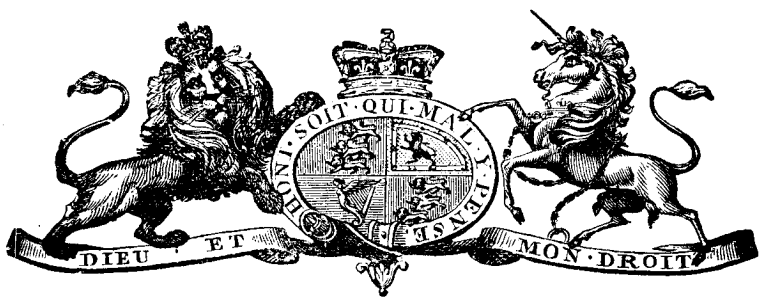

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CONTENTS.

* Alphabetical lists for the preceding quarters of the year 1902 appear in *Gazettes* Nos. 34, of the 1st May, and 75, of the 18th September, 1902.

Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 26th November, 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. 14409.—10th January, 1902.—FRANK MARISCO, of Invercargill, New Zealand, Dealer. Improvements in gold-dredging appliances.*

Claims.—(1.) In combination, a centrifugal pump provided with suction-pipe and a delivery-pipe, a branch suction-pipe, a release branch pipe leading from said pump into said first named suction-pipe, means for closing said first named suction-pipe and delivery-pipe in unison and simultaneously therewith opening said branch suction-pipe and release branch pipe in unison, and means for operating said centrifugal pump, substantially as and for the purposes set forth. (2.) In combination, a centrifugal pump provided with suction and delivery pipes, a branch suction-pipe, a release branch pipe leading from the said pump into said first-named suction-pipe, a valve adapted to close alternately said branch suction-pipe and said first-named suction-pipe, a second valve adapted to close alternately said delivery-pipe and said release branch pipe, and means for operating said valves in unison, substantially as and for the purposes set forth. (3.) The general construction, arrangement, and combination of parts composing my improvements in gold-dredging appliances, all substantially as and for the purposes described with reference to the drawings.

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

No. 14507.—8th February, 1902.—RICHARD WILLIAM PEARSE, of Upper Waitohi, New Zealand, Farmer. Improvements in and connected with bicycles.*

Claims.—(1.) In driving-mechanism for bicycles, a disc rigidly mounted upon the driving-wheel of the machine, pawls upon the disc, and a pair of ratchet wheels having inside teeth that engage the pawls, for the purposes specified. (2.) In driving-mechanism for bicycles, a disc rigidly mounted upon the driving-wheel of the machine, pawls upon the disc, a pair of ratchet wheels having inside teeth with a forward set that engage the pawls, and connections between the ratchet wheels and bell-crank levers, as described, and operating as specified. (3.) In driving-mechanism for bicycles, a pair of ratchet wheels, one on either side of and gearing with a disc on the rear wheel's hub through pawls on the disc, a pair of circumferential channels upon each ratchet accommodating connections from the bell-crank levers actuated from the pedals as described, and for the purposes specified. (4.) In driving-mechanism for bicycles, in combination, a disc rigidly mounted upon the driving-wheel of the machine, pawls upon the disc, ratchet wheels on either side of and gearing with the disc through the pawls, circumferential channels upon each ratchet wheel and connections between the ratchets, and a pair of bell-crank levers mounted in the driving-bracket of the machine, so arranged that when a lever is depressed one ratchet will be forwardly

revolved while the other is revolved reversely, whereby the levers are interdependent, substantially as described. (5.) The combination with an air-pump upon the rim of a bicycle-wheel of an eccentric loosely held upon the wheel-axle, connected with the pump through a connecting-rod and strap, a stud upon the eccentric, and a rod that is adapted to engage said stud at will of the rider, as and for the purposes specified. (6.) The combination with bell-crank levers of slots for the reception of sockets attaching the forward ends of the connections for imparting motion to the ratchet wheels upon the driving-wheel of a bicycle, said slots being provided with teeth or serrations internally, as shown, and for the purposes set forth. (7.) The combination with tappet-levers upon the bell-crank levers, of a horizontal spindle, a collar upon one end of the spindle and a brake upon the other, and a spring around the spindle impinging against a bracket supporting it, substantially as and for the purposes set forth. (8.) The general arrangement, construction, and combination of parts comprising my improvements in and connected with bicycles, substantially as described and illustrated, and for the several purposes set forth.

(Specification, 7s.; drawings, 1s.)

No. 14512.—11th February, 1902.—ARTHUR WILLIAM MEMORY, of Bidwell Street, Wellington, New Zealand, Salesman, and FREDERICK GEORGE HIND, of Hall Street, Wellington aforesaid, Foreman. Improvements in the means for adjusting and supporting the ends of settees, couch-heads, box-ottoman scrolls, backs of chairs, operating-tables, and other articles.*

Claims.—(1.) A movement or fitting for adjusting and supporting the ends of settees, couch-heads, box-ottoman scrolls, operating-tables, and other articles, consisting of a ratchet supported on a standard, as described, and illustrated by drawings. (2.) A movement or fitting for adjusting and supporting the ends of settees, couch-heads, box-ottoman scrolls, operating-tables, and other articles, consisting of a ratchet supported on a standard and released by a lever, as described, and illustrated by drawings. (3.) A movement or fitting for adjusting and supporting the ends of settees, couch-heads, box-ottoman scrolls, operating-tables, and other articles, consisting of twin ratchets, supported by two standards, connected by a rod with lever attached, held in position by a steel coil spring, as described, and illustrated by drawings.

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

No. 14515.—12th February, 1902.—WILLIAM ROBERT KEANE, Blacksmith, and BAIN HOGG, Assayer, both of Whangamata, New Zealand. An improved machine for stirring or agitating auriferous material while undergoing chemical treatment, and for other analogous purposes.*

Claims.—(1.) A stirring or agitating frame composed of a number of sets of radial arms placed one above the other, and secured together by means of vertical tie-rods, and attached to a sleeve carried by a central spindle provided with means for revolving it, the radial arms of each set being made of different lengths, but of the same lengths as the corresponding arms of the other sets, in combination with means whereby the sleeve and agitating-frame may be raised or lowered whilst revolving, as and for the purposes set forth. (2.) A sleeve mounted upon a central spindle and adapted to be rotated therewith, and agitating-frame attached to such sleeve, screw-rods passing vertically through a flange upon the sleeve, the upper ends of which are provided with pinions and are supported upon bearings secured to the central spindle, in combination with means whereby such pinions and rods may be caused to revolve on their own axes, as and for the purposes set forth. (3.) A sleeve mounted upon a central spindle and adapted to be rotated therewith, an agitating-frame attached to such sleeve, screw-rods passing vertically through a flange upon the sleeve, the upper ends of which are provided with pinions, and are supported upon bearings secured to the central spindle, a hood-shaped casting loosely mounted upon the spindle provided with teeth on its inner periphery adapted to engage with the pinions on the tops of the screw-rods, and with a downwardly depending boss, a pair of pinions mounted upon the boss, one above the other, also adapted to engage with the pinions on the screw-rods, the lower of such pinions being secured to the boss, while the upper is loosely mounted thereon, in combination with means whereby the hood may be raised or lowered, as and for the purposes set forth. (4.) The general arrangement, construction, and combination of parts in our improved machine for stirring or agitating auriferous material while undergoing chemical treatment, and for other analogous purposes, as described and explained, as illustrated in the sheets of drawings, and for the several purposes set forth.

(Specification, 5s. 9d.; drawings, 2s.)

No. 14531.—13th February, 1902.—NORMAN GEORGE MCKAY, of Owen's Road, Epsom, near Auckland, New Zealand, Groom. A tin bottle for drenching horses and other cattle with liquid medicine.*

Claims.—(1.) In a bottle for the purpose described, a neck placed upon one side of the bottle whereby the said neck will, when the bottle is in use, be straight down the animal's mouth, and the bottle at the side of the same, substantially as and for the purposes set forth. (2.) In a bottle for the purpose described, a vent near the bottom of the same, and a valve for opening and closing the said vent to regulate the flow of the drench, substantially as and for the purposes set forth. (3.) A bottle for the purposes described, having a neck upon one side and a vent and spring-operated valve near the bottom, substantially as and for the purposes set forth. (4.) The combination and arrangement of parts comprising my bottle for administering drenches to animals substantially as and for the purposes set forth, and illustrated on the drawing.

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

No. 14556.—24th February, 1902.—HARRY PENNINGTON, Farmer, and MANSON THEODORE WEST, Factory-manager, both of Ngaire, Taranaki, New Zealand. Milk-cooler and aerator.*

Claims.—(1.) In an improved aerator and milk-cooler, the parts being substantially set forth and illustrated in the drawings. (2.) The plane surface, over which the milk flows, at the back of which is a narrow chamber giving a thin body of water. (3.) A chamber of narrow proportions stayed as shown in the drawings, as and for the purpose set forth. (4.) An improvement in aerating and cooling milk, in the combination and arrangement of the parts as set forth, and the hanging or suspending by hooks, chains, or wires at any angle as required, as described, and illustrated in the drawings. (5.) The combination and arrangement as set forth and illustrated in the drawings, of a plane surface, a chamber of narrow proportions, stayed as shown, the whole being hung or suspended by hooks, chains, or wires at any angle, as and for the purpose set forth.

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

No. 14590.—1st March, 1902.—JOHN POMEROY, of Invercargill, New Zealand, Fish-curer. Improvements in sheep-shears for regulating the opening of the blades.*

Claims.—(1.) In combination, a pair of pivotally connected links, means at one end for their relative adjustment, and means for attachment of said links to the handles of sheep-shears by their other ends, substantially as and for the purposes set forth. (2.) In combination, a hook-ended straight link securable to a pin in one handle of a sheep-shears, a spring hook-ended curved link adapted to engage an opposite pin in the other handle, a pivotal connection between said links, and an adjusting screw stud on the heel of said straight link, substantially as and for the purposes set forth. (3.) The general construction, arrangement, and combination of parts composing my "improvements in sheep-shears for regulating the opening of the blades," all substantially as and for the purposes described with reference to the drawings.

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

No. 15152.—23rd July, 1902.—AMERICAN AMALGAMATING COMPANY, a company organized under the laws of State of Georgia, and having their place of business at 23, Court Street, Boston, Massachusetts, United States of America (assignees of Paul August Knapp, of Grantville, Georgia, United States of America). Method of and apparatus for the amalgamation of metals by the use of free mercury.

Claims.—(1.) In an amalgamator, the combination of a mixing-chamber having a pulp-inlet, means for intermingling the pulp and mercury therein, a settling-chamber having a less restricted space than the mixing-chamber in communication therewith and adapted to receive the intermingled pulp and mercury therefrom, means in said settling-chamber for circulating and opening up said intermingled mass, a gangue-outlet therefrom, and a settling-space therein out of the path of travel of the intermingled pulp and mercury. (2.) In an amalgamator, the combination of a mixing-chamber, mixing-means therein, a settling-chamber communicating with said mixing-chamber and having less restricted space than said mixing-chamber, so located as to receive the intermingled substances from said mixing-chamber, freeing-means therein for aiding the free circulation of the particles of pulp, an outlet for said settling-chamber, said settling-chamber having

a settling-space out of the path of travel of the intermingled pulp and mercury, and means to cause the passage of the pulp under pressure through said mixing-chamber, settling-chamber, and outlet-passage. (3.) In an amalgamator, the combination of a mixing-chamber having a pulp-inlet, mixing-means therein, a settling-chamber communicating with said mixing-chamber having a less restricted space than said mixing-chamber, and so located as to receive the intermingled pulp and mercury therefrom, said settling-chamber having a settling-space out of the path of travel of the intermingled pulp and mercury, and means for diluting the intermingled pulp and mercury during its passage through the amalgamator to aid the circulation of the same and the separation of the heavier from the lighter particles. (4.) In an amalgamator, the combination of a mixing-chamber having a pulp-inlet, means for intermingling the pulp and mercury therein, a settling-chamber having a less restricted space than the mixing-chamber in communication therewith, and adapted to receive the intermingled pulp and mercury therefrom, means in said settling-chamber for circulating and opening up said intermingled mass, a gangue-outlet therefrom, a settling-space therein out of the path of travel of the intermingled pulp and mercury, and a source of electricity connected with the interiors of said chambers to cause passage of the current through the intermingled pulp and mercury. (5.) An amalgamator, comprising distinct mixing and settling chambers in open communication, mixing-means in said mixing-chamber, said settling-chamber having less restricted space than said mixing-chamber, and having a settling-space out of the path of travel of the intermingled pulp and mercury, means for causing the pulp to circulate through said chambers under pressure, and means for diluting the pulp in its passage. (6.) In an amalgamator, a closed amalgamating-receptacle having inlet and outlet passages, and comprising a mixing-chamber with mixing-means therein, and a settling-chamber, of less restricted space than said mixing-chamber, with settling or freeing means therein, and having a settling space out of the path of travel of the intermingled pulp and mercury. (7.) In an amalgamator, an amalgamating-receptacle comprising a substantially horizontal mixing-chamber having mixing-means therein, communicating with a substantially horizontal stationary settling-chamber, of less restricted space than said mixing-chamber, having settling-means therein and a settling-space out of the path of travel of the intermingled pulp and mercury. (8.) An amalgamator comprising a mixing-chamber, a settling-chamber having a less restricted space than said mixing-chamber leading therefrom, and vehicle fluid inlet-passage near the initial end of said settling-chamber, said settling chamber having a settling-space outside the path of travel of the intermingled pulp and mercury. (9.) The described method for amalgamating metals, which consists in producing a pulp, bringing the same into contact with mercury, enforcing and intermingling of the mercury and the pulp, confining the mixed pulp and mercury within a restricted space during such intermingling, thereafter freeing the intermingled pulp and mercury from said restricted space, separating the heavier particles from the lighter by gravitation in a space less restricted for the circulation of the pulp-particles, and preventing further intermingling. (10.) The described method for amalgamating metals, which consists in producing a pulp, filling a space with said pulp and with mercury in the presence of pressure, and enforcing an intermingling of the two, placing said filled space in communication with a second space, and permitting the latter to be filled with the intermingled pulp and mercury from the first, also in the presence of pressure, freeing the mixture in said second space from the mixture-enforcing action of the first space, settling the amalgam and mercury in said second space, and carrying off the lighter sand and gangue under the pressure therein. (11.) The described method for amalgamating metals which consists in producing a pulp, bringing the same into contact with mercury, enforcing an intermingling of the mercury and the pulp, confining the mixed pulp and mercury within a restricted space during such intermingling, freeing the intermingled pulp and mercury from said restricted space, diluting the same with liquid, separating the heavier particles from the lighter, and settling the same by gravitation, and preventing the reintermingling of the settled particles. (12.) The described method for amalgamating metals, which consists in producing a pulp, introducing the same into a space containing mercury, said space being such that a slight movement of the pulp-particles in certain directions results in contact with the mercury, causing such movement of the pulp as to enforce an intermingling of the same with the mercury, passing the mixed pulp and mercury into a space such that the pulp-particles may move with relative freedom without contact with mercury, opening up the material of the mixture by disturbing the same while in this space, permitting the separation of the heavier particles therefrom by gravitation, and preventing further intermingling. (13.) The process of amalgamating metals which consists in forming a pulp, bringing the same into contact with mercury, enforcing an intermingling of the mercury and the pulp, confining the mixed pulp and mercury within a restricted space during such intermingling, thereafter freeing the mixed pulp and mercury from said restricted space, separating the heavier particles by gravitation in a less restricted space, and causing the passage of an electric current through the intermingled pulp and mercury. (14.) The described method for amalgamating metals which consists in producing a pulp, passing the same through a confined space containing mercury, enforcing an intermingling of the mercury and the pulp therein, passing the intermingled mercury and pulp through a less restricted space, separating therein the heavier particles from the lighter by gravitation, settling the same out of the path of the moving mass, and preventing further intermingling of the settled particles. (15.) The described method of amalgamating metals which consists in producing a pulp, passing the same through a confined space containing mercury, intermingling the mercury and the pulp therein, causing the intermingled mass to travel in a substantially horizontal direction through a less restricted space, opening up the materials thereof during its passage through said less restricted space, and separating the heavier particles from the lighter by gravitation. (16.) The described method for amalgamating metals which consists in producing a pulp, bringing the same into contact with mercury, enforcing an intermingling of the mercury and pulp, confining the mixed pulp and mercury within a restricted space during such intermingling, causing the intermingled mass to travel in a substantially horizontal direction through a less restricted space, diluting the same with liquid, separating the heavier particles from the lighter by gravitation, and preventing the reintermingling of the settled particles.

(Specification, 15s.; drawings, 1s.)

No. 15230.—7th August, 1902.—JOHN WILLIAM PORTER, of the Rifle Ranges, Williamstown, Victoria, Ranger. Improved apparatus for operating moving targets.*

Claims.—(1.) Improved apparatus for operating moving targets, comprising a traveller running on rails and carrying a rotatable target adapted to be rotated at irregular intervals through an angle of 90° so as to turn same "edge on" and "face on" alternately, and means for retaining same in either position, substantially as specified and illustrated. (2.) In apparatus for operating moving targets, a traveller running on rails and provided with a rotatable vertical spindle carrying the target, said spindle having a tappet wheel with four radial equidistant projections adapted to strike against pins projecting from or between the rails, substantially as and for the purposes specified and as illustrated. (3.) In apparatus for operating moving targets, a traveller running on a pair of rails in the same horizontal plane, said traveller having a rotatable pivoted arm or grip attached to an endless travelling wire and a vertical guide for said arm or grip, substantially as specified and as illustrated. (4.) In apparatus for operating moving targets, a traveller running on a pair of rails in the same horizontal plane, said traveller having on its underside a spring-operated retaining-arm having a notch therein adapted to engage teeth on each of four radial equidistant projections of a tappet wheel, substantially as and for the purposes specified and as illustrated. (5.) In apparatus for operating moving targets, a vertical traveller running on a pair of rails in the same vertical plane, said traveller having a spring-operated pivoted grip for holding the wire, adapted to release said wire on contacting with an inclined check-block, substantially as and for the purposes specified and as illustrated. (6.) In apparatus for operating moving targets, a rotatable rod mounted between a pair of rails, said rod having a plurality of rows of pins thereon, and having a series of cam-faces at each end adapted to engage fingers on each end of a traveller so as to partially revolve said rod on each run of the traveller, substantially as and for the purposes specified and as illustrated. (7.) In apparatus for operating moving targets, a modification of the mechanism set forth in the last-preceding claim wherein the travelle has a curved cam-guide at each end adapted to engage radia arms on the rotatable rod, substantially as and for the purposes specified, and as illustrated in Fig. 5.

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

No. 15406.—16th September, 1902.—CARL AUGUST BERGERSEN, of Broad Street, Palmerston North, New Zealand, Gunsmith. A wire-strainer.

Description of Invention.—My invention is to provide an apparatus for use in straining wire, especially fencing-wire. It consists of a frame marked A as per drawing, and of the several parts described: B, a saw-edged eccentric grip; C and D, saw-edged eccentric spring grips; E, the stand on three claw feet; F, fulcrum lever; G, connecting-rod between lever

and travelling spring grip D, of which J is a slide clasped around part of the frame, partly duplicated on drawing marked A; K is a handle with hammer attached, also used to lengthen lever F; H is an anchor used to secure the apparatus with when straining on the side of a post or support—it is also used as a staple-extractor and for wire-knotting; I is a wire-cutter; L is a staple on the frame to attach the anchor to by means of a piece of wire.

Claim.—The wire-strainer substantially as described, and illustrated in the drawing.

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

No. 15601.—5th November, 1902.—The Hon. Charles Algernon Parsons, of Heaton Works, Newcastle-on-Tyne, Northumberland, England, Engineer. Improvements in condensers working in conjunction with air-pumps.

Claims.—(1.) The use of an ejector or jet pump, operated by steam, in conjunction with a vacuum pump, in order to intensify the vacuum produced by the vacuum pump. (2.) In the evacuation of vessels, the employment of a steam-operated ejector or jet pump in conjunction with a vacuum pump, the ejector being situated in the passage which connects the air-pump with the vessel to be evacuated, whereby the vacuum produced by the vacuum pump is intensified. (3.) Intensifying the vacuum produced in a condenser by the air or vapour pump by means of a steam-operated ejector or jet pump working in conjunction with the air-pump, the ejector being situated in the passage which connects the air-pump with the condenser, substantially as described. (4.) In the system of intensifying the vacuum in a condenser claimed in claim 3, the employment of an auxiliary condenser between the ejector and the air-pump, for the purpose described. (5.) Condenser plant employing an ejector or jet pump operating in conjunction with the vacuum pump in order to intensify the vacuum, consisting of a condenser having one of its ends lower than the other, the lower end being on a higher level than the vacuum pump with which it is connected, whereby the water of condensation flows by gravity into this pump, the other end of the condenser being connected with the vacuum pump by way of the steam-operated jet pump, whereby the work of the jet pump is limited to the ejection of air and vapour from the condenser to the vacuum pump, substantially as described. (6.) The improved condenser plant described with reference to Figs. 5 and 6 of the drawings. (7.) A vacuum-intensifier operating in conjunction with a vacuum pump and comprising an ejector-box into which the gases and vapours from the vessel to be evacuated are drawn on their way to the vacuum pump, the box having within it one or more steam-jets directed towards the centre of a discharge-passage leading to the pump, whereby the gases and vapours are assisted in their progress from the vessel to the vacuum pump and the vacuum in the vessel is intensified, substantially as described. (8.) The steam-operated intensifier, as and for the purposes described with reference to Figs. 1 to 4 of the drawings. (9.) In the system of vacuum-intensifying claimed in claim 1, adjustable steam-jets, as described with reference to Figs. 7 and 8 of the drawings. (10.) In the system of vacuum-intensifying claimed in claim 1, a vacuum-intensifier consisting of a suction-box containing a steam-chest provided with a nozzle concentric with the discharge-pipe, the chest having within it a tubular plug for regulating the amount of opening of the steam-jet, the discharge of air or vapour being effected through the tubular plug alone or through the plug and an annular space between the nozzle and the discharge-pipe, substantially as described. (11.) In the system of vacuum-intensifying claimed in claim 1, adjustable steam-jets, as described with reference to Figs. 11 and 12 of the drawings.

(Specification, 8s.; drawings, 4s.)

No. 15603.—5th November, 1902.—The American Tobacco Company, a corporation organized and existing under the laws of the State of New Jersey, having their place of business at No. 111, Fifth Avenue, New York, United States of America (assignees of Jakob Wojciechowski, of Warsaw, Russia, Technical Engineer). Improvements in cigarette-machines.

Claims.—(1.) The combination with a shaping mechanism, of a disintegrating-mechanism and an intermittently operating conveyer such as a belt or its equivalent upon which the tobacco falls from the disintegrating-mechanism and by which it is transferred to the shaping-mechanism. (2.) The combination with a set of pickers, of a shaping-mechanism, means for operating the pickers, and an intermittently operated conveyer for transferring the tobacco from the pickers to the shaping-mechanism. (3.) The combination with a shaping-mechanism, of a set of reciprocating pickers, and means for conveying tobacco from the pickers to the shaping-mechanism. (4.) The combination with a set of reciprocating pickers, of means for feeding tobacco thereto, a hopper, means for giving the sides of the hopper a to-and-fro movement, and a conveyer. (5.) The combination with a set of reciprocating pickers, of means for feeding tobacco thereto, a hopper, a channel, means for giving the sides of the hopper a to-and-fro movement, an intermittently operated conveyer forming the bottom of the channel, and a shaping-mechanism. (6.) The combination with a set of reciprocating bars, of sets of pickers mounted thereon, means for feeding tobacco to the pickers, a hopper, means for giving the walls of the hopper a to-and-fro movement, an intermittently operated conveying-belt to which the hopper delivers, and a shaping-mechanism. (7.) The combination with a pair of bars, of brackets carried thereby, a plurality of sets of pickers supported by the brackets, a hopper, means for giving the walls of the hopper a to and-fro movement, and a conveyer to which the hopper delivers. (8.) The combination with a set of reciprocating pickers, of a belt operating to deliver tobacco thereto, means for giving the belt a comparatively slow movement, a hopper through which the tobacco falls from the pickers, a conveying-belt which receives the tobacco from the hopper, and means for giving the conveying-belt a comparatively rapid movement. (9.) The combination with a set of reciprocating pickers, of a belt operating to deliver tobacco thereto, means for giving the belt a comparatively slow movement, a hopper through which the tobacco falls from the pickers, a conveying-belt which receives the tobacco from the hopper, means for giving the conveying-belt a comparatively rapid intermittent movement, and a shaping-mechanism to which the belt delivers. (10.) The combination with a shaper-case, of a shaper working therein, an intermittently operated conveyer to which the tobacco is introduced into the shaper, and a knife working close to the side of the shaper-case. (11.) The combination with a shaper-case, of a shaper working therein, an intermittently operated conveyer, an inlet through which the tobacco is forced by the conveyer into the shaper-case, and a knife working between the inlet and the shaper-case. (12.) The combination with a shaper-case, of means for adjusting its size to vary its capacity, a shaper working therein, means for varying the throw of the shaper, an intermittently operated conveyer, an inlet through which the tobacco is forced by the conveyer into the shaper-case, means for adjusting the size of the inlet, and a knife working between the inlet and the shaper case. (13.) The combination with a shaper-case having adjustable ends, of a shaper reciprocating therein, means for a justing the throw of the shaper, a pair of overlapping plates forming an inlet, means for adjusting the position of the plates to vary the size of the inlet, a knife working between the inlet and the shaper-case, and an intermittently operated conveyer. (14.) The combination with a shaper-case having movable ends, of means, as set-screws, for determining the position of the ends, a pair of side plates provided with overlapping projecting plates which form an inlet to the case, means including set-screws for adjusting the position of the side plates, and through them the overlapping plates to vary the size of the inlet, a reciprocating shaper, means for varying the throw of the shaper, a knife working between the inlet and the shaper-case, and an intermittently operated conveyer delivering to the inlet. (15.) The combination with a shaper-case having adjustable ends, of a shaper working therein, means including an adjustable cam for reciprocating the shaper, and means for introducing tobacco into the shaper. (16.) The combination with a shaper-case having adjustable ends, of a shaper, a knife working close to the shaper-case, and an intermittently operated conveyer for introducing tobacco into the case. (17.) The combination with a shaper-case of means for varying its size to vary its capacity, a shaper, means including an adjustable cam for operating the shaper, a pair of removable nozzles through which the shaped tobacco is delivered, a pair of alternately operating reciprocating rammers, a knife working close to the shaper-case, and an intermittently operated conveyer. (18.) The combination with a shaper-case of means for varying its size to vary its capacity, a shaper, means including an adjustable cam for operating the shaper, a pair of removable nozzles through which the shaped tobacco is delivered, a pair of alternately operating reciprocating rammers, an adjustable inlet, a knife working between the inlet and the shaper-case, and an intermittently operated conveyer. (19.) The combination with a shaper-case of a shaper working therein, means for delivering tobacco thereto, a pair of nozzles, means for supplying tubes to the nozzles, clamping-means for holding the tubes thereon, means for forcing the shaped tobacco from the shaper-case through the nozzles into the tubes, and a pair of strikers for removing the filled tubes from the nozzles (20.) The combination with a shaper-case of a shaper, a lever and cam for operating the shaper, a pair of nozzles through which the shaped tobacco is delivered, means for supplying tubes to the nozzles, a clamping-device operated by the shaper-operating lever, means for forcing the shaped tobacco through the nozzles

