson, New Zealand, Farmer. A protection for river-banks, groins, piers, dams, approaches to bridges, flooring of watercourses, and all places requiring defence from the scouring action of water.

Extract from Specification.—The mode of construction is as follows: A strip of netting (of the length to be determined by the circumstances, and of such width as may be convenient for the placing of the mattress in position) shall be laid upon the site of the protective work, or upon a platform adjacent thereto: this may be known as the floor of the mattress. Rows of wires, for the purpose of securing the top of the mattress to the floor, and also to prevent "bagging," shall be inserted and secured by taking one turn (about the middle of the wire) around a mesh, and giving the ends two or three twists, then leaving the ends projecting upright for securing in a similar manner to the top of the mattress. These wires must be at intervals of not more than 9 in. apart, and not more than 2 ft. between the rows. Upon the floor the loading or filling of stones shall be laid to the thickness required, which it is recommended should be about 6 in., but may be varied as circumstances require. Another strip of netting similar to the floor, and which may be known as the top, shall then be placed over the loading or filling, and the sides and ends of the top and floor securely laced together with wire, at the same time securing the top with the wires left to prevent "bagging." When sufficient mattress has been constructed to hang as a protecting apron in front of the river-bank, groin, pier, or other position to be protected, in addition to permitting of a certain length lying on the bed of the river, watercourse, or pond over and beyond the bottom or toe of the river-bank, groin, pier, or other position to be protected (such additional length to be determined by the amount of scour or underwashing anticipated), then the mattress shall be lowered into position by inclining the platform, or by any other means, the top end of the mattress being securely made fast to the top of the river-bank, groin, pier, &c.

This claim is made with the full knowledge that wire and wire netting have already been used and patented in connection with river-protection, and my claim is made only in connection with the mode or application of wire netting as above specified.

Claim.—The making and using of the mattress, as described in the specification, loaded with stones or other suitable filling, for the protection of river-banks, groins, piers, dams, and other places subject to the scouring action of water.

(Specification, 2s. 3d.)

No. 14518.—13th February, 1902.—ALEXANDER STANLEY ELMORE, of 4, Bishopsgate Street Within, London, England, Electro-metallurgist. Improvements in the process and apparatus for separating mineral substances by the selective action of oil.

Claims.—(1.) In processes for separating minerals by the selective action of oil, the addition of a small quantity of acid to the oil or water employed in the process, or to both, substantially as and for the purposes set forth. (2.) Apparatus for separating minerals by the selective action of oils, comprising a trough containing a shaft carrying inclined blades adapted to revolve within the trough, a settling-tank partitioned at the top, and a centrifugal machine adapted to revolve within a casing, constructed and operating substantially as described. (3.) Apparatus for effecting separation of minerals by the selective action of oils and like substances, comprising a mixer of the oil with the aqueous pulp of pulverised mineral, an incline for downflow of the mixture having steps or baffles, an endless apron, means of distributing oil over it, and means of causing it to travel in a direction opposite to the said downflow, a conical revolving sieve adapted to receive the discharge from the incline, a nozzle for delivering a shower of water over one side of the sieve, and two launders adapted to remove the matters that pass through and the matters that are washed over the sieve respectively, substantially as described. (4.) The combination of a stepped incline for downflow of the mixed pulp and oil with a travelling apron provided with a distributer of oil over its surface, substantially as described. (5.) The combination of a conical revolving sieve, a distributer of a water-shower over part of the sieve, a launder adapted to lead off the matters washed over the sieve, and a launder lined with blanket adapted to lead off the matters that pass through the sieve, substantially as described.

(Specification, 6s.; drawings, 2s.)

No. 14587.—6th March, 1902.—JAMES COUSTON, of Perth, Western Australia, Engineer and Contractor, and WILLIAM PORRITT, of Perth aforesaid, Engineer and Contractor. Improved method for jointing iron plates used in the manufacture of pipes and in connecting plates used for any other purpose.

Claims.—(1.) In iron plates used for the manufacture of pipes, a thickened edge on one or both sides of the plate and a dovetailed tongue on the corresponding edge of the other iron plate, which when shaped into semicircles can, when

pressure is applied in the usual method, be jointed to form a pipe substantially as shown and described, without exterior projections of any sort. (2.) In iron plates used for the manufacture of pipes, a thickened edge on either side of the plate with a groove therein and a double-tongued locking-bar to fit this groove, which upon pressure being applied completes the joint substantially as shown and described, and also without exterior projections of any sort. (3.) In iron plates used for the manufacture of pipes, a thickened edge on either side of the plate, with a groove or tongue to correspond with a male and female locking-bar respectively, which upon pressure being applied completes the joint substantially as shown and described, and also without exterior projections of any sort. (4.) In iron plates generally requiring to be jointed, either of the above methods for making joints secure and strong, substantially as shown and described, one side being perfectly flat, without projections of any sort. We wish it to be distinctly understood that the grooves may be varied from the shapes shown in the drawings as may be best to accomplish the object desired. The grooves may be made of a dovetailed shape to fit the tongues respectively, as shown in the drawings, as nearly as possible before the closing-pressure is applied, or they may be taken out square.

(Specification, 3s. 6d.; drawings, 1s.)

No. 14648.—20th May, 1901.—HENRY SMITH, of 176, Edgevale Road, Kew, Victoria, Art Decorator. Method or process of and apparatus for decorating woodwork.

[NOTE.—This is an application under section 106 of the Act, the date given being the official date of the application in Great Britain.]

Claims.—(1.) The method or process of ornamenting wood consisting in applying to the smoothed surface of wood wetted paper, the design on which paper has been prepared with oil or spirit colours, placing the design on face of paper on the wood, applying pressure and heat to the back of such paper whereby the design on the paper is caused to impregnate or be incorporated into the wood. (2.) The method or process of ornamenting wood which consists in treating the smoothed surface of wood with kerosene and crystal paper-varnish, then applying wetted paper on which is a design made with oil or spirit colours with face of paper on to the wood, then applying pressure and heat to the paper, whereby the design on the paper is caused to impregnate or be incorporated into the wood. (3.) The method or process of ornamenting wood which consists in treating the smoothed surface of wood with kerosene and crystal paper-varnish, then applying wetted paper on which is a design made with oil or spirit colours with the face of paper on the wood, then applying a damp cloth to back of paper, then applying pressure to the damp cloth by means of a heated iron or roller, substantially as described. (4.) The method or process of ornamenting wood which consists in treating smoothed surface of wood with kerosene and crystal paper-varnish, then applying wetted paper on which is a design made with oil or spirit colours with the face of paper on the wood, then applying a damp cloth to back of paper, then applying pressure to the damp sheet by means of a heated iron or roller, then, after the design has dried on the wood, applying size and afterwards varnish or polish, substantially as described. (5.) The method or process of ornamenting wood which consists in treating smoothed surface of wood first with a coating of whiting-and-milk solution, and afterwards with a solution of kerosene and crystal paper-varnish, then applying wetted paper, on which is a design made with oil or spirit colours, to the surface of the wood, then applying at back of paper a damp cloth, preferably of cotton, then applying an even pressure over the cotton sheet by means of a heated household iron or a roller, then allowing the surface of the wood with the design to dry, then sizing and afterwards varnishing or polishing the surface, substantially as described. (6.) The apparatus for carrying out the process described, comprising a table 1 to support the wood to be decorated, a strip of specially prepared paper 3 placed on the wood, a cloth 4 on back of paper, means for holding the cloth in position, a roller 8 provided with hollow spindles with tubes for the admission of heating-fluid and escape-gases, and a handle 9 for holding the roller, substantially as and for the purposes described. (7.) The apparatus for carrying out the process described, comprising a table 1 to support the wood to be decorated and having recess 7 for roller when idle, strip of design paper 3 laid on the wood, a damped cloth 4 laid over the paper, clip 6 for holding end of cloth, roller 8 having hollow spindles connected with flexible gas-tubing, one of said spindles being in the form of a Bunsen burner, and the other forming outlet for heat-fumes, and a handle 9 for operating the roller, substantially as and for the purposes described. (8.) The apparatus for carrying out the process described, comprising a fixed frame 21 having rollers 34, sliding table 35 set on the rollers and carrying the wood to be decorated and the wetted design paper on the wood, frame 25 hinged to fixed frame and having cloth or like interior, uprights 38 secured to fixed rollers 28 having hollow spindles for the admission and exhaust of heating-fluid set in bearing-blocks 39, and means for adjusting the pressure of the roller on the wood, substantially as and for the purposes described. (9.) The apparatus for carrying out the process described, comprising a fixed frame 21 having rollers 34, sliding table 35—with handle 29—set on the rollers and carrying the wood to be decorated and the wetted design paper on the wood, a frame 25 hinged to fixed frame 21 and having cloth or like interior 24, uprights 38 secured to fixed frame, roller 28 having short hollow spindles 30, 31—connected with flexible gas-tubing—one of which forms a Bunsen burner and the other an exhaust for heat-fumes having removable plug 44 for lighting Bunsen, bearing-blocks 39 for said spindles set in slots in uprights 38, spiral springs 41 on blocks 39, and set-screws 40 acting on the springs to adjust pressure of roller, substantially as and for the purposes described.

(Specification, 6s.; drawings, 1s.)

No. 14698.—3rd April, 1902.—UNITED SHOE-MACHINERY COMPANY, of Paterson, New Jersey, United States of America, a corporation duly organized under the laws of said State of New Jersey, and having their principal place of business at 205, Lincoln Street, Boston, Massachusetts, United States of America (assignees of Ronald Francis McFeely, of Beverly, Massachusetts aforesaid, Inventor). Improvements in pulling-over machines.

Claims.—(1.) In a pulling-over or like machine, the combination with the gripper-bars with or without their spring (for example, 162, 168, 170), of a loose slide such as 196, a device for connecting bar 168 and that slide whereby the grippers are caused to be closed and they and the bar 162 to be lifted by bar 168, and means to permit at times a relative movement of parts 196 and 162 to relax the bite of the grippers. (2.) In a pulling-over or like machine, the combination with the gripper-bars with or without their spring (for example, 162, 168, 170) of a loose slide, a movable gripper 186 operated by the slide, and a latch to engage the slide with the bar 168, for the purpose described. (3.) In a pulling-over or like machine, the combination with the gripper-bar 168 of a loose slide having rollers or projections thereon, and a movable gripper having an extension operated by one projection to open and by another to close the grippers. (4.) In a pulling-over or like machine, the employment, in combination with the apparatus claimed in preceding claiming-clause, No. 3, of a gripper extension, which at its upper end is hook-shaped or otherwise so formed that it will impart a throw for the purpose described to the slide 196, with which it is engaged. (5.) In a pulling-over or like machine, the combination of a bar 162, a pair of grippers, a loose slide movable with relation to said bar for closing the grippers, a latch, and means (which may or may not comprise the latch) to retard the movement in which the slide releases the grippers. (6.) In a pulling-over or like machine, the combination with the gripper-bars and their spring (for example, 162, 168, 170) of a loose slide, having upon it a raised part with an inclined face and a latch pivoted upon bar 168, and co-operating with said part for the purpose described. (7.) The improved gripper-mechanism substantially as and for the purpose described, and illustrated in Figs. 14, 15, and 16 of the drawings. (8.) In a pulling-over or like machine, the combination of a bar, a pair of grippers, a second bar, means actuated by the second bar for closing the grippers together, means including a part on said second bar for causing said grippers and first bar to be lifted by the second bar, said part being movable relatively to the second bar to relax the hold of the grippers, substantially as described. (9.) In a pulling-over or like machine, the combination with the bar 168 in the gripper-mechanism of a spring such as 170, a loose slide and a gripper, the two latter so formed and disposed relatively to one another as to allow the slide to cause the spring to yield in order that the grip on the stock may be a yielding one. (10.) In a pulling-over or like machine, the combination with an arm such as 62 of a yielding wiper which can move endwise relatively to the arm, or can lift and also move endwise substantially as described. (11.) In a pulling-over or like machine, the combination with a wiper of a yielding device controlling not only the lifting but also the endwise motion thereof relatively to the arm which carries it. (12.) In a pulling-over or like machine, the combination of a tilting wiper movable endwise, and having an inclined portion, and a yielding device acting on the inclined portion substantially as described, to control the tilt and the endwise movement. (13.) In a pulling-over or like machine, a yielding wiper engaged with and movable in relation to an arm such for example as 62, substantially as and for the purpose described, and illustrated in the drawings. (14.) In a pulling-over or like machine, arms such as 270, 272, each

adjustable along its axis of oscillation (for example, by the movement vertically of the stud 112 or 114), in order that it may work at different altitudes. (15.) In a pulling-over or like machine, the combination with a moving last-supporter of a part (such, for example, as 22), movable relatively thereto for the purpose of correcting or extending its motion, and shifting the last longitudinally, with or without means for varying the extent of such relative movement. (16.) In a pulling-over or like machine, the combination with a pivoted or other reciprocating last-supporter of a part (such, for example, as 22) made to bear against an abutment on the frame of the machine during the motion of the last-supporter so as to move relatively thereto and shift the last longitudinally. (17.) In a pulling-over or like machine, an adjustable abutment (such, for example, as 10, 15) for the purpose described, with or without a spring. (18.) In a pulling-over or like machine, a last-supporter having a member such as 30 retained and adjusted on it by means substantially such as are described and illustrated in Fig. 11 of the drawings. (19.) In a pulling-over or like machine, the complete pivoted last-supporter substantially as and for the purpose described, and illustrated in Figs. 11, 12, 12*a*, and 13 of the drawings. (20.) In a pulling-over or like machine, the combination with arms such as 270, 272, of devices acting to force against the last that part of the upper which is turned over upon the last, and at the same time to support the last against such action. (21.) In a pulling-over or like machine, a support (such, for example, as 278) having a tongue, a segment-piece having a groove to receive said tongue, a contact-member movable on said segment-piece, and shaped and operated to engage first the side and then the bottom of the last, and means to maintain said contact-member in normal position, substantially as described. (22.) In a pulling-over or like machine, the combination with arms such as 270, 272, of devices such as 92, 104, arranged and operating substantially as and for the purpose described. (23.) In a pulling-over or like machine, the device 92 or 104 and its appurtenances, substantially as and for the purpose described, and illustrated in Fig. 2*a* or Figs. 3 and 4 of the drawings. (24.) In a pulling-over or like machine, the combination, with means to engage an upper and means to engage a last, of mechanism to cause one or other or both of those means to pull upon the ball of the upper in a direction towards the shank of the last, all constructed and operating substantially as described. (25.) In a pulling-over or like machine, the combination of a bar, a pair of grippers, a device (such, for example, as 196) to be moved for closing the grippers, a second bar, means for connecting said second bar and said device whereby the first bar and grippers are caused to be lifted by the second bar, and means (such, for example, as spring 170) to effect a relative movement of said closing-device and said first bar to relax the bite of the grippers. (26.) In a pulling-over or like machine, the combination of a bar, a pair of grippers, a device (such, for example, as 196) movable with relation to said bar for closing the grippers, means (such, for example, as spring 170) to impart a movement to said device for releasing the grippers, and mechanism for retarding said releasing movement of said device.

(Specification, 19s.; drawings, 4s.)

No. 14724.—9th April, 1902.—JOHN EDWARD FRIEND, of Gore, New Zealand, Engineer. An improved digger for dredges.

Claims.—(1.) In a dredge, a digger comprising a boss with blades having a twist or pitch, the said digger being mounted on the shaft of the bottom tumbler, substantially as and for the purposes set forth. (2.) In a dredge, a digger comprising a boss, blades dovetailed into the boss, said blades having a twist or pitch, and a ring secured to the boss to keep the blades in position, substantially as and for the purposes set forth. (3.) The combination and arrangement of parts comprising my improved digger for dredges, substantially as and for the purposes set forth.

(Specification, 1s. 3d.; drawings, 1s.)

No. 14725.—8th April, 1902.—THE AUSTRALIAN MANUFACTURING AND IMPORTING COMPANY, an unregistered company carrying on business at 125, Colombo Street, Christchurch, New Zealand (assignees of James Clegg, of 169, High Street, Christchurch aforesaid, Perambulator-manufacturer). Improvements in standards used in the game of "ping-pong."

Claim.—(1.) A standard for supporting the net in the game of "ping-pong," in which the vertical pillar is arranged to revolve and act as a roller upon which the net may be wound, a ratchet-wheel fixed upon the pillar, and a pawl, which when in engagement therewith prevents the pillar from revolving in one direction, substantially as and for the purpose specified.

(Specification, 1s. 3d.; drawings, 1s.)

No. 14726.—7th April, 1902.—JOSEPH LYBRAND FERRELL, of 2218, Race Street, Philadelphia, Pennsylvania, United States of America, Mechanical Engineer. Improvements in wood-preserving.

Claims.—(1.) The described product, characterized by capacity to resist flame, and consisting of wood impregnated with a chloride mixed with another chemical capable of obviating the hygroscopic tendency of the chloride. (2.) The described product, characterized by capacity to resist flame, and consisting of wood impregnated with a chloride mixed with a sulphate capable of obviating the hygroscopic tendency of the chloride. (3.) The described process of preserving wood, which consists in impregnating wood with an aqueous solution of a chloride mixed with another chemical capable of obviating the hygroscopic tendency of the chloride, and subsequently evaporating the moisture from the wood. (4.) The described process of preserving wood, which consists in impregnating wood with different chemical solutions in succession, which solutions mutually decompose and deposit a chloride mixed with another chemical capable of obviating the hygroscopic tendency of the chloride, and subsequently evaporating the moisture from the wood.

(Specification, 3s. 3d.)

No. 14728.—10th April, 1902.—CHARLES EMERY BILLIN, of 205, Goethe Street, Chicago, Illinois, United States of America, Manufacturer (assignee of Walter Sabin McKinney, of 1212, West Addison Street, Chicago aforesaid, Mechanical Engineer). Improvements in stamp mills.

Extract from Specification.—My invention relates to improvements in stamp mills for crushing or comminuting ores and like hard substances, and refers more specifically to that class of stamp mills provided with a stationary die or dies and with reciprocating stamps or shoes. In the operation of stamp mills the dies and stamps or shoes are subjected to constant wear, with the result that the correct contact between the shoes and dies necessary to produce a uniform product and to obtain the maximum output, or to keep the mill up to its most effective and fullest crushing-capacity, may be maintained only by providing adjusting-means to compensate for this deterioration of the parts, and to preserve the relation between the dies and shoes as approximately constant as possible. In stamp mills, as now generally constructed, the adjustment to provide for and take up this constant wear of the shoes and dies is effected by various expedients or devices, such, for example, as lowering or resetting the steam-cylinder or removing distance-blocks in the frame. In all types of mills with which I am familiar, and which embody some such analogous form of device, the adjustment always results in a considerable loss of time, for it is necessary to stop the mill while the changes are being made. Furthermore, the adjustment is frequently improperly done, whereby the mill is not properly set—as, for example, the piston-rod is often left out of line with the guides. It is also apparent that in all such types of mill a very serious loss of capacity results, owing not only to the time consumed in making the required adjustments, during which the mill is idle, but also due to the fact that while the mill is running it is for much of the time below its maximum output, owing to the very rapid wear of the shoes and dies, which affects the effective relation between these parts until another adjustment is made. The primary object of the present invention is to provide a stamp mill in which the proper adjustment to compensate for the wear of the shoes and dies may be made while the mill is in operation, whereby the relation between the shoes and dies approximates the maximum effective point at all times, and the mill is kept up to its fullest capacity. Another object is to provide an adjusting-device whereby the alignment of parts is not disturbed in any manner in effecting the adjustment. Other objects of the invention are to provide simple and effective means for controlling the number of strokes of the stamp or shoe per minute, and for regulating the force of the blow. With these objects in view, the invention consists in an improved mechanism to provide for the proper adjustment of the parts while the mill is in operation, to compensate for the constant and rapid wear of the shoes and dies, and, further, in novel means to control the force of the blow of the stamp and the frequency of its strokes.

[NOTE.—The number and length of the claims in this case preclude them from being printed, and the foregoing extract from the specification is inserted instead.]

(Specification, 11s. 6d.; drawings, 3s.)

No. 14729.—10th April, 1902.—CHARLES ALBERT KELLER, of 3, Rue Vignon, Paris, France, Engineer. Electric blast-furnace, and process for obtaining metals and their alloys.

Claims.—(1.) Improved process for obtaining metals or alloys by the treatment of minerals and metals by means of

two electric furnaces arranged one above the other, the upper furnace serving to produce the metal or the alloy, and the lower furnace serving to refine or to treat with other substances, or reheat said metal or alloy, substantially as described. (2.) The method of electrically treating metals or their alloys, especially iron-ores, for obtaining at will either pig-iron or steel or refined iron in an electric blast-furnace, either with or without a refining-furnace, arranged in the manner set forth, by means of the variations of temperature obtained either in one and the same electric furnace or in different electric furnaces, substantially as described. (3.) In an electric blast-furnace, substantially as set forth, the employment of two groups of electrodes, the electrodes of each group being placed in parallel, and the two groups working at like potential, the number of hearths thus formed being equal to the number of the electrodes, and the hearths being arranged so that the materials to be treated placed between the hearths serve as intermediate conductors between the two groups of electrodes, which allows of a central charging between the electrodes, substantially as described. (4.) In an electric blast-furnace as set forth in claim 2, the arrangement of the electrodes at the vertices or sides of a polygon adapted to the section of a charging-shaft, leaving a free space into which are introduced the substances to be treated, and can be effectively subjected to the action of the hearths without alteration of their composition by the absorption of carbon from the electrodes, so that after a test-batch the composition of the metal can be determined with certainty and kept uniform, substantially as set forth. (5.) In an electric blast-furnace, as set forth, the removal of the reaction-gases through a flue between the two concentric walls of a shaft of masonry containing the materials to be treated, the reheating of said gases at the upper part of the furnace, which part is heated by radiation from the hearth of the electrodes, and the combustion, by passing in air, of the reaction-gases under the sole of the furnace for the purpose of superheating the fusion-zone of the substances treated, and thus augmenting the thermic efficiency of the apparatus, substantially as described. (6.) In an electric blast-furnace, causing a long arc of considerable blast and calorific power to act on the molten mass whilst the metal is being run off, in order to effect a superheating thereof and a volatilisation of the impurities, and combustion and absorption of the carbon, substantially as set forth. (7.) In an electric furnace, the formation or liquefaction, resulting from an increase of temperature momentarily obtained, of certain refractory slags, and the effecting by their discharge the elimination of injurious substances such as titanic acid, substantially as and for the purposes set forth. (8.) In the process for treating ores and metals electrically as described above, the employment of a movable furnace for receiving the metal run off, arranged so as to be very easily placed in circuit during the running-off of the metal from an upper furnace, and which can be moved underneath a number of furnaces of the same battery to receive successively the run-off metal, the placing in circuit of the movable furnace taking place in front of the upper furnaces substantially as described, in order, first, to refine and treat the run-off metal if required; second, to keep melted the metal contained in the electric receptacle, thus admitting of the collection in one receptacle of a very large quantity of metal and consequently of casting very large articles.

(Specification, 18s.; drawings, 2s.)

No. 14730.—10th April, 1902.—ALBERTO TEODORO DE BARY, of 745, Calle Tucuman, Buenos Aires, Argentine Republic, Merchant. Improved rod for wire fencing.