into the tubes, and a pair of strikers for removing the filled tubes from the nozzles. (21.) The combination with a shaper-case, an intermittently operated conveyer for delivering tobacco thereto, a knife working close to the side of the shaper-case, a shaper, means including a lever for operating the shaper, a pair of nozzles to which the shaped tobacco is delivered, means for supplying tubes to the nozzles, a clamping-device operated by the shaper-operating lever, a pair of rammers for forcing the tobacco through the nozzles, and a pair of strikers for removing the tubes from the nozzles. (22.) The combination with a shaper-case of a shaper working therein, a pair of nozzles to which the case delivers, a pair of rammers for forcing the tobacco through the nozzles, and means operated from the rammer-operating mechanism for supplying tubes to the nozzles. (23.) The combination with a shaper-case of a shaper working therein, a pair of nozzles, a pair of alternately operating rammers, a hopper provided with two delivery-channels, and means operated from the rammer-operating mechanism for alternately carrying tubes from said outlets to the nozzles. (24.) The combination with a hopper for cigarette-tubes having a delivery-channel down which the tubes fall, said channel being wide enough to hold a single vertical row of tubes, of a bar having surfaces at different levels, a cut-off operating to separate the lower tube from the row and to support the row, said cut-off being operated when the higher surface of the bar is beneath the channel, means for transferring the tube from the higher surface to the lower surface of the bar, filling-devices, and means for operating the bar to transfer the tube thereon from the hopper to the filling-devices. (25.) The combination with a hopper, of a reciprocating plate one of the ends of which extends into the hopper, a wall forming with said plate a channel which is wide enough to hold a single vertical row of tubes, a bar having surfaces at different levels, a cut-off operating to separate the lower tube from the row and to support the row, said cut-off being operated when the higher surface of the bar is beneath the channel, means for transferring the tube from the higher surface to the lower surface of the bar, filling-devices, and means for operating the bar to transfer the tube thereon from the hopper to the filling-devices. (26.) The combination with a hopper, of a pair of reciprocating plates one end of each of said plates working in the hopper, a pair of walls, said walls co-operating with the plates to form channels wide enough to hold a single vertical row of tubes, a pair of bars having surfaces at different levels, a pair of cut-offs operating to separate the lower tube from each row and to support the rows, said cut-offs coming into operation when the higher surface of the bar is beneath the channel, means for transferring the tubes from the higher surface to the lower surface of each bar, filling-devices, and means for alternately reciprocating the bars from the hopper to the filling-devices. (27.) The combination with a hopper, of a pair of reciprocating plates, one end of each of said plates working in the hopper, a pair of walls, said walls co-operating with the plates to form channels wide enough to hold a single vertical row of tubes, a pair of bars having surfaces at different levels, a pair of movable frames having projections which enter the channels and form cut-offs, means carried by the bars for operating the frames to withdraw the cut-off projections when the higher surface of the bar is under the channel, thus allowing the row of tubes to drop, means for operating the frames to cause the cut-off projections to enter the channels and to separate the remaining tubes of the row from the lower one, means for transferring the tubes from the higher surface to the lower surface of each bar, filling-devices, and means for alternately reciprocating the bars from the hopper to the filling-devices. (28.) The combination with a shaper-case, of a shaper, means including a lever for operating the shaper, delivery nozzles attached to the shaper-case, a pair of rammers, a pair of bars having surfaces at different levels, connections between each bar and the corresponding rammer, a hopper having two delivery-channels beneath which the bars reciprocate, cut-off mechanisms operated by the bar, an agitating-mechanism, and means for operating the rammers. (29.) The combination with a shaper-case, of a shaper, means including a lever for operating the shaper, delivery-nozzles attached to the shaper-case, a pair of rammers, a pair of bars having surfaces at different levels, connections between each bar and the corresponding rammer, a hopper having two delivery-channels beneath which the bars reciprocate, cut-off mechanisms operated by the bar, an agitating-mechanism operated by the shaper-lever, means for operating rammers, and a tube-clamp. (30.) The combination with a shaper-case, of a shaper, means including a lever for operating the shaper, delivery-nozzles attached to the shaper-case, a pair of rammers, a pair of bars having surfaces at different levels, connections between each bar and the corresponding rammer, a hopper having two delivery channels beneath which the bars reciprocate, cut-off mechanism operated by the bar, an agitating-mechanism operated by the shaper-lever, means for operating the rammer, a tube-clamp thrown into operation by the shaper-lever, and a pair of strikers for removing the filled tubes from the nozzles. (31.) The combination with cigarette-forwarding devices, of a rotating cigarette-carrier provided with pockets, a knife operating with the carrier, and a straightening-device which operates on the cigarettes before they are delivered to the carrier. (32.) The combination with cigarette-forwarding devices, of a rotating carrier having pockets for the cigarettes, a knife co-operating with the carrier, and a rotating hub provided with blades which operates to straighten the cigarettes before they are delivered to the carrier. (33.) The combination with cigarette-carrying tapes, of a rotating straigh ening-device having projections operating to lift the cigarettes from the tapes, whereby they become straightened. (34.) The combination with cigarette carrying tapes, of a rotating lifting-device provided with blades or their equivalents which operate to lift the cigarettes from the tapes. (35.) The combination with cigarette-carrying tapes, of a straightening-device provided with lifting-projections, said device working between the tapes and operating to lift the cigarettes therefrom and deliver them thereto after the cigarettes are straightened. (36.) The combination with cigarette carrying tapes of a rotating straightening-device provided with lifting-projections, said device being located between the tapes, a carrier also rotating between the tapes, and a cutter co-operating with the carrier. (37.) The combination with a pair of carrying-tapes of means for evening the cigarettes on the tapes, a straightening-device, and cutting-devices. (38.) The combination with cigarette-carrying tapes, of means for the evening the cigarettes on the tapes, a straightening-device, a carrier, a cigarette-shifting mechanism operating in connection with the carrier, and a cutter. (39.) The combination with cigarette-carrying tapes, of means for evening the cigarettes on the tapes, a straightening-device, a rotating carrier, a cigarette-shifting mechanism operating in connection with the carrier, and a rotating cutter. (40.) The combination with a belt having forwarding projections, of tapes overlying the same, a rotating straightening-device having lifting-projections, a rotating carrier provided with pockets, means for retaining the cigarettes in the pockets, a shifting mechanism co-operating with the carrier, and a cutter. (41.) The combination with a belt having forwarding-projections, of carrying-tapes overlying the belt, a pusher operating to even the cigarettes, a straightening-device consisting of a rotating hub having lifting-projections located between the tapes, and a cutting-mechanism. (42.) The combination with a belt having forwarding-projections, of carrying-tapes overlying the belt, a pusher operating to even the cigarettes, a straightening-device consisting of a rotating hub having lifting-projections located between the tapes, a rotating carrier having pockets, a shifting-mechanism, means for rotating the cigarettes in the pockets, and a cutter. (43.) The combination with a rotating carrier having pockets, of a shifting-mechanism located at each end of the pockets, so that either end of the cigarettes may be acted upon, means for retaining the cigarettes in the pockets, and a cutter. (44.) The combination with a rotating carrier provided with pockets, of a cam located at one end of the pockets, a vibrating shifter located at the other end of the pockets, and a rotating cutter. (45.) The combination with cigarette-carrying tapes, of a rotating straightening-device having lifting-projections located between the tapes, a carrier having pockets also located between the tapes, a cam at one end of the pockets for acting on one end of the cigarettes, a vibrating shifter located at the other end of the pockets for operating on the other end of the cigarettes, and a cutter. (46.) The combination with a belt having forwarding-projections, of tapes overlying the same, a pusher, a rotating straightening-device having lifting-projections lying between the tapes, a carrier having pockets, a cam located at one end of the pockets for operating on one end of the cigarettes, a vibrating shifter located at the other end of the pockets for operating on the other end of the cigarettes, and a rotating cutter. (47.) The combination with a belt, of a pair of tapes overlying the same, a pair of pushers, one on each side of the belt, for operating on the cigarettes, a rotating straightening-device having lifting-blades lying between the tapes, a carrier having pockets, a cam located at one end of the pockets for operating on one end of the cigarettes, a vibrating shifter located at the other end of the pockets for operating on the other end of the cigarettes, and a cutter.

(Specification, 19s.; drawings, 7s.)

No. 15609.—6th November, 1902.—GEORGE HENRY AIREY, of 3, Rue Cernuschi, Paris, France, Gentleman. Improvements in loading and unloading vessels.

Claims.—(1.) Means substantially as described for loading and unloading vessels; the said means comprising a mast erected on the delivering vessel; a pulley near the top of the said mast; a downwardly sloping tube near the said pulley; a drum at the top of the said mast; a drum at the bottom

of the said mast; means for rotating the said drums; an endless band free to run over the said drums; carrier arms outstanding from the said band; hooks on the said carrier arms for raising the goods; means for passing the hooks from the carriers to the sloping tube; a mast erected on the receiving vessel; a pulley at the top of the mast; a pulley on the deck; a weight free to slide on the mast of the receiving vessel; a weight free to slide on the mast of the delivering vessel; a wire rope having its ends attached to the said weights and passing in its passage from one weight to the other over the pulley of the mast of the delivering vessel, through the sloping tube under the pulley on the deck of the receiving vessel, and over the pulley of the mast of the said receiving vessel. (2.) A hook having a flat overturned part to rest on a carrier, and having an upstanding loop with a downturned and outwardly sloped arm substantially as described. (3.) The method substantially as described of transferring goods from one vessel to another, the said method consisting essentially in the raising of the goods by carriers attached to an endless band passing over upper and lower drums, from which carriers the hooks and goods are transferred to a wire rope inclined towards the receiving vessel.

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

No. 15610.—6th November, 1902.—JOHN LOUDON MCMILLAN, of Syracuse, New York, United States of America, Designing Engineer. Improvements in rotary engines.

Claims.—(1.) In a rotary steam-engine, the combination of a high-pressure cylinder adapted to receive live steam; a low-pressure cylinder adapted to receive the exhaust steam from the high-pressure cylinder; an intermediate steam-chest or chamber; and a conduit connecting the high- and low-pressure cylinders and passing through the steam-chest or chamber, whereby the exhaust steam is subjected to the heat of the live steam on its passage from one to the other cylinder. (2.) A compound rotary engine comprising a plurality of cylinders in axial alignment; a plurality of chambers likewise in axial alignment, each of circular form, and having the circle of its inner wall arranged to cut that of the cylinder with which it is formed; a shaft passing axially through the cylinders; a second shaft parallel with the first, passing axially through the supplemental chambers; gears carried by said shafts, one in each cylinder and one in each chamber, and arranged to mesh in pairs; pistons carried one by each gear within the cylinders; a port for the admission of fluid to the first of said cylinders; an eduction-port for the exit of said fluid from said cylinder; a conduit or passage connecting the exhaust-port with an inlet-port of a succeeding cylinder; an exhaust-port for such succeeding cylinder; and a valve adapted alternately to admit and to cut off steam from the inlet-port of the first cylinder of the series. (3.) In a compound rotary engine, a plurality of cylinders each provided with a revolving piston; an inlet-port for the first cylinder of the series; an eduction-port for said cylinder; passages connecting the eduction-port of the first cylinder with an induction-port of a succeeding cylinder; a cut-off valve for permitting and controlling the induction of steam to said first cylinder, said valve having a fixed axis, but capable of rocking or turning about said axis; and means substantially such as described for controlling the movements of the valve, whereby steam may be cut off from the first cylinder at a predetermined point in the stroke or revolution of its piston, substantially as described. (4.) In a compound rotary engine, the combination of a high-pressure cylinder; a low-pressure cylinder; and an intermediate steam-chest having walls in common and coextensive with the adjacent cylinders, whereby the live steam within the chest is caused to maintain a relatively high temperature in the high- and low-pressure cylinders. (5.) In combination with high-pressure cylinder A and chamber B in communication therewith, shafts C, D, provided with gears E, F, the former carrying a piston G; steam-chest or chamber J; a cut-off valve H serving to open and close an induction-port between the steam-chest and the cylinder A; a reversing-valve I interposed between the cut-off valve H and the cylinder A, said valve I being provided with ports *d* and *e* within the casting of cylinder A adapted to register with ports *b* and *c* thereof, and further provided with ports *t* and *v* and t^1 and v^1; a low-pressure cylinder casting M provided with ports *s*, s^1, *w*, w^1, with which under different adjustments the ports *t* and *v* and the ports t^1, v^1, may be made to register alternately; shafts C and D extending axially through the cylinders and the supplemental chambers A and M and B and N; gears E, F, within the chamber A, gear E being provided with a piston G and gear F with a recess G^1; gears O and P carried by the shafts C and D within the cylinder M and chamber N, gear O being provided with piston Q and gear P with recess or cavity Q^1; valve L provided with ports *o*, *p*, *q*, adapted to register under different adjustment with ports *i*, *j*, *k* and *m* in a casing surrounding the valve; a partition S separating the low-pressure cylinder casting into two spaces or chambers outside of the cylinder and its supplemental chamber; inlet-ports *h* and *y* affording communication from the interior of the steam-chest to the interior of the valve L under a certain adjustment of the valve; and a valve T controlling the port *y*, all substantially as set forth. (6.) In combination with cylinder A, provided with an inlet-port *c* and an outlet-port *f*; a rotary member E contained within the cylinder A, and provided with a revolving piston G; a rotary abutment adapted to co-operate with the rotary member E and piston G; a second cylinder M provided with a rotary member O, having piston Q, and co-acting rotary abutment P; a tubular valve controlling the exhaust-port *f* of the first cylinder, and extending thence to a steam-passage of the second cylinder; and an inlet-port for said second cylinder communicating with said valve through the intermediate steam-passage, all substantially as shown and described. (7.) In a rotary engine, the combination of a cylinder A and supplemental chamber B, the former provided with a channel or depression *z*; an inlet-port *c*; an exhaust-port *f*; rotary gears E, F, arranged within the cylinder A and chamber B, and concentric with said chambers, the gear E being provided with a piston G, and the gear F formed with a recess G^1; and means for admitting steam to and cutting off the steam-supply of cylinder A. (8.) In a compound rotary engine, the combination of cylinders A and M and intermediate steam-chest J; gears E, F, and O, P, arranged within the respective cylinders and their supplemental chambers, and provided respectively with pistons G and Q and cavities G^1 and Q^1; reversing-valves I and L; and cut-off valves H and T adapted to control the several induction and eduction ports, substantially as described and shown. (9.) In a rotary compound engine, a low-pressure cylinder provided with induction and eduction ports; and a valve controlling said ports and adapted when set in one position to admit steam into the cylinder from the high-pressure cylinder, and when adjusted to another position to cut off communication with the high-pressure cylinder and to open communication with the steam-chest or supply, and thereby to admit live steam to the low-pressure cylinder to reverse its action.

(Specification, 15s. 6d.; drawings, 9s.)

No. 15613.—4th November, 1902.—THOMAS MUTTON, Merchant, and HORACE EDWIN HUPTON, Electrician, both of 59, West Street, Brighton, England. Improvements in moving stands or figures for exhibition, advertising, and similar purposes.

Claims.—(1.) A pneumatic telescopic show-stand or device for displaying goods, or for exhibitions, advertising, and similar purposes, as described and set forth. (2.) A pneumatic telescopic show-stand or device consisting of telescopic tubes caused to rise and fall or project and rotate, said projection being vertical, horizontal, spiral, or otherwise, said tubes being operated by pneumatic pressure obtained from an air-pump or from pressure air-reservoir fed by said pump actuated by an electric or other suitable motor, as described and set forth. (3.) In a pneumatic stand with telescopic action, either straight, curved, or spiral, the air-reservoir G, air-distributor 1, air-pumps F, and pipes connecting same, as described and set forth.

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

No. 15617.—7th November, 1902.—HARRY SMITH WAINWRIGHT, of Alfred House, Ashford, Kent, England, Locomotive Engineer. Improvements in the construction and arrangement, in locomotive engines, of draught-promoting and spark-arresting devices.

Claims.—(1.) In a locomotive engine, a tube-like spark-arrester so arranged that without being dismounted it can, according to requirement, be caused to occupy either its normal position in which it extends upward from the blast-pipe towards the chimney, or an out-of-use position in which it will not prevent free access to the ends of fire-tubes. (2.) In a locomotive engine, a spark-arrester, such as referred to in claim 1, composed wholly or partly of sections that are telescopically arranged in relation to one another. (3.) In a locomotive engine, a spark-arrester, such as referred to in claim 1, composed of sections that are telescopically arranged in relation to one another, in combination with means for securing them in position for use, and means whereby when released the lower sections or section will be in an automatic manner caused to enter the uppermost section so as to afford access to fire-tubes, substantially as described. (4.) In a locomotive engine, a spark-arrester

such as referred to in claim 1, mounted so that it can be turned, either as a whole or in parts, about an axis, so as to afford free access to fire-tubes, substantially as described. (5.) In a locomotive engine, a spark-arrester, such as referred to in claim 1, comprising two concentric parts so constructed and mounted to turn about a common axis in such a manner that they can be caused to assume relative positions in which one part will be within the other, so as to afford free access to fire-tubes, substantially as described. (6.) In a locomotive engine, a spark-arrester, such as referred to in claim 1, made collapsible so as to afford free access to fire-tubes, and comprising either (*a*) a number of hoops connected together by open links, or (*b*) upper and lower rings connected together by interwoven open links, intermediately contracted to keep them mutually in place, or (*c*) upper and lower rings connected together by short solid links and joint-pins, substantially as severally described with reference to drawings. (7.) In a locomotive engine, a spark-arrester constructed with a frame or frames comprising top and bottom rings connected by notched bars, and a rod or rods or a bar or bars wound spirally around the said frame or frames and placed in the notches of their connecting bars, whether or not the arrester extends to and surrounds or meets the base of the chimney, substantially as described and shown. (8.) In a locomotive engine, a chimney-cone having external spiral or inclined projections substantially as described, whether formed of wire or produced by a corrugated formation, substantially as described, for the purpose specified. (9.) In a locomotive engine, a chimney-cone composed of top and bottom rings connected by a spirally wound wire or rod or spirally wound wires or rods, with notched bars connecting the top and bottom rings together, and having the spirally wound wire or wires or rod or rods located in their notches, substantially as described. (10.) In a locomotive engine, the combination with a spark-arrester of an open-work or perforated guard of a diameter equal to or greater than that of the base of the chimney, whether or not the guard be formed by flanging or extending the chimney-cone or the spark-arrester, or both, substantially as described. (11.) In a locomotive engine, the arrangement, in combination with the chimney-base, of a chimney-cone and a perforated flange which connects together the chimney-base and the chimney-cone, substantially as described. (12.) In a locomotive engine, a spark-arrester and a chimney-cone forming a constructive portion of the arrester, substantially as described. (13.) In a locomotive engine, a blast-pipe having its interior formed or provided with ribs or projections constituting an inclined or spiral channel or inclined or spiral channels, in combination (or not) with a spark-arrester formed of a spirally wound rod or bar or spirally wound rods or bars, having its spiral rod or rods or bar or bars so arranged that the passage or passages between them form a continuation or continuations of the said channel or channels, substantially as described. (14.) In a locomotive engine, the combination with a short blast-pipe of a spark-arrester comprising a lower part adapted to be turned about a vertical axis to afford free access to the fire-tubes, and an upper part that extends around a chimney-cone or around the base of the chimney and is made separate from the lower part of the spark-arrester to enable the said lower part to be turned, substantially as described. (15.) A locomotive blast-pipe formed with holes or passages through which smoke and hot gas can freely pass, and which have a radially upward inclination so that their upper surfaces will aid in arresting and throwing down sparks or glowing particles coming into contact therewith, substantially as described. (16.) A locomotive blast-pipe comprising a lower portion having a projection or projections spirally arranged within its interior, so as to cause exhaust steam to revolve or whirl in passing therethrough, and an upper portion formed with holes or passages through which smoke and hot gases can freely pass into the blast-pipe, but not sparks or glowing particles, substantially as described and shown. (17.) In a locomotive engine, the combination of a short blast-pipe, a spark-arrester constructed of a framework comprising upper and lower rings, notched bars connecting the said rings, and a rod or bar, or rods or bars, spirally arranged around the said notched bars and engaging in the notches thereof, and a horizontal or approximately horizontal grid extending across the smoke-box, substantially as described. (18.) The improved construction and arrangement in a locomotive engine of draught-inducing and spark-arresting devices, hereinbefore described with reference to and shown in Figs. 1 and 4 of the drawings, and the same modified as described with reference to and shown in Figs. 2 or 3 of the drawings. (19.) The several improved constructions and arrangements in locomotive engines and draught-inducing and spark-arresting devices described with reference to and shown respectively in Fig. 5, in Fig. 6, in Figs. 7 and 8, in Fig. 9, in Fig. 10, in Figs. 11 and 12, in Fig. 13, in Figs. 14 and 15, in Fig. 16, in Fig. 17, in Fig. 18, in Figs. 19 to 21 inclusive, and in Fig. 22 of the drawings.

(Specification, 14s.; drawings, 7s.)

No. 15619.—12th November, 1902.—DAVID HARRIS, of Ballance, New Zealand, Farmer. Improved appliances for straining, aerating, and cooling milk or other liquids.

Claims.—(1.) In appliances for straining, aerating, and cooling milk or other liquids, a receiving-vessel provided with a strainer and with a ring of perforations in the bottom, in combination with a dome-shaped chamber above which the receiving-vessel is mounted so that its perforations shall open above the dome, as specified. (2.) A receiving-vessel provided with a straining-partition and with a ring of perforations in its bottom, in combination with a dome-shaped chamber above which it is placed, and with a saucer-shaped receptacle in which the chamber will rest, as and for the purposes set forth. (3.) The general arrangement, construction, and combination of parts in my improved appliances for straining, aerating, and cooling milk or other liquids, as described and explained, as illustrated in the drawings, and for the several purposes set forth.

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

No. 15620.—12th November, 1902.—DAVID HARRIS, of Ballance, New Zealand, Farmer. An improved method of and means for securing together the adjacent ends of the wires used in wire-fencing, and for other like purposes.

Claim.—The improved method of and means for securing together the adjacent ends of the wires used in wire-fencing and for other like purposes, the same consisting in the employment of a disc or block formed with parallel holes passing therethrough, and through which the adjacent ends of the wires are passed from opposite sides and are then twisted upon each other, as specified.

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

No. 15624.—13th November, 1902.—JAMES BURGE, of Victoria Street, Warragul, Victoria, Saddler. An improved rug for cows, horses, and like animals.

Claims.—(1.) In a rug for the purpose specified, fastening-straps as B and B^1 each secured to rug-cloth near its fore part, either direct or with a spring catch, and held together under the body of animal with a loose ring as B^2, and with the back part of each strap passed through a buckle as a^5 on rug, substantially as described and shown. (2.) In a rug for the purpose specified, two fastening-straps as B, B^1, secured to the rug, and which straps serve as body and breeching straps by first passing under the body of animal and being held together by a loose ring B^2, and by the end parts of each strap passing out through a slot in rug and the ends being connected with a buckle fastening, substantially as described and shown. (3.) An improved rug for the purpose specified, consisting of the combination of the rug-cloth A, straps B–B^1, the former furnished with a hook and ring fastening a^1–a^2, ring B^2, slots a^4, buckles a^5 and *b*, and the breast-straps A^1–A^2, all arranged and secured substantially as described and shown.

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

No. 15634.—17th November, 1902.—GEORGE FREDERICK NEWMAN, of Peel Forest, Canterbury, New Zealand, Coach-driver. Improved waterproofing composition.

Claim.—A waterproofing composition consisting of linseed-oil, castor-oil, sulphur, and dryers mixed together in the relative proportions indicated and boiled, substantially as set forth and described.

(Specification, 2s. 3d.)

No. 15635.—17th November, 1902.—FRANCIS PRENDEVILLE WILSON, of Wellington, New Zealand, Schoolmaster. A combined printer's galley and chase.

Claims.—(1.) In means for setting up and holding type, a rectangular frame provided with removable bottom, sliding bars placed across the frame at right angles to each other, and means whereby such bars may be moved up and down the frame, as specified. (2.) In means for setting up and holding printing-type, a rectangular frame provided with a removable bottom, bars placed across the space enclosed by the frame and at right angles to each other, the ends of such bars being formed with sliding pieces that fit within slides in the sides of the frame, and with projecting bosses through which pass screw-threaded rods that are carried in bearings upon the corners of the frame, and are provided with thumb-nuts thereon, as set forth. (3.) In means for setting up and holding printing-type, a rectangular frame provided with sliding bars placed across the frame at right angles to each other, means whereby such bars may be moved up and down the frame, and dovetailed sliding surfaces on the underside

of the frame, in combination with a plate formed with corresponding dovetailed sliding surfaces on its edges and fitting upon the bottom of the frame, as specified. (4.) In means for setting up and holding printing-type, a rectangular frame the under surfaces of two sides of which are formed with dovetailed sliding faces, in combination with a plate formed with corresponding dovetailed sliding faces on its edges and fitting upon the bottom of the frame, as specified. (5.) The general arrangement, construction, and combination of parts in my combined printer's galley and chase as described and explained, as illustrated in the sheet of drawings, and for the several purposes set forth.

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

No. 15637.—15th November, 1902.—ALEXANDER JEWISS, of Albert Street, Auckland, New Zealand, Plumber, and GEORGE INGLIS, of Mount Eden, near Auckland aforesaid, Plumber. An improved method of glazing corrugated iron, applicable to roofs and sides of houses and other buiidings.

Claims.—(1.) In glazing corrugated iron as described, the use of and fitting to, and on the top, sides, and bottom of the opening made in the corrugated iron, of hoop or flat iron, angle iron, V-shaped iron, sheet lead, and glass, in combination with the corrugated iron, for the purpose set forth, substantially as specified. (2.) The method of glazing corrugated iron described, and the configuration, combination, and application of the materials mentioned, for the purpose set forth, substantially as specified.

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

No. 15644.—19th November, 1902.—THE WOLSELEY SHEEP-SHEARING MACHINE COMPANY, LIMITED, of Sydney Works, Alma Street, Birmingham, England, Manufacturers, and HERBERT AUSTIN, of the same address, a Director of the said company. Improvements in machines for cutting or shearing hair or wool.

Claims.—(1.) In a mechanically operated machine for cutting or shearing hair or wool, a portion of the under-side of the case formed flat with a hole therethrough to receive the lower end of a reeling pillar which supports the hinder end of the sideway-vibrating lever, and a plate fixed to the flat under surface of the case and forming the bottom of the said hole through the under-side of the case and providing the surface on which the reeling pillar rolls, substantially as set forth. (2.) In a mechanically operated machine for cutting or shearing hair or wool, the under-side of the forward portion of the case formed flat with a hole therethrough to receive the lower end of a reeling pillar which supports the hinder end of the sideway-vibrating lever, a plate fixed to the flat under-surface of the case and forming the bottom of the said hole therethrough and providing the surface on which the reeling pillar rolls, and a comb fixed also against the flat bottom of the forward end of the case whereby its upper surface is in the same plane with the upper surface of the said plate, substantially as set forth. (3.) In a mechanically operated machine for cutting or shearing hair or wool, forming the upper forward end of the case open and providing a cover for such open portion, through the medium of which the pressure of the forward end of the vibrating lever upon the cutter may be adjusted, substantially as set forth. (4.) In a mechanically operated machine for cutting or shearing hair or wool, the combination of a case having an open upper forward end and notches such as *g* in its sides, with a cover such as L having pivot-pins such as *f* f r engagement with the notches *g*, substantially as set forth and illustrated. (5.) In a mechanically operated machine for cutting or shearing hair or wool, the combination with a case having an open forward upper end of a pivoted cover which carries the fulcrum about which the sideway-vibrating lever vibrates, and a vertical pin which passes up through the case and through the cover and is provided with a nut through the medium of which the cover may be pressed down to adjust the pressure of the sideway-vibrating lever upon the cutter, substantially as set forth and illustrated. (6.) In a machine for cutting or shearing hair or wool, a cutter provided with three teeth only, and the forward end of the sideway-vibrating lever which operates such cutter formed bifurcated or with two prongs only, the centres of the two bearing surfaces of the lever upon the cutter being each about one-third of the distance from the centre of an outer tooth of such cutter towards the centre of the middle tooth thereof, whereby the pressure of the lever upon the cutter is equally distributed between the three teeth of the cutter, substantially as set forth.

(Specification, 7s.; drawings, 1s.)

No. 15645.—19th November, 1902.—FRANZ BAERTL, of Bahnhofstrasse, 81, Zurich, Switzerland, Manufacturer. Improvements in automatic pressure-regulators for gas flames or burners.

Claims.—(1.) The combination of a gas burner or pipe, a gas-pressure regulator placed therein so as not to lengthen said pipe or alter the height of the flame, said regulator consisting of a sleeve provided with an upper valve-seat, a valve in said sleeve having a passage for gas and adapted to be pressed against said seat on high gas-pressure and to fall by gravity on reduction of said pressure, and means for limiting the downward movement of said valve, substantially as described. (2.) The combination of a gas burner or pipe, a gas-pressure regulator placed therein so as not to lengthen said pipe or alter the height of the flame, said regulator consisting of a sleeve provided with an upper valve-seat, a conical valve in said sleeve having a longitudinal passage therethrough for gas and adapted to be pressed against said seat on high gas-pressure and to fall by gravity on reduction of said pressure, and means for limiting the downward movement of said valve, substantially as described. (3.) The combination of a gas burner or pipe, a gas-pressure regulator placed therein so as not to lengthen said pipe or alter the height of the flame, said regulator consisting of a sleeve provided with an upper valve-seat, a valve in said sleeve having a passage for gas and adapted to be pressed against said seat on high gas-pressure and to fall by gravity on reduction of said pressure, means for limiting the downward movement of said valve, and means for giving the regulator the desired vertical or inclined position in the gas-pipe, substantially as described. (4.) The combination of a gas burner or pipe, a gas-pressure regulator placed therein so as not to lengthen said pipe or alter the height of the flame, said regulator consisting of a sleeve provided with an upper valve-seat, a valve in said sleeve having a passage for gas and adapted to be pressed against said seat on high gas-pressure and to fall by gravity on reduction of said pressure, means for limiting the downward movement of said valve, and means for giving the regulator the desired vertical or inclined position in the gas-pipe, consisting of a socket inserted in said pipe and adapted to receive a regulator, substantially as described. (5.) The combination of a gas burner or pipe, a gas-pressure regulator placed therein so as not to lengthen the latter or alter the height of the flame, said regulator consisting of a sleeve provided with an upper valve-seat, a valve in said sleeve having a passage for gas and adapted to be pressed against said seat on high gas-pressure and to fall by gravity on reduction of said pressure, means for limiting the downward movement of said valve, and means for giving the regulator the desired vertical or inclined position in the gas-pipe, consisting of a socket inserted in said pipe and adapted to receive a regulator, said socket having a by-pass orifice, substantially as described. (6.) The combination of a gas burner or pipe, a gas-pressure regulator placed therein so as not to lengthen the latter or alter the height of the flame, said regulator consisting of a sleeve provided with an upper valve-seat, a valve in said sleeve having a passage for gas and adapted to be pressed against said seat on high gas-pressure and to fall by gravity on reduction of said pressure, means for limiting the downward movement of said valve, and means for giving the regulator the desired vertical or inclined position in the gas-pipe, consisting of a socket in said pipe and adapted to receive a plurality of regulators, said socket having a by-pass orifice, substantially as described.

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

No. 15646.—19th November, 1902.—JOSEPH ALEXANDER CARRUTHERS, of High Street, St. James, Victoria, Australia, Mechanic. Improvements in electrically actuated and controlled clocks and other time-recording apparatus.

Claims.—(1.) In electrical clocks and other time-recording apparatus, a pendulum having at its base an armature, an electro-magnet set beneath the said armature, means as claimed in claim 2 carried by the pendulum for causing make and break of the electrical circuit to energise and de-energise the electro-magnet, substantially as and for the purposes described. (2.) A hinged plate set in a box supported from pendulum and arranged to cause spring plates to make contact in one direction of travel of pendulum and to pass idly over plate on return, substantially as and for the purposes described. (3.) In combination, bracket *j* adjustable on pendulum rod and supporting b x j^2, a hinged plate j^3 within the box, spring plates h^2, h^3, set beneath said hinged plate, electrical-wire connections with the spring plates and cell or battery, substantially as and for the purposes described. (4.) The combination and arrangement of the several parts for the purposes described, and substantially as illustrated on the drawings.

(Specification, 3s. 9d.; drawings, 1s.)

No. 15647.—19th November, 1902.—JOSEPH ALEXANDER CARRUTHERS, of High Street, St. James, Victoria, Australia, Mechanic. Electrically actuated and controlled clock.

Claims.—(1.) In electrically actuated and controlled clocks, a pendulum having at its base an armature, an electro-magnet set beneath the said armature, means carried by the pendulum for causing make and break of electrical circuit to energise and de-energise the electro-magnet, a rod *l* oscillated by the pendulum and pivoted in a block *s* that limits its travel and actuating a bar *m*, an escapement carried by the bar *m*, and an escapement-wheel on spindle actuated by the escapement, substantially as and for the purposes described. (2.) In electrically actuated and controlled clocks, in combination, a pendulum, an armature at its base, an electro-magnet beneath the armature, a bracket h^1 carrying spring plate h^3, bracket *h* carrying spring plate h^2, a hinge-plate j^3 adjustably supported from the pendulum so as to bear on the plate h^3 at intervals, a rod *l* oscillated by the pendulum and pivoted in block *s* that limits its travel, a bar *m* attached to rod *l* and carrying escapement *n*, n^1, n^2, a ratchet wheel engaging with escapement and set on a spindle, from which the dial mechanism of the clock is actuated, substantially as and for the purposes described. (3.) The combination and arrangement of the whole of the parts for the purposes described, and substantially as illustrated on the drawings.

(Specification, 4s. 9d.; drawings, 2s.)

No. 15652.—19th November, 1902.—ALEXANDER GILLIES, of Terang, Victoria, Dairyman. Improvements in milking-apparatus.

Claims.—(1.) In milking-apparatus of the type specified, a teat-cup consisting of a casing and a complete thin loose lining between which the pulsations are delivered, the space enclosed by said lining being in communication with the milk-receiver, and the space between said lining and casing in communication with the pulsator, substantially as described and illustrated. (2.) In milking-apparatus of the type specified, a teat-cup consisting of a comparatively thick rubber casing with a thin inwardly extending lip around, the inner end of which is a complete thin loose lining, secured at its other end to an internal spout or mouth in communication with a milk-pipe leading to the milk-receiver, substantially as described and illustrated. (3.) In milking-apparatus of the type specified, a double "claw" or bracket, one passage of which has branches for conveying the pulsations, and the other passage of which has branches for the milk and coupled up with the teat-cups pulsator and vacuum, substantially as described and illustrated.

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

No 15654.—19th November, 1902.—CHARLES PEYRON DE LAJARD, of 7, Rue Theodore Aubanel, Avignon, France, Director of the Compagnie Générale des Moteurs Maritimes. Device for the utilisation of the power derived from the waves of the sea.

Claim.—Device for the utilisation of the power derived from the waves of the sea, comprising, in combination with a main frame running on wheels, a fly-wheel for the transmission of the power to working machines, axles rotated by the movement of the surface of the sea, a gearing connecting the axle of the fly-wheel with said axles, ratchet wheels on said axles, forks embracing the ratchet wheels, pawls linked to the forks and engaging with the ratchet wheels, racks at the closed ends of the forks, spur wheels engaging with said racks, pinions engaging with said spur wheels, racks engaging with the pinions, shifting rods linked to the outer ends of said pinion-racks, levers linked with the upper end to the outer end of the shifting rods, floaters coupled in pairs by rigid frames, a cross-bar fixed on the centre of the side bars of said floater-frame, one end of which is rigidly connected with the lower end of one of the levers of the shifting rods, connecting-rods rigidly fixed to the ends of two of the cross-bars, a rigid frame for the floaters adjustably connected with the main frame by a vertical axle, an axle rotatably supported in the ends of the frame carrying the connecting-bars of each set of two pairs of floaters and the ends of the levers of four of the shifting rods, substantially as described and shown and for the purpose set forth.

(Specification, 3s. 9d.; drawings, 2s.)

No. 15657.—20th November, 1902.—LUCY ADAMSON, of Waihao Forks, New Zealand, Employed in Domestic Duties. Improved apparatus for employment in connection with the collection of rain-water from the roofs of houses.

Claims.—(1.) Apparatus for the purpose indicated, consisting of the combination and arrangement of parts, substantially as herein specified. (2.) In apparatus for the purpose indicated, the combination with a rain-water down-pipe of a valve and valve-seat therein, and a float within a receptacle for actuating said valve, a branch from the down-pipe above the valve leading to a tank receiving clean water, substantially as specified and illustrated.

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

No. 15660.—19th November, 1902.—HUNTER HENRY MURDOCH, of Hastings, Hawke's Bay, New Zealand, Patent Agent. Improvements in set-squares for use in mechanical and other drawing.

Claims.—(1.) The improvements in set-squares described, and illustrated in Figs. 1 to 10 (both inclusive) of the drawings—that is to say, the formation in a set-square of a slot or slots, in which slot or in one or other of such slots is inserted a sliding stop of any one of the kinds described, the said stop and set-square being arranged and operated relatively to and with each other, essentially as and for the purpose described. (2.) The sliding stops described with reference to Figs. 2 and 3 of the drawings—that is to say, a series of graduated stops, each of which consists of an oblong plate of wood, ebonite, or other suitable material, of such width as to fit and slide easily in the slot or either of the slots in the aforesaid set-squares, but of less length than such slot or slots, the length of each stop being such as, when it is used in combination with either of the set-squares, to enable the draughtsman to draw section or other lines of the requisite distance apart, essentially as described. (3.) The adjustable sliding stop described, and illustrated in Figs. 4, 5, and 6 of the drawings—that is to say, an oblong stop furnished with a set-screw, the lower part of the milled head of which enters the slot in either of set-squares aforesaid, the said sliding stop and set-square being arranged and operated relatively to and with each other, essentially as and for the purpose described. (4.) The adjustable sliding stop described, and illustrated in Figs. 7, 8, and 9 of the drawings—that is to say, a stop consisting of two oblong plates arranged one upon the other, the upper plate having on its under-side a longitudinal dovetail rib which slides as required in a correspondingly formed longitudinal rebate in the upper side of the lower plate, the said plates being clamped together as required by means of a screw fixed in the said lower plate, which screw passes through a longitudinal slot formed in the said upper plate and carries a milled nut, the said upper plate having at one end a transverse rib which enters the slot in either of the set-squares aforesaid, the sliding adjustable stop thus constructed and the set-square being arranged and operated relatively to and with each other, essentially as and for the purpose described.

(Specification, 7s. 6d.; drawings, 2s.)

No. 15664.—18th November, 1902.—JOHN ROGER, of 6, Coningsby Road, Finsbury Park, London, England, late a Tea-planter in Ceylon, and MONTAGUE KELWAY BAMBER, of the Laboratory, Hyde Park Corner, Cinnamon Gardens, Colombo, Ceylon, Agricultural Chemist. An improved process for obtaining a soluble extract of tea.

Claims.—(1.) The process of obtaining from the leaf of the tea-plant a soluble extract or extracts containing the tannin, theine, and other valuable principles of the leaf, and possessing the peculiar aroma, flavour, pungency, and invigorating properties of the ordinary tea of commerce, characterized by firstly obtaining such principles in solution, and then separating such principles from the solvent fluid and obtaining the same as an extract or extracts in the form of dry powder or thick fluid by the successive procedures of heating the fluid sufficiently to keep soluble matters in solution, separating by centrifugal action foreign matters from the hot fluid, refrigerating the clear fluid sufficiently to throw the tannin, theine, and other valuable principles of the tea out of solution, separating by centrifugal action from the refrigerated fluid such of such principles as are specifically heavier than the fluid in paste-like or caky mass, reducing such mass to dryness, evaporating the fluid down to any required degree of concentration, refrigerating the concentrated fluid sufficiently to throw the remaining valuable principles out of solution, separating by centrifugal action such principles from such refrigerated concentrated liquid in paste-like or caky mass, reducing such mass to dryness, repeating such concentrating, refrigerating, separating, and drying processes if necessary, and evaporating the resultant fluid, if containing any valuable principles, down to a thick fluid condition or to dryness, as set forth. (2.) In obtaining from the leaf of the tea-plant an extract containing the valuable principles thereof, the process consisting in and characterized by obtaining such principles in solution, and separating such principles from the solvent fluid—after freeing the latter from foreign matters by heating the fluid and subjecting it while hot to the action of a cen-

trifugal separator—by refrigerating the fluid sufficiently to throw the valuable principles out of solution, and subjecting the fluid while so refrigerated to the action of a centrifugal separator, and evaporating the remaining fluid if containing any valuable principles, repeating the refrigerating, separating, and evaporating procedures if necessary, as set forth.
(Specification, 5s. 6d.)

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 after the number.

Provisional Specifications.

Patent Office,
Wellington, 26th November, 1902.

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

No. 15449.—26th September, 1902.—JOHN ARMSTRONG, of Mount Roskill, Auckland, New Zealand, Carpenter. Improved means for securing cords to window-sashes and for other analogous purposes.

No. 15543.—23rd October, 1902.—RICHARD BOXALL, of Warren Street, Brisbane, Queensland, Engineer, and ARTHUR ANTHONY ROBINSON, of Moorooka, Queensland, Manufacturer. Tinning and printing machine for butter and other analogous substances.

No. 15567.—28th October, 1902.—PETER JOHN DARLING, of 28, Tuam Street, Christchurch, New Zealand, Electrician; FREDERICK LYNSDAY SUMMERTON, of 11, Worcester Street, Christchurch, New Zealand, Engineer; and FREDERICK JOHN AMOS, of 80, Hereford Street, Christchurch aforesaid, Joiner. An improved means for automatically sustaining air-pressure in pneumatic tires.

No. 15580.—30th October, 1902.—THOMAS NAPIER, of Hawera, New Zealand, Carpenter. Improvements in boot-polishing machines.

No. 15589.—3rd November, 1902.—JOHN ROBERT WATT, of Christchurch Meat Company, Timaru, New Zealand, Carpenter. Improvements in or relating to doors for freezing-rooms, cold-stores, ice-houses, &c.

No. 15595.—4th November, 1902.—FRANCIS ANTONIO BURDETT-STUART, of Chertsey, Canterbury, New Zealand, Water Ranger. An improved trap for small birds and the like.

No. 15612.—4th November, 1902.—JOHN DENNISTON SMITH, of 10, Harbour Terrace, Dunedin, New Zealand, Engineer. Improved foodplate.

No. 15614.—5th November, 1902.—ROBERT PEARCE GIBBONS, of Kopu, Thames, New Zealand, Sawmill-proprietor. An improved vertical steam boiler.

No. 15615.—7th November, 1902.—GEORGE FREDERICK BROWN, of Forest Road, Hurstville, New South Wales, Land Agent. An unpuncturable pneumatic-tire covering.

No. 15616.—7th November, 1902.—JOSEPH BAKER, of Lower Hepburn Street, near Auckland, New Zealand, Watchmaker, and DANIEL PLUMB PARKER, of Coromandel, Auckland, New Zealand, Engineer. An improved automatic acetylene-generator.

No. 15618.—12th November, 1902.—FREDERICK JONES, of 4, Lorne Street, Wellington, New Zealand, Boot-salesman. An improvement in a nail for boots and shoes.

No. 15621.—7th November, 1902.—CHARLES DAVIS LIGHTBAND, of 79, Armagh Street, Christchurch, New Zealand, Leather-salesman. A resilient leather heel.

No. 15622.—7th November, 1902.—CHARLES DAVIS LIGHTBAND, of 79, Armagh Street, Christchurch, New Zealand, Leather-salesman. A binocular suspender.

No. 15623.—13th November, 1902.—RICHARD ERNEST PENNINGTON, Engineer, and JAMES BELLETT, Stationer, both of 227, Bridport Street, Albert Park, near Melbourne, Victoria. An improved locknut plate for preventing nuts loosening or turning back on fish-plates and the like.

No. 15625.—13th November, 1902.—EDWARD LAURIS WICKINS, of 40, Powell Street, South Yarra, Victoria, Mechanic. An improved rotary steam-engine.

No. 15626.—13th November, 1902.—DAVID RUTHERFORD ROSS, of De Carle Street, Brunswick, Victoria, Engineer. Improvements in milking-machines.

No. 15628.—11th November, 1902.—WILLIAM HENRY FAHEY, of Royal Terrace, Kew, Dunedin, New Zealand, Commercial Traveller. Improved hat-fastener.

No. 15629.—11th November, 1902.—SAMUEL WHITE, of Dunedin, New Zealand, Coachbuilder. Game apparatus.

No. 15630.—11th November, 1902.—WILLIAM BEAMISH, of Cromwell, Central Otago, New Zealand, Occupied in the Dredging Industry. Appliance for carrying a running line along a standing line.

No. 15631.—11th November, 1902.—WILLIAM BEAMISH, of Cromwell, Central Otago, New Zealand, Occupied in the Dredging Industry. Improved oil-feeding can.

No. 15632.—11th November, 1902.—ROBERT PEARCE GIBBONS, of Kopu, Thames, New Zealand, Mill-proprietor. An improved bottom and sides for all kinds of kettles and liquid-heating boilers.

No. 15633.—15th November, 1902.—WILLIAM GEORGE HOOD, Engineman, and REES WILLIAMS, Engineering Blacksmith, both of Petone, New Zealand, and JOHN REILLY, of Tory Street, Wellington, New Zealand, Engineering Smith. An improved marine governor.

No. 15636.—17th November, 1902.—VAN HORNE LAWRENCE WOOD, of Birkenhead, Auckland, New Zealand, Gentleman. Improved means for supporting window-curtains.

No. 15638.—15th November, 1902.—JAMES BAIRD, of Wynyard Street, Devonport, near Auckland, New Zealand, Engineer. An automatic spark-arrester for locomotive and other boilers.

No. 15639.—14th November, 1902.—JOHN PAYNE, of Alpha Road, Parnell, Auckland, New Zealand, Clerk. A device for converting an ordinary dumb-bell into a spring-grip dumb-bell.

No. 15640.—13th November, 1902.—ROBERT PEARCE GIBBONS, of Kopu, Thames, New Zealand, Sawmill-proprietor. An auxiliary propeller for disabled steam or sailing ships.

No. 15641.—18th November, 1902.—PETER HILL MCCONACHY, of Gore, New Zealand, Butcher. Improved apparatus for making staples.

No. 15642.—17th November, 1902.—HENRY COE, of Greymouth, New Zealand, Gardener. An improved attachment to ploughs for breaking the subsoil.

No. 15643.—17th November, 1902.—DAVID HANNA, of Christchurch, New Zealand, Plumber. An improved appliance for pumping smoke or fumes.

No. 15648.—19th November, 1902.—HARRY HAM, of Kumeroa, Hawke's Bay, New Zealand, Chainman. An improved nightsoil receptacle.

No. 15649.—19th November, 1902.—WILLIAM MCLEAN, of Invercargill, New Zealand, Mariner. Improvements in apparatus used in playing parlour billiards and the like.

No. 15650.—19th November, 1902.—UNITED SHOE MACHINERY COMPANY, of Paterson, in the State of 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 Benjamin Franklin Mayo, of Salem, Essex, Massachusetts aforesaid, Inventor). Improvements in or relating to machines for rounding or trimming the soles of boots and shoes.

No. 15653.—19th November, 1902.—EDWIN ROBERT JENNINGS and THE "PYROJIM" SYNDICATE, LIMITED, of 3, Broad Street Buildings, London, England (assignees of John May Jameson, lately residing at Lorraine Villa, Wigston Fields, Leicester, England, Civil Engineer). Improvements in treating floor-dust, house and other refuse, for making or converting it into fuel.

No. 15655.—19th November, 1902.—JAMES ROBSON, of Ngaire, Taranaki, New Zealand, Sawmiller. Improvements in or relating to vertical sawing machines.

No. 15656.—17th November, 1902.—JOHN RAMSAY, of Round Hill, Southland, New Zealand, Mine-manager. Improvements in tables for saving gold.

No. 15658.—20th November, 1902.—JOHN THOMAS MURPHY, of Blenheim, New Zealand, Farmer. Improvements in harness for horses and the like.

No. 15661.—18th November, 1902.—DAVID RANKEN SHIRREFF GALBRAITH, of Ladies' Mile, Remuera, Auckland, New Zealand, Analytical Chemist, and WILLIAM STEUART, of Herald Buildings, Queen Street, Auckland aforesaid, Electrical Engineer. A new method and apparatus for the reduction of ironsand, iron-oxides, and other suitable substances.

No. 15662.—18th November, 1902.—DAVID RANKEN SHIRREFF GALBRAITH, of Ladies' Mile, Remuera, Auckland, New Zealand, Analytical and Consulting Chemist, and WILLIAM STEUART, of Herald Buildings, Queen Street, Auckland aforesaid, Electrical Engineer. Supplementary apparatus for the reduction of ironsand, iron-oxides, and other suitable substances.

No. 15663.—18th November, 1902.—JOHN HILTON SMITHIES BROWN, of Devonport, near Auckland, New Zealand, Engineer. A match-striking attachment to cigarette-boxes.

No. 15665.—21st November, 1902.—PATRICK ARTHUR HARKIN, of Mount Roskill, Auckland, New Zealand, Builder.

Improved apparatus for use in moulding confectionery and the like.

No. 15666.—21st November, 1902.—SYDNEY STURGES STRETTON, of Ongarue, Auckland, New Zealand, Bushman. Improvements in or relating to the lids of saucepans.

No. 15667.—19th November, 1902.—JOHN KELLY, of Palmerston, Otago, New Zealand, Engine-driver. An improved grain reel or beater for reaping-and-binding machines.

No. 15668.—19th November, 1902.—WILLIAM BEAMISH, of Cromwell, Central Otago, New Zealand, Occupied in the Dredging Industry. Cyclists' trouser-clip.

No. 15669.—19th November, 1902.—WILLIAM BEAMISH, of Cromwell, Central Otago, New Zealand, Occupied in the Dredging Industry. Improved sack-mouth fastener.

No. 15676.—19th November, 1902.—DAVID LANDSBOROUGH COCHRANE, of Otahuhu, Auckland, New Zealand, Contractor. Dray scoop.

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 12th to the 26th November, 1902, inclusive:—

No. 13659.—R. W. Jones, knife-cleaner.
No. 13903.—R. A. McLeod, winch.
No. 13906.—J. MacLean, horse-cover.
No. 13910.—T. Hawke, horse-cover.
No. 13917.—E. R. Atkin, stowing away back seat of buggy, &c.
No. 13932.—C. Curham and R. J. K. Jackson, blight-destroyer.
No. 14130.—A. F. Hadecke, concave.
No. 14228.—F. T. Mumford, treatment of ores.
No. 14398.—J. Neagle, head-bag for racehorse.
No. 14407.—F. Hornby, toy or educational device.
No. 14549.—Lamson Store-service Company, Limited, cash carrier (J. T. Cowley).
No. 14735.—H. W. Buff, coverings for the feet.
No. 14773.—C. A. Trotter, range-finding for rifles.
No. 15129.—H. Hammond, rubbish, &c., catch for tank.
No. 15151.—W. H. Lawrence and R. Kennedy, milking-apparatus.
No. 15165.—J. P. Robertson, fire-alarm.
No. 15201.—G. C. Smith, wood or metal screw.
No. 15206.—United Shoe Machinery Company, welt-sewing machine (E. E. Winkley).
No. 15208.—United Shoe Machinery Company, stitch-separating machine (J. B. Hadaway).
No. 15210.—M. Neustadt, delivering disinfectant to charge of water (J. L. Wade).
No. 15228.—United Shoe Machinery Company, pressing-form for sole-laying machine (G. H. Gifford).
No. 15229.—R. D. Brett and T. P. Wood, smoke-consumer.
No. 15246.—The American Tobacco Company, sealed tin (W. I. Tuttle).
No. 15282.—R. F. Wells, sheep-shears.
No. 15283.—G. S. Heatley, bedstead and mattress.
No. 15298.—K. Wessell, mattress-filling machine.
No. 15309.—D. T. Sharples, milking-apparatus.
No. 15310.—J. P. Campbell, electric arc lamp (G. Westinghouse).
No. 15311.—R. J. L. Witty, plant and seed setter.
No. 15312.—J. T. Hunter, incandescent filament and mantle (the Plaisetty Mantle Syndicate, Limited—A. M. Plaisetty).

F. WALDEGRAVE,
Registrar.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

NO. 10901.—H. S. Elworthy, manufacturing carbonic acid. 14th November, 1902.
No. 11122.—D. Donald, wire-strainer. 12th November, 1902.
No. 11154.—A. M. Waters, potato digger, bagger, &c. 14th November, 1902.
No. 11156.—W. E. Hughes, floor (E. Jensen). 13th November, 1902.
No. 11163.—W. E. Hughes, concrete pipes, &c. (E. Jensen). 13th November, 1902.
No. 11202.—J. Hall, treating skins, &c. 13th November, 1902.
No. 11206.—A. Melchior, machine sheep-shears. 13th November, 1902.
No. 11270.—The Empire Cash-register, Limited, cash-register (J. Fauvel and N. Collins). 19th November, 1902.
No. 11282.—L. A. Garchey, ceramic stone. 19th November, 1902.

THIRD-TERM FEE.

No. 8141.—F. V. Friderichsen, preserving blood with molasses. 13th November, 1902.

F. WALDEGRAVE,
Registrar.

Letters Patent abandoned.

LIST of applications for Letters Patent (with which provisional specifications only have been filed) abandoned from the 13th to the 26th November, 1902, inclusive:—

No. 14432.—A. McLeod, branding appliance.
No. 14433.—A. C. Wolff, packing-case.
No. 14439.—E. A. Derrett, fencing-dropper.
No. 14440.—T. J. Broome and C. W. Langstone, composition for making cloth, &c., waterproof.
No. 14441.—M. Peryer, cleansing painted surfaces.
No. 14444.—A. C. Murray, coal-scuttle.
No. 14445.—A. C. Murray, can-handles.
No. 14446.—W. F. Kennedy, wire-strainer.
No. 14449.—G. Dent, hairdressers' cabinet.
No. 14455.—A. J. Park, operating window-sash.
No. 14457.—R. and J. H. Millis, gold-saving apparatus.
No. 14459.—K. C. Jackson, tramrail-clearer.
No. 14461.—F. Kettle, hat-fastener.
No. 14463.—H. H. Rayward and E. S. Baldwin, gold-dredging machinery.
No. 14466.—W. Burrell and J. P. McMeekin, rabbit, &c., crate.
No. 14467.—J. S. C. Bonham, pump.
No. 14468.—W. M. Bartle, flush conductor.
No. 14469.—W. Steer, heel for boot, &c.
No. 14470.—F. Kettle, hat-fastener.
No. 14471.—C. L. Watt, parallel ruler.
No. 14472.—A. J. Park, mirror.
No. 14474.—W. Riddell, batter-lifter.
No. 14475.—E. T. Matthews, watch-pocket.
No. 14477.—J. F. Smith, rope-grip.
No. 14478.—S. J. Ensor and F. Tanner, claw-hammer.
No. 14482.—J. J. Macky, shirt.

F. WALDEGRAVE,
Registrar.

Letters Patent lapsed.

LIST of applications for Letters Patent (with which complete specifications have been lodged) lapsed from the 13th to the 26th November, 1902, inclusive:—

No. 13609.—J. Macpherson, screen for sorting mineral wash.
No. 13620.—W. H. Clarke, rapid photo.-printing apparatus.
No. 13631. R. Walker, milk, &c., aerator.
No. 13632.—H. Wimsett, preventing cracks in horses' feet.
No. 13637.—H. J. Bettany, reel for measuring tape, &c.
No. 13646.—W. C. Greig, curtain-pole.
No. 13658.—M. Hawkins and B. Denly, asphalt.
No. 14146.—H. P. Rasmussen and W. Hagerty, pneumatic hub for cycle-wheel.

F. WALDEGRAVE,
Registrar.

Letters Patent void.

LIST of Letters Patent void through non-payment of renewal fees from the 13th to the 26th November, 1902, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 10581.—B. Roberts and T. Rose, chimney-top.
No. 10870.—A. Smith, recovering gold.
No. 10871.—A. G. Tomkies, foot-grip for bicycle-pedals.
No. 10875.—S. and S. Priest, cycle-brake.
No. 10876.—B. Roberts and T. Rose, chimney-top.
No. 10879.—H. W. Drew and T. N. Jonas, photography on china, &c.