Claims.—(1.) An improved metallic rod to be used in wire fencing, essentially characterized by having a groove- or corrugation-like shape, provided at the back of both ends with a slot, so that a bifurcation is formed, both of whose arms 4, 4, which are provided with holes 3, 3, may be bent outwards, forming ears, which will tightly hold in position and against the holes the wire passing therethrough, so that the lateral displacement or sliding of the rod is rendered practically impossible, essentially as has been described, with reference to the drawings and for the purpose indicated. (2.) In the construction of wire fencing, and with reference to claim 1, the method of fastening the rod to the wires by bending outwards the bifurcated ends of the rod through which the wire passes, whereby the wire between both arms of the bifurcation will be slightly curved and held down firmly by the said arms, rendering so impossible any displacement of the rods, essentially as described and for the purposes indicated.

(Specification, 2s. 6d.; drawings, 1s.)

No. 14731.—10th April, 1902.—ROBERT OXLADE, of 177, George Street, Redfern, near Sydney, New South Wales, Electrical Engineer, and WILLIAM JOSEPH WHITE RICHARDSON, of Shaw and Belgrave Streets, Petersham, near Sydney aforesaid, Electrician. Improvements in audible electric telegraphy.

Claims.—(1.) In electric telegraphy, transmitting signals to a telephone by means of an induced current between stations by the arbitrary breaking of a local primary current of two different strengths in a transformer from which such induced current is derived, substantially as described and explained. (2.) In electric telegraphy, interposing a transformer between a sending-key for opening by two impulses a closed circuit at one station and a telephone receiver at the other, so as to transmit signals between such stations by a secondary or induced current in the line wire, substantially as described and explained. (3.) In electric telegraphy, having an induced current in the line wire conveying signals caused by the breaking or opening of a closed local primary circuit of two different strengths, devices for short-circuiting the secondary coils, and a transformer for inducing said current in the line wire, substantially as described and explained. (4.) The combination and arrangement, with the line wire of an audible electric-telegraph system carrying an induced current, of battery such as D having a part-connection such as X, or having a smaller battery and similar connection of a sending-key such as E having connections such as Ex, E1, E2, and E3, a transformer or induction coil such as B, a switch such as C having arm such as Cx, and contacts such as C1, C3, and C4, and a telephone receiver such as A with or without a resonator, substantially as described and explained, and as illustrated in Figs. 1 and 2 of the drawings.

(Specification, 4s. 3d.; drawings, 1s.)

No. 14733.—10th April, 1902.—WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of the Baron Cigarette-machine Company, Limited, of 4 to 6, St. James Place, Aldgate, London, England, Manufacturers—the assignees of Louis Bernhard Baron, of 4 to 6, St. James Place, Aldgate, London, aforesaid, Engineer, and Edward Thomas Pollard, of 126, Queen's Road, Everton, Liverpool, England, Engineer). Improvements in machines for packing cigarettes, cigarette-mouthpieces, and like articles.

Extract from Specification.—This invention relates to improvements in machinery for forming the slide cases or packets for packing therein cigarettes, cigars, or the like, together with a suitable number of mouthpieces for same if desired, the object being to provide a machine which will form the slide from a series of paper or pasteboard blanks presented to it in a continuous strip, fill the same with cigarettes, for example, insert if desired a suitable number of mouthpieces at the side or sides of same, and finally insert the filled slide case in an outer rectangular case or cover. The machine comprises a framework of any suitable form carrying a fixed hopper 1 for the outer cases *a*, which are rectangular frames collapsed, as shown in Fig. 1, such cases being adapted to be dropped into open-ended recesses 5 in the rim of a wheel 2 on a shaft 7, in which they are opened out as it is rotated until the recess in which they are held is brought into line with another wheel 3 on shaft 8 having somewhat similar recesses 6, in which the slides are formed and filled, with mechanism for producing necessary movements, &c.

[NOTE.—The number and length of the claims in this case preclude them from being printed, and the foregoing extract from the specification is inserted instead.]

(Specification, 17s. 6d.; drawings, 6s.)

No. 14734.—2nd April, 1902.—JOHN VORBACH, of Renwicktown, Marlborough, New Zealand, Blacksmith. Potato-digger.

Claims.—(1.) The double sprocketed wheel G, with the flat chains B. (2.) The chains in the middle of the system of endless chains B, B, being made longer than the side chains. (3.) The nave of the traction-wheels, with the slide-box, ratchet, and pawl, as described in the last clause of the specifications, from the word "third" to the end of the specification. (4.) I also claim the foregoing claims in combination with the machine as described in the first fifteen lines of the specification, ending with the word "work."

(Specification, 1s. 3d.; drawings, 2s.)

No. 14739.—11th April, 1902.—FEDERAL REFINING COMPANY, a corporation organized and existing under the laws of the State of New Jersey, having their principal place of business at Jersey City, New Jersey, United States of America (assignees of Claus A. Spreckels and Charles A. Kern, of New York, United States of America, respectively Engineer and Manufacturer, and Chemist and Manufacturer). Improvements in treatment of sugar, sugar-liquor, and sugar-bearing material, and in cleansing compositions employed in such treatment.

Extract from Specification.—One object of this invention is to economically and quickly remove impurities from

sugar or sugar-solutions. Another object is to produce a new cleansing-body, which, when mixed with impure sugar, will absorb or seize the impurities, including the invert sugar, and, when separated from the mass under treatment, will retain the absorbed or seized impurities. Prior to our invention, efforts had been made to wash or cleanse a mass containing sugar, usually in the form of sugar-crystals, by treating the same with a saturated solution of sugar, or with alcohol; but the saturated solution of sugar was only a non-solvent of the sugar when its full strength was maintained, and its use, in any event, resulted only in the transfer of a certain proportion of impurities from one body containing sugar to another of nearly equal quantity. The process of treating with alcohol was difficult to practise, owing to the volatile character of the material, and the large losses necessarily incident to its use. Moreover, the percentage of refined sugar recovered or produced in both of the above attempts was unsatisfactory both in amount and in quality of product. We are also aware that it has been proposed to wash a mass containing sugar-crystals with a liquid consisting of a mixture of water and paraffine-oil; but the employment of paraffine-oil in such process was only for the purpose of diminishing the amount of water used, and so lessening the dissolving effect upon the sugar-crystals, and the mixture had little or no effect upon the earthy or metallic salts, or the invert sugar, in the mass under treatment. We are further aware of the common practice of filtration of sugar-liquor or dissolved sugar, containing impurities, through a mass of bone-black or other comminuted material for the special purpose of removing colouring-matter, and which process incidentally partially removes other impurities; but it does not act to remove the salts or invert sugar, which remains and interferes with final crystallization, and forms molasses therein. The object of our invention is to avoid these tedious, expensive, and imperfect processes. Our process is practised by mixing the impure sugar with a defecating or cleansing liquid having greater affinity or absorbent properties for the earthy or metallic salts, and for the invert sugar and caramel, ordinarily found associated with sugar or sugar-bearing bodies, than the adherence of such substances to the sugar itself, and subsequently separating the sugar from the said cleanser containing the absorbed impurities. For this purpose we have devised, and employ, cleansing-materials which can be made from members of a class of bodies all having certain common characteristics as set forth.

[NOTE.—The number and length of the claims in this case preclude them from being printed, and the foregoing extract from the descriptive part of the specification is inserted instead.]

(Specification, 14s.)

No. 14752.—17th April, 1902.—ROBERT WLADISLAS DE MONTALK, of Queen Street, Auckland, New Zealand, Architect. An improved method of and means for constructing fireproof floors and ceilings.

Claims.—(1.) In the construction of fireproof floors and ceilings, the use of hollow tiles, made of any suitable material, and with sides shaped so as to enclose a space of greater width at the top than at the bottom, an opening in the bottom of such tile to allow of the tile being placed upon the building-joists, flanges upon the outer faces of the tile, and a covering adapted to fit and close the bottom opening of the tile as specified. (2.) In the construction of fireproof floors and ceilings, a tile shaped approximately as shown in Figs. 5 and 6, such tile being adapted to fit against the side of a girder, and, in conjunction with a corresponding tile upon the other side of the girder, to encircle the bottom thereof, such tiles being formed with holes therein through which the building-joists are passed, and with or without holes for the admission of insulating-material as set forth. (3.) The improved method of constructing fireproof floors and ceilings as described and explained, and as illustrated in the sheet of drawings.

(Specification, 3s. 6d.; drawings, 1s.)

No. 14753.—17th April, 1902.—LOUIS CARNEGY AULDJO, of Equitable Building, George Street, Sydney, New South Wales, Consulting Engineer. Improvements in air or gas compressors.

Claims.—(1.) In air or gas compressors, the combination of the piston *b* with the passages *k* and *k'* and ports 1, substantially as described and shown on the drawings and for the purpose set forth. (2.) In air or gas compressors, the combination of the passages *k* and *k'* with the ports 1, substantially as and for the purpose set forth. (3.) In air or gas compressors, the combination of the piston *b* with the valve *f'*, the passages *k* and *k'* and ports 1, substantially as and for the purpose set forth. (4.) In air or gas compressors, the combination of the piston *b* with the valves *e* and *e'*, passages *g* and *g'*, valves *f* and *f'*, passages *k* and *k'*, and ports 1, substantially as and for the purpose set forth. (5.) An air or gas compressor having both ends of the cylinder connected, substantially as and for the purpose set forth. (6.) The air or gas compressor as a whole, substantially as described and shown on the drawings, and for the purpose set forth.

(Specification, 3s.; drawings, 1s.)

No. 14757.—17th April, 1902.—ADAM MCCRACKEN, of Greensborough, Victoria, Pastoralist. An improved process of manufacturing a safety explosive.

Claims.—(1.) In the manufacture of a safety explosive, the combination of picric acid and glycerine, and the neutralisation thereof by the addition of carbonate of ammonia, substantially as described. (2.) In the manufacture of a safety explosive, the combination of picric acid and glycerine, and the neutralisation thereof by the addition of carbonate of ammonia, with the further addition of infusorial earth, and so producing the picrated mixture, substantially as described. (3.) In the manufacture of a safety explosive, the combination of picric acid and glycerine, and the neutralisation thereof by the addition of carbonate of ammonia, with the further addition of infusorial earth, and the production of the picrated mixture with the still further addition of nitrate of potash, substantially as described. (4.) In the manufacture of a safety explosive, the combination, method, or process described, comprising the association of picric acid and glycerine, the neutralisation thereof by the addition of carbonate of ammonia, the further addition of infusorial earth, and the production of the picrated mixture, to which is added nitrate of potash, together with a small percentage of sulphur, after which the drying operation is carried out, substantially as described, as and for the purpose set forth.

(Specification, 2s.)

No. 14758.—17th April, 1902.—HENRY GRASS, of Flowerdale, near Broadford, Victoria, Grazier. An improved dropper for pasty material such as the phosphorized pollard used in rabbit-destruction.

Claims.—(1.) In a tool of the class indicated, a reservoir having a nozzle, and having a movable foot having an attachment for the closing and opening of said nozzle, substantially as set forth. (2.) In a tool of the class indicated, a spring-actuated foot substantially as and for the purposes set forth. (3.) In a tool of the class indicated, a nozzle having an extension as B^4, and openings as at B^1 and B^5, substantially as and for the purposes set forth. (4.) In a tool of the class indicated, a plug as D^4 adapted to operate as set forth. (5.) In a tool of the class indicated, the combination and arrangement of all the parts shown in Fig. 3 of the drawings. (6.) In a tool of the class indicated, having a reservoir with piston, auxiliary means for pressing down the said piston, substantially as set forth. (7.) In a tool of the class indicated, having a reservoir with piston, auxiliary adjustable means for pressing down the said piston, substantially as set forth. (8.) In a tool of the class indicated, a reservoir having a piston and piston-rod in combination with a cylinder enclosing a spring, and an adjustable finger as I arranged relatively to said spring, substantially as set forth. (9.) The general combination as a whole of the parts A to K described, substantially as and for the purposes set forth.

(Specification, 4s.; drawings, 1s.)

No. 14759.—17th April, 1902.—ALLGEMEINE BELEUCHTUNGS UND HEIZ-INDUSTRIE ACTIEN-GESELLSCHAFT, of Behrenstrasse, 67, Berlin W., Germany, Manufacturers (assignees of Paul Lucas, of Neue Winterfeldstrasse, 31, Schoneberg, near Berlin aforesaid, Engineer). Improvements in incandescent gas-lamps.

Claims.—(1.) A method of producing high illuminating-power in incandescent gas-lamps with normal gas-pressure, in which, owing to the suctional effect of a lengthened draught-tube, the burner is always supplied through the mixing-tube of the lamp with a mixture of air and gas containing a higher proportion of gas than is required to produce pure oxyhydrogen with coal-gas more than 6 : 1, for the purpose set forth. (2.) A modification of the method described in claim 1, in which the surplus of air sucked in through the burner-tube is correspondingly reduced, in some cases to below the proportion of 6 : 1, by cooling the burner-head by means of air supplied from outside the head, and subsequently also serving for combustion. (3.) An incandescent gas-lamp working with normal pressure, having a draught-tube of more than ordinary width and length combined, with a burner-tube widened to receive a surplus of air beyond the quantity of

air required to produce an oxyhydrogen mixture, and considerably lengthened in order to produce a good mixture, the foot of the said burner-tube preferably terminating openly above the gas-nozzle to allow of unimpeded inflow of air.

(Specification, 5s. 6d.; drawings, 1s.)

No. 14762.—18th April, 1902.—HALIBURTON PECK, of Vancouver, British Columbia, Canada, temporarily of Sydney, New South Wales, Canning-machine Specialist (nominee of James Moore Kelly Letson and Frank Watts Burpee, both of 142 to 148, Alexander Street, Vancouver aforesaid, Canning Specialists and General Machinists). Improvements in can-washing machines.

Extract from Specification.—This invention relates to can-washing machines adapted for use in canning establishments for removing the grease and other foreign substances with which the exterior surfaces of the cans become covered in the process of filling, the removal of such foreign substances being necessary previous to securing the caps upon the cans in order to insure the adhesion of the solder or cement. The object of the invention is to provide a compact and efficient machine which will receive the cans, cover the same temporarily to prevent the escape of the contents thereof, carry them through a jet of hot water or other cleansing agent, remove the surplus water and dry the surfaces of the cans, and finally transfer them to a continuously moving carrier, whereby they are transported to the table where the caps are applied.

[NOTE.—The number and length of the claims in this case preclude them from being printed, and the foregoing extract from the specification is inserted instead.]

(Specification, 13s. 6d.; drawings, 3s.)

No. 14763.—18th April, 1902.—HALIBURTON PECK, of Vancouver, British Columbia, Canada, temporarily of Sydney, New South Wales, Canning-machine Specialist (nominee of James Moore Kelly Letson and Frank Watts Burpee, both of 142 to 148, Alexander Street, Vancouver aforesaid, Canning Specialists and General Machinists). Improvements in machines for applying caps or ends to cans.

Claims.—(1.) A can-capping machine comprising a rotating frame having reciprocally movable can-seats, a rotatable table having openings for the cans, means for feeding the caps in position, vertically reciprocal cap-pressers, and means for simultaneously elevating the can-seats and depressing the cap-pressers, as specified. (2.) A can-capping machine comprising a rotating frame having can-seats, a rotatable table having openings for the cans, means for keeping the cap in position, and vertically reciprocal cap-pressers mounted on the frame, rotatable with the can-carrying frame, and means for reciprocally moving the cap-pressers in engagement with the caps and holding them during the operation of delivering the same to a take-off belt, substantially as described. (3.) In combination with a machine for applying the caps to cans, a rotatable table having openings for the cans and means for applying caps thereto, of a frame 24 having radial arms with spindles arranged therein, depending discs on the ends of such spindles, a rigidly fixed frame 27 secured to the top of the spindle 13, on which the table and the frames 14 and 24 rotate, said frame having a track 28 for rollers around the upper and lower sides of its rim, rollers 30 arranged to turn on the shanks of collars which are secured to the top of the spindles 25, and such rollers to take around the track 28, such track taking on the under-side of the rim of the frame 27 for a distance vertically above the fixed cam 46 on the bed, whereby the discs will be depressed and the can-supports will be elevated simultaneously, as set forth. (4.) A rotatable table having openings therein, in combination with reciprocating-discs above and below such openings, of jaws forming the annular rims of the said openings, a ring supporting said jaws having grooves in the upper side thereof beneath each respective jaw member, tongues depending from the under-sides of said jaws and engaging in the grooves, said grooves and tongues being placed at differential axis to the openings, for the purposes set forth. (5.) In combination with a rotatable table having openings therein, with reciprocating-discs vertically above and below such openings, of jaw members around said openings, rings connected with tongue-and-grooved mechanism with such jaws, said tongues and grooves arranged on arcs with a differential axis to the openings, of support members 53 secured beneath the table and supporting the said rings, arms 54 passing through slots in the upper sides of the members 53 and engaging fixed pins 52*b* depending from the said rings, antifriction devices on the projecting ends of said arms, and a cam 56 arranged on one side of the table which will engage and push the said arms inward and draw them forward, whereby the rings 52 will be turned for a distance back and forth, and whereby the openings will be expanded and contracted, as set forth. (6.) In combination with a rotatable table having openings therein, with reciprocating can and cap discs beneath and above such openings, of jaw members arranged at an angle around the said openings, said jaws being bell-mouthed from below and slightly flared from above, the contracted annular centre having rims for the seats of the can-caps, and upwardly projecting lips around such seats, of rigidly fixed pins depending from the table 20 to within slots 51*c* in said jaw members, said slots being arranged at an angle to each other, and with their slideways at right angles to the axis of the openings in the table, as specified. (7.) In combination with a rotatable table having openings therein, with reciprocating can and cap discs below and above such openings, of members for contracting and expanding the openings as specified, brackets 41 secured to the table at the rear sides of the openings, plates 48 arranged to reciprocate in slots on opposite sides of the openings, triggers 49 pivotally secured to oppositely fixed ears on the brackets 41, and the horizontally disposed arms of the triggers engaging with projections on the spindles which support the discs above the openings, as set forth. (8.) In a machine of the class described having a rotatable table with openings therein for the contact of cans and caps, the combination of spindles having discs 26 arranged above such openings, and means for raising and depressing the same, oppositely disposed projections secured on the rear sides of the said spindles 25, brackets 41 secured to the rear sides of the said openings, the inner sides of these brackets being of arc form on the same contour to the openings, slidable plates 48 arranged on opposite sides of the said openings, triggers 49 pivotally connected to upwardly and oppositely disposed ears on the brackets 41, and connecting with the projections on the spindles 25 and the slidable plates 48, whereby when the spindles rise and fall the said plates will be reciprocated over the opposite sides of the openings. (9.) In a machine of the class described having a rotatable table with openings therein, spindles arranged in a carrier 24 secured to the said table, said spindles having discs on their depending ends, collars 29 rigidly fixed to the upper ends of the said spindles, shanks on said collars which project inwardly, rollers on the ends of the shanks engaging with a track on the fixed frame 27, vertical apertures through the said shanks of the collars and guides 50, rigidly fixed in the arms of the frame 24 and passing upwardly through the apertures in said shanks of the collars, whereby the spindles 25 will be prevented from turning, as set forth. (10.) In combination with a rotatable table having openings therein, with reciprocating can and cap discs below and above such openings, slidable stems 42 arranged within the spindles 25 above the table, cap-holding discs 26 on the depending ends of the stems 42, coil springs 44 for normally pressing these holders downward, slots 25*a* in the sides of the spindles, and screws 43 inserted through such slots and secured in the spindles 42, whereby their movement will be controlled. (11.) In combination with a rotatable table having openings for cans, can-supporting discs arranged beneath in a frame integral with the table, a fixed table or can-guideway 33 supported and secured by brackets 32 on a level plane with the can-supports below the table, of an inwardly projecting horizontally disposed bracket 34 secured to one end of said table, a shaft 35 vertically journalled in such bracket, a wheel 36 having can-recesses 36*a* therein, said recesses being placed in alignment with the openings in the table, of a cap-feeding wheel 37 secured on the upper end of the shaft 35 and having recesses therein directly above the recesses in the wheel 36, and a toothed wheel 39 secured to upwardly projecting brackets on the cap-feeding wheel, which toothed wheel meshes with a like wheel 31 secured to the frame 24 above the rotatable table, as set forth. (12.) In combination with a rotable table having openings therein, can-supporting discs below such openings, cap-engaging discs above such openings, of a can-feeding wheel having its recesses engage in alignment below the recesses or openings in the table, can-guards 40 arranged to prevent the cans from being pushed beyond such alignment, a table or bracket 38 secured upon the table 33 having a slideway for caps, a cap-feeding wheel 37 having recesses vertically arranged above the recesses or seats in the wheel 36, and means for communicating movements to these wheels simultaneously with the movement of the table 20, whereby a can will be placed on the support below the opening therein, and a cap will be placed over such opening, as set forth. (13.) In combination with a rotatable table having openings therein, and can-supports below such openings on a plane with a fixed table 33, a groove in such table for the passage of a belt 59, and an arc guide 63 fixed at even radii with the diameter of a can-feeding wheel 36, and means for changing

the radius of such guide, as set forth. (14.) In a machine of the class described, in combination with a rotatable table having openings for the contact of cans with their caps, a groove for the passage of a belt 59 arranged to pass over a fixed table, an adjustable bracket 75 having reciprocating-fingers 79 arranged in mechanism therein, such mechanism connecting with a cam wheel by an oscillatory lever, whereby the fingers will be thrust back and forth over the said belt 59, as and for the purposes set forth. (15.) A fixed table (33) having a belt passing over a groove or recess in the same, means for imparting movement to such belt, a can-spacing mechanism on one side thereof, and means for pushing cans at intervals around a common centre from the belt on one side to pass over to the other side without contacting with such belt, by a plate intervening. (16.) In a device for feeding caps to cans in a machine as described, the combination of a table 33, and a recess therein for a belt travelling thereover, a can-feeding wheel having seats for cans which push the cans forward over the table, a guide 63 arranged to control the cans, a bracket 86 pivotally fixed without the track of the cans, oppositely disposed arms on said bracket projecting into the path of the cans, of a cap-feeding belt 69 arranged over a bracket or slideway 36, an adjustable bracket 91 secured to a lug on such bracket 38, and a finger-cap-releasing mechanism arranged on the bracket 91, the same being connected to the arm 88 as shown and described, whereby each can engaging the arms of the bracket 86 will release its own cap. (17.) In combination with a rotatable table having openings therein for the passage of caps, can-supports arranged below said openings, and seats for the caps in such openings, a fixed table 33 and means for passing cans thereover on a plane with the can-supports beneath the rotatable table, a bracket 38 arranged above the table 33, a groove for a cap-feed belt 69 which takes thereover and around a pulley 70 on a shaft 71, and means for imparting movement to such pulley by a sprocket belt 98 taking over a wheel 99 secured on the shaft 16, said belt 69 arranged on a plane with the table 20, and means for simultaneously depositing a can and a cap respectively below and above one of the said openings, as set forth. (18.) In a can-capping machine, the combination of a rotating frame having reciprocally movable can-seats, a rotatable table having contractible openings for the cans and provided with cap-seats, means for simultaneously feeding a can to one of the seats and a cap to its seat, vertically reciprocal cap-pressers, and means for simultaneously elevating the can-seats and for depressing the cap-pressers, and for releasing and delivering the same to a belt, substantially as described. (19.) In combination with a rotatable table having openings therein, each opening being formed by members arranged at an angle to each other, and having tongues on the under-sides resting in grooves in a movable ring, which are placed at a differential axis to the opening, and the whole being supported by brackets or plates 53, an arm passing through such plate diametrically in line with the table, a rigid pin secured to said ring and engaging in a slot in the deflected end of such arm, and means for forcing the arm in and out, whereby the jaw member will contract and expand the opening, as set forth. (20.) In a can-capping machine, the combination of a rotary table having openings, reciprocating-discs above the openings, reciprocating-plates at opposite sides of the openings for supporting the caps, and connections between the discs and plates, whereby the plates will be withdrawn when the discs are moved downward, substantially as described. (21.) In a can-capping machine, the combination of a rotary table having openings, vertically reciprocating-discs located above the openings and adapted to engage the caps, reciprocating-plates located at opposite sides of the openings for supporting the caps, and levers connecting the discs and the plates, whereby the latter will be withdrawn when the former move downward, substantially as described.