No. 10881.—G. P. and W. H. Butler, tobacco-leaf stemming.
No. 10883.—P. F. M. Burrows, wire-straining reel.
No. 10885.—A. J. Cuming, branding carcases.
No. 10888.—S. G. Jameson and W. Hampson, enumerating-machine.
No. 10889.—C. F. C. Lohmann, rotary motor.
No. 10890.—H. Cooper, a combined washing board and dolly.
No. 10891.—C. Grosvenor, production of gas from gasolene (J. Crook).
No. 10898.—E. Smethurst, fencing-dropper.
No. 10908.—G. M. Wright, grill.
No. 10909.—L. E. Abercrombie, abdominal support.
No. 11648.—A. Vogt, electrical resistance.
No. 11743.—J. F. Bachmann, A. Vogt, C. C. Weiner, A. König, J. Kirchner, and A. Jörg, electrical resistance.
No. 11744.—J. F. Bachmann, A. Vogt, C. C. Weiner, A. König, J. Kirchner, and A. Jörg, electrical heating appliance.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

No. 7840.—J. Graham and G. Watson, gorse-clipper.
No. 7844.—S. and J. H. Collet, rabbit-trap.
No. 7851.—E. Waters, gate (E. H. R. Evans).

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. 14465.—J. L. Wilson, of Fairlie, Provincial District of Canterbury, in New Zealand, Baker. [J. Murray.] 18th November, 1902.

No. 14757.—The Taipo Explosives Syndicate, Limited, being a company incorporated in New Zealand under "The Companies Act, 1882," and its amendments, and having its registered office in Crawford Street, Dunedin, New Zealand. [A. McCracken.] 14th November, 1902.

F. WALDEGRAVE,
Registrar.

Applications for Registration of Trade Marks.

Patent Office,
Wellington, 26th November, 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: 3994.
Date: 13th November, 1902.

TRADE MARK.

The word

ACME.

NAME.

FREDERICK NATHANIEL ROBERTON MEADOWS, of 7, Featherston Street, Wellington, New Zealand. Dairy Produce Exporter.

No. of class: 42.
Description of goods: Preservative for butter.

No. of application: 3873.
Date: 7th August, 1902.

TRADE MARK.

The essential particulars of this trade mark are the device and the words "Planter's Pride"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

THE IMPERIAL TOBACCO COMPANY (OF GREAT BRITAIN AND IRELAND), LIMITED, Registered Office East Street, Bedminster, Bristol, England, Tobacco-manufacturers.

No. of class: 45.
Description of goods: Manufactured tobacco.

No. of application: 3995.
Date: 13th November. 1902.

TRADE MARK.

The word

FEDERAL.

NAME.

THE AUSTRALIAN EXPLOSIVES AND CHEMICAL COMPANY, LIMITED, of 356, Little Collins Street, Melbourne, in the State of Victoria, Commonwealth of Australia.

No. of class: 2.
Description of goods: Chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes.

No. of application: 3996.
Date: 13th November, 1902.

TRADE MARK.

The word

FEDERAL.

NAME.

THE AUSTRALIAN EXPLOSIVES AND CHEMICAL COMPANY, LIMITED, of 356, Little Collins Street, Melbourne, in the State of Victoria, Commonwealth of Australia.

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

No. of application: 3687.
Date: 26th February, 1902.

TRADE MARK.

The essential particulars of the trade mark are the words "Vale Royal" and "St. Estelle," and the distinctive label; and any right to the exclusive use of the words "Vineyard," "South Australian Wine," "Proprietors," is disclaimed.

NAME.

CHOLMONDELEY AND BOSANQUET, of Grenfell Street, Adelaide, South Australia, Winegrowers.

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

No. of application: 3688.
Date: 26th February, 1902.

TRADE MARK.

The essential particulars of the trade mark are the words "Vale Royal" and "Belleblanche," and the distinctive label; and any right to the exclusive use of the words "Vineyard," "South Australian Wine," "Proprietors," is disclaimed.

NAME.

CHOLMONDELEY AND BOSANQUET, of Grenfell Street, Adelaide, South Australia, Winegrowers.

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

No. of application: 3982.
Date: 27th October, 1902.

TRADE MARK.

56 lbs Nett
PRESERVALINE
BEAVER BRAND
MADE EXPRESSLY FOR
J. B. MACEWAN & Co
WELLINGTON, DUNEDIN, NEW PLYMOUTH
SOLE AGENTS FOR NEW ZEALAND

The essential particular of this trade mark is the illustration of a beaver and the word "Beaver"; and the applicants disclaim any right to the exclusive use of the additional words excepting "J. B. MacEwan & Co."

NAME.

J. BARTRAM AND SON, of Melbourne, Victoria.

No. of class: 42.

Description of goods: Preservaline, a food-preservative.

No. of application: 4001.
Date: 20th November, 1902.

TRADE MARK.

The word
SOVEREIGN.

NAME.

THE GOLDEN BAY CO-OPERATIVE DAIRY FACTORY COMPANY, LIMITED, of Takaka, Nelson, New Zealand.

No. of class: 42.

Description of goods: Butter, cheese, condensed milk, hams, and bacon.

No. of application: 4004.
Date: 22nd November, 1902.

TRADE MARK.

The essential particulars of this trade mark are the device and the words "Fortuna Haematogen"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

ADOLPHUS MARCUS HERTZBERG, ABRAHAM HERTZBERG, and BENJAMIN COHEN, of Brisbane, Queensland, trading under the name, style, or firm of "A. M. Hertzberg and Co.," Merchants.

No. of class: 3.

Description of goods: Chemical substances prepared for use in medicine and pharmacy.

Trade Marks registered.

LIST of Trade Marks registered from the 12th to the 25th November, 1902, inclusive:—

No. 3029; 3432.—The Keystone Watch-case Company. Class 10. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3030; 3436.—Wailes and Co., Limited. Class 1. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3031; 3765.—Liebig's Extract of Meat Company, Limited. Class 42. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3032; 3797.—I. P. Clarke and Co. Class 23. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3033; 3798.—I. P. Clarke and Co. Class 23. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3034; 3799.—I. P. Clarke and Co. Class 23. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3035; 3801.—I. P. Clarke and Co. Class 23. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3036; 3827.—Sargood, Son, and Ewen. Class 38. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3037; 3840.—J. Myers and Co. Class 45. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3038; 3850.—Borax Consolidated, Limited. Class 1. (*Gazette* No. 67, of the 21st August, 1902.)

No. 3039; 3851.—Borax Consolidated, Limited. Class 2. (*Gazette* No. 67, of the 21st August, 1902.)

No. 3040; 3852.—Borax Consolidated, Limited. Class 3. (*Gazette* No. 67, of the 21st August, 1902.)

No. 3041; 3872.—Horrockses, Crewdson, and Co., Limited. Class 24. (*Gazette* No. 67, of the 21st August, 1902.)

No. 3042; 3875.—F. L. Smidth and Co. Class 6. (*Gazette* No. 67, of the 21st August, 1902.)

No. 3043; 3877.—H. Jansen. Class 43. (*Gazette* No. 67, of the 21st August, 1902.)

No. 3044; 3915.—M. M. B. Ashwin. Class 42. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3045; 3897.—Alaska Packers' Association. Class 42. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3046; 3901.—J. Connell and Co. Proprietary, Limited. Class 42. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3047; 3494.—Sterling Remedy Company. Class 3. (*Gazette* No. 75, of the 18th September, 1902.)

No. 3048; 3847.—G. I. Hudson. Class 3. (*Gazette* No. 75, of the 18th September, 1902.)

No. 3049; 3389.—F. Abraham and Co. Class 42. (*Gazette* No. 75, of the 18th September, 1902.)

No. 3050; 3895.—H. E. Partridge. Class 45. (*Gazette* No. 71, of the 4th of September, 1902.)

No. 3051; 3912.—W. Wylie. Class 42. (*Gazette* No. 71, of the 4th September, 1902.)

No. 3052; 3913.—The Wellington Fresh Food and Ice Company, Limited. Class 42. (*Gazette* No. 75, of the 18th September, 1902.)

F. WALDEGRAVE,
Registrar.

Subsequent Proprietors of Trade Marks registered.

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

NO. 88; 3148 (1900).—The Associated Portland-cement Manufacturers, Limited, of Dixon House, 72, Fenchurch Street, London, E.C., England, Cement-manufacturers. [J. B. White and Brothers, Limited.] 17th November, 1902.

No. 171; 130.—John de Kuyper and Son, of Rotterdam, Holland, Distillers of Hollands Geneva. [J. and A. M. de Kuyper.] 20th November, 1902.

No. 1103; 841.—Homocea, Limited, of 33, King William Street, London, England, Patent-medicine Manufacturers. [H. D. Brandreth.] 17th November, 1902.

No. 1104; 842.—Homocea, Limited, of 33, King William Street, London, England, Patent-medicine Manufacturers. [H. D. Brandreth.] 17th November, 1902.

No. 1443; 1145.—Homocea, Limited, of 33, King William Street, London, England, Patent-medicine Manufacturers. [H. D. Brandreth.] 17th November, 1902.

F. WALDEGRAVE,
Registrar.

Alphabetical List of Applicants for Letters Patent for Quarter ending 30th September, 1902.

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 Patents, Designs, and Trade Marks Act, 1889."

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Aggers, W., Auckland, N.Z. Chairs, settees, &c.	14026	21 Sept., 1901	71	4 Sept.
Aitken, W., Oamaru, N.Z. Water-wheel	15080	1 July	57	10 July.*
Alcock, H. U., Melbourne, Vic. Settee and billiard-table	15373	6 Sept.	75	18 Sept.*
Alcock, H. U., Melbourne, Vic. Convertible billiard and dining table	15259	12 Aug.	67	21 Aug.*
Alexe, F., London, Eng. Barrel	15345	3 Sept.	75	18 Sept.
American Amalgamating Company, Boston, U.S.A.. Amalgamating metals. (P. A. Knapp)	15152	23 July	99	27 Nov.
American Tobacco Company, New York, U.S.A. Sealed can. (W. I. Tuttle)	15246	14 Aug.	71	4 Sept.
American Tobacco Company, New York, U.S.A. Cigarette-wrapper and mouthpiece-machine. (S. D. S. and S. S. D. Rakowitzky)	15071	2 July	57	10 July.
American Tobacco Company, New York, U.S.A. Machine for inserting cotton in cigarette-tubes. (S. D. S. Rakowitzky.)	15072	2 July	57	10 July.
American Tobacco Company, New York, U.S.A. Machine for forming cigarette-tubes. (K. Harnisch)	15073	2 July	57	10 July.
Amos, F. J., and another, Christchurch, N.Z. Cycle-propelling mechanism	15433	23 Sept.	78	2 Oct.*
Anderson, J., Gisborne, N.Z. Plough	15170	25 July	63	7 Aug.
Anderson, J., Christchurch, N.Z. Trueing-up surface of flax-stripper drum	15185	29 July	67	21 Aug.*
Andersson, C. O., Wellington, N.Z. Saw-set	15115	14 July	75	18 Sept.*
Andrew, G., Carlton, Vic. Cash register and indicator	14110	10 Oct., 1901	63	7 Aug.
Andrew, N., and another, Wanganui, N.Z. Utilising exhaust of gas-engine	15339	1 Sept.	83	16 Oct.*
Andrews, W., and another, Christchurch, N.Z. Chaff-cutter	14290	28 Nov., 1901	75	18 Sept.*
Anscombe, H., and another, Dunedin, N.Z. Water-sprinkling cart	15473	30 Sept.	83	16 Oct.*
Armour, J. M., Dunedin, N.Z. Making chairs, &c., collapsible	15304	23 Aug.	71	4 Sept.*
Armour, J. M., Dunedin, N.Z. Combined chair, step-ladder, desk, and table	15287	20 Aug.	..	..
Armstrong, J., Auckland, N.Z. Securing cords to sashes	15449	26 Sept.	..	..
Armstrong, Sir W. G., Whitworth, and Company, Limited, Newcastle-on-Tyne, Eng. Shipping coal. (R. Wright)	15139	17 July	63	7 Aug.
Arragon, M., Adelong, N.S.W. Heating buildings	15436	24 Sept.	83	16 Oct.*
Arthur, E. B., Wellington, N.Z. Coal-scuttle	15126	17 July	63	7 Aug.*
Arthur, E. B., Wellington, N.Z. Pie-dish	15127	17 July	63	7 Aug.*
Atkin, W. H., Auckland, N.Z. Smoke-consumer, &c.	15219	2 Aug.	71	4 Sept.*
Aucher, A. C., Brisbane, Queensland. Incandescent gas-burner and mantle	14015	19 Sept., 1901	60	24 July.
August, H., Invercargill, N.Z. Closet-seat	14680	25 March	67	21 Aug.
August, H., Invercargill, N.Z. Closet-seat lid	15142	22 July	67	21 Aug.
August, H., Invercargill, N.Z. Water-closet	15294	21 Aug.	78	2 Oct.*
Auldjo, L. C., Sydney, N.S.W. Steam-boiler	15102	10 July	60	24 July.
Austin, J. J., Auckland, N.Z. Water-tank	15171	25 July	..	..
Automatic Aerator Patents, Limited, London, Eng. Aeration and bottling of liquids. (F. G. Hampson)	15134	16 July	63	7 Aug.
Ayson, A. R., Mosgiel, N.Z. Adjustable receptacle-handle	15110	11 July	60	24 July.
Ayson, W. S., Wyndham, N.Z. Spreader for draught-chain	15190	29 July	67	21 Aug.
Baldwin, E. S., and another, Wellington, N.Z. Distributing sewage on to filter-beds. (G. E. Ridgway)	15417	18 Sept.	78	2 Oct.
Baldwin, E. S., and another, Wellington, N.Z. Self-flushing time-valve. (G. E. Ridgway)	15418	18 Sept.	78	2 Oct.
Ballinger, T., Wellington, N.Z. Earth-closet	15445	25 Sept.	83	16 Oct.
Bannister, J., and another, Auckland, N.Z. Lock	15183	24 July	67	21 Aug.*
Barnard, A. W., and another, Dunedin, N.Z. Secateur	15200	30 July	67	21 Aug.*
Barningham, S., and others, Dunedin, N.Z. Fire-escape ladder	15146	19 July	63	7 Aug.
Bate, M., Auckland, N.Z. Gold extractor and separator	15405	13 Sept.	78	2 Oct.*
Bayley, C. H., Boston, U.S.A. (See United Shoe Machinery Company, No. 15204.)				
Beale, C., London, Eng. Food-preservative	15212	2 Aug.	67	21 Aug.*
Beaumont, G., Kaikorai, Dunedin, N.Z. Securing bradawl to handle	15257	12 Aug.	67	21 Aug.*
Beaven, A. W., and another, Christchurch, N.Z. Chaff-cutter	14290	28 Nov., 1901	75	18 Sept.
Bell, G. W., Sydney, N.S.W. Road-sweeper	15397	13 Sept.	78	2 Oct.*
Bell, J. H., and another, Thornbury, N.Z. Buckle	15258	12 Aug.	67	21 Aug.*
Benham, E., and another, Wanganui, N.Z. Match-striker	14442	17 Jan.	60	24 July.
Benson, J., Hedgehope, N.Z. Combined collar and hames	15366	3 Sept.	75	18 Sept.*
Berg, E., Picton, N.Z. Exploding whaling-lance	14042	24 Sept., 1901	57	10 July.
Bergersen, C. A., Palmerston North, N.Z. Wire-strainer	15406	16 Sept.	99	27 Nov.
Blanks, G. W., Sydney, N.S.W. Hydraulic duplex oil-brake	15352	4 Sept.	75	18 Sept.*
Bohm, E., London, Eng. Globe	15076	3 July	60	24 July.
Booth, H. C., London, Eng. (See Vacuum Cleaner Company, Limited, No. 15150.)				
Borlase, W., Dunedin, N.Z. Shear-regulator	15172	22 July	63	7 Aug.*
Börs, O., Trundle, N.S.W. Sheep-shears	15420	19 Sept.	78	2 Oct.*
Bowick, W. H., Hunterville, N.Z. Rubber heel and sole	15137	18 July	..	..

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

Name, Address, and Invention.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Boyens, W. H., Kaikoura, N.Z. Force-pump	15242	11 Aug.	67	21 Aug.*
Brady, W., San Francisco, U.S.A. Rock-drill	15329	26 Aug.	75	18 Sept.
Brain, W. B., and another, Auckland, N.Z. Using heavy oils in gas-engine	15323	26 Aug.	75	18 Sept.*
Brain, E., and another, Auckland, N.Z. Using heavy oils in gas-engine	15323	26 Aug.	75	18 Sept.*
Brasting, J., Christchurch, N.Z. Implement for breaking-up ground	15364	5 Sept.	75	18 Sept.*
Brett, R. D., and another, London, Eng. Smoke-consumer	15229	7 Aug.	71	4 Sept.
Brophy, C. M., Upper Manilla, N.S.W. Measuring skirts	15392	10 Sept.	78	2 Oct.*
Brown, J. H. S., Auckland, N.Z. Heating fluids	15141	22 July	63	7 Aug.*
Brown, J. P., Christchurch, N.Z. Button	15088	7 July	60	24 July. *
Brown, P. J., Little Kyeburn, N.Z. Closing leaks in gum-boots, &c.	15135	16 July	63	7 Aug.*
Brundell, H. J., Dunedin, N.Z. Wire mattress	15452	26 Sept.	83	16 Oct.*
Buhlmann, G., Berlin, Germany. Incandescent mantle	15160	24 July	63	7 Aug.*
Burgon, H., Sheffield, Eng. Sheep-shears	15122	17 July	63	7 Aug.
Burrell, T., and another, North Melbourne, Vic. Detachable boot sole	15279	21 Aug.	71	4 Sept.*
Burren, G., Wellington, N.Z. Tip-dray	15455	30 Sept.	83	16 Oct.*
Butler, F. J. J., and another, Thornbury, N.Z. Buckle	15258	12 Aug.	67	21 Aug.*
Campbell, A. A., North Sydney, N.S.W. Water-heater	15391	10 Sept.	78	2 Oct.*
Campbell, H. F., Boston, U.S.A. (See International Ore-separating Company, No. 15099.)				
Campbell, H. W., Invercargill, N.Z. Removable stove-flue	15216	1 Aug.	67	21 Aug.*
Campbell, J., Grove Bush, N.Z. Animal-trap	15370	9 Sept.	75	18 Sept.*
Campbell, J. D., and another, Brisbane, Queensland. Dredge-bucket	15437	24 Sept.	..	..
Campbell, J. P., Wellington, N.Z. Electric arc-lamp. (G. Westinghouse)	15310	27 Aug.	71	4 Sept.
Canda, F. M., New York, U.S.A. Locking device for cams, &c.	15125	17 July	63	7 Aug.
Carlyle, J., Waimate, N.Z. Feeding-trough	15412	18 Sept.	78	2 Oct.*
Catt, G. H., Southampton, Eng. Boot-finishing machine wheels	15350	4 Sept.	75	18 Sept.*
Cederman, A., Hokitika, N.Z. Dredge-bucket	15390	12 Sept.	78	2 Oct.
Chaffey, H. F., and others, Greymouth, N.Z. Gold-saving apparatus	15396	13 Sept.	78	2 Oct.*
Chamberlain, J., Catford, Eng. Obtaining light from gases of low calorific power	15234	6 Aug.	71	4 Sept.
Chambers, J. M., Auckland, N.Z. Compressing wheel-tires. (West's Patent Tire-setter Company, Limited—J. B. West)	15078	3 July	60	24 July.
Chambers, R., New Plymouth, N.Z. Attachment to pianos to hold music-book	15188	29 July	67	21 Aug.*
Clarke, G. C., Auckland, N.Z. Gate	15434	23 Sept.	78	2 Oct.
Clendinnen, Ede-. (See under E.)				
Clere, F. de J., Wellington, N.Z. Insulating walls, &c.	15273	20 Aug.	71	4 Sept.*
Coates, E. T. R., and others, Matakohe, N.Z. Ditching-plough	15251	12 Aug.	71	4 Sept.
Coates, J. G., and others, Matakohe, N.Z. Ditching-plough	15251	12 Aug.	71	4 Sept.
Coburn, S. S., Hawthorn, Vic. Field-gate	14288	28 Nov., 1901	71	4 Sept.
Cochrane, W. H., Otahuiti, N.Z. Yoking horses	15189	29 July	67	21 Aug.*
Cockburn, J. A., and others, Lewisham, N.S.W. Spark-arrester	15167	24 July	63	7 Aug.*
Collins, E., Invercargill, N.Z. Hedge-clipper	15231	7 Aug.	67	21 Aug.*
Collins, W. A., Wanganui, N.Z. Holding leg of cow	15425	19 Sept.	78	2 Oct.*
Collins, W. E., and another, Wanganui, N.Z. Compressing ensilage	15376	10 Sept.	78	2 Oct.*
Collins, W., Waiwera, N.Z. Animal-trap	15255	12 Aug,	67	21 Aug.*
Colonial Ammunition Company, Limited, Auckland, N.Z. Wad. (A. C. Whitney)	15435	24 Sept.	..	..
Coltman, R. H., Hunterville, N.Z. Silt-ejector for tank	15281	22 Aug.	78	2 Oct.
Combes, F. H., and another, Auckland, N.Z. (See A. H. Nathan, No. 15403.)				
Cometti, A., Wellington, N.Z. Electric trotting-race starter	14239	19 Nov., 1901	78	2 Oct.
Conroy, E., Ballina, N.S.W. Propeller	15444	25 Sept.	83	16 Oct.*
Conyers, E. A., Melbourne, Vic. Bed-pan	15416	18 Sept.	78	2 Oct.*
Conyers, W., Melbourne, Vic. Operating Venetian blind. (E. A. Powell)	14322	12 Dec., 1901	75	18 Sept.
Cook, F., and another, Foxton, N.Z. Filtering apparatus	14138	21 Oct., 1901	63	7 Aug.
Cooper, A., Wellington, N.Z. Vehicle-wheel lock	15232	7 Aug.	67	21 Aug.*
Copeland, L. D., and another, Los Angeles, U.S.A. Utilising heat from slag	15424	19 Sept.	78	2 Oct.
Cosslett, R., Auckland, N.Z. Tap	15202	30 July	67	21 Aug.
Cotton, F., Hornsby, N.S.W. Carbonaceous liquids as fuel	15318	28 Aug.	75	18 Sept.*
Coulthard, T. W., Mangapai, N.Z. Box for carriage of eggs. (J. Fowler)	15404	12 Sept.	78	2 Oct.*
Cowan, J., Edinburgh, Scotland. Water-tube boiler	15148	23 July	63	7 Aug.
Cowley, J. T., Lowell, U.S.A. (See Lamson Store Service Company, Limited, No. 14549.)				
Cowper, F. H. W., Christchurch, N.Z. Damper for letter-copying. (T. N. Rayward)	15431	23 Sept.	78	2 Oct.*
Cox, J. New Glenelg, S.A. Drilling and boring apparatus	15426	16 Sept.	83	16 Oct.
Cozens, G., and another, Auckland, N.Z. Closet	15395	13 Sept.	..	..
Crawford, B., and another, Auckland, N.Z. Ventilator	15481	3 Oct.	87	30 Oct.
Creamer, J., Wellington, N.Z. Plane-iron	15415	18 Sept.	78	2 Oct.*
Cresswell, R., Marlborough, N.Z. Finger for reaping-machine, &c.	14133	18 Oct., 1901	63	7 Aug.
Cross, C., Waitangi, N.Z. Platform for bushfelling	15450	26 Sept.	83	16 Oct.
Croxford, G., Dunedin, N.Z. Lead-headed nail	15214	31 July	67	21 Aug.*
Cunningham, C. S., and another, Melbourne, Vic. Rowing-machine for physical exercise	15439	20 Sept.	83	16 Oct.*

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

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Currie, F., and another, Mount Eden, N.Z. Snatch-block ..	15252	12 Aug. ..	67	21 Aug*
Curtis, R., Ongarue, N.Z. Suspender	15083	1 July ..	71 78	4 Sept.* 2 Oct.
Cutten, F. A., Dunedin, N.Z. Securing bush to tumbler-shaft of bucket-dredge	15180	25 July ..	..	..
Dade, H. E., New York, U.S.A. Binder for loose sheets of paper ..	15225	4 Aug. ..	75	18 Sept.
Dando, P. H., Whangarei, N.Z. Chamber utensils	15356	4 Sept. ..	75	18 Sept.*
Danks, T., Christchurch, N.Z. Bending sheet-metal tubes ..	15382	9 Sept. ..	83	16 Oct.
Darby, T. C., T. A., and S. C., Wickford Junction, Essex, Eng. Implement for breaking-up land	15314	27 Aug. ..	..	..
Davenport, E. F. Melrose, U.S.A. (See United Shoe Machinery Company, No. 15203.)				
Davidson, W. L., Cheviot, N.Z. Preventing extraction of letters from letter-boxes	15105	10 July ..	60	24 July.*
Davis, A. F., San Francisco, U.S.A. Detachable boot-heel. (M. L. Hansen)	15336	30 Aug. ..	75	18 Sept.
Davis, G. F. F., and another, Christchurch, N.Z. Plate ..	15130	18 July ..	63	7 Aug.*
Davy, K., Wanganui, N.Z. Umbrella	15300	16 Aug. ..	71	4 Sept.*
Deane, T., Christchurch, N.Z. Packing tea, &c.	15173	24 July ..	63	7 Aug.*
De Mole, L. E., Brighton, Vic. Automatically operating telephone exchange	15353	4 Sept. ..	75	18 Sept.*
Desmond, W., Outram, N.Z. Lamp-bracket	15278	21 Aug. ..	78	2 Oct.*
Diddams, W. H., Greytown North, N.Z. Vehicle mud-guard ..	15297	25 Aug. ..	71	4 Sept.*
Dimant, E., Melbourne, Vic. Divided sole for boots, &c. ..	15101	10 July ..	60	24 July.*
Donkin, H., Wellington, N.Z. Collapsible butter, &c., box ..	15186	29 July ..	67	21 Aug.*
Douglas, A., Otahuhu, N.Z. Candle-stick	15227	7 Aug. ..	67	21 Aug.*
Dudley, J. D., Pukerau, N.Z. Gold-saving appliance	14001	13 Sept., 1901..	57	10 July.
Dunbar, A., South Melbourne, Vic. Feed-water heater. (J. Macartney)	15157	24 July ..	63	7 Aug.*
Dunne, R., Dunedin, N.Z. Mitre-cutting machine	15243	8 Aug. ..	67	21 Aug.*
Dunne, R., Dunedin, N.Z. Mitre-cutting machine	15176	23 July ..	63	7 Aug.*
Dunne, R., Dunedin, N.Z. Hinge	15138	17 July ..	63	7 Aug.*
Earle, M., Gisborne, N.Z. Knife-cleaner	15235	2 Aug. ..	67	21 Aug.*
Easdown, R. H., Mount Macdonald, N.S.W. Mail-bag fastener ..	15077	3 July ..	63	7 Aug.
Ede-Clendinnen, W. A., Glenferrie, Vic. Tobacco-pipe	15384	11 Sept. ..	78	2 Oct.
Elder, W. K., and others, Auckland, N.Z. Ditching-plough ..	15251	12 Aug. ..	71	4 Sept.
Ellis, P., Wellington, N.Z. Rotary engine	15274	20 Aug. ..	71	4 Sept.*
England, R. W., Christchurch, N.Z. Chimney	14317	9 Dec., 1901 ..	75	18 Sept.
England, R. W., Christchurth, N.Z. (See A. J. Park, No. 14330.)				
Eppler, A., Allston, U.S.A. (See United Shoe Machinery Company, No. 15103.)				
Erickson, J., and others, Chicago, U.S.A. (See Strowger Automatic Telephone Exchange, No. 15422.)				
Erickson, C. J., and others, Chicago, U.S.A. (See Strowger Automatic Telephone Exchange, No. 15422.)				
Esse, C. E. A., Ormskirk, Eng. Inner tube of tire	15121	17 July ..	63	7 Aug.
Evans, W. J., and another, Brisbane, Queensland. Dredge-bucket..	15437	24 Sept. ..	..	..
Fairbanks, Morse, and Co., Chicago, U.S.A. Gas-generator. (F. G. Hobart)	15442	25 Sept. ..	83	16 Oct.
Fennessy, T., Port Melbourne, Vic. Roller for swampy ground, &c.	15075	3 July ..	60	24 July.*
Fessenden, R. A., Manteo, U.S.A. (See E. Waters, jun., Nos. 15374, 15375, 15394.)				
Fiddes, J. A., Dunedin, N.Z. Propelling, &c., boats	15432	23 Sept. ..	78	2 Oct.*
Firth, T., Wellington, N.Z. Wheel-lock	15369	9 Sept. ..	75	18 Sept.*
Firth, T., Wellington, N.Z. Wheel-lock	15223	6 Aug. ..	67	21 Aug.
Flameless Gaslight Company, Limited, London, Eng. Incandescence gas or vapour lighting. (W. Hooker)	15124	17 July ..	63	7 Aug.*
Fleming, M. W., Milton, N.Z. Portable truck and hoist ..	15408	13 Sept. ..	78	2 Oct.*
Fleming, W. M., Milton, N.Z. Goods-elevator	15335	30 Aug. ..	75	18 Sept.*
Foley, M., and others, Auckland, N.Z. Advertising	15184	25 July ..	71	4 Sept.*
Foreign McKenna Process Company, Milwaukee, U.S.A. Reshaping rolled products. (D. H. Lentz.)	15327	26 Aug. ..	75	18 Sept.
Forwood, H., and others, Christchurch, N.Z. Securing hat to head	15464	29 Sept. ..	83	16 Oct.
Fowler, J., Whangarei, N.Z. (See T. W. Coulthard, No. 15404.)				
Francis, J., Waltham, N.Z. Cramp for match-boarding.. ..	15108	11 July ..	..	..
Fraser, J., Feilding, N.Z. Rheumatics cure	15371	9 Sept. ..	75	18 Sept.*
Freeman, E. T., Boston, U.S.A. (See United Shoe Machinery Company, No. 15205.)				
Freeth, J. C., and another, Tauranga, N.Z. Fire-escape ..	14079	28 Sept., 1901..	57	10 July.
Galbraith, D. R. S., Auckland, N.Z. New milk food	15368	6 Sept. ..	75	18 Sept.*
Gare, G. W., and another, Waipori, N.Z. Removing clay from dredge-bucket	15175	23 July ..	63	7 Aug.*
Garrard, C. G., Birmingham, Eng. Cycle-driving gear	15149	23 July ..	67	21 Aug.
Garratt, T. A., Lyttelton, N.Z. Non-refillable bottle	15326	26 Aug. ..	75	18 Sept.*
Garrett, W. A., Auckland, N.Z. Wire mattress	15357	3 Sept. ..	83	16 Oct.
Gaudet, F. M., London, Eng. Target	15068	2 July ..	57	10 July.
Gaudin, H. H., and another, Christchurch, N.Z. Acetylene gas-lamp	15218	1 Aug. ..	67	21 Aug.*
George, G., Rangiora, N.Z. Bottle	15192	28 July ..	67	21 Aug.*
Gibbons, W. G., Leytonstone, Eng. Washing-machine	14036	4 April, 1901..	60	24 July.