(Specifications, £1; drawings, 7s.)

No. 14764.—18th April, 1902.—HALIBURTON PECK, of Vancouver, British Columbia, Canada, temporarily of Sydney, New South Wales, Canning-machine Specialist (nominee of James Moore Kelly Letson and Frank Watts Burpee, both of 142 to 148, Alexander Street, Vancouver aforesaid, Canning Specialists and General Machinists). Improvements in dies or stamps for forming can-ends.

Claim.—In a die for forming the ends of cans, the combination of a base, the outer cutting-ring rigid with the base and having an upper cutting-edge, a detachable centre-piece rigidly mounted upon the base, the vertical springs housed in the base and engaging the lower face of the centre-piece, and having their upward movement limited by the same, said springs projecting beyond the periphery of the centre-piece, a depressible ring located between the centre-piece and the cutting-ring and supported upon the said springs, and a punch, substantially as described.

(Specification, 3s. 6d.; drawings, 1s.)

No. 14772.—17th April, 1902.—HENRY DROUTLEGE, of Auckland, New Zealand, Clerk. An improved registering and recording machine for use in connection with totalisators, voting-apparatus, and suchlike.

Claims.—(1.) In a registering and recording machine of the kind specified, in combination, the individual outer registering-wheel, an over pawl and under pawl operating said outer registering-wheel, a lever having said over pawl connected thereto, a stud carrying said under pawl and projecting at right angles from arm jutting out from jacket or sleeve, said jacket fitted on to shaft and suitably secured thereto, said shaft carrying said outer registering-wheel, said stud carrying spiral spring connected with under pawl, said lever connected at its outer end to crank by rod and worked by handle or other suitable mechanism, said lever fulcrumed to said arm on or about its centre, whereby said over pawl is made to engage ratchet wheel fixed to said outer registering-wheel, all for the purpose set forth, substantially as described and illustrated. (2.) In a registering and recording machine of the kind specified, in combination, the grand total outer registering-wheel, an over and under pawl operating said outer registering-wheel, a lever having said under pawl connected thereto, a stud carrying said under pawl and projecting at right angles from arm jutting out from jacket or sleeves, said jacket fitted on to shaft and suitably secured thereto, said shaft carrying said outer registering-wheel, said stud carrying spiral spring connected with under pawl, said lever fulcrumed to said arm on or about its centre, whereby said over pawl is made to engage ratchet wheel fixed to said outer registering-wheel by upright rod connected to said lever, said upright rod connected to under arm, said under arm connected to and working with a horizontal rod, said horizontal rod having an upper arm extending upwardly and diagonally, said upper arm having a jaw-formation at its upper end, with stud passing through ends of said jaw, said jaw made to engage slot in inner end of horizontal piece, said horizontal piece loosely held at its outer end by pin connection and connected at its inner end to an upright rod, and said upright rod connected to inner end of lever, claimed for in first claim, all for the purpose set forth, substantially as described and illustrated. (3.) In a registering and recording machine of the kind specified, in combination, the inner wheel of either the individual or grand total sets, the ratchet wheel affixed thereto, the lever with upper pawl attached, the lower pawl fulcrumed to arm jutting out from jacket, said arm, said jacket, the screw, the stud, the spiral spring, and the projecting pin, as shown in Figs. 2 and 5, all for the purpose set forth, substantially as described and illustrated. (4.) In a registering and recording machine of the kind specified, the combination and arrangement of the several wheels, ratchet wheels, shafts, levers, pawls, jackets or sleeves, screws, arms, studs, springs, projecting pins, horizontal rod, horizontal pieces with slots at inner ends thereof, arms working with horizontal rod and having jaws and studs on upper arms, upright rods, slotted plate, and handle with cranks and connecting-rod, all for the purposes set forth, substantially as described and illustrated.

(Specification, 6s.; drawings, 1s.)

F. WALDEGRAVE,
Registrar.

An asterisk (*) denotes the complete specification of an invention for which a provisional specification has been already lodged.

NOTE.—The cost of copying the specification and drawings has been inserted after the notice of each application. An order for a copy or copies should be accompanied by a post-office order or postal note for the cost of copying.

The date of acceptance of each application is given, and the number.

Provisional Specifications.

Patent Office,
Wellington, 30th April, 1902.

APPLICATIONS for Letters Patent, with provisional specifications, have been accepted as under:—

No. 14697.—3rd April, 1902.—UNITED SHOE-MACHINERY COMPANY, of Paterson, New Jersey, United States of America, a corporation duly organized under the laws of the State of New Jersey, and having their principal place of business at 205, Lincoln Street, Boston, Massachusetts, United States of America (assignees of Benjamin Franklin Mayo, of Salem, Essex, Massachusetts aforesaid, Inventor). Improvements in heel-nailing machines.

No. 14736.—9th April, 1902.—JOSEPH HENRY THOMAS, of 177A, Salisbury Street, Christchurch, New Zealand, Coffee-stall Proprietor. An improved hedge-cutter.

No. 14740.—11th April, 1902.—JAMES HENRY SEYMOUR, of Oxford Street, South Dunedin, New Zealand, Cycle

Mechanic, and WILLIAM WARDROP, of Main Road, South Dunedin aforesaid, Chemist. Improvements relating to hat-fasteners.

No. 14741.—9th April, 1902.—JOHN POMEROY, of Invercargill, New Zealand, Fish-curer. Improvements in bowls for use in pots for cooking purposes.

No. 14742.—14th April, 1902.—GEORGE JOHN SELLARS, Jun., of 14, Salisbury Street, Christchurch, New Zealand, Compositor, and ARTHUR VALENTINE COXHEAD, of Brougham Street, Sydenham, New Zealand, Painter. An approved appliance for toasting bread.

No. 14743.—15th April, 1902.—HORACE ROLAND BELL, of Lyttelton, New Zealand, Clerk. Improvements in bottles and stoppers therefor.

No. 14749.—17th April, 1902.—HENRY JAMES JONES, of Stratford, Taranaki, New Zealand, Mechanic. Liquid seal cover.

No. 14750.—17th April, 1902.—ROBERT GARNHAM, of Wellington, New Zealand, Plumber. An improved non-refillable bottle.

No. 14751.—17th April, 1902.—JOHN SMITH HENDERSON, of Bluff Road, Ramornie, New Zealand, Cabinetmaker, and WALTER ROBINSON, of Strathearn, Invercargill, New Zealand, Woodcarver. A spring retaining-catch for doors and the like.

No. 14754.—17th April, 1902.—JOHN SMETHURST, of Wyalong, New South Wales, Architect. Improvements in the construction of tanks, vats, and the like.

No. 14755.—17th April, 1902.—WILLIAM CHANDOS WALL, of 22, Wellington Street, Newtown, New South Wales, Commercial Agent. An improved washing-machine.

No. 14756.—17th April, 1902.—NICHOLAS MARCH, of 88, Taranaki Street, Wellington, New Zealand, Engine-driver, and AUGUSTUS THOMPSON, of the Hospital, Wellington aforesaid, Carpenter. Improvements in carriage-lamps.

No. 14769.—16th April, 1902.—DAVID RANKEN SHIRREFF GALBRAITH, of Ladies' Mile, Remuera, Auckland, New Zealand, Analytical and Consulting Chemist. An improved electro-metallurgical method for the treatment of iron-oxides or other substances.

No. 14770.—14th April, 1902.—ROBERT PEARCE GIBBONS, of Kopu, Thames, New Zealand, Sawmill-proprietor. An improvement in high-pressure gauge-glasses for steam-boilers.

No. 14771.—16th April, 1902.—WILLIAM DAWSON, of 44A, Shortland Street, Auckland, New Zealand, Photo-engraver. A mixture or remedy for the cure of cuts, bruises, scalds, burns, running sores, chilblains, frost-bites, piles, eczema, and other skin-diseases, also animal and insect bites.

F. WALDEGRAVE,
Registrar.

NOTE.—Provisional specifications cannot be inspected, or their contents made known by this office in any way, until the complete specifications in connection therewith have been accepted.

The date of acceptance of each application is given after the number.

Letters Patent sealed.

LIST of Letters Patent sealed from the 17th April, 1902, to the 30th April, 1902, inclusive:—

No. 13188.—J. Y. Johnson, sterilising liquids (Compagnie Générale pour la Conservation des Liquides—W. Kuhn).

No. 13278.—T. Awdry, label-ticket holder.

No. 13284.—W. Nicol, door-stop.

No. 13318.—J. N. Clapham, rein-holder and wheel-stop.

No. 13352.—R. Cockerell, amalgamating-screen.

No. 13398.—P. P. J. Clinton, vehicle-brake.

No. 13439.—B. G. A. Harkness, water-heater.

No. 13457.—J. H. Lancashire and J. W. Worsey, treating complex ores.

No. 13468.—W. S. Hazelton, extracting gold.

No. 13495.—A. J. Hewetson, cycle-holder.

No. 13557.—C. J. Seager, cavalry great-coat.

No. 13660.—A. G. Rosser, railway spike and wedge.

No. 13854.—J. P. van der Ploeg, treating ores for antimony.

No. 13987.—W. S. Burt, cleaning hulls of vessels.

No. 13994.—J. P. Goodbun, dumb-caddie.

No. 14037.—R. M. Cooper, H. J. Cooper, and J. Stone, jun., window-support.

No. 14112.—F. Eisbeneis and F. Garelly, stone cutting and drilling.

No. 14132.—O. Andrews, milk-can.

No. 14146.—H. P. Rasmussen and W. Hagerty, pneumatic hub.

No. 14182.—R. Sands, punching-press for paper, &c. (J. Roberts).

No. 14196.—H. Simkin, broom-handle attachment.

No. 14223.—R. Kändler, explosive.

No. 14283.—W. E. Hughes, windings for electrical machines (B. G. Lamme).

No. 14299.—The Victorian Forage-compressing Company Proprietary, Limited, compressing forage, &c. (J. Ferrier).

No. 14300.—E. Knudsen, treating ores.

No. 14311.—J. F. Martin, taps, &c.

No. 14320.—J. D. Ashby, athletic apparatus.

No. 14323.—E. G. Sjöstrand, "Kite" sinking-apparatus.

No. 14325.—L. Grote, glass-bottle machine.

No. 14329.—A. Wolfe, culinary stirrer.

No. 14356.—I. A. Timmis, bogie for railway rolling-stock.

No. 14359.—C. Perdrisat, coin-freed sale apparatus.

No. 14360.—W. F. Ellis and E. C. Davis, vehicle-wheel.

No. 14361.—F. J. E. Johansson, steam-engine.

No. 14377.—A. G. Haehre, treating match-sticks.

No. 14380.—W. Moir and J. Robertson, seamless tin.

No. 14381.—C. Garrett, money-till.

No. 14386.—A. A. Brooks and G. A. Watson, camera.

No. 14387.—C. W. Milne and F. C. Haste, pump.

No. 14388.—D. H. and E. J. Burrell, liquid-delivery apparatus (H. Feldmeier).

No. 14393.—J. Gadsden, canister.

No. 14402.—Porcherine, Limited, sweetening liquids (Paul Porchère).

No. 14403.—B. F. McTear, manufacture of steel tubes.

No. 14404.—W. T. L. Travers, windings for electrical machines (B. G. Lamme).

No. 14410.—A. Gentzsch, guttapercha substitute.

No. 14437.—The Barwest Coaster-brake Company, driving and braking mechanism (G. F. Barton).

F. WALDEGRAVE,
Registrar.

New Patent granted.

NEW Letters Patent, No. 2733, have been granted to Job Osborne, of Doyleston, Canterbury, in respect of his invention for "a double-action well-driver," for a term of seven years from the 8th January, 1902, *subject to the special condition that the said invention may be used by any person on payment of a royalty of not more than twenty shillings for every well in sinking which it is used.*

F. WALDEGRAVE,
Registrar.

Letters Patent on which Fees have been paid.

[NOTE.—The dates are those of the payments.]

SECOND-TERM FEES.

NO. 10593.—B. C. Pole, motive-power engine. 12th April, 1902.

THIRD-TERM FEES.

Nil.

F. WALDEGRAVE,
Registrar.

Subsequent Proprietors, &c., of Letters Patent registered.

[NOTE.—The name of the patentee is given in brackets; the date is that of registration.]

NO. 12276.—The International Pneumatic Tool Company, Limited, of Palace Chambers, Westminster, in the County of Middlesex, England, pneumatic drill. [H. J. Kimman.] 30th April, 1902.

No. 12317.—The International Pneumatic Tool Company, Limited, of Palace Chambers, Westminster, in the County of Middlesex, England, direct-acting engine. [H. J. Kimman—E. N. Hurley.] 30th April, 1902.

No. 12456.—The International Pneumatic Tool Company, Limited, of Palace Chambers, Westminster, in the County of Middlesex, England, pneumatic riveting-apparatus. [H. J. Kimman.] 30th April, 1902.

No. 12743.—Walter Stimpson, of St. Helier's, Auckland, New Zealand, Gentleman, wire-strainer. [H. A. Wilson—W. Nepean-Hutchison.] 26th April, 1902.

No. 13399.—Walter Robinson, of Palmerston North, New Zealand, Printer, *registered as proprietor of an undivided moiety or half-share*, meat-dish handle. [F. E. Newth.] 30th April, 1902.

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent abandoned.

LIST of Applications for Letters Patent (with which provisional specifications only have been lodged) abandoned from the 17th April, 1902, to the 30th April, 1902, inclusive:—

No. 13729.—A. R. Fowler, gas-lighting (G. H. Burrows).
No. 13730.—T. W. Pierson, branding carcases.
No. 13736.—J. J. Macky, broom.
No. 13737.—W. Painter, skeith or coulter attachment.
No. 13739.—J. S. Holmes, sales-check.
No. 13744.—T. Firth, rocking-chair.
No. 13745.—W. M. Davies, nose-bag.
No. 13751.—R. Caldwell, fire escape.
No. 13754.—P. Ferguson, amalgamating-trap.
No. 13765.—J. H. Coupe, reversing rotation of shafting.
No. 13768.—C. A. Trotter, ascertaining distances.
No. 13771.—C. L. Watt, A. C. McGeorge, and S. Crow, tailings-elevator.
No. 13775.—W. P. McNair, wire-strainer.

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent lapsed.

LIST of Applications for Letters Patent (with which complete specifications have been lodged) lapsed from the 17th April, 1902, to the 30th April, 1902, inclusive:—
No. 13089.—L. G. Reeves, smoke-conveyer and spark-extinguisher.
No. 13108.—J. H. Gay, stone-sawing machine.
No. 13109.—W. G. Tilley, ruling-machine.

F. WALDEGRAVE,
Registrar.

Letters Patent void.

LIST of Letters Patent void through non-payment of fees from the 17th April, 1902, to the 30th April, 1902, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 10293.—G. Paterson, velocipede.
No. 10294.—G. Paterson, velocipede.
No. 10295.—G. Paterson, velocipede.
No. 10296.—G. Paterson, velocipede.
No. 10297.—G. Paterson, velocipede.
No. 10298.—W. Pickup, pruning-appliance.
No. 10301.—W. Sully, ore-roasting furnace.
No. 10305.—J. R. Bradley, H. Giles, and F. V. Sanderson, labelling tins, jars, &c.
No. 10306.—W. E. Hughes, leaf-stemming machine (J. E. Evans-Jackson).
No. 10308.—T. F. Evans, horse-cover.
No. 10310.—W. B. Lucas, refrigerator.
No. 10314.—E. R. Dinsmore, starch-mixture.
No. 10316.—A. A. and T. S. Grace, buckle-fastener.
No. 10317.—L. and D. McInnes, headstall halter.
No. 10323.—W. Asmus, ventilating mines.
No. 10326.—L. Braly, auto-luminous composition.
No. 10327.—W. Cooper, air-cooler.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

No. 7386.—C. C. Morris, tobacco-cutter.
No. 7403.—H. L. Mainland, ceiling for dairy factory.

F. WALDEGRAVE,
Registrar.

Designs registered.

DESIGNS have been registered in the following names on the dates mentioned:—
No. 152.—Andrew Devlin, of Duncan Street, South Dunedin, New Zealand, Lapidary. Class 2. 7th March, 1902.
No. 153.—Andrew Devlin, of Duncan Street, South Dunedin, New Zealand, Lapidary. Class 2. 24th March, 1902.
No. 154.—S. Barry, of Palmerston North, New Zealand, Eyesight Specialist. Class 5. 18th April, 1902.

F. WALDEGRAVE,
Registrar.

Applications for Registration of Trade Marks.

Patent Office,
Wellington, 30th April, 1902.

APPLICATIONS for registration of the following trade marks have been received. Notice of opposition to the registration of any of these applications may be lodged at this office within two months of the date of this *Gazette*. Such notice must be in duplicate, and accompanied by a fee of £1.

No. of application: 3298.

Date: 8th February, 1901.

TRADE MARK.

"THE RIDGES"

MAGPIE

KIMBOLTON

NAME.

W. T. LONDON, of Kimbolton, New Zealand, Farmer.

No. of class: 42.

Description of goods: Butter.

No. of application: 3692.

Date: 5th March, 1902.

TRADE MARK.

The essential particular of this trade mark is the device; and the applicants disclaim any right to the exclusive use of the added matter, except their name and address.

NAME.

ALEXANDER AND CO., of Kaiapoi, Canterbury, New Zealand, Cordial-manufacturers.

No. of class: 44.

Description of goods: Mineral and aerated waters, natural and artificial, including ginger-beer.

No. of application: 3725.
Date: 24th March, 1902.

TRADE MARK.

The essential particulars of the trade mark are the word "Bear," and the combination of the word "Bear" and a shield; and any right to the exclusive use of the added matter, except the word "Union," is disclaimed.

NAME.

THE UNION BAG AND PAPER COMPANY, a corporation organized and existing under the laws of the State of New Jersey, and having a place of business at Jersey City, in the said State of New Jersey, United States of America.

No. of class: 39.
Description of goods: Paper bags.

No. of application: 3726.
Date: 24th March, 1902.

TRADE MARK.

The essential particulars of the trade mark are the representation of a bear and the combination of devices; and any right to the exclusive use of the added matter, except the word "Union," is disclaimed.

NAME.

THE UNION BAG AND PAPER COMPANY, a corporation organized and existing under the laws of the State of New Jersey, and having a place of business at Jersey City, in the said State of New Jersey, United States of America.

No. of class: 39.
Description of goods: Paper bags.

No. of application: 3731.
Date: 1st April, 1902.

TRADE MARK.

The applicants claim that the said trade mark has been used by them and their predecessors in business since the year 1886.

NAME.

J. AND J. M. WORRALL, LIMITED, of Ordsall Dye-works, Salford, Lancashire, England, Dyers.

No. of class: 24.
Description of goods: Cotton piece-goods.

No. of application: 3732.
Date: 1st April, 1902.

TRADE MARK.

The essential particulars of the trade mark are the combination of devices, including the representation of a crown other than the Royal Crown, and the motto "We fear no foe"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

JAMES WATSON AND CO., LIMITED, of 97, Seagate, Dundee, Scotland, Distillers.

No. of class: 43.
Description of goods: Whisky.

No. of application: 3755.
Date: 12th April, 1902.

TRADE MARK.

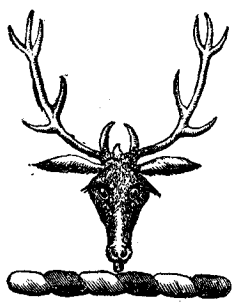
NAME.

CURTIS'S AND HARVEY, LIMITED, of 3, Gracechurch Street, London, England, Explosive-manufacturers.

No. of class: 20.
Description of goods: Explosive substances.

No. of application: 3756.
Date: 12th April, 1902.

TRADE MARK.



NAME.

MACKENZIE BROS., of Dalmore Distillery, Allness, Rossshire, Scotland, Distillers.

No. of class: 43.
Description of goods: Whisky.

No. of application: 3754.
Date: 12th April, 1902.

TRADE MARK.

The word

"ALEXANDRA."

NAME.

UNION OIL, SOAP, AND CANDLE COMPANY, LIMITED, of Lower Albert Street, Auckland, New Zealand.

No. of class: 47.
Description of goods: Starch-glaze.

No. of application: 3757.
Date: 12th April, 1902.

TRADE MARK.

The word

DALMORE

NAME.

MACKENZIE BROS., of Dalmore Distillery, Allness, Rossshire, Scotland, Distillers.

No. of class: 43.
Description of goods: Whisky.

No. of application: 3758.
Date: 12th April, 1902.

TRADE MARK.

The word

WALBRON

NAME.

WALTER WILLIAM BROWN, of Stamford Factory, Portsmouth, Corset-manufacturer.

No. of class: 38.
Description of goods: Articles of clothing.

No. of application: 3763.
Date: 14th April, 1902.

TRADE MARK.

The word

MILITARY.

NAME.

HAYWARD BROS., LIMITED, of 171, Peterborough Street, Christchurch, New Zealand, Pickle and Sauce Manufacturers.

No. of class: 42.
Description of goods: Substances used as food or as ingredients in food.

No. of application: 3764.
Date: 17th April, 1902.

TRADE MARK.

The word

TROPHIES

NAME.

THE AMERICAN TOBACCO COMPANY, a corporation organized and existing under the laws of the State of New Jersey, one of the United States of America, and having an office at No. 111, Fifth Avenue, in the City of New York, State of New York, one of the United States of America.

No. of class: 45.
Description of goods: Tobacco, cigars, and cigarettes.

No. of application: 3766.
Date: 15th April, 1902.

TRADE MARK.

The words

"WATERFALL BRAND."

The essential particular of this trade mark is the word "Waterfall"; and any right to the exclusive use of the word "Brand" is disclaimed.

NAME.

D. G. LANE, of Waikare, Bay of Islands, New Zealand.

No. of class: 42.
Description of goods: Preserved fruit, meat, or fish.

No. of application: 3767.
Date: 19th April, 1902.

TRADE MARK.

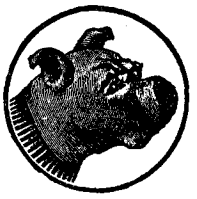
NAME.

NEW SUNLIGHT INCANDESCENT COMPANY (1900), LIMITED, of Nos. 33 and 34, Shoe Lane, London, England.

No. of class: 18.
Description of goods: Incandescent mantles.

No. of application: 3768.
Date: 21st April, 1902.

TRADE MARK.

BULL-DOG  BRAND

The essential particulars of the trade mark are as follow—the device of the head of a bull-dog, and the word "Bull-dog"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

RIGBY, BATTCOCK, AND CO., of 50, Bethnal Green Road, London, England, Brush-manufacturers.

No. of class: 50 (subsection 5).
Description of goods: Brushes of all kinds.

No. of application: 3769.
Date: 24th April, 1902.

TRADE MARK.

The word

PILOT.

NAME.

HAYWARD BROS., LIMITED, of Peterborough Street, Christchurch, New Zealand, Pickle and Sauce Manufacturers.