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

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Gibbs, R. W., and another, Nelson, N.Z. Truss	15381	8 Sept.	78	2 Oct.
Gifford, E., and another, Auckland, N.Z. Wire-strainer, &c.	15253	15 Aug.	83	16 Oct.*
Gifford, G. H., Lynn, Massachussetts, U.S.A. (See United Shoe Machinery Company, No. 15228.)				
Giles, F., St. Kilda, Vic. Roofing nail and screw	15247	14 Aug.	71	4 Sept.*
Goosman, G., Mangare, N.Z. Shoulder-strap for bags, &c.	15196	28 July	67	21 Aug.*
Gore, W. H., and another, Wingatui, N.Z. Apparatus for boiling eggs	15303	22 Aug.	71	4 Sept.*
Goss, W. G., Lower Hutt, N.Z. Exhausting air	15324	29 Aug.	75	18 Sept.*
Gossling, P. J., Dunedin, N.Z. Cigar-cutter, match-holder, and advertising device	15256	12 Aug.	67	21 Aug.*
Gossling, P. J., Dunedin, N.Z. Hairdresser's rack, &c.	15217	1 Aug.	67	21 Aug.*
Gowlland, G. L., Ontario, Canada. Prepayment and recording current-meter	15100	10 July	60	24 July.
Graham, J. M., Gore, N.Z. Fire-alarm	15407	17 Sept.	78	2 Oct.*
Gray, A., Manapouri Station, N.Z. Claw-hammer and staple-drawer	15265	15 Aug.	71	4 Sept.*
Gray, A., Manapouri Station, N.Z. Saddle tool-bag	15266	15 Aug.	71	4 Sept.*
Gray, A., Manapouri Station, N.Z. File, wire-twister, and rule	15267	15 Aug.	71	4 Sept.*
Grayson, L. W., and another, Melbourne, Vic. Rowing-machine for physical exercise	15439	20 Sept.	83	16 Oct.*
Grindrod, C. E., and others, Kingston, N.S.W. Spark-arrester	15167	24 July	63	7 Aug.*
Griswold, N. W., Honolulu, Hawaii. Watering-trough	15089	5 July	63	7 Aug.
Grönberg, A., Wasa, Finland. Furnace	15268	15 Aug.	71	4 Sept.
Gwillim, D., Toorak, Vic. Indoor games	15341	2 Sept.	75	18 Sept.*
Haar, F., Ashburton, N.Z. Sewing-palm	14333	16 Dec., 1901	71	4 Sept.
Hadaway, J. B., Brockton, U.S.A. (See United Shoe Machinery Company, No. 15208.)				
Hamilton, J. A., St. Peter's, S.A. Concentrating, &c., table	15421	19 Sept.	78	2 Oct.*
Hammond, H., Aratapu, N.Z. Preventing rubbish passing into tanks	15129	18 July	71	4 Sept.
Hampson, F. G., Chelsea, Eng. (See Automatic Aerator Patents, Limited, No. 15134.)				
Hancock, J. N., Centre Bush, N.Z. Envelope	15269	18 Aug.	71	4 Sept.*
Hanley, J., Gore, N.Z. Car-coupling	15289	19 Aug.	71	4 Sept.*
Hansen, M. L., San Francisco, U.S.A. (See A. F. Davis, No. 15336.)				
Harnish, K., St. Petersburg, Russia. (See American Tobacco Company, No. 15073.)				
Harvey, W., Auckland, N.Z. Milk-straining pan	15299	22 Aug.	71	4 Sept,
Heatley, G. S., Morpeth, Eng. Bedstead and mattress	15283	22 Aug.	71	4 Sept.
Heffer, S. J., Wellington, N.Z. Candle-holder	15154	23 July	63	7 Aug.
Henderson, F., Dunedin, N.Z. Dredge-screen	15197	29 July	71	4 Sept.*
Henrici, W. A. E., Berlin, Germany. Rotary engine	14351	18 Dec., 1901	63	7 Aug.
Herbert, T., Auckland, N.Z. Ping-pong bat	15032	19 June	60	24 July.
Herdman, W., Christchurch, N.Z. Egg-beater	15400	12 Sept.	78	2 Oct.*
Hicks, T. H., Fort Wayne, U.S.A. Separating mercury, &c., from ore-pulp	15092	10 July	60	24 July.
Hicks, T. H., Fort Wayne, U.S.A. Recovering gold from refractory ores	15093	10 July	60	24 July.
Hicks, T. H., Fort Wayne, U.S.A. Separating mercury from amalgam	15094	10 July	60	24 July.
Hicks, T. H., Fort Wayne, U.S.A. Ore-concentrator	15095	10 July	60	24 July.
Hicks, T. H., Fort Wayne, U.S.A. Single-ball ore-pulveriser	15096	10 July	60	24 July.
Higgie, T. M., Wanganui, N.Z. Scrubber	15454	25 Oct.	94	13 Nov.
Hobart, F. G., Beloit, U.S.A. (See Fairbanks, Morse, and Co., No. 15442.)				
Hodder, C. N., and another, Greymouth, N.Z. Office ruler and blotting-pad	15128	14 July	63	7 Aug.*
Hollis, R., and others, Newtown, N.S.W. Spark-arrester	15167	24 July	63	7 Aug.*
Holmes, R. R., and another, Auckland, N.Z. Wire-strainer, &c.	15253	15 Aug.	83	16 Oct.*
Hooker, W., London, Eng. (See Flameless Gas-light Company, Limited, No. 15124.)				
Hooley, T., Stockport, Eng. (See The Linotype Company, Limited, No. 15414.)				
Hopkirk, J., and another, Hawera, N.Z. Support-bearing for shaft	15147	23 July	..	..
Hornby, F., Liverpool, Eng. Toy or educational device for the young	14407	8 Jan.	71	4 Sept.
Hoskins, G. J., Sydney, N.S.W. Joint for pipe	15386	8 Sept.	78	2 Oct.
Hughan, G., Carterton, N.Z. Handle for milk-can	14145	22 Oct., 1901	63	7 Aug.
Humble, W. H., Geelong, Vic. Valve for gas-compressor	15286	20 Aug.	71	4 Sept.
Humphreys, A. W., Wellington, N.Z. Cycle, &c., brake	15215	2 Aug.	67	21 Aug.
Hunt, F. M., Christchurch, N.Z. Preservative for butter	15295	25 Aug.	75	18 Sept.*
Hunter, J. T., Wellington, N.Z. Electric motor. (B. G. Lamme)	15070	2 July	57	10 July.
Hunter, J. T., Wellington, N.Z. Incandescent mantle. (Plaissetty Mantle Syndicate, Limited—A. M. Plaisetty)	15312	27 Aug.	71	4 Sept.
Hurley, G. A., and another, Wellington, N.Z. Gold-saving appliance	15220	5 Aug.	71	4 Sept.*
Hylard, J., St. Kilda, Vic. Detecting and indicating gas in mine	15320	28 Aug.	75	18 Sept.*
Hylard, J., St. Kilda, Vic. Detecting and testing gas in mine	15321	28 Aug,	75	18 Sept.*
Innes, N. C., Awatuna East, N.Z. Running-out barb-wire	15191	29 July	71	4 Sept.*
International Ore-separating Company, Boston, U.S.A. Separating ore-pulp. (H. F. Campbell)	15099	10 July	63	7 Aug.
Jackson, A. B., and others, Tuparoa, N.Z. Dust, &c., excluder for doors	15222	5 Aug.	67	21 Aug.*

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

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Jackson, G. C., and others, Tuparoa, N.Z. Dust, &c., excluder for doors	15222	5 Aug. ..	67	21 Aug.*
Jackson, J. B., Gisborne, N.Z. Earth-scoop	14306	4 Dec., 1901..	75	18 Sept.
Jennings, E., and others, Christchurch, N.Z. Securing hat to head	15464	29 Sept. ..	83	16 Oct.
Jervis, C. L., Newark-on-Trent, Eng. Potato and seed planter ..	15453	25 Sept. ..	83	16 Oct.
Jesson, W. G., Christchurch, N.Z. Driving-mechanism for cycles ..	15346	2 Sept. ..	75	18 Sept.*
Juriss, W., Christchurch, N.Z. Building-brick	15411	18 Sept. ..	78	2 Oct.*
Johnson, J. T., Waipori, N.Z. Driving dredge by water-power ..	15086	3 July ..	63	7 Aug.*
Johnson, J., Dunedin, N.Z. Pneumatic foot	15199	30 July ..	67	21 Aug.*
Johnston, A., Devonport, N.Z. Electric-alarm thermometer ..	15332	28 Aug. ..	75	18 Sept.*
Jones, A., Onehunga, N.Z. Verandah roof, window-shutter, and sun-shade	14123	10 Oct., 1901 ..	60	24 July.
Jones, H. J., Stratford, N.Z. Liquid seal cover	14749	17 April ..	78	2 Oct.
Keamy, E. N., Auckland, N.Z. Dumb-bell	15271	19 Aug. ..	..	..
Kelleher, D. J., Fairton, N.Z. Detecting and giving alarm of fire ..	14052	24 Sept., 1901..	71	4 Sept.
Kelly, R. D., Pigeon Bay, N.Z. Outrigger draw-gear	15254	15 Aug. ..	67	21 Aug.*
Keith, A. E., and others, Chicago, U.S.A. (See Strowger Automatic Telephone Exchange, No. 15422.)				
Kennedy, R., and another, Glasgow, Scotland. Milking apparatus..	15151	23 July ..	67	21 Aug.
Keon, W. H., and another, Dunedin, N.Z. Fire-escape ..	15261	15 Aug. ..	78	2 Oct.*
Keon, W. H., Dunedin, N.Z. Pipe coupling	15349	4 Sept. ..	75	18 Sept.*
Keon, W. H., and another, Dunedin, N.Z. Water-closet cistern ..	15262	15 Aug. ..	78	2 Oct.*
Kernbaum, J. P., South Yarra, Vic. Mail-bag lock	14111	10 Oct., 1901 ..	63	7 Aug.
Kerr, J., Yering, Vic. Milk-strainer	15292	23 Aug. ..	71	4 Sept.*
Kerr, J., Yering, Vic. Milk-cooler	15293	23 Aug. ..	71	4 Sept.*
Keys, R. J., Oamaru, N.Z. Patty-pan	15342	2 Sept. ..	75	18 Sept.
Keyte, R., Whangarei, N.Z. Indicating change in temperature ..	14198	6 Nov., 1901..	67	21 Aug.
Kilburn, J. F., Toorak, Vic. Wire-strainer	15123	17 July ..	63	7 Aug.*
Killingsworth, F. H., and another, Christchurch, N.Z. Boot, &c., polisher	15305	25 Aug. ..	71	4 Sept.*
Knapp, P. A., Grantville, U.S.A. (See the American Amalgamating Company, No. 15152.)				
Laffey, J., and another, Dunedin, N.Z. Fire-escape and extinguisher	15116	14 July ..	63	7 Aug.*
Laffey, J., and another, Dunedin, N.Z. Fire-escape, extinguisher, and alarm	15155	21 July ..	63	7 Aug.*
Lambert, F., Waikaremoana, Hawke's Bay, N.Z. Tension bridge ..	15238	8 Aug. ..	67	21 Aug.*
Lambert, F., Waikaremoana, Hawke's Bay, N.Z. Canal for harbour bar removal	15240	8 Aug. ..	67	21 Aug.*
Lamme, B. G., Pittsburg, U.S.A. (See J. T. Hunter, No. 15070.)				
Lamson Store Service Company, Limited, London, Eng. Cash-carrier. (J. T. Cowley)	14549	20 Feb. ..	71	4 Sept.
Langstone, C. W., Wellington, N.Z. Plug-brick	15272	20 Aug. ..	71	4 Sept.*
Lashlie, C., Christchurch, N.Z. Hat and clothes brush ..	15365	5 Sept. ..	75	18 Sept.*
Lawless. (See under Massey-Lawless.)				
Lawrence, W. H., and another, Glasgow, Scotland. Milking apparatus	15151	23 July ..	67	21 Aug.
Lawrence, W. H., Christchurch, N.Z. Bench for pot plants ..	14264	21 Nov., 1901..	60	24 July.
Lee, W., and another, Dunedin, N.Z. Breaking clay in sluice-boxes	15182	24 July ..	67	21 Aug.*
Leitch, W., Malvern, Vic. Manufacture of sweetmeats	15158	24 July ..	63	7 Aug.
Lentz, D. H., Joliet, U.S.A. (See Foreign McKenna Process Company. No. 15327.)				
Lindsay, J., Burnside, N.Z. Rabbit-crate	15367	8 Sept. ..	75	18 Sept.*
Linotype Company, Limited, London, Eng. Printing in gold, &c., powders. (T. Hooley)	15414	18 Sept. ..	78	2 Oct.
Loader, C. A., Dunedin, N.Z. Spraying-machine	14313	4 Dec., 1901..	75	18 Sept.
Lodge, O. J., and others, Birmingham, Eng. Receiver for wireless telegraphy	15383	11 Sept. ..	78	2 Oct.
Lorie, A. F. W., Dunedin, N.Z. Sash-fastener	15145	19 July ..	63 78	7 Aug.* 2 Oct.
Love, J. T., Wellington, N.Z. Milk-can lid	15250	14 Aug. ..	67	21 Aug.*
Lowrey, L. E., and another, Auburn, Vic. Advertising attachment to incandescent lamps	15090	10 July ..	60	24 July.*
Ludbrook, E. R., and others, Tuparoa, N.Z. Dust, &c., excluder for doors	15222	5 Aug. ..	67	21 Aug.*
Ludington, F. J., Waterbury, U.S.A. (See United Cigarette-machine Company, No. 15249.)				
Luxford, E. H., Fitzroy, Vic. Combined mattress or bed and bolster	15355	4 Sept. ..	75	18 Sept.*
Macartney, J., Sydney, N.S.W. (See A. Dunbar, No. 15157.)				
Macdonald, St. C. N. H., Auckland, N.Z. Rotary engine ..	15132	18 July ..	63	7 Aug.*
Macky, J. J., Auckland, N.Z. Nut-lock	15280	19 Aug. ..	71	4 Sept.*
Maclean, J., Wanganui, N.Z. Horse-cover	13906	14 Aug., 1901..	67	21 Aug.
Mallett, J., Devonport, N.Z. Spark-arrester	15315	27 Aug. ..	75	18 Sept.*
Manners, S. H., Norwood, S.A. (See H. Thatcher, No. 15317.)				
Manson, T. H., and another, Nelson, N.Z. Truss	15381	8 Sept. ..	78	2 Oct.
Marriott, W., and another, Wanganui, N.Z. Match-striker ..	14442	17 Jan. ..	60	24 July.
Maslin, E., Marseilles, France. Steam-boiler furnace	15079	3 July ..	60	24 July.
Mason, J. B., Dunedin, N.Z. Concentrating-table	15372	6 Sept. ..	75	18 Sept.
Mason, J. J., Timaru, N.Z. Wash-tub, and empyting same ..	15181	28 July ..	71	4 Sept.*
Massey-Lawless, H. J. K., and another, Wingatui, N.Z. Apparatus for boiling eggs	15303	22 Aug. ..	71	4 Sept.*
Massey, A. J., Gisborne, N.Z. New indoor game	15107	11 July ..	60	24 July.*
Massie, J. G., Belleville, U.S.A. Illuminating compound ..	15233	4 Aug. ..	67	21 Aug.

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

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Maxted, T. D'A. C., Blenheim, N.Z. Closet-seat lid	15409	15 Sept.	78	2 Oct.*
May, H., and another, Meningie, S.A. Sheep-shears	15161	24 July	63	7 Aug.*
Mayo, B. F., Salem, U.S.A. (See United Shoe Machinery Company, No. 15413.)				
McArthur, D. W., Paeroa, N.Z. Paper-feeder for typewriter	15430	23 Sept.	78	2 Oct.*
McCormack, T., and others, Dunedin, N.Z. Fire-escape ladder	15146	19 July	63	7 Aug.
McDonald, H. E., Wellington, N.Z. Vehicle-wheel	15389	12 Sept.	78	2 Oct.*
McDonald, H. E., Wellington, N.Z. Cuff-protector	15448	26 Sept.	83	16 Oct.*
McGee, T., Ashburton, N.Z. Sheep-shears	15066	1 July	57	10 July.*
McGowan, H., Randwick, N.S.W. Electric lamp	15410	18 Sept.	78	2 Oct.*
McIntyre, C., and others, Wellington, N.Z. Ping-pong net	15344	3 Sept.	75	18 Sept.*
McIvor, J. F., Dunedin, N.Z. Preventing loss of dredge-bucket on breaking of a connection	15082	2 July	60	24 July.*
McKay, J., Kilmore, Vic. Target score-indicator	15354	4 Sept.	75	18 Sept.*
McKenzie, A. W., and another, Timaru. Opening bivalves	15239	8 Aug.	67	21 Aug.*
McKenzie, J. B., and another, Timaru. Opening bivalves	15239	8 Aug.	67	21 Aug.*
McLellan, N. B., Bannockburn, N.Z. Door-retainer	15428	19 Sept.	78	2 Oct.*
McLennan, T. C., and another, Belfast, N.Z. Non-refillable bottle	15085	5 July	60	24 July.*
McLennan, T. C., and another, Belfast, N.Z. Non-refillable bottle	15106	9 July	60	24 July.*
McLeod, H. N., and another, Wellington, N.Z. Gold-saving apparatus	15220	5 Aug.	71	4 Sept.*
McMillan, T., Wylie's Crossing, N.Z. Window-blind	15427	20 Sept.	78	2 Oct.*
McNaught, W., Alexandra South, N.Z. Animal-trap	15377	3 Sept.	75	18 Sept.*
McNeill, J. K., and another, Wanganui, N.Z. Compressing ensilage	15376	10 Sept.	78	2 Oct.
Metcalfe, W. H., Marrickville, N.S.W. Manufacturing manure from waste animal material	15313	27 Aug.	75	18 Sept.
Metters, J. T., and another, Melbourne, Vic. Open fire-grate	15098	10 July	60	24 July.*
Metters, C. H., and another, Melbourne, Vic. Open fire-grate	15098	10 July	60	24 July.*
Middleton, J., and another, Christchurch, N.Z. Cream cooler and agitator	14370	23 Dec., 1901	75	18 Sept.
Miller, F. A., Lawrence, N.Z. Lifting-jack	15388	12 Sept.	78	2 Oct.
Miller, W. O., and another, Roslyn, N.Z. Fire-escape	15261	15 Aug.	78	2 Oct.*
Miller, W. O., and another, Roslyn, N.Z. Water-closet cistern	15262	15 Aug.	78	2 Oct.*
Mitchell, G., and another, Arizona, U.S.A. Utilising heat from slag	15424	19 Sept.	78	2 Oct.
Mole, de. (See under "De.")				
Montague, F., and another, Dunedin, N.Z. Fire escape and extinguisher	15116	14 July	63	7 Aug.*
Montague, F., and another, Dunedin, N.Z. Fire escape, extinguisher, and alarm	15155	21 July	63	7 Aug.*
Moroney, J., Hastings, N.Z. Girth and surcingle	14629	15 March	60	24 July.
Moyes, J. A., and another, Hawera, N.Z. Support-bearing for shaft	15147	23 July	..	..
Muirhead, A., and others, Shortlands, Eng. Receiver for wireless telegraphy	15383	11 Sept.	78	2 Oct.
Mumford, F. T., Kalgoorlie, W.A. Electrolytical treatment of ores and slimes	14228	14 Nov., 1901	67	21 Aug.
Munro, J., and another, Wellington, N.Z. Potato-chipper	15402	16 Sept.	78	2 Oct.
Munro, P. J. H., and another, Tauranga, N.Z. Fire-escape	14079	28 Sept., 1901	57	10 July.
Murray, A. C., Cromwell, N.Z. Frying-pan lid and strainer	14120	14 Oct., 1901	63	7 Aug.
Murray, A. C., Cromwell, N.Z. (See A. J. Park, No. 15361.)				
Murray, J., Fairlie, N.Z. Clothes line and peg	14465	24 Jan.	63	7 Aug.
Nathan, A. H., Auckland, N.Z. Packing tea, &c. (F. H. Combes and W. F. Tucker)	15403	16 Sept.	78	2 Oct.*
Neagle, J., Dannevirke, N.Z. Lead-bag for racehorse	14398	4 Jan.	71	4 Sept.
Nethery, J. W., Indianapolis, U.S.A. (See H. L. Wallace, No. 15423.)				
Neustadt, M., Sydney, N.S.W. Delivering disinfectant to charge of water. (J. L. Wade)	15210	2 Aug.	67	21 Aug.
Nichol, G. M., Campbelltown, N.Z. Bicycle-pedal	15140	17 July	63	7 Aug.*
Nicholas, C. E., Matlock, Vic. Steam-condenser	14583	6 March	60	24 July.
Nicholson, H. A., Bluff, N.Z. Oil and gas motor	15290	19 Aug.	71	4 Sept.*
Nicol, W., and another, Invercargill, N.Z. Candlestick	15179	24 July	67	21 Aug.*
Nicol, W., Invercargill, N.Z. Race starter and timer	14014	19 Sept., 1901	67	21 Aug.
Nicol, W., and another, Invercargill, N.Z. Candlestick	15119	11 July	63 75	7 Aug.* 18 Sept.
Nicol, W., Invercargill, N.Z. Hair-curler	15288	18 Aug.	71	4 Sept.*
Nicol, W., and another, Invercargill, N.Z. Candlestick	15308	22 Aug.	71	4 Sept.*
Nicolson, S., Gore, N.Z. Knife cleaner and sharpener	15276	20 Aug.	71	4 Sept.*
Nightingale, A., Auckland, N.Z. Couch	15156	22 July	63	7 Aug.*
North, T. W., Christchurch, N.Z. Horse-collar	15380	11 Sept.	75	18 Sept.*
North, T. W., and others, Christchurch, N.Z. Securing hat to head	15464	29 Sept.	83	16 Oct.
O'Connell, E. T., and others, Dunedin, N.Z. Fire-escape ladder	15146	19 July	63	7 Aug.
Odering, J. W., and another, Christchurch, N.Z. Connecting bicycles with trailed carriage	15177	26 July	63	7 Aug.
Odering, J. W., and another, Christchurch, N.Z. Motor attachment to bicycles	15306	25 Aug.	75	18 Sept.*
Ollerenshaw, W., and another, Dunedin, N.Z. (See A. F. Roy, No. 15263.)				
Orr, J., jun., Temuka, N.Z. Holding bags for filling	15120	14 July	63	7 Aug.
O'Rourke, T. M., and another, Matakitaki, N.Z. Dredge-screen and elevator	15153	23 July	63	7 Aug.*
Painter, F. W., Christchurch, N.Z. Bicycle-holder	15284	22 Aug.	71	4 Sept.*
Palethorpe, F. C., and others, Wellington, N.Z. Ping-pong net	15344	3 Sept.	75	18 Sept.*