No. of class: 42.
Description of goods: Substances used as food or as ingredients in food.

No. of application: 3771.
Date: 24th April, 1902.

TRADE MARK.

ROSS, McKENZIE & Co'y

THE CLANS BLEND WHISKY

REGISTERED

GLASGOW.

Glasgow 19th September 1890

I have carefully examined samples of "The Clans Blend" of Scotch Whisky supplied by Ross McKenzie & Co and have determined its qualities It is entirely free from impurities resulting from imperfect manufacture It is a well matured whisky of soft mellow flavor and fragrant bouquet and can be confidently recommended for such Medicinal or Dietetic uses as Alcoholic liquors may be applied to

In fact I may say "The Clans Blend" is equal to any whisky I have ever examined

James Adams M.D. F.F.P.S.G
Late President of the Glasgow
Medico Chirurgical Society

The essential particulars of the trade mark are as follow—the word "Clans" and the distinctive label; and any right to the exclusive use of the added matter is disclaimed.

NAME.

JAMES WATSON AND CO., LIMITED, of 97, Seagate, Dundee, Scotland, Distillers and Scotch-whisky Merchants.

No. of class: 43.
Description of goods: Whisky.

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 17th April, 1902, to the 30th April, 1902, inclusive:—

No. 2837; 3323.—J. G. Ward and Co. Class 42. (*Gazette* No. 35, of the 4th April, 1901.)

No. 2838; 3406.—J. G. Ward and Co. Class 42. (*Gazette* No. 63, of the 27th June, 1901.)

No. 2839; 3334.—H. Morris and B. Thomas. Class 22. (*Gazette* No. 6, of the 24th January, 1902.)

No. 2840; 3587.—Sargood, Son, and Ewen. Class 49. (*Gazette* No. 11, of the 6th February, 1902.)

No. 2841; 3643.—The Patea Co-operative Poultry Company, Limited. Class 42. (*Gazette* No. 6, of the 24th January, 1902.)

No. 2842; 3644.—I. Singer. Class 1. (*Gazette* No. 6, of the 24th January, 1902.)

No. 2843; 3652.—A. and F. Pears, Limited. Class 48. (*Gazette* No. 11, of the 6th February, 1902.)

No. 2844; 3655.—C. R. Baxter and Co. Class 43. (*Gazette* No. 11, of the 6th February, 1902.)

No. 2845; 3664.—The New South Wales Creamery Butter Company, Limited. Class 42. (*Gazette* No. 11, of the 6th February, 1902.)

No. 2846; 3361.—W. Rainbow. Class 11. (*Gazette* No. 44, of the 2nd May, 1901.)

No. 2847; 3608.—J. B. MacEwan and Co. Class 42. (*Gazette* No. 102, of the 28th November, 1901.)

No. 2848; 3609.—J. B. MacEwan and Co. Class 42. (*Gazette* No. 102, of the 28th November, 1901.)

No. 2849; 3660.—The South Canterbury Dairy Company, Limited. Class 42. (*Gazette* No. 11, of the 6th February, 1902.)

No. 2850; 3661.—The Mazawattee Tea Company, Limited. Class 42. (*Gazette* No. 16, of the 20th February, 1902.)

No. 2851; 3677.—Weingarten Bros. Class 38. (*Gazette* No. 16, of the 20th February, 1902.)

No. 2852; 3651.—D. Mollet. Class 3. (*Gazette* No. 16, of the 20th February, 1902.)

No. 2853; 3662.—H. J. Marriner. Class 25. (*Gazette* No. 16, of the 20th February, 1902.)

No. 2854; 3612.—The Svenska Centrifug Aktie Bolaget. Class 7. (*Gazette* No. 16, of the 20th February, 1902.)

F. WALDEGRAVE,
Registrar.

Trade Mark Renewal Fees paid.

NO. 88/455.—E. Valle, of Habana, Cigar-manufacturer. 26th April, 1902.

No. 88/2901.—J. M. Mackenzie and Co., of Wishaw, in the County of Lanark, North Britain, Distillers. 24th April, 1902.

No. 41/50.—Tyzack, Sons, and Turner, of Little London Works, Sheffield, in the County of York, England, Manufacturers. 18th April, 1902.

F. WALDEGRAVE,
Registrar.

Alphabetical List of Applicants for Letters Patent for Quarter ending 31st March, 1901.

THIS list includes also (1) applications lodged prior to but gazetted during the quarter, (2) complete specifications following provisional specifications, accepted and gazetted during the quarter. Where the number and date of the *Gazette* are omitted, the application has not yet been accepted.

* Denotes a provisional specification. † Denotes a prior date under section 106 of the Act.

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Alexander, H. A., Ormondville, N.Z. Extracting gum from *Phormium tenax*	14496	27 Jan. ..	16	20 Feb.*
Allan, H., Newmarket, N.Z. Safety tap	14579	3 Mar. ..	24	20 Mar.*
Allison, J., and others, Wanganui, N.Z. Tent	14603	10 Mar. ..	27	3 Apr.*
American Machine Telephone Company, Limited, Brantford, Canada. Telephone exchange. (G. W. Lorimer.)	14550	21 Feb. ..	27	3 Apr.
Amesbury, D. E., Feilding, N.Z. Caster	14397	4 Jan. ..	3	9 Jan.*
Angus, E. A., Moonee Ponds, Vic. Railway signalling	14406	8 Jan. ..	6	24 Jan.*
Arthur, R., Mount Eden, Auckland, N.Z. Discharging waste products of combustion of marine oil-engine	14669	22 Mar. ..	27	3 Apr.*
Ashton, W. J., and others, Dunedin, N.Z. Leggings	14506	7 Feb. ..	16	20 Feb.*
August, H., Invercargill, N.Z. Lid seat for nightsoil-box ..	14680	25 Mar. ..	30	17 Apr.*
Babcock and Wilcox, Limited, London, Eng. (See J. Chambers and Son, Limited, Nos. 14670–72.)				
Baldwin, E. S., and another, Wellington, N.Z. Gold-dredging machinery	14463	22 Jan. ..	11	6 Feb.*
Baldwin, T. M., Dunedin, N.Z. Gold-saving apparatus	14505	6 Feb. ..	16	20 Feb.*
Baldwin, T. M., and another, Dunedin, N.Z. Creating and circulating cold air	14502	4 Feb. ..	16	20 Feb.*
Ballinger, T., Wellington, N.Z. Skylight	14491	3 Feb. ..	16	20 Feb.
Ballinger, T., Wellington, N.Z. Skylight	14604	11 Mar. ..	27	3 Apr.
Ball, R. J., Te Kopuru, Auckland, N.Z. Saw-guard	14354	19 Dec. ..	6	24 Jan.*
Bamford, C. E., Hautapu, N.Z. Means for preventing children falling from bed	14451	20 Jan. ..	19	6 Mar.
Barney, G., Waitohi Flat, N.Z. Plough	14508	10 Feb. ..	19	6 Mar.*
Bartle, W. M., Napier, N.Z. Water-closet flush conductor ..	14468	22 Jan. ..	11	6 Feb.*
Bartle, W. M., Napier, N.Z. Flushing water-closets	14625	14 Mar. ..	27	3 Apr.*
Barton, G. F., New York, U.S.A. (See Barwest Coaster Brake Company, No. 14437.)				
Barwest Coaster Brake Company, New York, U.S.A. Driving and braking mechanism. (G. F. Barton)	14437	16 Jan. ..	6	24 Jan.
Bedford, J., and another, Puriri, N.Z. Windmill	14541	20 Feb. ..	19	6 Mar.*
Benham, E., and another, Wanganui, N.Z. Match-striker ..	14442	17 Jan. ..	6	24 Jan.*
Benkel, B., London, Eng. Cigar-holder	14503	7 Feb. ..	16	20 Feb.
Bidstrup, N., Broadford, Vic. Fluid-register	14540	19 Feb. ..	19	6 Mar.
Bigelow, G. H., Auckland, N.Z. Hairpin	14532	14 Feb. ..	16	20 Feb.*
Bigelow, G. H., Auckland, N.Z. Hairpin	14539	15 Feb. ..	19	6 Mar.*
Bigelow, G. H., and another, Auckland, N.Z. Nut-lock	14626	12 Mar. ..	27	3 Apr.*
Bingham, E. G. H., and another, Broomwood, Kent, Eng. Magazine gun	14405	8 Jan. ..	..	..
Bishop, E. A., Sydney, N.S.W. Sheet-music cabinet-attachment to piano	14155	20 Oct., 1901 ..	16	20 Feb.
Black, J., and others, Nelson, N.Z. Hothouse	14435	15 Jan. ..	16	20 Feb.
Bonham, J. S., Richmond, Vic. Pump	14467	24 Jan. ..	11	6 Feb.*
Bonnaud, J. B. G., Dover, Eng. Nitro-cellulose compound ..	14642	20 Mar. ..	27	3 Apr.
Borlase, W., North-east Valley, N.Z. Wire-strainer	14443	15 Jan. ..	6	24 Jan.*
Borlase, W., North-east Valley, N.Z. Pot-cleaner	14517	10 Feb. ..	16	20 Feb.*
Bowles, E., Hukanui, N.Z. Colander and cooking utensil ..	14557	24 Feb. ..	30	17 Apr.
Boyens, W. H., Kaikoura, N.Z. Pump for drawing off liquids ..	14396	3 Jan. ..	3	9 Jan.*
Bradbury, S. W., Capetown, Cape Colony. Wire-strainer ..	14431	14 Jan. ..	11	6 Feb.
Brassell, H. P., Alfredton, N.Z. Braking or controlling vehicles ..	14602	10 Mar. ..	24	20 Mar.*
Bristow, C., Addington, N.Z. Hat-fastener	14534	15 Feb. ..	16	20 Feb.*
Bromhead, S. S., and another, London, Eng. Reproducing and transmitting sound	14572	3 Mar. ..	24	20 Mar.
Broome, T. J., and another, Wellington, N.Z. Waterproofing composition	14440	17 Jan. ..	6	24 Jan.*
Broome, T. J., and others, Wellington, N.Z. Compressed fuel ..	14651	20 Mar. ..	27	3 Apr.*
Brown, J. H. S., Woodville, N.Z. Siphon	14678	27 Mar. ..	30	17 Apr.
Brown, T. H., Wellington, N.Z. Artificial fuel	14400	6 Jan. ..	6	24 Jan.*
Brown, T. H., and another, Wellington, N.Z. Branding-fluid ..	14668	24 Mar. ..	30	17 Apr.*
Brunt, J. R., and another, Christchurch, N.Z. Pneumatic tire ..	14408	8 Jan. ..	6	24 Jan.*
Burpee, F. W., and another, Vancouver, B.C. (See H. Peck, No. 14544.)				
Burrell, W., and another, Melbourne, Vic. Packing rabbits ..	14466	24 Jan. ..	16	20 Feb.*
Bursill, F. W., Sedgemere, N.Z. Fencing-swinger	13703	10 June, 1901 ..	19	6 Mar.
Burt, W. S., Albury, N.S.W. Cleaning a vessel's hull	13987	10 Sept. ..	3	9 Jan.
Buskirk, Van. (See under V.)				
Callaghan, J., and another, Sydney, N.S.W. (See Mutual Benefit Bonus Company, Limited, No. 14580.)				
Campbell, J. P., Wellington, N.Z. Electric generator. (B. G. Lamme)	14644	20 Mar. ..	27	3 Apr.
Campbell, R. F., and another, Brookside, N.Z. Root-slicer ..	13738	19 June, 1901 ..	19	6 Mar.
Cary, H. B., Los Angeles, U.S.A. Voting-machine	14576	4 Mar. ..	24	20 Mar.
Caselberg, L., Wellington, N.Z. Stopper for bottle	14476	27 Jan. ..	11	6 Feb.*
Casgrain, L. A., Winchester, U.S.A. (See United Shoe Machinery Company, No. 14647.)				
Cassels, H. O., and another, Invercargill, N.Z. Horse-collar ..	14568	28 Feb. ..	24	20 Mar.*
Catley, D., Renwicktown, N.Z. Lasting-pinchers	13814	11 July, 1901 ..	27	3 Apr.

ALPHABETICAL LIST OF APPLICANTS FOR LETTERS PATENT—*continued.*

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Challis, G. C., High Cliff, Dunedin, N.Z. Stump-extractor ..	14415	8 Jan. ..	6	24 Jan.*
Chalmers, E. K. C., Onehunga, N.Z. Wardrobe	14453	21 Jan. ..	11	6 Feb.
Chambers, J. A., Pittsburg, U.S.A. Manufacture of glass articles. (J. H. Rubbers)	14429	14 Jan. ..	6	24 Jan.
Chambers and Son, Limited, J., Auckland, N.Z. Oil-separator. (Babcock and Wilcox, Limited)	14670	25 Mar. ..	..	..
Chambers and Son, Limited, J., Auckland, N.Z. Stoker for furnace. (Babcock and Wilcox, Limited—G. W. Thode)	14671	25 Mar. ..	..	..
Chambers and Son, Limited, J., Auckland, N.Z. Stoker for furnace. (Babcock and Wilcox, Limited—G. W. Thode)	14672	25 Mar. ..	..	..
Clamond, C., Paris, France. (See Kern Burner Company, Limited, No. 14546)				
Clark, I. M., Lompoc, Cal., U.S.A. Child's high chair	14520	13 Feb. ..	16	20 Feb.
Clarke, J. F., Woolwich, N.S.W. Weighing-machine	14379	30 Dec., 1901 ..	11	6 Feb.
Clayden, A. W., and others, Nelson, N.Z. Hothouse	14435	15 Jan. ..	16	20 Feb.
Claydon, G., Christchurch, N.Z. Spark-arrester	14528	14 Feb. ..	16	20 Feb.*
Cochrane, D. L., Otahuhu, N.Z. Drain-excavator and road-grader..	14526	14 Feb. ..	16	20 Feb.*
Cochrane, D. L., Otahuhu, N.Z. Dray and scoop combined ..	14578	6 Mar. ..	24	20 Mar.*
Colborn, E. F., Salt Lake City, U.S.A. Explosive engine. (A. Hayes)	14427	14 Jan. ..	6	24 Jan.
Colborn, E. F., Salt Lake City, U.S.A. Production of gas ..	14428	14 Jan. ..	6	24 Jan.
Conrad, F., Wilkinsburg, U.S.A. (See J. T. Hunter, No. 14611.)				
Conyers, W., Melbourne, Vic. Operating venetian blinds. (E. A. Powell)	14322	12 Dec., 1901 ..	19	6 Mar.*
Cooper, F., Invercargill, N.Z. Cultivator	14677	22 Mar. ..	30	17 Apr.*
Cooper, H. A., Wellington, N.Z. Spark-catcher	14530	15 Feb. ..	16	20 Feb.*
Cooze, C. J., Carterton, N.Z. Fire-escape	14594	7 Mar. ..	24	20 Mar.*
Corbett, J. C., Epsom, N.Z. Framing pictures	14527	14 Feb. ..	19	6 Mar.*
Corrington, M., and another, New York, U.S.A. Railway signalling	14618	13 Mar. ..	..	..
Couston, J., and another, Perth, W.A. Jointing iron plates ..	14587	6 Mar. ..	34	1 May.
Cowley, J. T., Lowell, U.S.A. (See Lamson Store Service Company, Limited, No. 14549.)				
Cowper, F. H. W., Christchurch, N.Z. Ping-pong	14631	14 Mar. ..	27	3 Apr.
Croft, J. R., London, Eng. (See Valves, Limited, No. 14682.)				
Crown Paper Company, Boston, U.S.A. Making carbon paper. (F. B. How)	14553	19 Feb. ..	19	6 Mar.
Currie, W., Hillsborough, N.Z. Ballast-spreading machine ..	14462	22 Jan. ..	16	20 Feb.
Curtis, C. L., and another, New York, U.S.A. Bottle-closures ..	14655	21 Mar. ..	27	3 Apr.*
Davidson, G., Hokitika, N.Z. Hauling logs	14510	10 Feb. ..	..	..
Davidson, G., Hokitika, N.Z. Hauling logs	14558	24 Feb. ..	19	6 Mar.*
Dennes, A. C., Auckland, N.Z. Retaining-catch for brooch-pin ..	13492	25 Mar., 1901..	27	3 Apr.
Dent, G., Auckland, N.Z. Hairdressers' cabinet	14449	18 Jan. ..	20	16 Feb.*
Derrett, E. A., Hawarden, N.Z. Fencing-dropper	14439	17 Jan. ..	6	24 Jan.*
Dingwall, J., Melbourne, Vic. Canister for butter, &c.	14486	30 Jan. ..	16	20 Feb.
Dodd, W. G., San Francisco, U.S.A. Ore-concentrator	14485	30 Jan. ..	16	20 Feb.
Dodgson, F. L., and another, Rochester, U.S.A. Railway signalling	14618	13 Mar. ..	..	..
Donald, D., Masterton, N.Z. Punching, shearing, and stamping machine	14559	25 Feb. ..	19	6 Mar.*
Donaldson, R. R., Dunedin, N.Z. Treating sewage	14660	21 Mar. ..	30	17 Apr.
Donaldson, R. R., Dunedin, N.Z. Catch-pit for street-drainage	14640	19 Mar. ..	30	17 Apr.*
Donnelly, J. F., Feilding, N.Z. Preparation for the hair ..	14592	12 Mar. ..	24	20 Mar.*
Douglas, A., Otahuhu, N.Z. Buckle attachment to spring hook ..	14454	21 Jan. ..	11	6 Feb.*
Drumm, T. J., and another, Auckland, N.Z. Fire-extinguisher ..	14538	18 Feb. ..	19	6 Mar.*
Dugins, W. F., Kew, Vic. Check roller for blinds	13522	4 Apr., 1901 ..	16	20 Feb.
Duncan, A. S., Invercargill. Gate-hinge	14628	11 Mar. ..	27	3 Apr.
Edwards, H. H., and another, Brisbane, Queensland. Target ..	14326	12 Dec., 1901 ..	19	6 Mar.
Ehrmann, M. B. L., and others, Pinkenba, Queensland. Joint for tin or can	14614	13 Mar. ..	27	3 Apr.
Elliot's Patent Improved Domestic Pin Company, Limited, Sydney, N.S.W. Pin. (R. N. Elliot)	14589	6 Mar. ..	..	..
Elliot, R. N., Lindfield, N.S.W. (See Elliot's Patent Improved Domestic Pin Company, Limited, No. 14589.)				
Elmore, A. S., London, Eng. Separating minerals	14518	13 Feb. ..	34	1 May.
Ensor, S. J., and another, Waihi, N.Z. Claw hammer	14478	24 Jan. ..	11	6 Feb.*
Fabrik für Mechanische Hirnholzmosaik Gesellschaft mit Beschrankter Haftung, München, Germany. Manufacturing fabric composed of wooden blocks. (J. Wehinger)	14577	3 Mar. ..	24	20 Mar.
Fahey, J. V., Roslyn Bush, N.Z. Sheaf-carrier for harvester ..	14637	15 Mar. ..	27	3 Apr.*
Fahey, W. H., and another, Dunedin, N.Z. Broom, brush, &c. ..	14416	8 Jan. ..	6	24 Jan.*
Falconer, J. M., Endsleigh, N.Z. Feed for grain-drill	14489	27 Jan. ..	20	16 Feb.*
Farrer, T., Auckland, N.Z. Window-fastener	14303	29 Nov., 1901..	27	3 Apr.
Ferrell, J. L., Philadelphia, U.S.A. Wood-preserving	14519	13 Feb. ..	16	20 Feb.
Findlay, A., jun., and others, Dunedin, N.Z. Leggings ..	14506	7 Feb. ..	16	20 Feb.*
Foot, W. J., London, Eng. Fixing railway-track rails	14426	14 Jan. ..	6	24 Jan.
Ford, J., Cromwell, N.Z. Tap	14560	24 Feb. ..	24	20 Mar.*
Forsyth, W. H., Bristol, Eng. Cycling-knickers	13496	26 Mar., 1901..	3	9 Jan.*
Francis, A. A., Bergamo, Italy. Ore-concentrator	14545	20 Feb. ..	19	6 Mar.
French, Z. T., and another, Boston, U.S.A. Sewing-machine ..	13688	6 June, 1901..	19	6 Mar.
Fresh Air and Safety Sash-fastener Company, Limited, Adelaide, S.A. Sash-fastener. (R. Williams)	14493	4 Feb. ..	16	20 Feb.
Galbraith, D. R. S., Remuera, N.Z. Utilising kauri deposits ..	14492	31 Jan. ..	16	20 Feb.*
Geary, W. G., Weraroa, N.Z. Martingale	14664	24 Mar. ..	..	..

ALPHABETICAL LIST OF APPLICANTS FOR LETTERS PATENT—*continued.*

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Gee, J. E., London, Eng. Apparatus for washing floors ..	14656	21 Mar. ..	27	3 Apr.
Gentzsch, A., Vienna, Austria. Gutta-percha substitute ..	14410	10 Jan. ..	6	24 Jan.
Gilbreth, F. B., Boston, U.S.A. (See W. E. Hughes, No. 14227.)				
Goucher, T., Ulverstone, Tasmania. Target	14565	28 Feb. ..	24	20 Mar.*
Gough, F., Stafford, N.Z. Legholder for cows	14635	7 Mar. ..	30	17 Apr.
Grattan, J. H., Avondale, N.Z. Saw stripper and regulator ..	14630	13 Mar. ..	27	3 Apr.*
Green, J., Bradford, Eng. Seed-sowing machine	14543	19 Feb. ..	19	6 Mar.
Greenacre, J., Huntly, N.Z. Log-sawing machine	14514	11 Feb. ..	19	6 Mar.*
Greig, W. C., Christchurch, N.Z. Curtain-pole	13646	23 May, 1901..	19	6 Mar.
Gwatkin, J. F., The Peaks, Canterbury, N.Z. Seed-sower ..	13772	27 June, 1901..	19	6 Mar.
Hale, E., Kereru, N.Z. Appliance for castrating lambs, &c. ..	13489	22 Mar., 1901..	19	6 Mar.
Hancock, J., and another, Centre Bush, Southland, N.Z. Non-refillable bottle	14596	6 Mar. ..	24	20 Mar.*
Hankin, H. G., Reefton, N.Z. Gold-saving	14564	27 Feb. ..	19	6 Mar.*
Hanneborg, O. B. H., Christiania, Norway. Excavator.. ..	14536	18 Feb. ..	19	6 Mar.
Hare, W. W., London, Eng. (See Inverted Incandescent Gas-lamp Syndicate, Limited, No. 14612.)				
Harkness, B. G. A., Stratford, N.Z. Water-heater	13439	2 Mar. ..	3	9 Jan.
Harris, R. D., London, Eng. Drill	14575	3 Mar. ..	..	..
Harrison, I., and another, Wellington, N.Z. Fire-escape ..	14650	20 Mar. ..	27	3 Apr.*
Hayes, A., Salt Lake City, U.S.A. (See E. F. Colborn, No. 14427.)				
Haywood, W. F., Los Angeles, U.S.A. (See E. Waters, No. 14584.)				
Healey, W., Staveley, N.Z. Distribution of mechanical power ..	13679	3 June, 1901..	19	6 Mar.
Henderson, H. W. G., Dannevirke, N.Z. Manufacture of water-gas	14654	20 Mar. ..	27	3 Apr.*
Heppell, G. T., Hokitika, N.Z. Gold-saving screen and table ..	14608	12 Mar. ..	27	3 Apr.*
Herbert, A., Boston, U.S.A. (See H. B. Newton, No. 14523.)				
Hewetson, A. J., Nelson, N.Z. Bicycle-support	13495	26 Mar., 1901..	6	24 Jan.
Hind, F. G., and another, Wellington, N.Z. Settee, couch, &c. ..	14512	11 Feb. ..	16	20 Feb.*
Hodge, C. E., Mercer, N.Z. Spark-arrester	14633	18 Mar. ..	27	3 Apr.*
Hogg, B., and another, Whangamata, N.Z. Stirring auriferous material	14515	12 Feb. ..	19	6 Mar.*
Hope, E., Christchurch, N.Z. Preventing "racing" of marine engines	14511	10 Feb. ..	16	20 Feb.*
Hornby, F., Liverpool, Eng. Toy or educational device ..	14407	8 Jan. ..	6	24 Jan.*
Hosking, W. V., Midhurst, N.Z. Bailing cows..	14566	28 Feb. ..	24	20 Mar.*
How, F. B., Boston, U.S.A. (See Crown Paper Company, No. 14553.)				
Howard, J. E., London, Eng. Compressed-fluid engine.. ..	14448	15 Jan. ..	6	24 Jan.
Hudson, H. A., Wellington, N.Z. Wire-fencing staple	14593	7 Mar. ..	24	20 Mar.*
Hughes, W. E., Wellington, N.Z. Concrete-mixer. (F. B. Gilbreth)	14227	14 Nov., 1901..	19	6 Mar.
Hughes, W. E., Wellington, N.Z. Engine-shaft bearing. (C. Robinson)	14501	6 Feb. ..	16	20 Feb.
Hughes, W. E., Wellington, N.Z. Electrical distribution. (B. G. Lamme)	14649	20 Mar. ..	27	3 Apr.
Huhn, G., Berlin, Germany. Metallic packing-ring	14412	10 Jan. ..	6	24 Jan.
Hunter, J. T., Wellington, N.Z. Electric-current indicator. (F. Conrad)	14611	13 Mar. ..	27	3 Apr.
Hurley, G. A., and another, Wellington, N.Z. Gold-dredging ..	14401	6 Jan. ..	3	9 Jan.*
Hutchinson, R., and another, Wellington, N.Z. Fire-escape ..	14598	10 Mar. ..	24	20 Mar.
Hutchinson, R., and another, Wellington, N.Z. Fire-alarm ..	14599	10 Mar. ..	24	20 Mar.
Hylard, J., and another, St. Kilda, Vic. Magazine gun.. ..	14405	8 Jan. ..	..	..
Inverted Incandescent Gas-lamp Syndicate, Limited, London, Eng. Gas-burner (W. W. Hare)	14612	13 Mar. ..	27	3 Apr.*
Jackson, J. B., Motu, N.Z. Stand for timber-jack	14399	6 Jan. ..	11	6 Feb.
Jackson, K. C., Masterton, N.Z. Tram-rail clearer	14459	22 Jan. ..	11	6 Feb.*
Jackson, K. C., and another, Masterton, N.Z. Stock-mark ..	14666	22 Mar. ..	27	3 Apr.*
Jackson, N. E., Masterton, N.Z. Wire strainer, holder, and cutter	14582	6 Mar. ..	24	20 Mar.*
Jackson, N. E., and another, Masterton, N.Z. Stock-mark ..	14666	22 Mar. ..	27	3 Apr.*
Jacobsen, T. B., Auckland, N.Z. Attaching handle of door-lock ..	14652	20 Mar. ..	30	17 Apr.*
Jamieson, J., and another, Christchurch, N.Z. Dressing and moulding limestone	14639	19 Mar. ..	30	17 Apr.
Jamieson, W. G., and another, Christchurch, N.Z. Dressing and moulding limestone	14639	19 Mar. ..	30	17 Apr.
Jay, J., Greymouth, N.Z. Furnace	14632	13 Mar. ..	27	3 Apr.*
Jewell, J. R., and another, Brunswick, Vic. Locking vehicle-wheels	14645	20 Mar. ..	27	3 Apr.*
Jewell, W. H., and another, Northcote, Vic. Locking vehicle-wheels	14645	20 Mar. ..	27	3 Apr.*
Johns, J. T., Onehunga, N.Z. Fruit-preserving pan	14504	7 Feb. ..	16	20 Feb.*
Johnson, M. A., Wellington, N.Z. Lowering, raising, and fastening window-sashes	14535	17 Feb. ..	19	6 Mar.*
Jones, D. R., and another, Eltham, N.Z. Preserving perishable products	14586	6 Mar. ..	24	20 Mar.*
Jones, H., Ascot Vale, Vic. Tobacco-cutting machine	14617	13 Mar. ..	27	3 Apr.
Jones, J. W., Sumner, N.Z. Racquet for table-games	14653	19 Mar. ..	30	17 Apr.*
Keane, W. R., and another, Whangamata, N.Z. Stirring auriferous material	14515	12 Feb. ..	19	6 Mar.*
Kennedy, W. F., Saddle Hill, Dunedin, N.Z. Wire-strainer ..	14446	15 Jan. ..	6	24 Jan.*
Keoghan, S. O., Bainham, N.Z. Releasing horse from stable ..	14673	25 Mar. ..	30	17 Apr.*
Keoghan, S. O., Bainham, N.Z. Fastening ends of machinery belts	14674	25 Mar. ..	30	17 Apr.*
Keoghan, S. O., Bainham, N.Z. Balancing window-sashes ..	14675	25 Mar. ..	30	17 Apr.*
Kern Burner Company, Limited, London, Eng. Incandescent mantle. (C. Clamond)	14546	20 Feb. ..	19	6 Mar.
Kettle, F., Roslyn, N.Z. Scouring wool	13432	26 Feb., 1901 ..	6	24 Jan.

ALPHABETICAL LIST OF APPLICANTS FOR LETTERS PATENT—*continued.*

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Kettle, F., Roslyn, N.Z. Hat-fastener	14461	22 Jan.	11	6 Feb.*
Kettle, F., Roslyn, N.Z. Hat-fastener	14470	22 Jan.	11	6 Feb.*
Kirkland, E. L., and another, Wellington, N.Z. Fire escape	14650	20 Mar.	27	3 Apr.*
Klaerr, F., and another, St. Kilda, Vic. Wire mattress. (A. Linard)	14419	6 Jan.	6	24 Jan.
Knight, W. A., Auckland, N.Z. Stewing and preserving pan	14591	4 Mar.	24	20 Mar.
Knox, W. J., Edgewood Park, Pennsylvania, U.S.A. (See G. Westinghouse, No. 14494.)				
Lamme, B. G., Pittsburg, U.S.A. (See W. E. Hughes, No. 14649.)				
Lamme, B. G., Pittsburg, U.S.A. (See W. T. L. Travers, No. 14404.)				
Lamme, B. G., Pittsburg, U.S.A. (See J. P. Campbell, No. 14644.)				
Lamson Store Service Company, Limited, London, Eng., and Sydney, N.S.W. Cash-carrier. (J. T. Cowley)	14549	20 Feb.	19	6 Mar.*
Lanauze, H. W. C., and another, Linwood, N.Z. Canoe	14481	27 Jan.	20	16 Feb.*
Langstone, C. W., and another, Wellington, N.Z. Waterproofing composition	14440	17 Jan.	6	24 Jan.*
Langstone, J. E., and others, Wellington, N.Z. Compressed fuel	14651	20 Mar.	27	3 Apr.*
Larritt, P. A., and another, Eltham, N.Z. Preserving perishable products	14586	6 Mar.	24	20 Mar.*
Law, A., and another, St. Kilda, Vic. Wire mattress	14419	6 Jan.	6	24 Jan.
Lemire, J., Quebec, Canada. Milk-aerator	14634	18 Mar.	30	17 Apr.
Letson, J. M. K., and another, Vancouver, B.C. (See H. Peck, No. 14544.)				
Levat, D., Paris, France. Dredger	13939	26 Aug., 1901	19	6 Mar.
Levinge, H. M., Wanganui, N.Z. Igniting and extinguishing street gas-lamps	14667	24 Mar.	27	3 Apr.*
Lightband, C. D., and another, Christchurch, N.Z. Canoe	14481	27 Jan.	20	16 Feb.*
Linard, A., Balaclava, Vic. (See F. Klaerr and A. Law, No. 14419.)				
Lion, A., and another, Sydney, N.S.W. Stamping and marking press	14438	16 Jan.	6	24 Jan.
Lister, M. J., Waikari, N.Z. Target	14413	9 Jan.	6	24 Jan.*
Long, F. H., Chicago, U.S.A. (See E. Waters, jun., Nos. 14661–62.)				
Longland, T. F., and another, Auckland, N.Z. Windmill	14541	20 Feb.	19	6 Mar.*
Lorie, A. F. W., Dunedin, N.Z. Sash-fastener	14529	12 Feb.	16	20 Feb.*
Lorie, A. F. W., Dunedin, N.Z. Sash-fastener	14554	20 Feb.	19	6 Mar.*
Lorimer, G. W., Piqua, U.S.A. (See American Machine Telephone Company, Limited, No. 14550.)				
Lovell, E. C., Bristol, Eng. Paper-bag-making machine	14287	28 Nov., 1901	27	3 Apr.
Lubbers, J. H., New Kensington, U.S.A. (See J. A. Chambers, No. 14429.)				
Lyell, A., Clarence River, N.S.W. Cycle-carrier for railway-car	14513	11 Feb.	19	6 Mar.*
Macalister, J., Invercargill, N.Z. Seed-sower	14495	1 Feb.	16	20 Feb.*
Mackie, J., and another, Auckland, N.Z. Fire-extinguisher	14538	18 Feb.	19	6 Mar.*
Mackley, J. F., Greymouth, N.Z. Boot-sole	14658	21 Mar.	27	3 Apr.*
Macky, J. J., Auckland, N.Z. Kettle	14424	9 Jan.	6	24 Jan.*
Macky, J. J., Auckland, N.Z. Shirt for holding studs securely	14482	24 Jan.	16	20 Feb.*
Macky, J. J., Auckland, N.Z. Shirt-neck and collar fastening	14542	17 Feb.	19	6 Mar.*
Macky, J. J., and another, Auckland, N.Z. Nut-lock	14626	12 Mar.	27	3 Apr.*
MacLean, G. F. S., and another, Dunedin, N.Z. Merchandise-conveyor	14561	24 Feb.	24	20 Mar.*
Macpherson, J., and another, Wellington, N.Z. Delivering tailings	14460	22 Jan.	16	20 Feb.
Madill, W. H., Tuakau, N.Z. Pump	14509	10 Feb.	16	20 Feb.*
Marchbank, J., Broadford, Vic. (See N. Bidstrup, No. 14540.)				
Marisco, F., Invercargill, N.Z. Gold-dredge	14409	10 Jan.	6	24 Jan.*
Marple, J. H., Opouriao, N.Z. Holding book for reading	14537	18 Feb.	19	6 Mar.*
Marriott, W., and another, Wanganui, N.Z. Match-striker	14442	17 Jan.	6	24 Jan.*
Martin, E., and another, London, Eng. Vehicle wheel and tire	14619	13 Mar.	27	3 Apr.
Mason, J. B., and another, Dunedin, N.Z. Driving dredge	14421	6 Jan.	6	24 Jan.*
Mason, J. B., Dunedin, N.Z. Grading and concentrating table	14420	6 Jan.	6	24 Jan.*
Matthews, E. T., Benmore, N.Z. Watch-pocket	14475	23 Jan.	11	6 Feb.*
May, C., Dunedin, N.Z. Ascertaining level of liquids	13816	13 July, 1901	19	6 Mar.
McDonald, J., Christchurch, N.Z. Securing bed-clothes in position	13537	13 Apr., 1901	11	6 Feb.
McFarlane, A., Invercargill, N.Z. Fire-escape	14597	6 Mar.	24	20 Mar.*
McFarlane, T., Auckland, N.Z. Ascertaining co-ordinates of plane right-angled triangles	14500	6 Feb.	16	20 Feb.*
McFeely, R. F., Beverly, U.S.A. (See United Shoe Machinery Company, No. 14547.)				
McKay, N. G., Epsom, N.Z. Tin bottle for drenching horse	14531	13 Feb.	19	6 Mar.*
McLean, R., Ranfurly, Otago, N.Z. Animal-trap	14595	7 Mar.	24	20 Mar.*
McLeod, A., Auckland, N.Z. Stump-extractor	14352	16 Dec.	6	24 Jan.*
McLeod, A., Auckland, N.Z. Brand	14432	13 Jan.	6	24 Jan.*
McLeod, A., Auckland, N.Z. Game	14450	16 Jan.	11	6 Feb.
McLeod, F., and others, Wellington, N.Z. Compressed fuel	14651	20 Mar.	27	3 Apr.*
McLeod, H. N., and another, Wellington, N.Z. Gold-dredging	14401	6 Jan.	3	9 Jan.*
McMeekin, J. P., and another, Melbourne, Vic. Packing rabbits	14466	24 Jan.	16	20 Feb.*
McNaught, T., Amberley, N.Z. Horse-cover	14685	27 Mar.	30	17 Apr.*
McNeill, J. F., Melbourne, Vic. Seed-sower	14567	27 Feb.	24	20 Mar.*
McTear, B. F., Rainhill, Lancaster, Eng. Manufacture of steel tubes	14403	6 Jan.	6	24 Jan.
Memory, A. W., and another, Wellington, N.Z. Settee, couch, &c.	14512	11 Feb.	16	20 Feb.*
Meyer, W. C., and another, Boston, U.S.A. Sewing-machine	13688	6 June, 1901	19	6 Mar.
Millar, R., Dunedin, N.Z. Using action of waves as a motive-power	13694	8 June, 1901	19	6 Mar.*
Miller, F. A., Lawrence, N.Z. Table for invalids	14600	10 Mar.	24	20 Mar.*
Millis, J. H., and another, Dunedin, N.Z. Gold-saving apparatus	14457	18 Jan.	11	6 Feb.*
Millis, R., and another, Dunedin, N.Z. Gold-saving apparatus	14457	18 Jan.	11	6 Feb.*

ALPHABETICAL LIST OF APPLICANTS FOR LETTERS PATENT—*continued.*

Name, Address, and Invention.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Moore, J. C., New York, U.S.A. Sewing-machine	14456	21 Jan.	11	6 Feb.*
Moroney, J., Hastings, N.Z. Combined girth and surcingle	14629	15 Mar.	27	3 Apr.*
Morrison, A., Dunedin, N.Z. Saving gold	13675	4 June, 1901	16	20 Feb.*
Mosely, M. E., and another, Sydney, N.S.W. Stamping and marking press	14438	16 Jan.	6	24 Jan.
Moss, E., Christchurch, N.Z. Rotary motor	14552	20 Feb.	19	6 Mar.*
Murison, J., Dunedin, N.Z. Bush for dredge-tumbler	14683	25 Mar.	30	17 Apr.*
Murray, A. C., Cromwell, N.Z. Coal-scuttle	14444	15 Jan.	6	24 Jan.*
Murray, A. C., Cromwell, N.Z. Can-handle	14445	15 Jan.	6	24 Jan.*
Murray, A. C., Cromwell, N.Z. Tap	14622	10 Mar.	27	3 Apr.*
Murray, J., Fairlie, N.Z. Clothes-line and clothes-peg	14465	24 Jan.	16	20 Feb.*
Mutual Benefit Bonus Company, Limited, Sydney, N.S.W. Trade coupon and advertising method. (J. Thomas and J. Callaghan)	14580	6 Mar.	30	17 Apr.
Neagle, J., Dannevirke, N.Z. Lead-bag for racehorse	14398	4 Jan.	6	24 Jan.*
Neilsen, H., and another, Blackball, N.Z. Gold-saving mat	14422	11 Jan.	11	6 Feb.*
Newcomb, E. C., and another, Jamaica Plain, U.S.A. Generating steam	14436	7 June, 1901†	6	24 Jan.
Newton, H. B., Haverhill, U.S.A. Hand tacking-tool. (A. Hebert)	14523	13 Feb.	16	20 Feb.
Nichol, H., Invercargill, N.Z. Gratings in cooking-ranges	14681	27 Mar.	30	17 Apr.*
Nicholas, C. E., Matlock, Vic. Steam-condenser	14583	6 Mar.	24	20 Mar.*
Norris, J. B., and another, Dunedin, N.Z. Creating and circulating cold air	14502	4 Feb.	16	20 Feb.*
Oakden, F., Dunedin, N.Z. Manufacturing cement	14605	8 Mar.	27	3 Apr.*
O'Donoghue, J., Waimate, N.Z. Chaff-cutter and corn-crusher	14601	10 Mar.	24	20 Mar.*
Osmond, C. H., Dunedin, N.Z. Artificial minnow	14684	26 Mar.	30	17 Apr.*
Over, W., Auckland, N.Z. Antiseptic dressing	14533	13 Feb.	16	20 Feb.
Park, A. J., Ngaruawahia, N.Z. Delivering steam into steam heating-appliance	14452	21 Jan.	19	6 Mar.
Park, A. J., Ngaruawahia, N.Z. Operating window-sashes	14455	21 Jan.	11	6 Feb.*
Park, A. J., Dunedin, N.Z. Mirror	14472	22 Jan.	16	20 Feb.*
Parkinson, R. W., and another, Greymouth, N.Z. Gold-saving mat	14422	11 Jan.	11	6 Feb.*
Patten, P., Christchurch, N.Z. Clothes-pocket	14555	21 Feb.	19	6 Mar.
Payne, F. W., Dunedin, N.Z. Centrifugal tailings-stacker	14636	15 Mar.	27	3 Apr.
Peacock, W. D., Hobart, Tasmania. Closing ends of tins	13687	6 June, 1901	6	24 Jan.
Pearse, R. W., Upper Waitohi, N.Z. Bicycle	14507	8 Feb.	16	20 Feb.*
Peck, H., Vancouver, B.C. Can-end soldering-machine. (J. M. K. Letson and F. W. Burpee)	14544	20 Feb.	30	17 Apr.
Peck, J. S., Pittsburg, U.S.A. (See W. T. L. Travers, No. 14430.)				
Pennington, H., and another, Ngaire, N.Z. Milk cooler and aerator	14556	24 Feb.	19	6 Mar.*
Percival, G., Narrowmine, N.S.W. Bicycle-crank	14562	27 Feb.	..	..
Perotti, G. J., Greymouth, N.Z. Amalgamator	14464	22 Jan.	16	20 Feb.
Perotti, G. J., Greymouth, N.Z. Amalgamator	14676	26 Mar.	30	17 Apr.
Peryer, M., Christchurch, N.Z. Cleansing-composition for painted surfaces	14441	16 Jan.	6	24 Jan.*
Peryer, M., Christchurch, N.Z. Cleansing-composition for painted surfaces	14606	10 Mar.	27	3 Apr.
Phillipps, J. M., Wharepapa, N.Z. Windmill	14516	12 Feb.	16	20 Feb.
Phillips, L., and another, Greymouth, N.Z. Delivering tailings	14460	22 Jan.	16	20 Feb.
Philpott, T. S., Wellington, N.Z. Oiling axles of vehicle	14609	12 Mar.	27	3 Apr.*
Philpott, T. S., and another, Wellington, N.Z. Fire-escape	14598	10 Mar.	24	20 Mar.*
Philpott, T. S., and another, Wellington, N.Z. Fire-alarm	14599	10 Mar.	24	20 Mar.*
Pike, C. D., Wellington, N.Z. Fastener for door-mat, &c.	14524	13 Feb.	19	6 Mar.*
Pitt, G. W., and another, London, Eng. Vehicle wheel and tire	14619	13 Mar.	27	3 Apr.
Pitt, R. C., and another, Christchurch, N.Z. Pneumatic tire	14408	8 Jan.	6	24 Jan.*
Plews, A. S., London, Eng. Manufacture of white oxide of antimony	14643	20 Mar.	27	3 Apr.
Plummer, I. A., Woollahra, N.S.W. Patterns for drafting garments	14487	30 Jan.	20	6 Feb.
Pomeroy, J., Invercargill, N.Z. Hat-fastener	14414	8 Jan.	6	24 Jan.
Pomeroy, J., Invercargill, N.Z. Sheep-shears	14590	1 Mar.	24	20 Mar.*
Porchére, P., Lyons, France. (See Porcherine, Limited, No. 14402.)				
Porcherine, Limited, London, Eng. Sweetening liquid. (P. Porchére)	14402	6 Jan.	6	24 Jan.
Porritt, W., and another, Perth, W.A. Jointing iron plates	14587	6 Mar.	34	1 May.
Powell, E. A., North Fitzroy, Vic. (See W. Conyers, No. 14322.)				
Preston, H., and another, Invercargill, N.Z. Horse-collar	14568	28 Feb.	24	20 Mar.*
Purkiss, J., Halcombe, N.Z. Match-box	14621	14 Mar.	27	3 Apr.*
Queensland Meat Export and Agency Company, Limited, and another, Pinkenba, Queensland. Joint for tin or can	14614	13 Mar.	27	3 Apr.
Rabbidge, P., Sydney, N.S.W. Connecting alarm to telephone exchange	14498	6 Feb.	16	20 Feb.
Ramage, G., and another, Centre Bush, Southland, N.Z. Non-refillable bottle	14596	6 Mar.	24	20 Mar.*
Ramsay, T., Invercargill, N.Z. Rule, measure, and square	13555	25 Apr., 1901	11	6 Feb.
Ravhoff, J. M., Chicago, U.S.A. Converting motion	14641	20 Mar.	27	3 Apr.
Ray, C., Christchurch, N.Z. Pneumatic tire	14395	3 Jan.	3	9 Jan.*
Rayward, H. H., and another, Wellington, N.Z. Gold-dredging machinery	14463	22 Jan.	11	6 Feb.*
Rawnsley, E. G., Christchurch, N.Z. Table-tennis apparatus	14610	11 Mar.	27	3 Apr.*
Reardon, P. H., San Francisco, U.S.A. Pressure-regulator	14638	15 Mar.	27	3 Apr.
Recht, F., and another, New York, U.S.A. Bottles-closures	14655	21 Mar.	27	3 Apr.*
Richardson, E., Hawthorn, Vic. Fittings of locomotive, &c. boilers	14581	6 Mar.	24	20 Mar.*
Riddell, W., Dunedin, N.Z. Butter-printer	14473	23 Jan.	11	6 Feb.*