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

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Park, A. J., Dunedin, N.Z. Chimney. (R. W. England) ..	14330	11 Dec., 1901 ..	75	18 Sept.
Park, A. J., Dunedin, N.Z. Chair. (A. C. Murray)	15361	5 Sept. ..	75	18 Sept.*
Parker, A. W., Auckland, N.Z. Electric railway	15446	20 Sept. ..	83	16 Oct.*
Parker, J., and others, Auckland, N.Z. Advertising	15184	25 July ..	71	4 Sept.*
Parsons, Hon. C. A., Newcastle-on-Tyne, Eng. Marine steam-turbine	15351	4 Sept. ..	75	18 Sept.
Paterson, F. W., Dunedin, N.Z. Vote-recorder	15174	23 July ..	63	7 Aug.*
Payne, F. W., Dunedin, N.Z. Tailings-elevator	15343	30 Aug. ..	78	2 Oct.
Pearson, G. L., Lincoln, N.Z. Boring and artesian-well driving ..	14904	23 May ..	63	7 Aug.
Peek, T. G., and others, Auckland, N.Z. Fire-escape	15387	8 Sept. ..	78	2 Oct.*
Pegler, F., Greymouth, N.Z. Blackboard-easel	14825	29 April ..	60	24 July.
Penny, C. W., Te Akatea, N.Z. Pearl-fishing boat	15275	20 Aug. ..	71	4 Sept.*
Pepperell, J. W., and another, Belfast, N.Z. Non-refillable bottle..	15085	5 July ..	60	24 July.*
Pepperell, J. W., and another, Belfast, N.Z. Non-refillable bottle ..	15106	9 July ..	60	24 July.*
Perdriau, E. C., and another, Melbourne, Vic. Detachable boot-sole	15279	21 Aug. ..	71	4 Sept.*
Perks, J., and another, Christchurch, N.Z. Attachment to range ..	15136	15 July ..	63	7 Aug.*
Peterson, P., Timaru, N.Z. Life-saving appliance. (L. Rosengren)	15338	1 Sept. ..	83	16 Oct.
Pfaff, A., Melbourne, Vic. Preserving eggs	15322	28 Aug. ..	75	18 Sept.*
Phillimore, A. E., Bath, Eng. Bedstead	15226	7 Aug. ..	67	21 Aug.*
Phillips, E., Melbourne, Vic. Explosive. (E. Steele)	14160	24 Oct., 1901 ..	60	24 July.
Philpott, T. S., Wellington, N.Z. Non-refill bottle	14050	25 Sept., 1901..	63	7 Aug.
Pinnock, J. M., Waikouaiti, N.Z. Malted food	15114	11 July ..	63	7 Aug.*
Plaissetty Mantle Syndicate, Limited, London, Eng. (See J. T. Hunter, No. 15312.)				
Plaissetty, A. M., Paris, France. (See J. T. Hunter, No. 15312.)				
Pomeroy, J., North Invercargill, N.Z. Fountain pen	15087	3 July ..	60	24 July.*
Porter, J. W., Williamstown, Vic. Operating moving target ..	15230	7 Aug. ..	67	21 Aug.*
Potter, F. S., Auckland, N.Z. Vehicle-spring	15144	17 July ..	63	7 Aug.*
Powell, J. H., Caulfield, Vic. Indoor table game	15224	4 Aug. ..	67	21 Aug.*
Powell, E. A., North Fitzroy, Vic. (See W. Conyers, No. 14322.)				
Poynter, J. B., Wellington, N.Z. Picking up balls	15133	18 July ..	63	7 Aug.*
Purvis, J., and another, London, Eng. Artificial stone.. ..	15069	2 July ..	57	10 July.
Quilter, T. F., and another, Waipori, N.Z. Removing clay from dredge-bucket	15175	23 July ..	63	7 Aug.*
Rakowitzky, S. D. S., and another, Vilna, Russia. (See American Tobacco Company, No. 15071.)				
Rakowitzky, S. S. D., and another, Vilna, Russia. (See American Tobacco Company, No. 15071.)				
Rakowitzky, S. D. S., Vilna, Russia. (See American Tobacco Company, No. 15072.)				
Rawson, P., and another, Christchurch, N.Z. Boot-polisher ..	15305	25 Aug. ..	71	4 Sept.*
Rayson, P., Elsternwick, Vic. Spanner attachment	15159	24 July ..	63	7 Aug.
Raymond, K., Invercargill, N.Z. Hair-curler	15111	8 July ..	60	24 July.*
Rayward, H. H., and another, Wellington, N.Z. Distributing sewage into filter-beds. (G. E. Ridgway)	15417	18 Sept. ..	78	2 Oct.
Rayward, H. H., and another, Wellington, N.Z. Self-flushing time-valve. (G. E. Ridgway)	15418	18 Sept. ..	78	2 Oct.
Rayward, T. N., London, Eng. (See F. H. Cowper, No. 15431.)				
Reece, W., and others, Christchurch, N.Z. Securing hat to head ..	15464	29 Sept. ..	83	16 Oct.
Reeves, A. E., and another, Mataura, N.Z. Flax-scutcher ..	14034	21 Sept., 1901..	75	18 Sept.
Reid, W. G., and another, Dunedin, N.Z. Secateur	15200	30 July ..	67	21 Aug.*
Reilly, J. G., Melbourne, Vic. Window sash-fastener	15441	25 Sept. ..	83	16 Oct.*
Restorck, E. J., Richmond, Vic. Attaching woven-wire to bedsteads	15168	24 Feb.† ..	63	7 Aug.*
Ridgway, G. E., Brentwood, Eng. (See E. S. Baldwin and H. H. Rayward, Nos. 15417, 15418.)				
Riley, W. T., Sydney, N.S.W. Woven-wire mattress	14219	14 Nov., 1901..	60	24 July.
Rillstone, C., Dunedin, N.Z. Spark-preventer, &c.	15112	8 July ..	60	24 July.*
Risstrom, E. O., Rushworth, Vic. Showstand for axe, &c. ..	15385	11 Sept. ..	78	2 Oct.
Robb, G. M., Potts Point, N.S.W. (See A. K. Smith, No. 15393.)				
Roberts, H., and another, Auckland, N.Z. Lock	15183	24 July ..	67	21 Aug.*
Roberts, L., Dunedin, N.Z. Dress-cutting chart	15241	6 Aug. ..	67	21 Aug.*
Robertson, C. M., Christchurch, N.Z. Hair-restorer	15194	31 July ..	67	21 Aug.*
Robertson, L. D., Sandymount, N.Z. Spring-hook	15328	26 Aug. ..	75	18 Sept.*
Robertson, J. P., North Sydney, N.S.W. Electric fire-alarm ..	15165	24 July ..	71	4 Sept.
Robertson, M. J., Geelong, Vic. Cash-carrier	15277	21 Aug. ..	71	4 Sept.
Robinson, E. E., and others, Birmingham, Eng. Receiver for wireless telegraphy	15383	11 Sept. ..	78	2 Oct.
Robinson, H. A., and another, Dunedin, N.Z. Wire mattress and bedstead	15333	30 Aug. ..	75	18 Sept.*
Robinson, S., and another, Dunedin, N.Z. Wire mattress and bedstead	15333	30 Aug. ..	75	18 Sept.*
Rogers, J., and another, Greymouth, N.Z. Ruler and blotting-pad..	15128	14 July ..	63	7 Aug.*
Rose, J., Dunedin, N.Z. Horse-race starting-machine	14103	4 Oct., 1901 ..	63	7 Aug.
Rose, J. F., Takaka, Nelson, N.Z. Protecting river-banks ..	15113	12 July ..	71	4 Sept.
Rosengren, L., Trilleborg, Sweden. (See P. Petersen, No. 15338.)				
Ross, A. H., Rata, Rangitikei, N.Z. Docking, &c., lambs ..	14273	25 Nov., 1901..	75	18 Sept.
Ross, F., Mohaka, N.Z. Cough-mixture	15270	18 Aug. ..	75	18 Sept.
Ross, H. I. M., Dunedin, N.Z. Double-current ventilator ..	14884	14 May ..	60	24 July.
Ross, M. L., Paris, France. Burner	15347	3 Sept. ..	75	18 Sept.
Rouse, T., and another, Middlesex, Eng. Artificial stone ..	15069	2 July ..	57	10 July.
Rowe, W., Marrickville, N.S.W. Railway-traffic control system ..	15316	28 Aug. ..	75	18 Sept.

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

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Roy, A. F., Dunedin, N.Z. Waterproofing composition. (J. Taylor and W. Ollerenshaw)	15263	15 Aug. ..	71	4 Sept.*
Rugg, J., Auckland, N.Z. Broom-rack	15401	11 Sept. ..	78	2 Oct.*
Russell, G., and another, Dunedin, N.Z. Water-sprinkling cart ..	15473	30 Sept. ..	83	16 Oct.*
Rutherfurd, J. S., Nelson, N.Z. Medicated biscuit	15074	2 July ..	57	10 July.
Sadlier, J., Waianiwa, N.Z. Wire-strainer	15264	15 Aug. ..	71	4 Sept.*
Sawyer, C., Wellington, N.Z. Paint-brush binder	15319	28 Aug. ..	..	..
Schwartz, J. S., and others, Wellington, N.Z. Ping-pong net ..	15344	3 Sept. ..	75	18 Sept.*
Scoringe, P., Timaru, N.Z. Trouser-clip	15359	4 Sept. ..	78	2 Oct.*
Scott, J. R., Boston, U.S.A. (See United Shoe Machinery Company, No. 15207.)				
Scott, R., Waipukurau, N.Z. Attachment to bedstead ..	15163	24 July ..	63	7 Aug.
Senior, A. I., Wellington, N.Z. Reversing motion of steam-engine	15285	22 Aug. ..	71	4 Sept.*
Seymour, D., Napier, N.Z. Siphon	15302	26 Aug. ..	71	4 Sept.
Sharples, D. T., Winchester, U.S.A. Mechanical milking ..	15309	27 Aug. ..	71	4 Sept.
Shaw, W. E., Sydney, N.S.W. Tobacco-box	15209	2 Aug. ..	67	21 Aug.*
Shedd Electric and Manufacturing Company, The, New York, U.S.A. Ventilator. (T. R. Weyant)	15443	25 Sept. ..	83	16 Oct.
Shepherd, J., Dunedin, N.Z. Dredging machinery	15097	10 July ..	..	..
Shipway, C. J., and another, Meningie, S.A. Sheep-shears ..	15161	24 July ..	63	7 Aug.
Sigley, J., Gisborne North, N.Z. Weather-proof newspaper-box ..	15236	2 Aug. ..	67	21 Aug.*
Sigley. J., Hokitika, N.Z. Gold-saving apparatus	15358	5 Sept. ..	75	18 Sept.*
Sigley, J. R., Gisborne, N.Z. Concrete tank	15301	22 Aug. ..	71	4 Sept.*
Silk, M. B., Sydney, N.S.W. Cloth-shrinking apparatus ..	15166	24 July ..	63	7 Aug.
Simpson, F., Port Chalmers, N.Z. Attachment to screw-cutting lathe	15187	29 July ..	67	21 Aug.*
Simpson, G., Richmond, Vic. Sash-fastener	15337	30 Aug. ..	75	18 Sept.
Sinnet, R. H., Wellington, N.Z. Dredge-screen	15325	29 Aug. ..	75	18 Sept.*
Slater, E. H., Auckland, N.Z. Cutting-tool of planing-machine ..	14213	12 Nov., 1901 ..	63	7 Aug.
Smaill, J., Port Chalmers, N.Z. Inlet of suction-pipe	15334	30 Aug. ..	75	18 Sept.*
Smart, A., jun., and others, Auckland, N.Z. Fire-escape ..	15387	8 Sept. ..	78	2 Oct.*
Smith, A. A. S., Aberdeen, N.S.W. Mail-bag lock	15162	24 July ..	63	7 Aug.
Smith, A. D., Edinburgh, Scotland. Buffer-coupler	15248	14 Aug. ..	67	21 Aug.
Smith, A. K., Sydney, N.S.W. Table-tennis, &c., scorer. (G. M. Robb)	15393	10 Sept. ..	78	2 Oct.
Smith, F., Hokitika, N.Z. Dredging machinery	14349	18 Dec., 1901 ..	75	18 Sept.
Smith, F. E., and others, Greymouth, N.Z. Gold-saving apparatus	15396	13 Sept. ..	78	2 Oct.*
Smith, G. C., St. Kilda, Vic. Screw	15201	30 July ..	67	21 Aug.
Smith, G. J., Greymouth, N.Z. Dust, &c., excluder for doors ..	14274	25 Nov., 1901 ..	57	10 July.
Smith, H. R., and another, Christchurch, N.Z. Sandal ..	15178	25 July ..	67	21 Aug.*
Smith, R. S., Christchurch, N.Z. Attachment to leg of furniture ..	15378	8 Sept. ..	75	18 Sept.*
Smith, S., and another, Christchurch, N.Z. Sandal	15178	25 July ..	67	21 Aug.*
Smyth, E., and another, Kennedy Bay, N.Z. Snatch-block ..	15252	12 Aug. ..	67	21 Aug.*
Snapper, R., Albert Park, Vic. Boot-fastener	15213	2 Aug. ..	67	21 Aug.*
Soper, F., Dunedin, N.Z. Bicycle-crank	15118	14 July ..	63	7 Aug.*
Soutter, A., Buluwayo, South Africa. Non-refillable bottle ..	15346	3 Sept. ..	75	18 Sept.
Sprey, E., New Brighton, N.Z. Boot, &c., fastening	14166	26 Oct., 1901 ..	63	7 Aug.
Staples, L., and another, Christchurch, N.Z. Ventilating boots ..	15399	12 Sept. ..	78	2 Oct.*
Stedman, S. R., Dunedin, N.Z. Cultivator	15438	22 Sept. ..	83	16 Oct.*
Steele, E., Mile Valley, California, U.S.A. (See E. Phillips, No. 14160.)				
Steele, T. J., Auckland, N.Z. Treating clay for road-making ..	15131	18 July ..	63	7 Aug.
Stephenson, C. W., Wellington, N.Z. Patch for bicycle-tire ..	15109	11 July ..	60	24 July.*
Stevenson, T., Dunedin, N.Z. Shaft-bush	15419	17 Sept. ..	78	2 Oct.
Stewart, H. F., Cobram, Vic. Wire-strainer	15198	29 July ..	71	4 Sept.*
Stewart, J. H., and another, Invercargill, N.Z. Candlestick ..	15119	11 July ..	63 75	7 Aug.* 18 Sept.
Stewart, J. H., and another, Invercargill, N.Z. Candlestick ..	15179	24 July ..	67	21 Aug.*
Stewart, J. H., and another, Invercargill, N.Z. Candlestick ..	15308	22 Aug. ..	71	4 Sept.*
Stewart, J. H., Chicago, U.S.A. Shearing-tool	15091	10 July ..	83	16 Oct.
Strowger Automatic Telephone Exchange, Chicago, U.S.A. Automatic Telephone Exchange. (A. E. Keith and J. and C. J. Erickson)	15422	19 Sept. ..	78	2 Oct.
Suckling, R. L., Christchurch, N.Z. Lamp-wick	15307	25 Aug. ..	75	18 Sept.*
Sudholz, F. W., Footscray, Vic. Attachment to plough	15398	13 Sept. ..	78	2 Oct.*
Summerton, F. L., and another, Christchurch, N.Z. Cycle-propelling mechanism	15433	23 Sept. ..	78	2 Oct.*
Swanell, C. T., and another, Dunedin, N.Z. Breaking clay in sluice-boxes	15182	24 July ..	67	21 Aug.*
Symons, J., and another, Foxton, N.Z. Filtering-apparatus ..	14138	21 Oct., 1901 ..	63	7 Aug.
Tandy, C., Wellington, N.Z. Shearing-machine	14244	20 Nov., 1901 ..	71	4 Sept.
Taylor, J., and another, Dunedin, N.Z. (See A. F. Roy, No. 15263.)				
Taylor, J., and another, Mataura, N.Z. Flax-scutcher	14034	21 Sept., 1901 ..	75	18 Sept.
Taylor, W., and another, Sydenham, N.Z. Ventilating boots, &c. ..	15399	12 Sept. ..	78	2 Oct.*
Temperley, E. A., Marton, N.Z. Incubator	15211	2 Aug. ..	..	..
Thatcher, H., Hyde Park, S.A. Attachment to bicycles, boats, &c., for a shade, sail, &c. (S. H. Manners)	15317	28 Aug. ..	75	18 Sept.
Thies, C. E., and another, Auburn, Vic. Advertising attachment to incandescent lamps	15090	10 July ..	60	24 July.*
Thompson, D., Wanganui, N.Z. Capturing moths, &c.	15195	31 July ..	67	21 Aug.*
Tonkin, F. J., Eketahuna, N.Z. Rain-water filter	15340	1 Sept. ..	78	2 Oct.
Topliss, H. J., and another, Christchurch, N.Z. Cream cooler and agitator	14370	23 Dec., 1901 ..	75	18 Sept.

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

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Topliss, H. J., and another, Christchurch, N.Z. Utilising exhaust of gas-engine	15339	1 Sept. ..	83	16 Oct.*
Tosswill, R. D., and another, Upper Matakitaki. Dredge-screen and elevator	15153	23 July ..	63	7 Aug.*
Travers, W. T. L., Wellington, N.Z. Metallic box-making machinery. (F. E. Wattne)	15164	24 July ..	63	7 Aug.*
Traves, J., Russell's Flat, N.Z. Scarifier	15379	8 Sept. ..	75	18 Sept.*
Tripe, J. D., Wanganui, N.Z. Securing doors, windows, &c. ..	15244	11 Aug. ..	67	21 Aug.*
Trotter, C. A., Opunake, N.Z. Range-finder..	14773	19 April ..	71	4 Sept.
Tuck, W. A., jun., Wakefield, N.Z. Wire-strainer	14357	16 Dec., 1901 ..	78	2 Oct.
Tucker, W. F., and another, Auckland, N.Z. (See A. H. Nathan, No. 15403.)				
Turner, G., Blenheim, N.Z. Lacing boots, &c.	15360	5 Sept. ..	83	16 Oct.
Tuttle, W. I., Baltimore, U.S.A. (See American Tobacco Company, No. 15246.)				
Tyrrell, J., jun., Queenstown, N.Z. Pump	15451	26 Sept. ..	83	16 Oct.
Tyree, W., Sydney, N.S.W. Acetylene-gas generator	15447	26 Sept. ..	83	16 Oct.*
Underwood, A., Wellington, N.Z. Games	15193	30 July ..	67	21 Aug.*
United Cigarette-machine Company, London, Eng. Cigarette-machine. (F. J. Ludington)	15249	14 Aug. ..	67	21 Aug.
United Shoe Machinery Company, Boston, U.S.A. Turning boots, &c. (A. Eppler)	15103	10 July ..	60	24 July.*
United Shoe Machinery Company, Boston, U.S.A. Welt-sewing machine. (E. E. Winkley)	15206	2 Aug. ..	67	21 Aug.
United Shoe Machinery Company, Boston, U.S.A. Stitch-separating machine. (J. B. Hadaway)	15208	2 Aug. ..	67	21 Aug.
United Shoe Machinery Company, Boston, U.S.A. Pressing-form for sole-laying machine. (G. H. Gifford)	15228	7 Aug. ..	67	21 Aug.
United Shoe Machinery Company, Boston, U.S.A. Skiving-machine. (E. F. Davenport)	15203	2 Aug. ..	67	21 Aug.*
United Shoe Machinery Company, Boston, U.S.A. Skiving-machine. (C. H. Bayley)	15204	2 Aug. ..	67	21 Aug.*
United Shoe Machinery Company, Boston, U.S.A. Inserting fastenings. (E. T. Freeman)	15205	2 Aug. ..	67	21 Aug.*
United Shoe Machinery Company, Boston, U.S.A. Leather skiving-machine. (J. R. Scott)	15207	2 Aug. ..	67	21 Aug.*
United Shoe Machinery Company, Boston, U.S.A. Assorting nails. (B. F. Mayo)	15413	18 Sept. ..	78	2 Oct.*
Vacuum Cleaner Company, Limited, London, Eng. Extracting dust from carpets. (H. C. Booth)	15150	23 July ..	67	21 Aug.
Vibert, J. P., and another, Auckland, N.Z. Closet	15395	13 Sept. ..	..	..
Wade, J. L., London, Eng. (See M. Neustadt, No. 15210.)				
Walker, J., Dunedin, N.Z. Privy receptacle	15084	4 July ..	..	..
Wallace, H. L., Indianapolis, U.S.A. Valve. (J. W. Nethery) ..	15423	19 Sept. ..	78	2 Oct.
Walters, W. B., Dunedin, N.Z. Producing hydrocarbon gas ..	15260	16 Aug. ..	71	4 Sept.*
Ward, H. W., Dunedin, N.Z. Flushing cisterns	15363	5 Sept. ..	75	18 Sept.*
Wass, A. G., London, Eng. Printers' varnish and ink	15169	22 July ..	63	7 Aug.
Waters, E., jun., Melbourne, Vic. Signalling by electro-magnetic waves. (R. A. Fessenden)	15375	6 Sept. ..	78	2 Oct.
Waters, E., jun., Melbourne, Vic. Signalling by electro-magnetic waves. (R. A. Fessenden)	15394	10 Sept. ..	78	2 Oct.
Waters, E., jun., Melbourne, Vic. Transmission of power by electro-magnetic waves. (R. A. Fessenden)	15374	6 Sept. ..	78	2 Oct.
Waters, W., Auckland, N.Z. Street-sweeper	15143	17 July ..	63	7 Aug.*
Waters, W., Fitzroy, Vic. Rubber pad for horse-shoe	15440	20 Sept. ..	83	16 Oct.*
Watt, B., and another, Balclutha, N.Z. Hydro-carbon gas-generator	15330	1 Sept. ..	78	2 Oct.*
Watt, J., and another, Balclutha, N.Z. Hydro-carbon gas-generator	15330	1 Sept. ..	78	2 Oct.*
Watt, N., Dunedin, N.Z. Spark-arrester	15362	5 Sept. ..	75	18 Sept.*
Wattne, F. E., Stavanger, Norway. (See W. T. L. Travers, No. 15164.)				
Wells, R. F., Melbourne, Vic. Sheep-shears	15282	22 Aug. ..	71	4 Sept.
Wessel, K., St. Paul, U.S.A. Mattress-filling machine	15298	26 Aug. ..	71	4 Sept.
West's Patent Tire-setter Company, Limited, Sydney, N.S.W. (See J. M. Chambers, No. 15078.)				
West, J. B., Rochester, U.S.A. (See J. M. Chambers, No. 15078.)				
Westinghouse, G., Pittsburg, U.S.A. (See J. P. Campbell, No. 15310.)				
Weston, J. S., and others, Greymouth, N.Z. Gold-saving apparatus	15396	13 Sept. ..	78	2 Oct.*
Weylant, T. R., New York, U.S.A. (See The Shedd Electric and Manufacturing Company, No, 15443.)				
Whisker, N. H., and others, Auckland, N.Z. Fire-escape ..	15387	8 Sept. ..	78	2 Oct.*
Whitehouse, J., Waihi, N.Z. Spark-arrester	15429	22 Sept. ..	78	2 Oct.*
Whitelaw, J., and another, Wellington, N.Z. Potato-chipper ..	15402	16 Sept. ..	78	2 Oct.
Whitham, F. E., Oxenhope, York, Eng. Stone, &c., pulveriser ..	14615	13 March ..	75	18 Sept.
Whitley, J. J., and another, Christchurch, N.Z. Acetylene-gas lamp	15218	1 Aug. ..	67	21 Aug.*
Whitney, A. C., Auckland, N.Z. (See Colonial Ammunition Company, Limited, No. 15435.)				
Wilhelm, E. H., Marton, N.Z. Docking lamb	15117	14 July ..	78	2 Oct.*
Wilkie, A., Fairton, N.Z. Distribution of carcase meat ..	15331	30 Aug. ..	75	18 Sept.*
Wilkins, A. R., and another, Christchurch, N.Z. Connecting bicycle with a trailed carriage	15177	26 July ..	63	7 Aug.
Wilkins, A. R., and another, Christchurch, N.Z. Motor attachment to bicycle	15306	25 Aug. ..	75	18 Sept.*

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

Name, Address, and Invention.	Application.		*Gazette.*	
	No.	Date.	No.	Date.
Wilkinson, W. S., and others, Auckland, N.Z. Advertising ..	15184	25 July ..	71	4 Sept.*
Williams, F. C., and another, Christchurch, N.Z. Plate ..	15130	18 July ..	63	7 Aug.*
Williams, J. P., Wellington, N.Z. Billiard-table	15245	15 Aug. ..	71	4 Sept.*
Williams, J. P., Wellington, N.Z. Billiard-table	15291	23 Aug. ..	71	4 Sept.*
Williams, R., Petone, N.Z. Billiard-marker, &c.	15237	8 Aug. ..	67	21 Aug.*
Williams, S., and another, Christchurch, N.Z. Attachment to range	15136	15 July ..	63	7 Aug.*
Wilson, D., Feilding, N.Z. Acetylene gas-generator	15221	5 Aug. ..	67	21 Aug.*
Wilson, J., and others, Newmarket, N.Z. Fire-escape	15387	8 Sept. ..	78	2 Oct.*
Wilson, J. L., Kaitangata, N.Z. Ejector	15296	25 Aug. ..	71	4 Sept.*
Winkley, E. E., Lynn, Mass., U.S.A. (See United Shoe Machinery Company, No. 15206.)				
Witty, R. J. L., Yatala, Queensland. Plant and seed setter ..	15311	27 Aug. ..	71	4 Sept.
Wood, T. P., and another, London, Eng. Smoke-consumer ..	15229	7 Aug. ..	71	4 Sept.
Woods, J. T., Melbourne, Vic. Coupling railway-trucks ..	15104	10 July ..	60	24 July.*
Wright, R., Newcastle-on-Tyne, Eng. (See Sir W. G. Armstrong, Whitworth, and Company, Limited, No. 15139.)				
Wycherley, C. W., Wellington, N.Z. Securing horse-cover ..	14623	14 March ..	67	21 Aug.

Alphabetical List of Inventions for Quarter ending 30th September, 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.
Acetylene-gas lamp	H. H. Gaudin and J. J. Whitley	15218	1 Aug. ..	67	21 Aug.*
Acetylene-gas generator	D. Wilson	15221	5 Aug. ..	67	21 Aug.*
Acetylene-gas generator	W. Tyree	15447	26 Sept. ..	83	16 Oct.*
Adult's and child's chair	A. J. Park	15361	5 Sept. ..	75	18 Sept.*
Advertising	M. Foley, J. Parker, and W. S. Wilkinson	15184	25 July ..	71	4 Sept.*
Advertising attachment to cycle, boat, &c.	H. Thatcher	15317	28 Aug. ..	75	18 Sept.
Advertising attachment to gas-lamp ..	C. E. Thies and L. E. Lowrey ..	15090	10 July ..	60	24 July.*
Advertising device, &c.	P. J. Gossling	15256	12 Aug. ..	67	21 Aug.*
Advertising device and hairdresser's rack ..	P. J. Gossling	15217	1 Aug. ..	67	21 Aug.*
Aeration and bottling of liquid ..	Automatic Aerator Patents, Limited	15134	16 July ..	63	7 Aug.
Air-exhausting apparatus	W. G. Goss	15324	29 Aug. ..	75	18 Sept.
Alarm, Fire, communicating abroad ..	D. J. Kelleher	14052	24 Sept., 1901	71	4 Sept.
Alarm. (See Fire-escape, extinguisher, and alarm.)					
Alarm thermometer, Electric- ..	A. Johnston	15332	28 Aug. ..	75	18 Sept.*
Amalgamation of metals	American Amalgamating Company	15152	23 July ..	99	27 Nov.
Amalgam, &c., Separating, from ore-pulp ..	T. H. Hicks	15092	10 July ..	60	24 July.
Amalgam, Separating mercury from ..	T. H. Hicks	15094	10 July ..	60	24 July.
Amalgamating, &c., table	J. A. Hamilton	15421	19 Sept. ..	78	2 Oct.*
Ammonia-compressor, Valve for ..	W. H. Humble	15286	20 Aug. ..	71	4 Sept.
Ammunition wad	The Colonial Ammunition Company, Limited	15435	24 Sept. ..	..	..
Animal-feeding trough	J. Carlyle	15412	18 Sept. ..	78	2 Oct.*
Animal-trap	W. Collins	15255	12 Aug. ..	67	21 Aug.*
Animal-trap	W. McNaught	15377	8 Sept. ..	75	18 Sept.*
Arc-lamp, Electric	J. P. Campbell	15310	27 Aug. ..	71	4 Sept.
Artesian-well driving and boring ..	G. L. Pearson	14904	23 May ..	63	7 Aug.
Artificial stone	J. Purvis and T. Rouse ..	15069	2 July ..	57	10 July.
Axes, Show-case for	E. O. Risstrom	15385	11 Sept. ..	78	2 Oct.
Bag for filling, Holding	J. Orr, jun.	15120	14 July ..	63	7 Aug.
Bag, school-, &c., Shoulder-strap for ..	G. Goosman	15196	28 July ..	67	21 Aug.*
Bag. (See Mail-bag, Saddle tool-bag, Lead-bag.)					
Balls, Device for picking up	J. B. Poynter	15133	18 July ..	63	7 Aug.*
Bank of river, &c., Protecting	J. F. Rose	15113	12 July ..	71	4 Sept.
Barb-wire, Running out	N. C. Innes	15191	29 July ..	71	4 Sept.*
Barrel	F. Alexe	15345	3 Sept. ..	75	18 Sept.
Bat. (See Ping-pong bat.)					
Bearing for shaft, Support-	J. A. Moyes and J. Hopkirk ..	15147	23 July ..	..	..
Bed and bolster	E. H. Luxford	15355	4 Sept. ..	75	18 Sept.*
Bed-pan, Frame for slipper	E. A. Conyers	15416	18 Sept. ..	78	2 Oct.*
Bedstead	A. E. Phillimore	15226	7 Aug. ..	67	21 Aug.*
Bedstead, Attachment to	R. Scott	15163	24 July ..	63	7 Aug.
Bedstead, Attaching wire to	E. J. Restorck	15168	24 Feb.† ..	63	7 Aug.*
Bedstead and mattress	G. S. Heatley	15283	22 Aug. ..	71	4 Sept.
Bedstead, Wire mattress and	H. A. Robinson and S. Robinson	15333	30 Aug. ..	75	18 Sept.*