ALPHABETICAL LIST OF APPLICANTS FOR LETTERS PATENT—*continued.*

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Riddell, W., Dunedin, N.Z. Butter-lifter	14474	23 Jan.	11	6 Feb.*
Robinson, C., Edgewood Park, Pennsylvania, U.S.A. (See W. E. Hughes, No. 14501.)				
Rose, J. F., Takaka, N.Z. Protecting river-banks	14484	21 Jan.	34	1 May.
Ross, A. J., Kihikihi, N.Z. Instrument for cutting cows' teats	14171	29 Oct., 1901	19	6 Mar.
Ross, G. D., Glasgow, Scotland. Shifting points of tramway, &c., lines	14588	6 Mar.	24	20 Mar.
Rosser, A. G., Fremantle, W.A. Railway spike and wedge lock	13660	30 May, 1901	3	9 Jan.
Rowntree, A., South Rakaia, N.Z. Moustache-guard	14624	11 Mar.	27	3 Apr.*
Salinger, J., Auckland, N.Z. Operating air-brakes on trains	14665	20 Mar.	27	3 Apr.*
Salmon, J. B., and others, Dunedin, N.Z. Leggings	14506	7 Feb.	16	20 Feb.*
Salmon, J. J., and others, Dunedin, N.Z. Leggings	14506	7 Feb.	16	20 Feb.*
Seager, C. J., Elsternwick, Vic. Greatcoat	13557	26 Apr.	11	6 Feb.
Secor, J. A., New York, U.S.A. Explosion motor	14571	3 Mar.	..	..
Shepherd, J., Dunedin, N.Z. Dredging-machinery	14657	21 Mar.	27	3 Apr.*
Siegfried, R., Pittsburg, U.S.A. (See W. T. L. Travers, No. 14620.)				
Slack, E. A., Gisborne, N.Z. Dental suction cells. (T. Slack)	14521	5 Feb.	16	20 Feb.*
Slack, T., Sheffield, Eng. (See E. A. Slack, No. 14521.)				
Smith, H., Kew, Vic. Decorating woodwork	14648	20 May, 1901†	34	1 May.
Smith, J. F., Cromwell, N.Z. Rope-grip	14477	25 Jan.	11	6 Feb.*
Smith, J. D., Dunedin, N.Z. Hair-curler	14663	21 Mar.	27	3 Apr.*
Sorensen, O., Paeroa, N.Z. Concentrator	14458	25 Feb.	19	6 Mar.*
Sperry, E. A., St. Louis, U.S.A. Concentrator	13781	5 July, 1901	27	3 Apr.
Staples, J. E., and another, Wellington, N.Z. Branding-fluid	14668	24 Mar.	30	17 Apr.*
Steer, W., Napier, N.Z. Boot or shoe heel	14469	22 Jan.	19	6 Mar.*
Stevens, R., Linwood, N.Z. Milk cooler and aerator	13692	5 June, 1901	16	20 Feb.
Stewart, W., Albury, N.S.W. Fire-escape	14418	6 Jan.	6	24 Jan.
Stewart, W., Dunedin, N.Z. Copying-ink	14525	11 Feb.	16	20 Feb.
Stiggins, A. A., Beverly, U.S.A. (See United Shoe Machinery Company, No. 14548.)				
Storrie, A., Invercargill, N.Z. Roller and cleaner	14367	19 Dec.	6	24 Jan.*
Storrie, A., Invercargill, N.Z. Seed-sower and hopper	14423	8 Jan.	6	24 Jan.*
Stringer, J. A., and others, Nelson, N.Z. Hothouse	14435	15 Jan.	16	20 Feb.
Struthers, A. Le B. F., Whangarei, N.Z. Towel-rack	14659	21 Mar.	27	3 Apr.*
Summerton, T., jun., Christchurch, N.Z. Operating venetian blinds	14336	16 Dec., 1901	19	6 Mar.
Sutherland, A., Te Houka, N.Z. Wire-strainer	14569	28 Feb.	24	20 Mar.*
Sweet, G., Brunswick, Vic. Manufacture of hollow-ware from clay	14411	10 Jan.	11	6 Feb.
Swinbourne, V. G., Remuera, N.Z. Divider compass	14490	31 Jan.	19	6 Mar.
Tanner, F., and another, Waihi, N.Z. Claw hammer	14478	24 Jan.	11	6 Feb.*
Tas, H., Melbourne, Vic. Chair-silencer	14585	6 Mar.	24	20 Mar.*
Tas, H., Melbourne, Vic. Bedstead	14613	13 Mar.	27	3 Apr.*
Taylor, J. H. R., Riverton, N.Z. Branding cheese	14497	6 Feb.	16	20 Feb.*
Taylor, W., Sandiacre, Eng. Railway shunting-lever	14499	6 Feb.	..	..
Thode, G. W., London, Eng. (See J. Chambers and Son, Limited, Nos. 14671–72.)				
Thomas, G. W., Opaki, N.Z. Bread-toaster	14009	17 Sept., 1901	6	24 Jan.
Thomas, J., and another, Sydney, N.S.W. (See Mutual Benefit Bonus Company, Limited, No. 14580.)				
Thomas, W., Geraldine, N.Z. Printing process	14607	10 Mar.	27	3 Apr.*
Thrum, J. A., Fernhill, Vic. Manure-planter	14488	30 Jan.	16	20 Feb.*
Todd, A. B., Invercargill, N.Z. Lime, manure, and seed scatterer	14417	8 Jan.	6	24 Jan.*
Tornaghi, A., Sydney, N.S.W. Governor for steam-engine	14563	27 Feb.	24	20 Mar.
Towgood, E. T., and others, Wanganui, N.Z. Tent	14603	10 Mar.	27	3 Apr.*
Towgood, Y. S., and others, Wanganui, N.Z. Tent	14603	10 Mar.	27	3 Apr.*
Travers, W. T. L., Wellington, N.Z. Windings for electrical machine. (B. G. Lamme)	14404	7 Jan.	6	24 Jan.
Travers, W. T. L., Wellington, N.Z. Electrical distribution. (J. S. Peck)	14430	14 Jan.	16	20 Feb.
Travers, W. T. L., Wellington, N.Z. Collector ring for electrical machine. (R. Siegfried)	14620	13 Mar.	27	3 Apr.
Tuck, W. A., jun., Wakefield, N.Z. Wire-strainer	14357	16 Dec.	11	6 Feb.*
United Shoe Machinery Company, Paterson, U.S.A. Lasting-machine. (R. F. McFeely)	14547	20 Feb.	19	6 Mar.
United Shoe Machinery Company, Paterson, U.S.A. Lasting-machine. (A. A. Stiggins)	14548	20 Feb.	19	6 Mar.
United Shoe Machinery Company, Paterson, U.S.A. Machine for inserting fastenings. (L. A. Casgrain)	14647	20 Mar.	27	3 Apr.
Valves, Limited, London, Eng. Hermetic sealing of tins. (J. R. Croft)	14682	26 Mar.	30	17 Apr.
Van Buskirk, S., Auckland, N.Z. Bridle and bit	13861	25 July	3	9 Jan.
Van Volkenburgh, P., and another, New York, U.S.A. Generating steam	14436	7 June, 1901†	6	24 Jan.
Volkenburgh, Van. (See under Van.)				
Wales, R., and another, Dunedin, N.Z. Broom, brush, &c.	14416	8 Jan.	6	24 Jan.*
Walker, J., and another, Killinchy, N.Z. Root-slicer	13738	19 June, 1901	19	6 Mar.
Walker, R., Dunedin, N.Z. Milk-aerator	13631	22 May, 1901	27	3 Apr.
Waller, W. A. C., London, Eng. Building block or plate	14447	15 Jan.	6	24 Jan.
Wardle, W., Burton-on-Trent, Eng. Preparing yeast	14573	3 Mar.	24	20 Mar.
Warring, J., jun., Marton, N.Z. Brake for traction-engine	14646	20 Mar.	27	3 Apr.

ALPHABETICAL LIST OF APPLICANTS FOR LETTERS PATENT—*continued.*

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Waters, E., Melbourne, Vic. Manufacture of soap. (W. F. Hayward)	14584	6 Mar. ..	24	20 Mar.*
Waters, E., jun., Melbourne, Vic. Metallurgic filter. (F. H. Long)	14661	19 Mar. ..	27	3 Apr.
Waters, E., jun., Melbourne, Vic. Electrolytic converter. (F. H. Long)	14662	19 Mar. ..	27	3 Apr.
Waters, J. B., and another, Dunedin, N.Z. Merchandise-conveyor	14561	24 Feb. ..	24	20 Mar.*
Watt, C. L., Dunedin, N.Z. Parallel ruler	14471	22 Jan. ..	11	6 Feb.*
Watt, C. L., and another, Dunedin, N.Z. Driving dredge ..	14421	6 Jan. ..	6	24 Jan.*
Webb, J., East London, Cape of Good Hope. Wire-strainer ..	14483	27 Jan. ..	16	20 Feb.
Wehinger, J., Zurich, Switzerland. (See Fabrik für Mechanische Hirnholzmosaik Gesellschaft mit Beschrankter Haftung, No. 14577.)				
Wells, R. F., Invercargill, N.Z. Sheep-shears	14551	18 Feb. ..	19	6 Mar.*
West, M. T., and another, Ngaire, N.Z. Milk cooler and aerator ..	14556	24 Feb. ..	19	6 Mar.*
Westinghouse, G., Pittsburg, U.S.A. Internal-combustion engine ..	14434	15 Jan. ..	6	24 Jan.
Westinghouse, G., Pittsburg, U.S.A. Treating copper-ores. (W. J. Knox)	14494	4 Feb. ..	16	20 Feb.
Wheeler, C. H., Short Hills, N.J., U.S.A. Cooling-tower ..	14574	3 Mar. ..	24	20 Mar.
Whitham, F. E., Oxenhope, Eng. Grinding and reducing machinery	14615	13 Mar. ..	..	..
Whitson, R., Auckland, N.Z. Exhaust-condenser	14425	9 Jan. ..	6	24 Jan.*
Whyte, W., Wellington, N.Z. Suspending window-curtains ..	13536	13 Apr., 1901 ..	3	9 Jan.
Wieder, H. G. A. I., and another, London, Eng. Reproducing and transmitting sound	14572	3 Mar. ..	24	20 Mar.
Wiggins, F., Tacoma, U.S.A. Clutch for pulley	14522	13 Feb. ..	16	20 Feb.
Wilfley, A. R., Denver, U.S.A. (See Wilfley Ore-concentrator Syndicate, Limited, Nos. 14479–80.)				
Wilfley Ore concentrator Syndicate, Limited, London, Eng. Ore-concentrator. (A. R. Wilfley)	14480	29 Jan. ..	19	6 Mar.
Wilfley Ore-concentrator Syndicate, Limited, London, Eng. Ore-concentrator. (A. R. Wilfley)	14479	11 Mar., 1901†	24	20 Mar.
Williams, J. T., North Adelaide, S.A. Bell-sounding mechanism ..	13419	20 Feb., 1901 ..	19	6 Mar.
Williams, R , Malvern, S.A. (See Fresh Air and Safety Sash-fastener Company, Limited, No. 14493.)				
Williams, W. G., and another, Brisbane, Queensland. Target ..	14326	12 Dec., 1901 ..	19	6 Mar.
Wiseman, J., Auckland, N.Z. Gaiter	14616	13 Mar. ..	27	3 Apr.
Wolff, A. C., Christchurch, N.Z. Packing-case	14493	14 Jan. ..	6	24 Jan.*
Wycherley, C. W., Wellington, N.Z. Horse-cover	14623	14 Mar. ..	27	3 Apr.*
Young, F. R., Wellington, N.Z. Saddle-cloth and ambulance stretcher	14570	3 Mar. ..	24	20 Mar.*
Zobel, M., Mount Victoria, N.S.W. Ore-agitation vat	14627	15 Mar. ..	30	17 Apr.

Alphabetical List of Inventions for Quarter ending 31st March, 1902.

THIS list includes also applications lodged prior to but gazetted during the quarter, and complete specifications following provisional specifications, accepted and gazetted during the quarter. Where the number and date of the *Gazette* are omitted, the application has not yet been accepted.

* Denotes a provisional specification. † Denotes a prior date under section 106 of "The Patents, Designs, and Trade Marks Act, 1889."

Invention.	Name.	Application.		*Gazette.*	
		No.	Date.	No.	Date.
Advertising	Mutual Benefit Bonus Company, Limited	14580	6 Mar. ..	30	17 Apr.
Aerator. (See Milk-aerator.)					
Air-brakes, Operating	J. Salinger	14665	20 Mar. ..	27	3 Apr.*
Air, Creating and circulating cold ..	J. B. Norris and T. M. Baldwin ..	14502	4 Feb. ..	16	20 Feb.*
Alarm. (See Fire-alarm.)					
Alarm-call connection to telephone exchange	P. Rabbidge	14498	6 Feb. ..	16	20 Feb.
Amalgamator	G. J. Perotti	14464	22 Jan. ..	16	20 Feb.
Amalgamator	G. J. Perotti	14676	26 Mar. ..	30	17 Apr.
Ambulance stretcher, saddle-cloth, and camp bed combined	F. R. Young	14570	3 Mar. ..	24	20 Mar.*
Animal-trap	R. McLean	14595	7 Mar. ..	24	20 Mar.*
Antimony, white oxide of, Manufacturing	A. S. Plews	14643	20 Mar. ..	27	3 Apr.
Antiseptic dressing for wounds ..	W. Over..	14533	13 Feb. ..	16	20 Feb.
Arrester. (See Spark-arrester, Spark-catcher.)					
Artificial fuel	T. H. Brown	14400	6 Jan. ..	6	24 Jan.*
Auriferous material, Agitating ..	W. R. Keane and B. Hogg ..	14515	12 Feb. ..	19	6 Mar.*
Axles, Oiling	T. S. Philpott	14609	12 Mar. ..	27	3 Apr.*
Bag. (See Lead-bag, Paper bag.)					
Bailing cows, Appliance for	W. V. Hosking	14566	28 Feb. ..	24	20 Mar.*
Balance. (See Window-sash balance.)					
Ballast-spreading machine	W. Currie	14462	22 Jan. ..	16	20 Feb.
Bed. (See Camp bed.)					

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Bed, Preventing children falling out of ..	C. E. Bamford	14451	20 Jan. ..	19	6 Mar.
Bedclothes, Securing	J. McDonald	13537	13 Apr., 1901	11	6 Feb.
Bedstead	H. Tas	14613	13 Mar. ..	27	3 Apr.*
Bells, Sounding	J. T. Williams	13419	20 Feb., 1901	19	6 Mar.
Belt-fastener	S. O. Keoghan	14674	25 Mar. ..	30	17 Apr.*
Bicycle	R. W. Pearse	14507	8 Feb. ..	16	20 Feb.*
Bicycle-carrier for railway-car.. ..	A. Lyell	14513	11 Feb. ..	19	6 Mar.*
Bicycle-crank	G. Percival	14562	27 Feb. ..	..	..
Blind, Check roller for	W. A. Dugins	13522	4 Apr. ..	16	20 Feb.
Blinds. (See Venetian blinds.)					
Blood, Treatment of	R. R. Donaldson	14660	21 Mar. ..	30	17 Apr.
Boiler. (See Steam boiler.)					
Book-holder	J. H. Marple	14537	18 Feb. ..	19	6 Mar.*
Boot-heel	W. Steer	14469	22 Jan. ..	19	6 Mar.*
Boots, shoes, &c., Sole for	J. F. Mackley	14658	21 Mar. ..	27	3 Apr.*
Bottle. (See Drenching-bottle, Non-refillable bottle.)					
Bottle-closures	F. Recht and C. L. Curtis ..	14655	21 Mar. ..	27	3 Apr.*
Bottle-stopper	L. Caselberg	14476	27 Jan. ..	11	6 Feb.
Box. (See Match box.)					
Bracket. (See Cycle-bracket.)					
Brake. (See Air-brake, Vehicle-brake, Traction-engine brake.)					
Braking-mechanism for wheels ..	Barwest Coaster Brake Company	14437	16 Jan. ..	6	24 Jan.
Branding	A. McLeod	14432	13 Jan. ..	6	24 Jan.*
Branding cheese	J. H. R. Taylor	14497	6 Feb. ..	16	20 Feb.*
Branding-fluid	T. H. Brown and J. E. Staples ..	14668	24 Mar. ..	30	17 Apr.*
Bridle and bit	S. Van Buskirk	13861	25 July, 1901	3	9 Jan.
Brooch-pin catch	A. C. Dennes	13492	25 Mar., 1901	27	3 Apr.
Broom or brush	R. Wales and W. H. Fahey ..	14416	8 Jan. ..	6	24 Jan.*
Buckle attachment to hooks	A. Douglas	14454	21 Jan. ..	11	6 Feb.*
Burner. (See Gas-burner.)					
Bush for dredge-tumbler	J. Murison	14683	25 Mar. ..	30	17 Apr.*
Butter canister or package	J. Dingwall	14486	30 Jan. ..	16	20 Feb.
Butter-lifter	W. Riddell	14474	23 Jan. ..	11	6 Feb.*
Butter-printer	W. Riddell	14473	23 Jan. ..	11	6 Feb.*
Cabinet. (See Hairdressers' cabinet, Music-cabinet.)					
Camera. (See Photographic camera.)					
Camp bed, saddle-cloth, and ambulance stretcher combined	F. R. Young	14570	3 Mar. ..	24	20 Mar.*
Can-handle	A. C. Murray	14445	15 Jan. ..	6	24 Jan.*
Canister. (See Butter-canister.)					
Can-joint	M. B. L. Ehrmann and Queensland Meat Export and Agency Company, Limited	14614	13 Mar. ..	27	3 Apr.
Can-soldering machine	H. Peck	14544	20 Feb. ..	30	17 Apr.
Canoe	C. D. Lightband and H. W. C. Lanauze	14481	27 Jan. ..	16	20 Feb.*
Carbon paper, Machine for making ..	Crown Paper Company ..	14553	19 Feb. ..	19	6 Mar.
Carpet-fastener	C. D. Pike	14524	13 Feb. ..	19	6 Mar.*
Carving wood	A. McLeod	14432	13 Jan. ..	6	24 Jan.*
Case. (See Packing-case.)					
Cash-carrier system	Lamson Store Service Company, Limited	14549	20 Feb. ..	19	6 Mar.*
Caster	D. E. Amesbury	14397	4 Jan. ..	3	9 Jan.*
Castrating-appliance	E. Hale	13489	22 Mar., 1901	19	6 Mar.
Catch-pit drainage	R. R. Donaldson	14640	19 Mar. ..	30	17 Apr.*
Catch. (See Brooch-pin catch.)					
Cattle-drenching bottle	N. G. McKay	14531	13 Feb. ..	19	6 Mar.*
Cavalry greatcoat	C. J. Seager	13557	26 Apr., 1901	11	6 Feb.
Cell. (See Dental suction cell.)					
Cement. (See Portland cement.)					
Chaff-cutter and corn-crusher ..	J. O'Donoghue	14601	10 Mar. ..	24	20 Mar.*
Chair, Safety attachment to	I. M. Clark	14520	13 Feb. ..	16	20 Feb.
Chair-silencer	H. Tas	14585	6 Mar. ..	24	20 Mar.*
Check roller for blinds	W. F. Dugins	13522	4 Apr., 1901	16	20 Feb.
Cheese-branding	J. H. R. Taylor	14497	6 Feb. ..	16	20 Feb.*
Children falling from bed, Preventing ..	C. E. Bamford	14451	20 Jan. ..	19	6 Mar.
Child's high chair, Safety attachment to ..	I. M. Clark	14520	13 Feb. ..	16	20 Feb.
Cigar and cigarette holder	B. Benkel	14503	7 Feb. ..	16	20 Feb.
Claw hammer	S. J. Ensor and F. Tanner ..	14478	25 Jan. ..	11	6 Feb.*
Cleaner. (See Pot-cleaner.)					
Cleansing painted surfaces	M. Peryer	14441	16 Jan. ..	6	24 Jan.*
Cleansing painted surfaces	M. Peryer	14606	10 Mar. ..	27	3 Apr.
Cloth. (See Saddle-cloth.)					
Clothes-line	J. Murray..	14465	24 Jan. ..	16	20 Feb.*
Clothes-peg	J. Murray..	14465	24 Jan. ..	16	20 Feb.*
Clothes-pocket	P. Patten	14555	21 Feb. ..	19	6 Mar.
Clutches for pulleys	F. Wiggins	14522	13 Feb. ..	16	20 Feb.
Coal-scuttle	A. C. Murray	14444	15 Jan. ..	6	24 Jan.*
Colander and cooking utensil	E. Bowles	14557	24 Feb. ..	30	17 Apr.
Cold air, Creating and circulating ..	J. B. Norris and T. M. Baldwin..	14502	4 Feb. ..	16	20 Feb.*
Collar. (See Horse-collar.)					

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Collar fastener, Shirt-neck and ..	J. J. Macky	14542	17 Feb. ..	19	6 Mar.*
Collar-stud holder for shirts	J. J. Macky	14482	24 Jan. ..	16	20 Feb.*
Collector rings for electrical machines ..	W. T. L. Travers	14620	13 Mar. ..	27	3 Apr.
Combustion engine. (See Internal-combustion engine.)					
Compass. (See Divider compass.)					
Compressed-fluid engine	J. E. Howard	14448	15 Jan. ..	6	24 Jan.
Compressed fuel	J. E. Langstone and T. J. Broome	14651	20 Mar. ..	27	3 Apr.*
Concentrating-table	J. B. Mason	14420	6 Jan. ..	6	24 Jan.*
Concentrator. (See Ore-concentrator.)					
Concrete-mixer	W. E. Hughes	14227	14 Nov., 1901	19	6 Mar.
Condenser. (See Steam-condenser.)					
Condenser for motors	R. Whitson	14425	9 Jan. ..	6	24 Jan.*
Converter. (See Electrolytic converter.)					
Conveyer for lowering cases and merchandise	J. B. Waters and G. F. S. MacLean	14561	24 Feb. ..	24	20 Mar.*
Cooking utensil and colander	E. Bowles..	14557	24 Feb. ..	30	17 Apr.
Cooking-range grating	H. Nichol..	14681	27 Mar. ..	30	17 Apr.*
Cooler. (See Milk-cooler.)					
Cooling-tower	C. H. Wheeler	14574	3 Mar. ..	24	20 Mar.
Co-ordinates of right-angled triangles, Ascertaining	T. McFarlane	14500	6 Feb. ..	16	20 Feb.*
Copper-ores, Treating	G. Westinghouse	14494	4 Feb. ..	16	20 Feb.
Copying-ink	W. Stewart	14525	11 Feb. ..	16	20 Feb.
Corn-crusher	J. O'Donoghue	14601	10 Mar. ..	24	20 Mar.*
Couch-head	A. W. Memory and F. G. Hind ..	14512	11 Feb. ..	16	20 Feb.*
Coupon. (See Trade coupon.)					
Cover. (See Horse-cover.)					
Cow-bailing appliance	W. V. Hosking	14566	28 Feb. ..	24	20 Mar.*
Cow-leg holder	F. Gough..	14635	7 Mar. ..	30	17 Apr.
Cow-teat cutter	A. J. Ross..	14171	29 Oct., 1901	19	6 Mar.
Crank. (See Bicycle-crank.)					
Crate. (See Rabbit-crate.)					
Crusher. (See Corn-crusher.)					
Cultivator	F. Cooper..	14677	22 Mar. ..	30	17 Apr.*
Curler. (See Hair-curler.)					
Curtain. (See Window-curtain.)					
Curtain-pole	W. C. Greig	13646	23 May, 1901	19	6 Mar.
Cutter. (See Chaff-cutter, Stone-cutter, Teat-cutter, Tobacco-cutter.)					
Cycle-bracket	A. J. Hewetson	13495	26 Mar., 1901	6	24 Jan.
Decorating woodwork	H. Smith..	14648	20 May, 1901†	34	1 May.
Dental suction cell..	E. A. Slack	14521	5 Feb. ..	16	20 Feb.*
Diaphragm for transmitting sound ..	H. G. A. I. Wieder and S. S. Bromhead	14572	3 Mar. ..	24	20 Mar.
Divider compass	V. G. Swinbourne	14490	31 Jan. ..	19	6 Mar.
Door-handle, Attaching	T. B. Jacobsen	14652	20 Mar. ..	30	17 Apr.*
Door-mat fastener	C. D. Pike	14524	13 Feb. ..	19	6 Mar.*
Drafting garments	I. A. Plummer	14487	30 Jan. ..	16	20 Feb.
Drain-excavator and road-grader ..	D. L. Cochrane	14526	14 Feb. ..	16	20 Feb.*
Drainage catch-pit..	R. R. Donaldson	14640	19 Mar. ..	30	17 Apr.*
Drawers	W. H. Forsyth	13496	26 Mar. ..	3	9 Jan.
Dray and scoop combined	D. L. Cochrane	14578	6 Mar. ..	24	20 Mar.*
Dredge machinery, Driving	J. B. Mason and C. L. Watt ..	14421	6 Jan. ..	6	24 Jan.*
Dredgers	D. Levat	13939	26 Aug., 1901	19	6 Mar.
Dredges, Delivering tailings from ..	J. Macpherson and L. Phillips ..	14460	22 Jan. ..	16	20 Feb.
Dredge-tumbler, Bush for	J. Murison	14683	25 Mar. ..	30	17 Apr.*
Dredging. (See Gold-dredging.)					
Dredging machinery	J. Shepherd	14657	21 Mar. ..	27	3 Apr.*
Drenching-bottle for cattle	N. G. McKay	14531	13 Feb. ..	19	6 Mar.*
Drill	R. D. Harris	14575	3 Mar. ..	..	..
Drill. (See Grain-drill, Stone cutter and drill.)					
Dropper. (See Fencing-dropper.)					
Dynamo-electric generator	J. P. Campbell	14644	20 Mar. ..	27	3 Apr.
Educational devices	F. Hornby	14407	8 Jan. ..	6	24 Jan.*
Electrical distribution	W. E. Hughes	14649	20 Mar. ..	27	3 Apr.
Electrical distribution	W. T. L. Travers	14430	14 Jan. ..	16	20 Feb.
Electrical machine, Collector rings for ..	W. T. L. Travers	14620	13 Mar. ..	27	3 Apr.
Electric-current circuits, Phase-relation indicator for polyphase	J. T. Hunter	14611	13 Mar. ..	27	3 Apr.
Electric generator. (See Dynamo-electric generator.)					
Electric machines, Windings for ..	W. T. L. Travers	14404	7 Jan. ..	6	24 Jan.
Electrolytic converter	E. Waters, jun.	14662	19 Mar. ..	27	3 Apr.
Engine. (See Compressed-fluid engine, Explosive engine, Internal-combustion engine, Marine engine, Traction engine.)					
Engine-governor	A. Tornaghi	14563	27 Feb. ..	24	20 Mar.
Engine-shaft bearing	W. E. Hughes	14501	6 Feb. ..	16	20 Feb.
Escape. (See Fire-escape.)					
Excavator. (See Drain-excavator.)					

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application.		*Gazette.*	
		No.	Date.	No.	Date.
Excavator	O. B. H. Hanneborg	14536	18 Feb.	19	6 Mar.
Explosion motor	J. A. Secor	14571	3 Mar.	..	..
Explosive engine	E. F. Colborn	14427	14 Jan.	6	24 Jan.
Explosive motor	R. Whitson	14425	9 Jan.	6	24 Jan.*
Extinguisher. (See Fire-extinguisher; Gas-lamps, Lighting and extinguishing.)					
Extractor. (See Stump-extractor.)					
Fabric. (See Wood-block fabric.)					
Fastener. (See Belt-fastener, Carpet-fastener, Collar-fastener, Door-mat fastener, Hat-fastener, Sash-fastener, Window-fastener.)					
Fastenings, Machine for inserting	United Shoe Machinery Company	14647	20 Mar.	27	3 Apr.
Feed-water heater	B. G. A. Harkness	13439	2 Mar., 1901	3	9 Jan.
Fence. (See Wire fence.)					
Fencing-dropper	E. A. Derrett	14439	17 Jan.	6	24 Jan.*
Fencing-staple	H. A. Hudson	14593	7 Mar.	24	20 Mar.*
Fibre, Washing	F. Kettle	13432	26 Feb., 1901	6	24 Jan.
Filter. (See Metallurgic filter.)					
Fire-alarm	T. S. Philpott and R. Hutchinson	14599	10 Mar.	24	20 Mar.*
Fire-escape	C. J. Cooze	14594	7 Mar.	24	20 Mar.*
Fire-escape	I. Harrison and E. L. Kirkland	14650	20 Mar.	27	3 Apr.*
Fire-escape	A. McFarlane	14597	6 Mar.	24	20 Mar.*
Fire-escape	W. Stewart	14418	6 Jan.	6	24 Jan.
Fire-escape	T. S. Philpott and R. Hutchinson	14598	10 Mar.	24	20 Mar.*
Fire-extinguisher	J. Mackie and T. J. Drumm	14538	18 Feb.	19	6 Mar.*
Flax, Extracting gum from	H. A. Alexander	14496	27 Jan.	16	20 Feb.*
Floor washing and scrubbing apparatus	J. E. Gee	14656	21 Mar.	27	3 Apr.
Fluid-register	N. Bidstrup	14540	19 Feb.	19	6 Mar.
Flush-conductor for water-closets	W. M. Bartle	14468	22 Jan.	11	6 Feb.*
Flush for water-closets	W. M. Bartle	14625	14 Mar.	27	3 Apr.*
Frame. (See Picture-frame.)					
Fretwork	A. McLeod	14432	13 Jan.	6	24 Jan.*
Fruit-preserving pan	J. T. Johns	14504	7 Feb.	16	20 Feb.*
Fuel. (See Artificial fuel, Compressed fuel.)					
Furnace	J. Jay	14632	13 Mar.	27	3 Apr.*
Gaiter	J. Wiseman	14616	13 Mar.	27	3 Apr.
Game	A. McLeod	14450	16 Jan.	11	6 Feb.
Garments, Patterns for drafting	I. A. Plummer	14487	30 Jan.	16	20 Feb.
Gas. (See Water-gas.)					
Gas-burner	Inverted Incandescent Gas-lamp Syndicate, Limited	14612	13 Mar.	27	3 Apr.*
Gas-lamps, Lighting and extinguishing	H. M. Levinge	14667	24 Mar.	27	3 Apr.*
Gas, Producing	J. F. Colborn	14428	14 Jan.	6	24 Jan.
Generator. (See Dynamo-electric generator, Steam-generator.)					
Girth and surcingle	J. Moroney	14629	15 Mar.	27	3 Apr.*
Glass articles, Manufacturing	J. A. Chambers	14429	14 Jan.	6	24 Jan.
Gold and silver, Extraction of	M. Zobel	14627	15 Mar.	30	17 Apr.
Gold-dredging	F. Marisco	14409	10 Jan.	6	24 Jan.*
Gold-dredging	H. N. McLeod and G. A. Hurley	14401	6 Jan.	3	9 Jan.*
Gold-dredging machinery	H. H. Rayward and E. S. Baldwin	14463	22 Jan.	11	6 Feb.*
Gold-saving	H. G. Hankin	14564	22 Feb.	19	6 Mar.*
Gold-saving	G. J. Perotti	14676	26 Mar.	30	17 Apr.
Gold-saving apparatus	T. M. Baldwin	14505	6 Feb.	16	20 Feb.*
Gold-saving apparatus	R. and J. H. Millis	14457	18 Jan.	11	6 Feb.*
Gold-saving dredge-screen	G. T. Heppell	14608	12 Mar.	27	3 Apr.*
Gold-saving mat	R. W. Parkinson and H. Neilsen	14422	11 Jan.	11	6 Feb.*
Gold-saving screen	A. Morrison	13675	4 June, 1901	16	20 Feb.*
Governor, Engine	A. Tornaghi	14563	27 Feb.	24	20 Mar.
Grader. (See Road-grader.)					
Grading and concentrating table	J. B. Mason	14420	6 Jan.	6	24 Jan.*
Grain-drill, Feed for	J. M. Falconer	14489	27 Jan.	16	20 Feb.*
Grating. (See Cooking-range grating.)					
Greatcoat. (See Cavalry greatcoat.)					
Grinding lime, &c.	F. E. Whitham	14615	13 Mar.	..	..
Gum, Extracting, from flax	H. A. Alexander	14496	27 Jan.	16	20 Feb.*
Gum. (See also Kauri-gum.)					
Gun. (See Magazine gun.)					
Guard. (See Moustache-guard.)					
Guttapercha substitute	A. Gentzsch	14410	10 Jan.	6	24 Jan.
Hair-curler	J. D. Smith	14663	21 Mar.	27	3 Apr.*
Hairdresser's cabinet	G. Dent	14449	18 Jan.	16	20 Feb.*
Hairpin	G. H. Bigelow	14532	14 Feb.	16	20 Feb.*
Hairpin	G. H. Bigelow	14539	15 Feb.	19	6 Mar.*
Hair-restorer	J. F. Donnelly	14592	12 Mar.	24	20 Mar.*
Hammer. (See Claw hammer.)					
Handle. (See Can-handle, Door-handle.)					
Hat-fastener	C. Bristow	14534	15 Feb.	16	20 Feb.*
Hat-fastener	F. Kettle	14461	22 Jan.	11	6 Feb.*
Hat-fastener	F. Kettle	14470	22 Jan.	11	6 Feb.*

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application.		*Gazette.*	
		No.	Date.	No.	Date.
Hat-fastener	J. Pomeroy	14414	8 Jan.	6	24 Jan.
Hauling logs, Tripping-block for	G. Davidson	14510	10 Feb.	..	..
Hauling logs, Tripping-block for	G. Davidson	14558	24 Feb.	19	6 Mar.*
Heater. (See Feed-water heater.)					
Heel. (See Boot-heel.)					
Hinge for gates, &c.	Duncan, A. S.	14628	11 Mar.	27	3 Apr.
Holder. (See Book-holder, Cigar and cigarette holder, Cow-leg holder, Newspaper-holder.)					
Hollow-ware, Manufacture of	G. Sweet	14411	10 Jan.	11	6 Feb.
Hooks, Buckle attachment to spring	A. Douglas	14454	21 Jan.	11	6 Feb.*
Horse-collar	H. O. Cassels and H. Preston	14568	28 Feb.	24	20 Mar.*
Horse-cover	C. W. Wycherley	14623	14 Mar.	27	3 Apr.*
Horse-cover	T. McNaught	14685	27 Mar.	30	17 Apr.*
Horses, Releasing, from stables	S. O. Keoghan	14673	20 Mar.	30	17 Apr.*
Hothouse	J. Black, J. A. Stringer, and A. W. Clayden	14435	15 Jan.	16	20 Feb.
Hull. (See Vessel's hull.)					
Igniting lamps	H. M. Levinge	14667	24 Mar.	27	3 Apr.
Incandescence mantles	Kern Burner Company, Limited	14546	20 Feb.	19	6 Mar.
Indicator. (See Phase-relation indicator.)					
Ink. (See Copying-ink.)					
Internal-combustion engine	G. Westinghouse	14434	15 Jan.	6	24 Jan.
Invalid's table	F. A. Miller	14600	10 Mar.	24	20 Mar.*
Iron plates, jointing	J. Couston and W. Porritt	14587	6 Mar.	34	1 May.
Jack. (See Lifting-jack.)					
Joint for tin or can	M. B. L. Ehrmann and Queensland Meat Export and Agency Company, Limited	14614	13 Mar.	27	3 Apr.
Jointing iron plates	J. Couston and W. Porritt	14587	6 Mar.	34	1 May.
Kauri-gum deposits, Utilising	D. R. S. Galbraith	14492	31 Jan.	16	20 Feb.*
Kettle	J. J. Macky	14424	9 Jan.	6	24 Jan.*
Knickers, Cyclists'	W. H. Forsyth	13496	26 Mar.	3	9 Jan.
Lamps. (See Gas lamps.)					
Lasting-machine	United Shoe Machinery Company	14547, 8	20 Feb.	19	6 Mar.
Lasting-pincers	D. Catley	13814	11 July, 1901	27	3 Apr.
Lead-bags for racehorses	J. Neagle	14398	4 Jan.	6	24 Jan.*
Leggings	A. Findlay, jun., J. B. and J. J. Salmon, and W. J. Ashton	14506	7 Feb.	16	20 Feb.*
Level of liquids, Ascertaining	C. May	13816	13 July	19	6 Mar.
Lifting-jack, Shoe for	J. B. Jackson	14399	6 Jan.	11	6 Feb.
Lime, manure, and seed sower	A. B. Todd	14417	8 Jan.	6	24 Jan.*
Limestone-working machine	J. J. and W. G. Jamieson	14639	19 Mar.	30	17 Apr.
Line. (See Clothes-line.)					
Liquid-level finder	C. May	13816	13 July, 1901	19	6 Mar.
Lock. (See Nut-lock.)					
Locking wheels	J. R. and W. H. Jewell	14645	20 Mar.	27	3 Apr.*
Log-sawing machine	J. Greenacre	14514	11 Feb.	19	6 Mar.*
Magazine gun	J. Hylard and E. G. H. Bingham	14405	8 Jan.	..	..
Mantles. (See Incandescence mantles.)					
Manure, Preparing yeast as a	W. Wardle	14573	3 Mar.	24	20 Mar.
Manure, lime, and seed sower	A. B. Todd	14417	8 Jan.	6	24 Jan.*
Manure-planter	J. A. Thrumm	14488	30 Jan.	16	20 Feb.*
Marine engines, Preventing "racing" of	E. Hope	14511	10 Feb.	16	20 Feb.*
Marine oil-engine discharge	R. Arthur	14669	22 Mar.	27	3 Apr.*
Mark. (See Stock-mark.)					
Martingale	W. G. Geary	14664	24 Mar.	..	..
Mat. (See Gold-saving mat.)					
Match-box	J. Purkiss	14621	14 Mar.	27	3 Apr.*
Match-striker	W. Marriott and E. Binham	14442	17 Jan.	6	24 Jan.*
Mattress	F. Klaer and A. Law	14419	6 Jan.	6	24 Jan.
Measure, rule, and square	T. Ramsay	13555	25 Apr., 1901	11	6 Feb.
Metallurgic filter	E. Waters, jun.	14661	19 Mar.	27	3 Apr.
Milk-aerator	R. Walker	13631	22 May, 1901	27	3 Apr.
Milk-aerator	J. Lemire	14634	18 Mar.	30	17 Apr.
Milk cooler and aerator	H. Pennington and M. T. West	14556	24 Feb.	19	6 Mar.*
Milk cooler and aerator	R. Stevens	13692	5 June, 1901	16	20 Feb.
Mineral substances, Separating	A. S. Elmore	14158	13 Feb.	34	1 May.
Minnow, Artificial	C. H. Osmond	14684	26 Mar.	30	17 Apr.*
Mirror	A. J. Park	14472	22 Jan.	16	20 Feb.*
Mixer. (See Concrete-mixer.)					
Motion, Mechanism for converting	J. M. Rauhoff	14641	20 Mar.	27	3 Apr.
Motor. (See Explosive motor, Rotary motor, Wave motor.)					
Moustache-guard	A. Rowntree	14624	11 Mar.	27	3 Apr.*
Music-cabinet attachment for pianofortes	E. A. Bishop	14155	24 Oct., 1901	16	20 Feb.
Newspaper-holder	J. H. Marple	14537	18 Feb.	19	6 Mar.*
Nightsoil-box seat	H. August	14680	25 Mar.	30	17 Apr.*
Nitro-cellulose compounds	J. B. G. Bonnaud	14642	20 Mar.	27	3 Apr.

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Non-refillable bottle	J. Hancock and G. Ramage	14596	6 Mar.	24	20 Mar.*
Nut-lock	J. J. Macky and G. H. Bigelow	14626	12 Mar.	27	3 Apr.*
Oil-engine (See Marine oil-engine.)					
Oiling axles	T. S. Philpott	14609	12 Mar.	27	3 Apr.*
Oil-separator	J. Chambers and Son, Limited	14670	25 Mar.	..	..
Ore-concentrator	Wilfley Ore-concentrator Syndicate, Limited	14479	11 Mar., 1901†	24	6 Mar.
Ore-concentrator	Wilfley Ore-concentrator Syndicate, Limited	14480	29 Jan.	19	6 Mar.
Ore-concentrator	E. A. Sperry	13781	5 July, 1901	27	3 Apr.
Ore-concentrator	O. Sorensen	14458	25 Feb.	19	6 Mar.*
Ore-concentrator	A. A. Francis	14545	20 Feb.	19	6 Mar.
Ore-concentrator	W. G. Dodd	14485	30 Jan.	16	20 Feb.
Ores, Treating copper	G. Westinghouse	14494	4 Feb.	16	20 Feb.
Ottoman scroll	A. W. Memory and F. G. Hind	14512	11 Feb.	16	20 Feb.*
Oxide of antimony, Manufacturing	A. S. Plews	14643	20 Mar.	27	3 Apr.
Packing-case	A. C. Wolff	14433	13 Jan.	6	24 Jan.
Packing-rings	G. Huhn	14412	10 Jan.	6	24 Jan.
Painted surfaces, Cleansing	M. Peryer	14606	10 Mar.	27	3 Apr.
Painted surfaces, Cleansing	M. Peryer	14441	16 Jan.	6	24 Jan.*
Pan. (See Fruit-preserving pan, Preserving-pan, Stewing-pan.)					
Paper-bag-making machine	E. C. Lovell	14287	28 Nov., 1901	27	3 Apr.
Parallel ruler	C. L. Watt	14471	22 Jan.	11	6 Feb.*
Partition-wall block or plate	W. A. C. Waller	14447	15 Jan.	6	24 Jan.
Pattern. (See Garment-pattern.)					
Peg. (See Clothes-peg.)					
Phase-relation indicator for polyphase electric-current circuits	J. T. Hunter	14611	13 Mar.	27	3 Apr.
Phormium tenax. (See Flax.)					
Photographic camera	A. A. Brooks and G. A. Watson	14386	30 Dec., 1901	6	24 Jan.
Picture-frame	J. C. Corbett	14527	14 Feb.	19	6 Mar.*
Pin	Elliott's Patent Improved Domestic Pin Company	14589	6 Mar.	..	..
Pin. (See also Brooch-pin, Hair-pin.)					
Pincers. (See Lasting-pincers.)					
Ping-pong	F. H. W. Cowper	14631	14 Mar.	27	3 Apr.*
Planter. (See Manure-planter.)					
Plates, Connecting	J. Couston and W. Porritt	14587	6 Mar.	34	1 May.
Plough	G. Barney	14508	10 Feb.	19	6 Mar.*
Pneumatic-cushion appliance	W. Stewart	14418	6 Jan.	6	24 Jan.
Pneumatic tire	J. R. Brunt and R. C. Pitt	14408	8 Jan.	6	24 Jan.*
Pneumatic tire	C. Ray	14395	3 Jan.	3	9 Jan.*
Pocket. (See Watch-pocket, Clothes-pocket.)					
Points. (See Railway and Tramway points.)					
Portland cement	F. Oakden	14605	8 Mar.	27	3 Apr.*
Pot-cleaner	W. Borlase	14517	10 Feb.	16	20 Feb.*
Power, Distribution of	W. Healey	13679	3 June, 1901	19	6 Mar.
Preserving	D. R. Jones and P. A. Larritt	14586	6 Mar.	24	20 Mar.*
Preserving. (See also Wood-preserving.)					
Preserving and stewing pan	W. A. Knight	14591	4 Mar.	24	20 Mar.
Preserving-pan. (See also Fruit-preserving pan.)					
Press. (See Stamping and marking press.)					
Pressure-regulator	P. H. Reardon	14638	15 Mar.	27	3 Apr.
Printer. (See Butter-printer.)					
Printing	W. Thomas	14607	10 Mar.	27	3 Apr.*
Pulleys, Clutches for	F. Wiggins	14522	13 Feb.	16	20 Feb.
Pump	J. S. C. Bonham	14467	24 Jan.	11	6 Feb.*
Pump	W. H. Madill	14509	10 Feb.	16	20 Feb.*
Pump. (See also Siphon pump.)					
Punching-machine, Hand-power	D. Donald	14559	25 Feb.	19	6 Mar.*
Rabbit-crate	W. Burrell and J. P. McMeekin	14466	24 Jan.	16	20 Feb.*
Racehorses, Lead-bag for	J. Neagle	14398	4 Jan.	6	24 Jan.*
"Racing" of marine engines, Preventing	E. Hope	14511	10 Feb.	16	20 Feb.*
Racquet for table games	J. W. Jones	14653	19 Mar.	30	17 Apr.*
Rails. (See Railway-rails, Tramway-rails.)					
Railway-car bicycle-carrier	A. Lyell	14513	11 Feb.	19	6 Mar.*
Railway or tramway points, Shifting	G. D. Ross	14588	6 Mar.	24	20 Mar.
Railway-rails, Fixing	W. J. Foot	14426	14 Jan.	6	24 Jan.
Railway-spike and wedge lock	A. G. Rosser	13660	30 May, 1901	3	9 Jan.
Railway signalling	M. Corrington and F. L. Dodgson	14618	13 Mar.	..	..
Railway signals and points, Operating	W. Taylor	14499	6 Feb.	..	..
Reading-desk	J. H. Marple	14537	18 Feb.	19	6 Mar.*
Reducing lime, &c.	F. E. Whitham	14615	13 Mar.	..	..
Register. (See Fluid-register.)					
Regulator. (See Pressure-regulator.)					
River-bank protection	J. F. Rose	14484	21 Jan.	34	1 May.
Rings. (See Packing-rings.)					
Road-grader	D. L. Cochrane	14526	14 Feb.	16	20 Feb.*
Rolling-vat, Agitation	M. Zobel	14627	15 Mar.	30	17 Apr.
Root-slicer	J. Walker and R. F. Campbell	13738	19 June	19	6 Mar.