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Bending sheet-metal for tube-making ..	T. Danks	15382	9 Sept. ..	83	16 Oct.
Bicycle, Attachment to, for use as a sail, &c.	H. Thatcher	15317	28 Aug. ..	75	18 Sept.
Bicycle, Connecting with trailed carriage, &c.	A. R. Wilkins and J. W. Odering	15177	26 July ..	63	7 Aug.
Bicycle, Driving mechanism for ..	W. G. Jesson	15348	2 Sept. ..	75	18 Sept.*
Bicycle-holder	F. W. Painter	15284	22 Aug. ..	71	4 Sept.*
Bicycle, Motor-attachment for ..	A. R. Wilkins and J. W. Odering	15306	25 Aug. ..	75	18 Sept.*
Bicycle-pedal	G. M. Nichol	15140	17 July ..	63	7 Aug.
Bicycle. (See also Cycle.)					
Bicycle-tire, Repairing-patch for ..	C. W. Stephenson	15109	11 July ..	60	24 July.*
Billiard-table	J. P. Williams	15245	15 Aug. ..	71	4 Sept.*
Billiard-table	J. P. Williams	15291	23 Aug. ..	71	4 Sept.*
Billiard-table, Convertible	H. U. Alcock	15259	12 Aug. ..	67	21 Aug.*
Billiard-table and settee	H. U. Alcock	15373	6 Sept. ..	75	18 Sept.*
Billiards, Recording score at	R. Williams	15237	8 Aug. ..	67	21 Aug.*
Binder for loose sheets of paper ..	H. E. Dade	15225	4 Aug. ..	75	18 Sept.
Binder, Paint-brush	C. Sawyer	15319	28 Aug. ..	..	..
Biscuit. (See Medicated biscuit.)					
Bivalve, Opening	A. W. and J. B. McKenzie ..	15239	8 Aug. ..	67	21 Aug.*
Blackboard easel	F. Pegler	14825	29 April ..	60	24 July.
Blind. (See Window-blind.)					
Blinds, Operating Venetian	W. Conyers	14322	12 Dec., 1901	75	18 Sept.
Block. (See Snatch-block.)					
Blotting-pad and ruler	C. N. Hodder	15128	14 July ..	63	7 Aug.*
Boat, Attachment to, for use as a sail or advertiser	H. Thatcher	15317	28 Aug. ..	75	18 Sept.
Boat, &c., Propelling and sustaining ..	J. A. Fiddes	15432	23 Sept. ..	78	2 Oct.*
Boat. (See Diving-boat.)					
Boiler furnace, Steam-	E. Maslin	15079	3 July ..	60	24 July.
Boiler, Steam-	L. C. Auldjo	15102	10 July ..	60	24 July.
Boiler, Water-tube	J. Cowan	15148	23 July ..	63	7 Aug.
Boiling eggs	W. H. Gore and H. J. K. Massey-Lawless	15303	22 Aug. ..	71	4 Sept.*
Boot-fastening	E. Sprey	14166	26 Oct., 1901	63	7 Aug.
Boot-fastening	R. Snapper	15213	2 Aug. ..	67	21 Aug.*
Boot-heel	A. F. Davis	15336	30 Aug. ..	75	18 Sept.
Boot-sole	E. Dimant	15101	10 July ..	60	24 July.*
Boot-sole	T. Burrell and E. C. Perdriau ..	15279	21 Aug. ..	71	4 Sept.*
Boot, Polisher or brush for	F. H. Killingsworth and P. Rawson	15305	25 Aug. ..	71	4 Sept.*
Boot, Ventilating	L. Staples and W. Taylor ..	15399	12 Sept. ..	78	2 Oct.*
Boot, &c., Turning apparatu	United Shoe Machinery Company	15103	10 July ..	60	24 July.*
Boot-finishing machine, Wheels of ..	G. H. Catt	15350	4 Sept. ..	75	18 Sept.*
Boots. (See also Gum-boots.)					
Boring and artesian-well driving ..	G. L. Pearson	14904	23 May ..	63	7 Aug.
Boring, &c., Earth-	J. Cox	15426	16 Sept. ..	83	16 Oct.
Bottle	G. George	15192	28 July ..	67	21 Aug.*
Bottle. (See Non-refillable bottle.)					
Bottling and aeration of liquids ..	Automatic Aerator Patents, Limited	15134	16 July ..	63	7 Aug.
Box-making machinery	W. T. L. Travers	15164	24 July ..	63	7 Aug.*
Box. (See Tobacco-transporting box, Collapsible box, Newspaper-box, Egg-carrying box.)					
Bracket. (See Lamp-bracket.)					
Bradawls, &c., to handles, Securing ..	G. Beaumont	15257	12 Aug. ..	67	21 Aug.*
Brake for cycles, &c.	A. W. Humphreys	15215	2 Aug. ..	67	21 Aug.*
Brake. (See Hydraulic duplex oil-brake.)					
Breaking stone, &c., Machine for ..	F. E. Whitham	14615	13 Mar. ..	75	18 Sept.
Breaking-up ground, Implement for ..	J. Brasting	15364	5 Sept. ..	75	18 Sept.*
Brick, Building-	W. Juriss	15411	18 Sept. ..	78	2 Oct.*
Brick, Plug	C. W. Langstone	15272	20 Aug. ..	71	4 Sept.*
Bridge, Tension	F. Lambert	15238	8 Aug. ..	67	21 Aug.*
Broom, Rack for	J. Rugg	15401	11 Sept. ..	78	2 Oct.*
Brush. (See Paint-brush, Hat- and clothes-brush, Boot-brush.)					
Bucket. (See Dredge-bucket.)					
Buckle	J. H. Bell and F. J. J. Butler ..	15258	12 Aug. ..	67	21 Aug.*
Buffer-coupler	A. D. Smith	15248	14 Aug. ..	67	21 Aug.
Buildings, Heating	M. Arragon	15436	24 Sept. ..	83	16 Oct.*
Burner	M. L. Ross	15347	3 Sept. ..	75	18 Sept.
Bush, and securing same on shaft ..	F. A. Cutten	15180	25 July ..	..	..
Bush, Removable shaft-	T. Stevenson	15419	17 Sept. ..	78	2 Oct.
Bushfelling, Stage for	C. Cross	15450	26 Sept. ..	83	16 Oct.
Butter, &c., box, Collapsible	H. Donkin	15186	29 July ..	67	21 Aug.*
Butter-preservative	F. M. Hunt	15295	25 Aug. ..	75	18 Sept.*
Button	J. P. Brown	15088	7 July ..	60	24 July.*
Cable system of cash-carrier	Lamson Store Service Company, Limited	14549	20 Feb. ..	71	4 Sept.
Calculating altitudes. (See Range-finder.)					
Cams, &c., Locking-device for securing ..	F. M. Canda	15125	17 July ..	63	7 Aug.
Canal for harbour-bar removal ..	F. Lambert	15240	8 Aug. ..	67	21 Aug.*
Candlestick	J. H. Stewart and W. Nicol ..	15179	24 July ..	67	21 Aug.*

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Candlestick	W. Nicol and J. H. Stewart	15308	22 Aug.	71	4 Sept.*
Candlestick	A. Douglas	15227	7 Aug.	67	21 Aug.*
Candlestick	J. H. Stewart and W. Nicol	15119	11 July	63	7 Aug.*
				75	18 Sept.
Candle-holder	S. J. Heffer	15154	23 July	63	7 Aug.
Can, Sealed	American Tobacco Company	15246	14 Aug.	71	4 Sept.
Car-coupling	J. Hanley	15289	19 Aug.	71	4 Sept.*
Carbonaceous liquid as fuel, Using	F. Cotton	15318	28 Aug.	75	18 Sept.*
Carcase meat, Distribution of	A. Wilkie	15331	30 Aug.	75	18 Sept.*
Carpets, Extraction of dust from	The Vacuum Cleaner Company, Limited	15150	23 July	67	21 Aug.
Carriage, Connecting bicycle with trailed	A. R. Wilkins and J. W. Odering	15177	26 July	63	7 Aug.
Cart, Water-sprinkling	H. Anscombe and G. Russell	15473	30 Sept.	83	16 Oct.*
Casements, Securing	J. D. Tripe	15244	11 Aug.	67	21 Aug.*
Cash-carrier	M. J. Robertson	15277	21 Aug.	71	4 Sept.
Cash-carrier, Cable system of	Lamson Store Service Company, Limited	14549	20 Feb.	71	4 Sept.
Cash register and indicator	G. Andrew	14110	10 Oct., 1901	63	7 Aug.
Caster, Attachment to	R. S. Smith	15378	8 Sept.	75	18 Sept.*
Castrating, &c., lambs	E. H. Wilhelm	15117	14 July	78	2 Oct.*
Chaff-cutter, Crushing, &c., apparatus for	W. Andrews and A. W. Beaven	14290	28 Nov., 1901	75	18 Sept.
Chains. (See Draught-chains.)					
Chair, Easy	W. Aggers	14026	21 Sept., 1901	71	4 Sept.*
Chair, Adult's and child's	A. J. Park	15361	5 Sept.	75	18 Sept.*
Chair, &c., Collapsible	J. M. Armour	15304	23 Aug.	71	4 Sept.*
Chair, step-ladder, desk, &c.	J. M. Armour	15287	20 Aug.*	..	..
Chamber utensil	P. H. Dando	15356	4 Sept.	75	18 Sept.*
Chart for dress-cutting	L. Roberts	15241	6 Aug.	67	21 Aug.*
Checking descent of dredge-buckets down a ladder	J. F. McIvor	15082	2 July	60	24 July.*
Chipping potatoes, &c., Machine for	J. Whitelaw and J. Munro	15402	16 Sept.	78	2 Oct.
Chimney	R. W. England	14317	9 Dec., 1901	75	18 Sept.
Chimney	A. J. Park	14330	11 Dec., 1901	75	18 Sept.
Cigar-cutter, &c.	P. J. Gossling	15256	12 Aug.	67	21 Aug.*
Cigarette-machine	The United Cigarette-machine Company, Limited	15249	14 Aug.	67	21 Aug.
Cigarette-wrapper machine	The American Tobacco Company	15071	2 July	57	10 July.
Cigarette-wrapper tube-machine	The American Tobacco Company	15072, 3	2 July	57	10 July.
Cistern, Flushing	H. W. Ward	15363	5 Sept.	75	18 Sept.*
Claw-hammer and staple-drawer	A. Gray	15265	15 Aug.	71	4 Sept.*
Clay, Breaking, in sluice-boxes	C. T. Swanell and W. Lee	15182	24 July	67	21 Aug.*
Clay, Treating, for road-making	J. T. Steele	15131	18 July	63	7 Aug.
Cleaner. (See Knife-cleaner.)					
Clip. (See Trouser-clip.)					
Clipper. (See Hedge-clipper.)					
Closet	J. P. Vibert and G. Cozens	15395	13 Sept.	..	..
Closet. (See Earth-closet.)					
Closet-seat	H. August	14680	25 March	67	21 Aug.
Closet-seat lid	H. August	15142	22 July	67	21 Aug.
Closet-seat, Self-sealing	T. D'A. C. Maxted	15409	15 Sept.	78	2 Oct.*
Closet cistern, Water-	W. H. Keon and W. O. Miller	15262	15 Aug.	78	2 Oct.
Cloth, Apparatus for shrinking	M. B. Silk	15166	24 July	63	7 Aug.
Clothes brush, Hat and	C. Lashlie	15365	5 Sept.	75	18 Sept.
Clothes-line and peg	J. Murray	14465	24 Jan.	63	7 Aug.
Coal, Shipping and transferring	Sir W. G. Armstrong, Whitworth, and Co., Limited	15139	17 July	63	7 Aug.
Coal-scuttle	E. B. Arthur	15126	17 July	63	7 Aug.*
Collapsible chair, crib, &c.	J. M. Armour	15304	23 Aug.	71	4 Sept.*
Collapsible butter, &c., box	H. Donkin	15186	29 July	67	21 Aug.*
Collar and hames and traces	J. Benson	15366	3 Sept.	75	18 Sept.*
Commode, &c.	H. August	15294	21 Aug.	78	2 Oct.*
Composition, Waterproofing	A. F. Roy	15263	15 Aug.	71	4 Sept.*
Compressor. (See Ammonia Gas-compressor.)					
Concentrating-table	J. B. Mason	15372	6 Sept.	75	18 Sept.
Concentrating, &c., table	J. A. Hamilton	15421	19 Sept.	78	2 Oct.*
Concentrator. (See Ore-concentrator.)					
Concrete tank	J. R. Sigley	15301	22 Aug.	71	4 Sept.*
Condenser. (See Steam-condenser.)					
Consumer. (See Smoke-consumer.)					
Control system, Railway-traffic	W. Rowe	15316	28 Aug.	75	18 Sept.
Converter. (See Waste-converter.)					
Cooking-range attachment	S. Williams and J. Perks	15136	15 July	63	7 Aug.
Cooler. (See Milk-cooler, Cream-cooling.)					
Cooling and agitating cream	J. Middleton and H. J. Topliss	14370	23 Dec., 1901	75	18 Sept.
Compressing ensilage	J. K. McNeill and W. E. Collins	15376	10 Sept.	78	2 Oct.*
Copying letters, Damping apparatus for	F. H. W. Cowper	15431	23 Sept.	78	2 Oct.*
Couch	A. Nightingale	15156	22 July	63	7 Aug.
Couch, &c.	W. Aggers	14026	21 Sept., 1901	71	4 Sept.
Cough-mixture	F. Ross	15270	18 Aug.	75	18 Sept.
Coupler. (See Buffer-coupler.)					
Coupling railway-trucks	J. T. Woods	15104	10 July	60	24 July.*
Coupling. (See Pipe-coupling, Car-coupling.)					
Cover. (See horse-cover, liquid seal-cover.)					
Cow leg-holder	W. A. Collins	15425	19 Sept.	78	2 Oct.*

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Cramp for match boarding	J. Francis	15108	11 July	..	..
Cramp and crate for rabbit-packing	J. Lindsay	15367	8 Sept.	75	18 Sept.*
Crank. (See Cycle-crank.)					
Crate and cramp for rabbit-packing	J. Lindsay	15367	8 Sept.	75	18 Sept.*
Cream, Cooling and agitating	J. Middleton and H. J. Topliss	14370	23 Dec., 1901	75	18 Sept.
Crib, &c., Collapsible	J. M. Armour	15304	23 Aug.	71	4 Sept.*
Crushing, &c., apparatus for chaff-cutter	W. Andrews and A. W. Beaven	14290	28 Nov., 1901	75	18 Sept.
Cuff or sleeve protector	H. E. McDonald	15488	26 Sept.	83	16 Oct.*
Cultivator for drill	S. R. Stedman	15448	22 Sept.	83	16 Oct.*
Cultivating, &c., land	T. C. Darby, T. A. Darby, and S. C. Darby	15314	27 Aug.	..	..
Curler. (See Hair-curler.)					
Current-meter, Prepayment and recording	G. L. Gowlland	15100	10 July	60	24 July.
Cutter. (See Mitre cutter, Cigar-cutter.)					
Cutter of shearing-machine, Transmitting motion to	J. K. Stewart	15091	10 July	83	16 Oct.
Cutting-tool of planing-machine	E. H. Slater	14213	12 Nov., 1901	63	7 Aug.
Cycle-brake	A. W. Humphreys	15215	2 Aug.	67	21 Aug.*
Cycle-crank	F. Soper	15118	14 July	63	7 Aug.
Cycle driving-gear	C. G. Garrard	15149	23 July	67	21 Aug.
Cycle-propelling mechanism	F. L. Summerton and F. J. Amos	15433	23 Sept.	78	2 Oct.*
Cycle. (See also Bicycle.)					
Damping apparatus for letter-copying	F. H. W. Cowper	15431	23 Sept.	78	2 Oct.*
Digging and cultivating land	T. C., T. A., and S. C. Darby	15314	27 Aug.	..	..
Dining-table, Convertible	H. U. Alcock	15259	12 Aug.	67	21 Aug.*
Dish. (See Pie-dish.)					
Disinfectant, Delivering	M. Neustadt	15210	2 Aug.	67	21 Aug.
Distance, Ascertaining. (See Range-finder.)					
Distributor. (See Feed-water heater and distributor.)					
Distribution of carcase meat	A. Wilkie	15331	30 Aug.	75	18 Sept.*
Ditching-plough	E. T. R. and J. G. Coates and W. K. Elder	15251	12 Aug.	71	4 Sept.
Divided sole for boot, &c.	E. Dimant	15101	10 July	60	24 July.*
Diving-boat for pearl-fishing	C. W. Penny	15275	20 Aug.	71	4 Sept.*
Docking, &c., lambs	A. H. Ross	14273	25 Nov., 1901	75	18 Sept.
Door-retainer	N. B. McLennan	15428	19 Sept.	78	2 Oct.
Doors, Securing	J. D. Tripe	15244	11 Aug.	67	21 Aug.*
Draught-increaser, &c.	W. H. Atkin	15219	2 Aug.	71	4 Sept.*
Draught-chains of vehicles, Spreader for	W. S. Ayson	15190	29 July	67	21 Aug.
Draught-excluder for doors	G. J. Smith	14274	25 Nov.	57	10 July.
Draught-excluder for doors	E. R. Ludbrook, A. B. and G. C. Jackson	15222	5 Aug.	67	21 Aug*
Draught-producer, &c.	C. Rillstone	15112	8 July	60	24 July.*
Draw-gear	A. D. Smith	15248	14 Aug.	67	21 Aug.
Draw-gear, Outrigger vehicle	R. D. Kelly	15254	15 Aug.	67	21 Aug.*
Dray. (See Tip-dray.)					
Dredge-bucket, Checking descent of	J. F. McIvor	15082	2 July	60	24 July.*
Dredge-bucket, Removing clay from	T. F. Quilter and G. W. Gare	15175	23 July	63	7 Aug.*
Dredge-bucket	A. Cederman	15390	12 Sept.	78	2 Oct.
Dredge-bucket	W. J. Evans and J. D. Campbell	15437	24 Sept.	..	..
Dredge-ladder, Checking descent of bucket down a	J. F. McIvor	15062	2 July	60	24 July.*
Dredge-machinery, Driving	J. T. Johnson	15086	3 July	63	7 Aug.*
Dredge-screen, Gold	R. H. Sinnet	15325	29 Aug.	75	18 Sept.*
Dredge-screen and elevator	R. D. Tosswill and T. M. O'Rourke	15153	23 July	63	..
Dredging-machinery	J. Shepherd	15097	10 July*	..	7 Aug.*
Dredging-machinery	F. Smith	14349	18 Dec., 1901	75	18 Sept.
Dress-cutting chart	L. Roberts	15241	6 Aug.	67	21 Aug.*
Drill, Cultivator for	S. R. Stedman	15438	22 Sept.	83	16 Oct.*
Drill. (See Rock-drill.)					
Driving-gear	C. G. Garrard	15149	23 July	67	21 Aug.
Driving mechanism for bicycles, &c.	W. G. Jesson	15348	2 Sept.	75	18 Sept.*
Dumb-bell, Spring-grip	E. N. Kearny	15271	19 Aug.	..	..
Dust, &c., excluder for doors	E. R. Ludbrook, A. B. and G. C. Jackson	15222	5 Aug.	67	21 Aug.*
Dust-excluder for doors	G. J. Smith	14274	25 Nov., 1901	57	10 July.
Dust from carpets, Extraction of	The Vacuum Cleaner Company, Limited	15150	23 July	67	21 Aug.
Ear-marking lambs, &c.	A. H. Ross	14273	25 Nov., 1901	75	18 Sept.
Earth-boring. (See Boring.)					
Earth-closet	T. Ballinger	15445	25 Sept.	83	16 Oct.
Earth-scoop	J. B. Jackson	14306	4 Dec., 1901	75	18 Sept.
Easel. (See Blackboard-easel.)					
Easy-chair, &c.	W. Aggers	14026	21 Sept., 1901	71	4 Sept.
Educational device for children	F. Hornby	14407	8 Jan.	71	4 Sept.
Eggs, Box for carriage of	T. W. Coulthard	15404	12 Sept.	78	2 Oct.*
Egg-beater	W. Herdman	15400	12 Sept.	78	2 Oct.*
Eggs, Boiling, Apparatus for	W. H. Gore and H. J. K. Massey-Lawless	15303	22 Aug.	71	4 Sept.*
Eggs, Preserving	A. Pfaff	15322	28 Aug.	75	18 Sept.*
Ejector	J. L. Wilson	15296	25 Aug.	71	4 Sept.*

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Electric arc-lamp	J. P. Campbell	15310	27 Aug.	71	4 Sept.
Electric-lamp, Fittings for	H. McGowan	15410	18 Sept.	28	2 Oct.*
Electric motor	J. T. Hunter	15070	2 July	57	10 July.
Electric-railway, Three-wire overhead system for	A. W. Parker	15446	20 Sept.	83	16 Oct.*
Electrical fire-alarm	J. P. Robertson	15165	24 July	71	4 Sept.
Electrolytical treatment of ores, &c.	F. T. Mumford	14228	14 Nov., 1901	67	21 Aug.
Electro-magnetic waves, Transmission of power by	E. Waters, jun.	15374	6 Sept.	78	2 Oct.
Electro-magnetic waves, Signalling by	E. Waters, jun.	15375	6 Sept.	78	2 Oct.
Electro-magnetic waves, Signalling by	E. Waters, jun.	15394	10 Sept.	78	2 Oct.
Elevator. (See Dredge-screen and elevator, Goods-elevator, Tailings-elevator.)					
Engine, Rotary	W. A. E. Henrici	14351	18 Dec., 1901	63	7 Aug.
Engine, Rotary	P. Ellis	15274	20 Aug.	71	4 Sept.*
Ensilage, Compressing	J. K. McNeill and W. E. Collins	15376	10 Sept.	78	2 Oct.*
Envelope	J. N. Hancock	15269	18 Aug.	71	4 Sept.*
Exchange, Operating telephone	L. E. De Mole	15353	4 Sept.	75	18 Sept.*
Exchange, Automatic telephone	Strowger Automatic Telephone Exchange	15422	19 Sept.	78	2 Oct.
Exhaust from oil and gas engine, Utilising	H. J. Topliss and N. Andrew	15339	1 Sept.	83	16 Oct.*
Exhausting air, Hydraulic apparatus for	W. G. Goss	15324	29 Aug.	75	18 Sept.*
Explosive	E. Phillips	14160	24 Oct.	60	24 July.
Extractor and separator, Gold	M. Bate	15405	13 Sept.	78	2 Oct.*
Extinguisher. (See Fire-extinguisher.)					
Extraction of letter from box, Preventing	W. L. Davidson	15105	10 July	60	24 July.*
Fastener. (See Sash-fastener.)					
Fastening. (See Boot-fastening, Mail-bag fastening.)					
Fastening, Boot, &c.	E. Sprey	14166	26 Oct., 1901	63	7 Aug.
Fastening, Machine for inserting	United Shoe Machinery Company	15205	2 Aug.	67	21 Aug.*
Feed-water heater and distributor	A. Dunbar	15157	24 July	63	7 Aug.
Feeding attachment to type-writing machine, Paper-	D. W. McArthur	15430	23 Sept.	78	2 Oct.*
Field-gate	S. S. Coburn	14288	28 Nov., 1901	71	4 Sept.
Filament, Incandescent	J. T. Hunter	15312	27 Aug.	71	4 Sept.
File, wire-twister, and rule	A. Gray	15267	15 Aug.	71	4 Sept.*
Filter, Rain-water	F. J. Tonkin	15340	1 Sept.	78	2 Oct.
Filtering apparatus	J. Cook and J. Symons	14138	21 Oct., 1901	63	7 Aug.
Finger of reaping, &c., machine	R. Cresswell	14133	18 Oct., 1901	63	7 Aug.
Fire-alarm	D. J. Kelleher	14052	24 Sept., 1901	71	4 Sept.
Fire-alarm	J. M. Graham	15407	17 Sept.	78	2 Oct.*
Fire-alarm, Electrical	J. P. Robertson	15165	24 July	71	4 Sept.
Fire-escape	W. H. Keon and W. O. Miller	15261	15 Aug.	78	2 Oct.*
Fire-escape	N. H. Whisker, A. Smart, J. Wilson, and T. G. Peek	15387	8 Sept.	78	2 Oct.*
Fire-escape	J. C. Freeth and P. J. H. Munro	14079	28 Sept.	57	10 July.
Fire-escape, extinguisher, and alarm	F. Montague and J. Laffey	15155	21 July	63	7 Aug.*
Fire-escape and extinguisher	F. Montague and J. Laffey	15116	14 July	63	7 Aug.*
Fire-escape ladder	S. Barningham, T. O'Connell, and T. McCormack	15146	19 July	63	7 Aug.
Fire-grate	J. T. Metters and C. H. Metters	15098	10 July	60	24 July.*
Flax, Dressing New Zealand	J. Taylor and A. E. Reeves	14034	21 Sept., 1901	75	18 Sept.
Flax-stripper drum, Trueing-up surface of	J. Anderson	15185	29 July	67	21 Aug.*
Flue, Stove	H. W. Campbell	15216	1 Aug.	67	21 Aug.*
Fluid-heater	J. H. S. Brown	15141	22 July	63	7 Aug.
Flushing cistern	H. W. Ward	15363	5 Sept.	75	18 Sept.*
Food. (See Malted food, Milk food.)					
Food, Preservation of	C. Beale	15212	2 Aug.	67	21 Aug.*
Foot, Pneumatic	J. Johnson	15199	30 July	67	21 Aug.*
Force pump	W. H. Boyens	15242	11 Aug.	67	21 Aug.*
Foul gas in mines, Detecting	J. Hylard	15320	28 Aug.	75	18 Sept.
Foul gas in mines, Testing	J. Hylard	15321	28 Aug.	75	18 Sept.
Fountain-pen	J. Pomeroy	15087	3 July	60	24 July.*
Frame for slipper bed-pan	E. A. Conyers	15416	18 Sept.	78	2 Oct.*
Frying-pan lid and strainer	J. P. Kernbaum	14111	1 Oct., 1901	63	7 Aug.
Fuel, Using carbonaceous liquid as	F. Cotton	15318	28 Aug.	75	18 Sept.*
Fuel-economizer, &c.	W. H. Atkin	15219	2 Aug.	71	4 Sept.*
Furnace	A. Grönberg	15268	15 Aug.	71	4 Sept.
Furnace. (See Steam-boiler furnace.)					
Furniture	A. Nightingale	15156	22 July	63	7 Aug.
Furniture-leg, Attachment to	R. S. Smith	15378	8 Sept.	75	18 Sept.*
Game	A. Underwood	15193	30 July	67	21 Aug.*
Game, Indoor	D. Gwillim	15341	2 Sept.	75	18 Sept.*
Game, Indoor	J. H. Powell	15224	4 Aug.	67	21 Aug.*
Game, Indoor	A. J. Massey	15107	11 July	60	24 July.*
Game. (See also Ping-pong, Table-tennis.)					
Gas and oil motor	H. A. Nicholson	15290	19 Aug.	71	4 Sept.*
Gas burner and mantle. (See Incandescent gas burner and mantle.)					
Gas-compresser, Valve for	W. H. Humble	15286	20 Aug.	71	4 Sept.
Gas, Detecting foul	J. Hylard	15320	28 Aug.	75	18 Sept.*
Gas-generator	Fairbanks, Morse, and Co.	15442	25 Sept.	83	16 Oct.