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Rope-grip	J. F. Smith	14477	25 Jan.	11	6 Feb.*
Rope-tightener	S. W. Bradbury	14431	14 Jan.	11	6 Feb.
Rotary motor	E. Moss	14552	20 Feb.	19	6 Mar.*
Rule, measure, and square	T. Ramsay	13555	25 Apr., 1901	11	6 Feb.
Ruler. (See Parallel ruler.)					
Saddle-cloth, ambulance stretcher, or camp bed	F. R. Young	14570	3 Mar.	24	20 Mar.*
Safety attachment to child's chair	I. M. Clark	14520	13 Feb.	16	20 Feb.
Sash-fastener	Fresh Air and Safety Sash-fastener Company, Limited	14493	4 Feb.	16	20 Feb.
Sash-fastener	A. F. W. Lorie	14529	12 Feb.	16	20 Feb.*
Sash-fastener	A. F. W. Lorie	14554	20 Feb.	19	6 Mar.*
Sashes. (See Window-sashes.)					
Scouring. (See Wool-scouring.)					
Sewing-machine	J. Greenacre	14514	11 Feb.	19	6 Mar.*
Saw stripper or regulator	J. H. Grattan	14630	13 Mar.	27	3 Apr.*
Scoop and dray combined	D. L. Cochrane	14578	6 Mar.	24	20 Mar.*
Screen. (See Gold-saving screen.)					
Scrubbing. (See Floor washing and scrubbing.)					
Sealing tins	Valves, Limited	14682	26 Mar.	..	..
Seed, lime, and manure sower	A. B. Todd	14417	8 Jan.	6	24 Jan.*
Seed-sower	J. F. R. Gwatkin	13772	27 June, 1901	19	6 Mar.
Seed-sower	J. Macalister	14495	1 Feb.	16	20 Feb.*
Seed-sower	J. F. McNeill	14567	27 Feb.	24	20 Mar.*
Seed-sower	A. Storrie	14423	8 Jan.	6	24 Jan.*
Seed-sower	*J. Green*	14543	19 Feb.	19	6 Mar.
Separating mineral substances	A. S. Elmore	14158	13 Feb.	34	1 May.
Separator. (See Oil-separator.)					
Settee	A. W. Memory and F. G. Hind	14512	11 Feb.	16	20 Feb.*
Sewage-treatment	R. R. Donaldson	14660	21 Mar.	30	17 Apr.
Sewing-machine	Z. T. French and W. C. Meyer	13688	6 June, 1901	19	6 Mar.
Sewing-machine	J. C. Moore	14456	21 Jan.	11	6 Feb.*
Shaft-bearing, Engine	W. E. Hughes	14501	6 Feb.	16	20 Feb.
Sheaf-carrier	J. V. Fahey	14637	15 Mar.	27	3 Apr.*
Shearing-machine, Hand-power	D. Donald	14559	25 Feb.	19	6 Mar.*
Shears. (See Sheep-shears.)					
Sheep-shears	J. Pomeroy	14590	1 Mar.	24	20 Mar.*
Sheep-shears	R. F. Wells	14551	18 Feb.	19	16 Mar.*
Shirt-neck and collar fastening	J. J. Macky	14542	17 Feb.	19	6 Mar.*
Shirts, Collar-stud holder for	J. J. Macky	14482	24 Jan.	16	20 Feb.*
Shunting-appliances	W. Taylor	14499	6 Feb.	..	..
Signals. (See Railway signals.)					
Siphon pump	W. H. Boyens	14396	3 Jan.	3	9 Jan.*
Siphon	J. H. S. Brown	14678	27 Mar.	30	17 Apr.
Skylight	T. Ballinger	14491	3 Feb.	16	20 Feb.
Skylight	T. Ballinger	14604	11 Mar.	27	3 Apr.
Slicer. (See Root-slicer.)					
Soldering. (See Can-soldering.)					
Sole for boots, shoes, &c.	J. F. Mackley	14658	21 Mar.	27	3 Apr.*
Soap-manufacturing	E. Waters	14584	6 Mar.	24	20 Mar.*
Sounding bells	J. T. Williams	13419	20 Feb., 1901	19	6 Mar.
Sound reproducing and transmitting diaphragm	H. G. A. I. Wieder and S. S. Bromhead	14572	3 Mar.	24	20 Mar.
Sower. (See Seed-sower.)					
Spark-arrester	G. Claydon	14528	14 Feb.	16	20 Feb.*
Spark-arrester	C. E. Hodge	14633	18 Mar.	27	3 Apr.*
Spark-catcher	H. A. Cooper	14530	15 Feb.	16	20 Feb.*
Square, measure, and rule	T. Ramsay	13555	25 Apr., 1901	11	6 Feb.
Stacker. (See Tailings-stacker.)					
Stamping and marking press	A. Lion and M. E. Mosely	14438	16 Jan.	6	24 Jan.
Stamping-machine, Hand-power	D. Donald	14559	25 Feb.	19	6 Mar.*
Staple. (See Fencing-staple.)					
Steam-boiler fittings	E. Richardson	14581	6 Mar.	24	20 Mar.*
Steam-condenser	C. E. Nicholas	14583	6 Mar.	24	20 Mar.*
Steam-generator	E. L. Newcomb and P. van Volkenburg	14436	7 June, 1901†	6	24 Jan.
Steam heating-appliances, Delivering steam into	A. J. Park	14452	21 Jan.	19	6 Mar.
Stewing and preserving pan	W. A. Knight	14591	4 Mar.	24	20 Mar.*
Stock mark	K. C. and N. E. Jackson	14666	22 Mar.	27	3 Apr.
Stoker, Mechanical	J. Chambers and Son, Limited	14671, 2	25 Mar.	..	..
Stone. (See Limestone.)					
Stopper. (See Bottle-stopper.)					
Strainer. (See Wire-strainer.)					
Stud. (See Collar-stud.)					
Stump-extractor	G. C. Challis	14415	8 Jan.	6	24 Jan.*
Surcingle and girth	J. Moroney	14629	15 Mar.	27	3 Apr.*
Sweetening liquids	Porcherine, Limited	14402	6 Jan.	6	24 Jan.
Swinger. (See Wire-fence swinger.)					
Table tennis	E. G. Rawnsley	14610	11 Mar.	27	3 Apr.*
Table. (See Concentrating-table, Invalid's table.)					

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Tacking-tool, Hand	H. B. Newton	14523	13 Feb.	16	20 Feb.
Tailings, delivering from dredges	J. Macpherson and L. Phillips	14460	22 Jan.	16	20 Feb.
Tailings-stacker	F. W. Payne	14636	15 Mar.	27	3 Apr.
Tap	H. Allan	14579	3 Mar.	24	20 Mar.*
Tap	J. Ford	14560	24 Feb.	24	20 Mar.*
Tap	A. C. Murray	14622	10 Mar.	27	3 Apr.*
Target	T. Goucher	14565	28 Feb.	24	20 Mar.*
Target	M. J. Lister	14413	9 Jan.	6	24 Jan.*
Target	W. G. Williams and H. H. Edwards	14326	12 Dec., 1901	19	6 Mar.
Teat-cutter	A. J. Ross	14171	29 Oct., 1901	19	6 Mar.
Telephone exchange, Automatic	American Machine Telephone Company, Limited	14550	21 Feb.	27	3 Apr.
Telephone exchange, Alarm call connection to	P. Rabbidge	14498	6 Feb.	16	20 Feb.
Tennis. (See Table tennis.)					
Tent	E. T. and G. S. Towgood and J. Allison	14603	10 Mar.	27	3 Apr.*
Timber-jack, Shoe for	J. B. Jackson	14399	6 Jan.	11	6 Feb.
Tins, Closing	W. D. Peacock	13687	6 June, 1901	6	24 Jan.
Tins, Sealing	Valves, Limited	14682	26 Mar.	30	17 Apr.
Tire	G. W. Pitt and E. Martin	14619	13 Mar.	27	3 Apr.
Tire. (See also Pneumatic tires.)					
Tobacco-cutter	H. Jones	14617	13 Mar.	27	3 Apr.
Towel-rack	A. le B. F. Struthers	14659	21 Mar.	27	3 Apr.*
Toy	F. Hornby	14407	8 Jan.	6	24 Jan.*
Traction-engine brake	J. Warring, jun.	14646	20 Mar.	27	3 Apr.
Trade coupon	Mutual Benefit Bonus Company, Limited	14580	6 Mar.	30	17 Apr.
Trains and trams, Communication on	E. A. Angus	14406	8 Jan.	6	24 Jan.*
Tram-rail clearer	K. C. Jackson	14459	22 Jan.	11	6 Feb.*
Tramway rails, Fixing	W. J. Foot	14426	14 Jan.	6	24 Jan.
Trap. (See Animal-trap.)					
Trap for drainage	R. R. Donaldson	14640	19 Mar.	..	..
Triangles, Ascertaining co-ordinates of right-angled	T. McFarlane	14500	6 Feb.	16	20 Feb.*
Tripping-block, for use in hauling logs	G. Davidson	14558	24 Feb.	19	6 Mar.*
Trousers, Cyclists'	W. H. Forsyth	13496	26 Mar.	3	9 Jan.*
Tubes	B. F. McTear	14403	6 Jan.	6	24 Jan.
Turbine	E. Moss	14552	20 Feb.	19	6 Mar.*
Turnip and root slicer	J. Walker and R. F. Campbell	13738	19 June, 1901	19	6 Mar.
Under-pants	W. H. Forsyth	13496	26 Mar.	3	9 Jan.*
Vat. (See Rolling-vat.)					
Vehicle-brake	H. P. Brasell	14602	10 Mar.	24	20 Mar.*
Venetian blinds, Operating	W. Conyers	14322	12 Dec., 1901	19	6 Mar.*
Venetian blinds, Operating	T. Summerton, jun.	14336	16 Dec., 1901	19	6 Mar.
Vessel's hull, Cleaning	W. T. Burt	13987	10 Sept., 1901	3	9 Jan.
Voting-machine	H. B. Cary	14576	4 Mar.	24	20 Mar.
Wall. (See Partition-wall.)					
Wardrobe	E. K. C. Chalmers	14453	21 Jan.	11	6 Feb.
Washing floors	J. E. Gee	14656	21 Mar.	..	..
Watch-pocket	E. T. Matthews	14475	23 Jan.	11	6 Feb.*
Watercloset flush-conductor	W. M. Bartle	14468	22 Jan.	11	6 Feb.*
Watercloset, Flush for	W. M. Bartle	14625	14 Mar.	27	3 Apr.*
Water-heater. (See Feed-water heater.)					
Watercourse protection	J. F. Rose	14484	21 Jan.	..	..
Water-gas	H. W. G. Henderson	14654	20 Mar.	27	3 Apr.*
Waterproofing composition	C. W. Langstone and T. J. Broome	14440	17 Jan.	6	24 Jan.*
Wave-motor	R. Millar	13694	8 June, 1901	24	20 Mar.
Weighing-machine	J. F. Clarke	14379	30 Dec., 1901	11	6 Feb.
Wheel and tire	G. W. Pitt and E. Martin	14619	13 Mar.	27	3 Apr.
Wheel driving and braking mechanism	Barwest Coaster Brake Company	14437	16 Jan.	6	24 Jan.
Wheels of vehicles, Locking	J. R. and W. H. Jewell	14645	20 Mar.	27	3 Apr.*
Windings for electrical machine	W. T. L. Travers	14404	7 Jan.	6	24 Jan.
Windmill	J. Bedford and T. F. Longland	14541	20 Feb.	19	6 Mar.*
Windmills, Stopping and restarting	J. M. Phillipps	14516	12 Feb.	16	20 Feb.
Window-curtain suspender	W. Whyte	13556	13 Apr., 1901	3	9 Jan.
Window-fastener	T. Farrer	14303	29 Nov., 1901	27	3 Apr.
Window-sashes, Operating	M. A. Johnson	14535	17 Feb.	19	6 Mar.*
Window-sashes, Operating	A. J. Park	14455	21 Jan.	11	6 Feb.*
Window-sash balance	S. O. Keoghan	14675	25 Mar.	30	17 Apr.*
Wire-fence swinger	F. W. Bursill	13703	10 June, 1901	19	6 Mar.
Wire-strainer	S. W. Bradbury	14431	14 Jan.	11	6 Feb.
Wire-strainer	W. Borlase	14443	15 Jan.	6	24 Jan.*
Wire-strainer	W. F. Kennedy	14446	15 Jan.	6	24 Jan.*
Wire-strainer	A. Sutherland	14569	28 Feb.	24	20 Mar.*
Wire-strainer	W. A. Tuck, jun.	14357	16 Dec., 1901	11	6 Feb.*
Wire-strainer	J. Webb	14483	27 Jan.	16	20 Feb.
Wire strainer, holder, and cutter	N. E. Jackson	14582	6 Mar.	24	20 Mar.*
Wood-block fabric	Fabrik für Mechanische Hirnholzmosaik Gesellschaft mit Beschränkter Haftung	14577	3 Mar.	24	20 Mar.

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application.		*Gazette.*	
		No.	Date.	No.	Date.
Wood-preserving	J. L. Ferrell	14519	13 Feb. ..	16	20 Feb.
Woodwork, Decorating	H. Smith	14648	20 May, 1901†	34	1 May.
Wool-scouring machine	F. Kettle	13432	26 Feb., 1901	6	24 Jan.
Wounds, Antiseptic dressing for ..	W. Over	14533	13 Feb. ..	16	20 Feb.
Yeast, Preparing, for food or manure ..	W. Wardle	14573	3 Mar. ..	24	20 Mar.

List of Applicants for Registration of Designs.

ALPHABETICAL list of applicants for registration of designs during quarter ending 31st March, 1902.

Name and Address.	No. of Class.	Design.		*Gazette.*	
		No.	Date.	No.	Date.
Ballantyne and Co., J., Christchurch, N.Z. ..	5	147	10 March ..	24	20 March.
Barry, S., Palmerston North, N.Z.	5	150	26 March ..	27	3 April.
Devlin, A., Dunedin, N.Z.	2	152, 3	7 March ..	..	1 May.
Jupp, W. J., Wellington, N.Z.	3	151	26 March ..	27	3 April.
Ritchie, E. J., and another, Christchurch, N.Z.	1	146	7 February ..	16	20 February.
Ryan, F. L., Christchurch, N.Z.	1	149	24 March ..	27	3 April.
Schatz and Co., L., Wellington, N.Z.	2	145	4 February ..	16	20 February.
Schatz and Co., L., Wellington, N.Z.	1	148	22 March	27	3 April.
Townshend, N., and another, Christchurch, N.Z.	1	146	7 February ..	16	20 February.

List of Applicants for Registration of Trade Marks.

ALPHABETICAL list of applicants for registration of trade marks for quarter ending 31st March, 1902 (including also applications lodged prior to but gazetted during such quarter).

Name.	Address.	Class.	Application.		*Gazette.*	
			No.	Date.	No.	Date.
Ainslie, J.	Leith	43	3650	16 Jan. ..	6	24 Jan.
Ainslie and Co., J. (See J. Ainslie.)						
Alexander and Co.	Kaiapoi	44	3692	5 March ..	34	1 May.
Allcock Manufacturing Company ..	Birkenhead, Eng., and Sing Sing, U.S.A.	3	3396	29 May, 1901	24	20 March.
Anderson and Shaw	Glasgow	43	3722	21 March ..	..	..
Ashton and Parsons, Limited ..	London	3	3691	3 March ..	24	20 March.
Australian Manufacturing and Importing Company	Christchurch	50	3712	14 March ..	24	20 March.
Australian Manufacturing and Importing Company	Christchurch	49	3713	18 March ..	27	3 April.
Badham, C. J.	Christchurch	50	3721	21 March ..	27	3 April.
Ballantyne and Co., J.	Christchurch	38	3697	7 March ..	24	20 March.
Bassett, T.	Christchurch, Ashburton, and Dunedin	7	3710	14 March ..	24	20 March.
Baxter and Co., C. R.	Dundee	43	3655	21 Jan. ..	11	6 Feb.
Bell, A. G.	Wantwood, N.Z. ..	42	3690	28 Feb. ..	19	6 March.
Blackie, H. G.	Auckland	42	3699	8 March ..	30	17 April.
Briasco, J. D.	Wanganui	50	3684	21 Feb. ..	19	6 March.
Brunt, Pitt, and Co.	Christchurch	38	3668	31 Jan. ..	..	..
Buchanan, J.	London, Glasgow, and Glentauchers, Scotland	43	3717, 8	20 March ..	30	17 April.
Buchanan and Co., J. (See J. Buchanan.)						
Burgess, Fraser, and Co.	New Plymouth ..	42	3686	24 Feb. ..	19	6 March.
Canterbury Dairy Company, Limited, The South. (See under South.)						
Cholmondeley and Bosanquet ..	Adelaide	43	3687, 8	26 Feb. ..	..	..
Commonwealth Portland Cement Company, Limited	London, and Portland, N.S.W.	17	3695	6 March ..	24	20 March.
Connell and Co. Proprietary, Limited, J.	Sydney	42	3698	8 March ..	..	..
Consumers' Cordage Company, Limited	Montreal	50	3357	16 April, 1901	3	9 Jan.
Crosfield and Sons, Limited, J. ..	Warrington, Eng. ..	1	3673	6 Feb. ..	19	6 March.
Curtis, F.	Christchurch	3	3715	18 March ..	27	3 April.
Davis, E., and another	London and Sydney ..	13	3683	17 Feb. ..	19	6 March.
Dawson, P.	Dufftown and Glasgow	43	3674	6 Feb. ..	16	20 Feb.
Dent and Co., C. S.	London	3	3708	13 March ..	..	..
Donnelly, J. F.	Feilding	48	3696	7 March ..	30	17 April.

ALPHABETICAL LIST OF APPLICANTS FOR REGISTRATION OF TRADE MARKS—*continued.*

Name.	Address.	Class.	Application.		*Gazette.*	
			No.	Date.	No.	Date.
Elgin National Watch Company ..	Chicago	10	3423	22 June, 1901	24	20 March.
Ferguson and Co., A.	Glasgow	43	3631	19 Dec., 1901	24	20 March.
Gillman and Co.	Dunedin	38	3653	20 Jan. ..	..	..
Gillman and Co.	Dunedin	38	3682	14 Feb. ..	16	20 Feb.
Hardy, T. M.	Wellington	1	3720	2 March ..	27	3 April.
Hayward Bros., Limited	Christchurch	42	3724	24 March ..	..	..
Hean, G. W.	Wanganui	3	3658	24 Jan. ..	19	6 March.
Hollins and Co., Limited, W. ..	Nottingham and London	34	3646	14 Jan. ..	6	24 Jan.
Inglis Bros. (See T. Inglis.)						
Inglis, T.	Wellington	22	3716	19 March ..	27	3 April.
Jenkinson and Co., Limited	Wellington	22	3667	30 Jan. ..	16	20 Feb.
Jewell, Davis, and Co. (See E. Davis and S. H. Jewell.)						
Jewell, S. H., and another	Sydney and London ..	13	3683	17 Feb. ..	19	6 March.
Jhonson, W. W.	Sydney	3	3571	26 Oct., 1901	6	24 Jan.
Jhonson Manufacturing Company, W. W. (See W. W. Jhonson.)						
Johnson and Nephew, Limited, R. ..	Manchester	5	3729	27 March ..	27	3 April.
Lambert and Butler, Limited ..	London	45	3362	22 April, 1901	3	9 Jan.
Lanson Père and Fils	Reims	43	3656	21 Jan. ..	16	20 Feb.
Lever Bros., Limited	Balmain, Sydney ..	50	3629	18 Dec., 1901	11	6 Feb.
Little and Co., A. E.	Lynn, Massachusetts ..	40	3669, 70	4 Feb. ..	16	20 Feb.
Little and Co., A. E.	Lynn, Massachusetts ..	50	3671, 2	4 Feb. ..	16	20 Feb.
Manson and Barr	Palmerston North ..	6	3632	10 Feb. ..	16	20 Feb.
Marriner, H. J.	Christchurch	25	3662	29 Jan. ..	16	20 Feb
Marshall's Chemical Company, Limited	Dunedin	3	3457	18 July, 1901	3	9 Jan.
Mazawattee Tea Company, Limited, The	London	42	3661	28 Jan. ..	16	20 Feb.
Meadows, F. N. R.	Wellington	42	3663	29 Jan. ..	11	6 Feb.
Melbourne Chilled Butter and Produce Company Proprietary, Limited	Melbourne	42	3665, 6	30 Jan. ..	..	..
Mollet, D.	Killara, Sydney ..	3	3651	16 Jan. ..	16	20 Feb.
Morris, H., and another	Birmingham	22, 13	3334, 3645	22 Mar., 1901	6	24 Jan.
Morris, Thomas, and Ellis. (See H. Morris and B. Thomas.)						
Morrow, Bassett, and Co. (See T. Bassett.)						
Muralo Company, The	New Brighton, U.S.A.	17	3676	6 Feb. ..	16	20 Feb.
New Home Sewing-machine Company	Orange, U.S.A.	6	3473	1 Aug., 1901	24	20 March.
New South Wales Creamery Butter Company, Limited	Sydney	42	3664	29 Jan. ..	11	6 Feb.
New South Wales Creamery Butter Company, Limited	Sydney	42	3675	6 Feb. ..	16	20 Feb.
Ogden's, Limited	Liverpool	45	3719	20 March ..	30	17 April.
Oruru-Fairburn Co-operative Dairy Factory Company, Limited	Peria, N.Z.	42	3654	20 Jan. ..	6	24 Jan.
Parker, W.	Wellington	48	3642	6 Jan. ..	..	..
Patea Co-operative Poultry Company, Limited	Patea	42	3643	10 Jan. ..	6	24 Jan.
Paterson, Laing, and Bruce (1901), Limited	Sydney	38	3657	22 Jan. ..	11	6 Feb.
Pears, Limited, A. and F.	London and Isleworth ..	48	3652	16 Jan. ..	11	6 Feb.
Pettifer and Sons, F.	Malmesbury, Eng. ..	2	3649	15 Jan. ..	19	6 March.
Rawnsley, E. G.	Christchurch	49	3709	14 March ..	24	20 March.
Rawnsley, E. G.	Christchurch	49	3728	26 March ..	27	3 April.
Rimmer, S. L. P.	Auckland	42	3678	10 Feb. ..	..	..
Rimmer, S. L. P.	Auckland	42	3693	6 March ..	24	20 March.
Ross and Ansenne	Auckland	50	3711	14 March ..	27	3 April.
Salmon Bros.	Dunedin	38	3700	10 March ..	24	20 March.
Sandeman, Sons, and Co., G. G. ..	London	43	3630	19 Dec., 1901	24	20 March.
Sargood, Son, and Ewen	Dunedin	49	3587	11 Nov., 1901	11	6 Feb.
Singer, I.	Petone	1	3644	14 Jan. ..	6	24 Jan.
Smith and Smith. (See R. F. Smith.)						
Smith, R. F.	Dunedin	1	3714	18 March ..	27	3 April.
Snowdon, Sons, and Co., Limited ..	London	47	3723	21 March ..	27	3 April.
South Canterbury Dairy Company, Limited	Timaru	42	3660	28 Jan. ..	11	6 Feb.
Standard Paint Company	New York	1, 17	3496, 7	16 Aug., 1901	24	20 March.
Svenska Centrifug Aktie Bolaget ..	Stockholm	7	3612	2 Dec., 1901	16	20 Feb.
Sydney Soap and Candle Company, Limited	Sydney	47	3689	27 Feb. ..	24	20 March.
Tetlow, J.	Philadelphia	48	3707	13 March ..	24	20 March.
Thomas, B., and another	Birmingham	22, 13	3334, 3645	22 Mar., 1901	6	24 Jan.

ALPHABETICAL LIST OF APPLICANTS FOR REGISTRATION OF TRADE MARKS—*continued.*

Name.	Address.	Class.	Application.		*Gazette.*	
			No.	Date.	No.	Date.
Thomson, Bridger, and Co.	Dunedin	47	3659	24 Jan. ..	16	20 Feb.
Tyree and Co., A.	Christchurch	18	3647, 8	14 Jan. ..	6	24 Jan.
Tyree and Co., A.	Christchurch	38	3640	3 Jan. ..	11	6 Feb.
Vacuum Oil Company	Rochester, Melbourne, Wellington, &c.	47	3701	13 March ..	27	3 April.
Vacuum Oil Company	Rochester, London, Melbourne, &c.	47	2765	22 Aug., 1899	19	6 March.
Vacuum Oil Company	Rochester, Melbourne, Wellington, &c.	47	3702, 3, 5	13 March ..	24	20 March.
Vacuum Oil Company	Rochester, London, Melbourne, &c.	4	3704	13 March ..	24	20 March.
Vining, W. G.	Nelson	22	3616	12 Dec., 1901	19	6 March.
Waltke and Co., W...	St. Louis	47	3346	29 Mar., 1901	19	6 March.
Watson, Laidlaw, and Co.	Glasgow	7	3694	6 March ..	24	20 March.
Weingarten Bros.	New York	38	3677	8 Feb. ..	16	20 Feb.
Weingarten Bros.	New York	38	3679–81	13 Feb. ..	..	..
Weingarten Bros.	New York	38	3706	13 March ..	..	..
Wilcock and Co., J.	Manchester	50	3685	21 Feb. ..	19	6 March.
Wills, H. O.	Auckland	1	3727	25 March ..	..	..
Winjennia Proprietary, Limited ..	Melbourne	3	3641	6 Jan. ..	3	9 Jan.

By Authority: JOHN MACKAY, Government Printer, Wellington.—1902.