ALPHABETICAL LIST OF INVENTIONS - *continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Gas-lamp. (See Acetylene gas-lamp, Incandescent gas-lamp.)					
Gas of low calorific power, Obtaining light from	J. Chamberlain	15234	6 Aug. ..	71	4 Sept.
Gas. (See Hydrocarbon gas.)					
Gas, Testing	J. Hylard..	15321	28 Aug. ..	75	18 Sept.*
Gate	G. C. Clarke	15434	23 Sept. ..	78	2 Oct.
Gate, Field	S. S. Coburn	14288	28 Nov., 1901	71	4 Sept.
Gear. (See Draw-gear, Driving-gear.)					
Generating. (See Steam-generating.)					
Generator. (See Acetylene gas-generator, Hydrocarbon gas-generator, Gas-generator.)					
Gig, &c., Movable mudguard for ..	W. H. Diddams	15297	25 Aug. ..	71	4 Sept.*
Girth and surcingle	J. Moroney	14629	15 Mar. ..	60	24 July.
Globe for illuminating purposes ..	E. Bohm	15076	3 July ..	60	24 July.
Gold extractor and separator	M. Bate	15405	13 Sept. ..	78	2 Oct.*
Gold, Recovering from refractory ores ..	T. H. Hicks	15093	10 July ..	60	24 July.
Gold-saving apparatus	J. S. Weston, H. F. Chaffey, and F. E. Smith	15396	13 Sept. ..	78	2 Oct.*
Gold-saving appliance	J. D. Dudley	14001	13 Sept. ..	57	10 July.
Gold-saving apparatus	H. N. McLeod and G. A. Hurley	15220	5 Aug. ..	71	4 Sept.*
Gold-saving apparatus	J. Sigley	15358	5 Sept. ..	75	18 Sept.*
Gold-screen	F. Henderson	15197	29 July ..	71	4 Sept.*
Gold-dredge screen..	R. H. Sinnet	15325	29 Aug. ..	75	18 Sept.*
Goods-elevator	M. W. Fleming	15335	30 Aug. ..	75	18 Sept.*
Gout-cure	J. Fraser	15371	9 Sept. ..	75	18 Sept.*
Grading and concentrating table ..	J. B. Mason	15372	6 Sept. ..	75	18 Sept.
Grate. (See Fire-grate.)					
Gravity and automatic concentrating table	J. B. Mason	15372	6 Sept. ..	75	18 Sept.
Grinding stone, &c., Machine for ..	F. E. Whitham	14615	13 Mar. ..	75	18 Sept.
Gum-boots, Closing leaking holes in ..	P. H. Brown	15135	16 July ..	63	7 Aug.
Hair-curler	W. Nicol	15288	18 Aug. ..	71	4 Sept.*
Hair-curler	K. Raymond	15111	8 July ..	60	24 July.*
Hairdressers' rack and advertising device	P. J. Gossling	15217	1 Aug. ..	67	21 Aug.*
Hair, Preparation for the	C. M. Robertson	15194	31 July ..	67	21 Aug.*
Hames and collar and traces	J. Benson	15366	3 Sept. ..	75	18 Sept.*
Hammer. (See Claw-hammer.)					
Handle for receptacle	A. R. Ayson	15110	11 July ..	60	24 July.
Handle for milk-can	G. Hughan	14145	22 Oct., 1901	63	7 Aug.
Harbour-bar removal, Canal for ..	F. Lambert	15240	8 Aug. ..	67	21 Aug.*
Hat and clothes brush	C. Lashlie	15365	5 Sept. ..	75	18 Sept.*
Hats, Securing	T. W. North, E. Jennings, W. Reece, and H. Forwood	15464	29 Sept. ..	83	16 Oct.
Heater. (See Fluid-heater, Feed-water heater, Water-heater.)					
Heating of school-rooms, &c.	M. Arragon	15436	24 Sept. ..	83	16 Oct.*
Heavy oil, Using, in gas-engines ..	W. B. Brain and E. Brain ..	15323	26 Aug. ..	75	18 Sept.*
Hedge-clipping machine	E. Collins	15231	7 Aug. ..	67	12 Aug.*
Heel, Detachable boot-	A. F. Davis	15336	30 Aug. ..	75	18
Heel to boot, Attaching	W. H. Bowick	15137	18 July ..	..	..
Hilling and breaking-up ground, Implement for	J. Brasting	15364	5 Sept. ..	75	18 Sept.*
Hinge	R. Dunne	15138	17 July ..	63	7 Aug.
Hoist and truck, Portable	M. W. Fleming	15408	13 Sept. ..	78	2 Oct.*
Holder. (See Candle-holder, Bicycle-holder, Cow-leg holder.)					
Holding bag for filling	J. Orr, jun.	15120	14 July ..	63	7 Aug.
Hook. (See Spring-hook.)					
Horse-collar	T. W. North	15380	11 Sept. ..	75	18 Sept.*
Horse-cover	J. Maclean	13906	14 Aug., 1901	67	21 Aug.
Horse-covers, Securing	C. W. Wycherley	14623	14 March ..	67	21 Aug.*
Horse, Race-, lead-bag	J. Neagle	14398	4 Jan. ..	71	4 Sept.
Horse-race starting-machine	J. Rose	14103	4 Oct., 1901	63	7 Aug.
Horse-race starting-machine	A. Cometti	14239	19 Nov. ..	78	2 Oct.
Horseshoe, Rubber-pad for	W. Waters	15440	20 Sept. ..	83	16 Oct.*
Hose, Closing holes in	P. H. Brown	15135	16 July ..	63	7 Aug.
Hydraulic apparatus for exhausting air ..	W. G. Goss	..	..	..	..
Hydraulic duplex oil-brake	G. W. Blanks	15352	4 Sept. ..	75	18 Sept.*
Hydro-carbon gas, Production of ..	W. B. Walters	15260	16 Aug. ..	71	4 Sept.*
Hydro-carbon gas-generator	J. Watt and B. Watt	15330	1 Sept. ..	78	2 Oct.*
Illuminant	J. G. Massie	15233	4 Aug. ..	67	21 Aug.
Incandescent filament and mantle ..	J. T. Hunter	15312	27 Aug. ..	71	4 Sept.
Incandescence gas or vapour lighting ..	The Flameless Gas-light Company, Limited	15124	17 July ..	63	7 Aug.
Incandescent gas-burner and mantle ..	A. C. Aucher	14015	19 Sept. ..	60	24 July.
Incandescent lamp, Advertising attachment to	C. E. Thies and L. E. Lowrey ..	15090	10 July ..	60	24 July.*
Incandescent mantle	G. Buhlmann	15160	24 July ..	63	7 Aug.*
Incubator	E. A. Temperley	15211	2 Aug.* ..	..	..
Indestructible lamp-wick	R. L. Suckling	15307	25 Aug. ..	75	18 Sept.*

ALPHABETICAL LIST OF INVENTIONS - *continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Indicator. (See Temperature-indicator, Target score-indicator, Table-tennis score-indicator.)					
Indoor game. (See Game.)					
Ink, Printers' varnish and	A. G. Wass	15169	22 July	63	7 Aug.
Inlet of suction-pipe	J. Smaill	15334	30 Aug.	75	18 Sept.*
Inserting fastenings	United Shoe Machinery Company	15205	2 Aug.	67	21 Aug.*
Insulating walls, &c.	F. De J. Clere	15273	20 Aug.	71	4 Sept.*
Iron. (See plane-iron.)					
Jack. (See Lifting-jack.)					
Joint for locking-bar type of pipe	G. J. Hoskins	15386	8 Sept.	78	2 Oct.
Kerosene in oil-engines, Use of	W. B. Brain and E. Brain	15323	26 Aug.	75	18 Sept.*
Knife-cleaner	M. Earle	15235	2 Aug.	67	21 Aug.*
Knife cleaner and sharpener	S. Nicolson	15276	20 Aug.	71	4 Sept.*
Lacing of boots, belts, &c.	G. Turner	15360	5 Sept.	83	16 Oct.
Ladder. (See Fire-escape, Step-ladder, Dredge-ladder.)					
Ladies' skirts, Measuring	C. M. Brophy	15392	10 Sept.	78	2 Oct.*
Lamb, Docking, &c.	E. H. Wilhelm	15117	14 July	78	2 Oct.*
Lamb, Docking, &c.	A. H. Ross	14273	25 Nov., 1901	75	18 Sept.
Lamp, Acetylene-gas	H. H. Gaudin and J. J. Whitley	15218	1 Aug.	67	21 Aug.*
Lamp-bracket	W. Desmond	15278	21 Aug.	78	2 Oct.*
Lamp, Fitting for electric	H. McGowan	15410	18 Sept.	78	2 Oct.*
Lamp-wick	R. L. Suckling	15307	25 Aug.	75	18 Sept.*
Lance, Whaling	E. Berg	14042	24 Sept.	57	10 July.
Lathe, Screw-cutting, Attachment to	F. Simpson	15187	29 July	67	21 Aug.*
Lead-bag for horse-race	J. Neagle	14398	4 Jan.	71	4 Sept.
Lead-headed nail	G. Croxford	15214	31 July	67	21 Aug.*
Leather-skiving machine	United Shoe Machinery Company	15207	2 Aug.	67	21 Aug.*
Leg of cow, Holding	W. A. Collins	15425	19 Sept.	78	2 Oct.*
Letter-copying, Damping apparatus for	F. H. W. Cowper	15431	23 Sept.	78	2 Oct.*
Letter, Preventing extraction of from box	W. L. Davidson	15105	10 July	60	24 July.*
Lid. (See Closet-seat lid, Frying-pan lid, milk-can lid.)					
Life-saving appliance	P. Peterson	15338	1 Sept.	83	16 Oct.
Lifting-jack	F. A. Miller	15388	12 Sept.	78	2 Oct.
Light from gas of low calorific power, Obtaining	J. Chamberlain	15234	6 Aug.	71	4 Sept.
Line. (See Clothes-line.)					
Liquid-fuel	F. Cotton	15318	28 Aug.	75	18 Sept.
Liquid-seal cover	H. J. Jones	14749	17 April	78	2 Oct.
Lock. (See Mail-bag lock, Wheel-lock, Nut-lock.)					
Lock	H. Roberts and J. Bannister	15183	24 July	67	21 Aug.*
Locking-device for cams, &c.	F. M. Canda	15125	17 July	63	7 Aug.
Locking-bar type of pipe, Joint for	G. J. Hoskins	15386	8 Sept.	78	2 Oct.
Mail-bag fastening	R. H. Easdown	15077	3 July	63	7 Aug.
Mail-bag lock	J. P. Kernbaum	14111	10 Oct., 1901	63	7 Aug.
Mail-bag, Seal-lock	A. A. S. Smith	15162	24 July	63	7 Aug.
Malted food	J. M. Pinnock	15114	11 July	63	7 Aug.
Mantle. (See Incandescent gas-mantle.)					
Manure-distributing attachment to plough	F. W. Sudholz	15398	13 Sept.	78	2 Oct.*
Manure from waste products, Manufacture of	W. H. Metcalfe	15313	27 Aug.	75	18 Sept.
Marine steam-turbine	Hon. C. A. Parsons	15351	4 Sept.	75	18 Sept.
Marine screw propeller	E. Conroy	15444	25 Sept.	83	16 Oct.*
Match-boarding, Cramp for	J. Francis	15108	11 July	..	..
Match-holder, &c.	P. J. Gossling	15256	12 Aug.	67	21 Aug.*
Match-striker	W. Marriott and E. Benham	14442	17 Jan.	60	24 July.
Mattress and bedstead	G. S. Heatley	15283	22 Aug.	71	4 Sept.
Mattress-filling machine	K. Wessel	15298	26 Aug.	71	4 Sept.
Mattress. (See Wire mattress.)					
Mattress, bed, and bolster	E. H. Luxford	15355	4 Sept.	75	18 Sept.*
Meat, Distribution of	A. Wilkie	15331	30 Aug.	75	18 Sept.
Measuring ladies' skirts	C. M. Brophy	15392	10 Sept.	78	2 Oct.*
Mechanical milking	D. T. Sharples	15309	27 Aug.	71	4 Sept.
Medicated biscuit	J. S. Rutherfurd	15074	2 July	57	10 July.
Medicinal compound	J. Fraser	15371	9 Sept.	75	18 Sept.*
Mercury, &c., from ore-pulp, Separating	T. H. Hicks	15092	10 July	60	24 July.
Mercury from amalgam, Separating	T. H. Hicks	15094	10 July	60	24 July.
Meter. (See Current-meter.)					
Milk food	D. R. S. Galbraith	15368	6 Sept.	75	18 Sept.*
Milk-strainer	J. Kerr	15292	23 Aug.	71	4 Sept.*
Milk straining-pan	W. Harvey	15299	22 Aug.	71	4 Sept.
Milking, Mechanical	D. T. Sharples	15309	27 Aug.	71	4 Sept.
Milk-can lid	J. T. Love	15250	14 Aug.	67	21 Aug.*
Milk-can handle	G. Hughan	14145	22 Oct., 1901	63	7 Aug.
Milk-cooler	J. Kerr	15293	23 Aug.	71	4 Sept.*
Milking apparatus	W. H. Lawrence	15151	23 July	67	21 Aug.
Mines, Detecting foul gas in	J. Hylard	15320	28 Aug.	75	18 Sept.*

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Mines, Testing foul gas in	J. Hylard	15321	28 Aug.	75	18 Sept.*
Mitre-cutting machine	R. Dunne	15176	23 July	63	7 Aug.*
Mitre-cutting machine	R. Dunne	15243	8 Aug.	67	21 Aug.*
Moths, Capturing, at night-time	D. Thompson	15195	31 July	67	21 Aug.*
Motion of steam-engine, Reversing	A. I. Senior	15285	22 Aug.	71	4 Sept.*
Motive power	J. G. Massie	15233	4 Aug.	67	21 Aug.
Motor. (See Electric-motor.)					
Motor attachment to bicycle	A. R. Wilkins and J. W. Odering	15306	25 Aug.	75	18 Sept.*
Moving target, Operating	J. W. Porter	15230	7 Aug.	67	21 Aug.*
Mowing-machine finger	R. Cresswell	14133	18 Oct.	63	7 Aug.
Mud-guard for gig, &c., Movable	W. H. Diddams	15297	25 Aug.	71	4 Sept.*
Music-books, Attachment to piano for holding	R. Chambers	15188	29 July	67	21 Aug.*
Nails, Assorting	United Shoe Machinery Company	15413	18 Sept.	78	2 Oct.*
Nail, Lead-headed	G. Croxford	15214	31 July	67	21 Aug.*
Nail. (See Roofing-nail.)					
Net apparatus, Ping-pong	C. McIntyre, F. C. Palethorpe, and J. S. Schwartz	15344	3 Sept.	75	18 Sept.*
Newspaper-delivery box, Weather-proof	J. Sigley	15236	2 Aug.	67	21 Aug.*
Nicotine-trap for tobacco-pipe	W. A. Ede-Clendinnen	15384	11 Sept.	78	2 Oct.
Non-refillable bottle	T. C. McLennan and J. W. Pepperell	15085	5 July	60	24 July.*
Non-refillable bottle	T. C. McLennan and J. W. Pepperell	15106	9 July	60	24 July.*
Non-refill bottle	T. S. Philpott	14050	25 Sept., 1901	63	7 Aug.
Non-refillable bottle	A. Soutter	15346	3 Sept.	75	18 Sept.
Non-refillable bottle	T. A. Garratt	15326	26 Aug.	75	18 Sept.*
Nut-lock	J. J. Macky	15280	19 Aug.	71	4 Sept.*
Oil or gas engine, Use of heavy oils in	W. B. Brain and E. Brain	15323	26 Aug.	75	18 Sept.*
Oil and gas motor	H. A. Nicholson	15290	19 Aug.	71	4 Sept.*
Oil-brake, Hydraulic duplex	G. W. Blanks	15352	4 Sept.	75	18 Sept.*
Oil and gas engine, Utilising exhaust from	H. J. Topliss and N. Andrew	15339	1 Sept.	83	16 Oct.*
Ore-concentrator	T. H. Hicks	15095	10 July	60	24 July.
Ore-pulp, Separating	International Ore-separating Company	15099	10 July	63	7 Aug.
Ore-pulverizer, Single-ball	T. H. Hicks	15096	10 July	60	24 July.
Ores, Electrolytic treatment of	F. T. Mumford	14228	14 Nov.	67	21 Aug.
Overhead system of electric railway	A. W. Parker	15446	20 Sept.	83	16 Oct.*
Outrigger-vehicle draw-gear	R. D. Kelly	15254	15 Aug.	67	21 Aug.*
Packing tea, &c.	T. Deane	15173	24 July	63	7 Aug.*
Packing tea, &c.	A. H. Nathan	15403	16 Sept.	78	2 Oct.*
Pad. (See Rubber-pad for horse-shoe.)					
Paint-brush binder	C. Sawyer	15319	28 Aug.*	..	..
Pan. (See Bed-pan, Milk-straining pan.)					
Paper-feeding attachment to type-writer	D. W. McArthur	15430	23 Sept.	78	2 Oct.*
Paraffin in oil-engines, Using	W. Brain and E. Brain	15323	26 Aug.	75	18 Sept.
Patty-pan	R. J. Keys	15342	2 Sept.	75	18 Sept.
Pearl-fishing, Diving-boat for	C. W. Penny	15275	20 Aug.	71	4 Sept.*
Pedal. (See Bicycle-pedal.)					
Peg. (See Clothes-peg.)					
Pen. (See Fountain-pen.)					
Physical exercise, Rowing-machine for	L. W. Grayson and C. S. Cunningham	15439	20 Sept.	83	16 Oct.*
Pianoforte, Music-holder attachment to	R. Chambers	15188	29 July	67	21 Aug.*
Pie-dish	E. B. Arthur	15127	17 July	63	7 Aug.*
Ping-pong bat	T. Herbert	15032	19 June	60	24 July.
Ping-pong net apparatus	C. McIntyre, F. C. Palethorpe, and J. S. Schwartz	15344	3 Sept.	75	18 Sept.*
Pipe-coupling	W. H. Keon	15349	4 Sept.	75	18 Sept.*
Pipe. (See Tobacco-pipe.)					
Plane-iron	J. Creamer	15415	18 Sept.	78	2 Oct.*
Planing-machine, Cutting-tool of	E. H. Slater	14213	12 Nov., 1901	63	7 Aug.
Plant. (See Pot-plant.)					
Plant-setter	R. J. L. Witty	15311	27 Aug.	71	4 Sept.
Planting potatoes	C. L. Jervis	15453	25 Sept.	83	16 Oct.
Plate	G. F. F. Davis and F. C. Williams	15130	18 July	63	7 Aug.
Plough	J. Anderson	15170	25 July	63	7 Aug.
Plough, Trenching and ditching	E. T. R. and J. G. Coates and W. K. Elder	15251	12 Aug.	71	4 Sept.
Plough, Attachment to	F. W. Sudholz	15398	13 Sept.	78	2 Oct.*
Plug-brick	C. W. Langstone	15272	20 Aug.	71	4 Sept.*
Pneumatic foot	J. Johnson	15199	30 July	67	21 Aug.*
Pneumatic inner tube of tire	E. E. A. Esse	15121	17 July	63	7 Aug.
Polishing appliance for boot, &c.	F. H. Killingsworth and P. Rawson	15305	25 Aug.	71	4 Sept.*
Pot-plant watering-tray	W. H. Lawrence	14264	21 Nov.	60	24 July.
Potato-chipping machine	J. Whitelaw and J. Munro	15402	16 Sept.	78	2 Oct.
Potato-planter	C. L. Jervis	15453	25 Sept.	83	16 Oct.
Potato-planting attachment to plough	F. W. Sudholz	15398	13 Sept.	78	2 Oct.*
Power by electro-magnetic waves, Transmission of	E. Waters, jun.	15374	6 Sept.	78	2 Oct.
Preservative for butter	F. M. Hunt	15295	25 Aug.	75	18 Sept.*

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Preservative for eggs	A. Pfaff	15322	28 Aug.	75	18 Sept.*
Preservation of food	C. Beale	15212	2 Aug.	67	21 Aug.*
Pressing-form for sole-laying machine	United Shoe Machinery Company	15228	7 Aug.	67	21 Aug.
Preparation for the hair	C. M. Robertson	15194	31 July	67	21 Aug.*
Prepayment and recording current-meter	G. L. Gowlland	15100	10 July	60	24 July.
Printers' varnish and ink	A. G. Wass	15169	22 July	63	7 Aug.
Printing in gold, &c., powders	The Linotype Company, Limited	15414	18 Sept.	78	2 Oct.
Privy receptacle	J. Walker	15084	4 July	..	..
Propeller, Marine screw-	E. Conroy	15444	25 Sept.	83	16 Oct.*
Propelling and sustaining boats	J. A. Fiddes	15432	23 Sept.	78	2 Oct.*
Protector, cuff or sleeve	H. E. McDonald	15448	26 Sept.	83	16 Oct.*
Protecting bank of river, &c.	J. F. Rose	15113	12 July	71	4 Sept.
Pulverizer, Single-ball ore-	T. H. Hicks	15096	10 July	60	24 July.
Pump for low lifts	J. Tyrrell, jun.	15451	26 Sept.	83	16 Oct.
Pump. (See Force-pump.)					
Rabbit-packing, Crate and cramp for	J. Lindsay	15367	8 Sept.	75	18 Sept.*
Rabbit-trap	J. Campbell	15870	9 Sept.	75	18 Sept.*
Rabbit-trap, Attachment to	J. T. Good	14747	14 April	78	2 Oct.
Race starter and timer	W. Nicol	14014	19 Sept., 1901	67	21 Aug.
Race. (See also Horse-race, &c.)					
Rack. (See Hairdressers' rack, Broom rack.)					
Railway-truck coupling	J. T. Woods	15104	10 July	60	24 July.*
Railway-traffic control system	W. Rowe	15316	28 Aug.	75	18 Sept.
Railway. (See Electric railway.)					
Rain-excluder for doors	G. J. Smith	14274	25 Nov.	57	10 July.
Rain excluder for door	E. R. Ludbrook, A. B. and G. C. Jackson	15222	5 Aug.	67	21 Aug.*
Rain-water strainer	F. J. Tonkin	15340	1 Sept.	78	2 Oct.
Raising and lowering Venetian blinds	W. Conyers	14322	12 Dec., 1901	75	18 Sept.
Range. (See Cooking-range.)					
Range-finder	C. A. Trotter	14773	19 April	71	4 Sept.
Reaping-machine, Fingers for	R. Cresswell	14133	18 Oct., 1901	63	7 Aug.
Receptacle-handle	A. R. Ayson	15110	11 July	60	24 July.
Receptacle, Privy	J. Walker	15048	4 July	..	..
Recorder. (See Vote-recorder, Billiard-score recorder.)					
Reducing stone, &c., Machine for	F. E. Whitham	14615	13 Mar.	75	18 Sept.
Refractory ores, Recovering gold from	T. H. Hicks	15093	10 July	60	24 July.
Register and indicator, Cash	G. Andrew	14110	10 Oct., 1901	63	7 Aug.
Regulator. (See Shear-regulator.)					
Repairing-patch for bicycle-tire	C. W. Stephenson	15109	11 July	60	24 July.*
Reshaping rolled products	Foreign McKenna Process Company	15327	26 Aug.	75	18 Sept.
Retainer. (See Door-retainer.)					
Reversing motion of steam-engine	A. I. Senior	15285	22 Aug.	71	4 Sept.*
Rheumatism, Medicinal compound for	J. Fraser	15371	9 Sept.	75	18 Sept.*
River-banks, Protecting	J. F. Rose	15113	12 July	71	4 Sept.
River-bar removal, Canal for	F. Lambert	15240	8 Aug.	67	21 Aug.*
Road-making, Treating clay for	J. T. Steele	15131	18 July	63	7 Aug.
Rock-drill	W. Brady	15329	26 Aug.	75	18 Sept.
Rock-drill	J. Cox	15426	16 Sept.	83	16 Oct.
Rolled products, Reshaping	Foreign McKenna Process Company	15327	26 Aug.	75	18 Sept.
Rolled-iron pipe, Joint for	G. J. Hoskins	15386	8 Sept.	78	2 Oct.
Roller for swampy, &c., ground	T. Fennessy	15075	3 July	60	24 July.*
Roofing nail and screw	F. Giles	15247	14 Aug.	71	4 Sept.*
Rotary engine	P. Ellis	15274	20 Aug.	71	4 Sept.*
Rotary engine	W. A. E. Henrici	14351	18 Dec., 1901	63	7 Aug.
Rotary engine	St. C. N. H. Macdonald	15132	18 July	63	7 Aug.*
Rowing-machine for exercise, &c.	L. W. Grayson and C. S. Cunningham	15439	20 Sept.	83	16 Oct.*
Rubber-heel, Attaching, to boot	W. H. Bowick	15137	18 July.*	..	..
Rubber-pad for horse-shoe	W. Waters	15440	20 Sept.	83	16 Oct.*
Rule, file, and wire-twister	A. Gray	15267	15 Aug.	71	4 Sept.*
Ruler and blotting-pad	C. N. Hodder and J. Rogers	15128	14 July	63	7 Aug.*
Running-out barb-wire	N. C. Innes	15191	29 July	71	4 Sept.*
Saddle tool-bag	A. Gray	15266	15 Aug.	71	4 Sept.*
Sandal	S. Smith and H. R. Smith	15178	25 July	67	21 Aug.*
Sash-fastener	A. F. W. Lorie	15145	19 July	63 78	7 Aug.* 2 Oct.
Sash-fastener	G. Simpson	15337	30 Aug.	75	18 Sept.
Sash-fastener	J. G. Reilly	15441	25 Sept.	83	16 Oct.*
Sash, Securing cord to	J. Armstrong	15449	26 Sept.	..	..
Saving. (See Life-saving appliance, Gold-saving.)					
Saw-set	C. O. Andersson	15115	14 July	75	18 Sept.*
Scarifier	J. Traves	15379	8 Sept.	75	18 Sept.*
Scoop, Earth-	J. B. Jackson	14306	4 Dec., 1901	75	18 Sept.
Score-indicator, Target	J. McKay	15354	4 Sept.	75	18 Sept.*
Score-indicator for table-tennis, &c.	A. K. Smith	15393	10 Sept.	78	2 Oct.
Score, Recording billiard	R. Williams	15237	8 Aug.	67	21 Aug.*

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Screen. (See Dredge-screen, Gold-screen.)					
Screw. (See Roofing-screw.)					
Screw	G. C. Smith	15201	30 July ..	67	21 Aug.
Screw-cutting attachment to lathe ..	F. Simpson	15187	29 July ..	67	21 Aug.*
Screw-propeller	E. Conroy	15444	25 Sept. ..	83	16 Oct.*
Scutching-machine for flax	J. Taylor and A. E. Reeves ..	14034	21 Sept., 1901	75	18 Sept.
Scuttle. (See Coal-scuttle.)					
Seal-cover, Liquid	H. J. Jones	14749	17 April ..	78	2 Oct.
Seal-lock for mail-bag, &c.	A. A. S. Smith	15162	24 July ..	63	7 Aug.
Sealed can	American Tobacco Company ..	15246	14 Aug. ..	71	4 Sept.
Seat. (See Closet-seat.)					
Secateur	A. W. A. Barnard and W. G. Reid	15200	30 July ..	67	21 Aug.*
Securing cams, &c., Locking-device for ..	F. M. Canda	15125	17 July ..	63	7 Aug.
Securing hat on head	T. W. North, E. Jennings, W. Reece, and H. Forwood	15464	29 Sept. ..	83	16 Oct.
Self-flushing time-valve for sewage-distribution	E. S. Baldwin and H. H. Rayward	15418	18 Sept. ..	78	2 Oct.
Schoolrooms, &c., Heating	M. Arragon	15436	24 Sept. ..	83	16 Oct.*
Seed-setter	R. J. L. Witty	15311	27 Aug. ..	71	4 Sept.
Self-sealing closet-seat	T. D'A. C. Maxted	15409	15 Sept. ..	78	2 Oct.*
Separating gold from alluvial wash ..	F. Henderson	15197	29 July ..	71	4 Sept.*
Separating mercury, &c., from ore-pulp ..	T. H. Hicks	15092	10 July ..	60	24 July.
Separating mercury from amalgam ..	T. H. Hicks	15094	10 July ..	60	24 July.
Separating ore-pulp	International Ore-separating Company	15099	10 July ..	63	7 Aug.
Set. (See Saw-set.)					
Settee, &c.	W. Aggers	14026	21 Sept., 1901	71	4 Sept.
Settee and billiard-table	H. U. Alcock	15373	6 Sept. ..	75	18 Sept.*
Setter. (See Seed and plant setter.)					
Sewage on to filter-beds, Distributing ..	E. S. Baldwin and H. H. Rayward	15417	18 Sept. ..	78	2 Oct.
Sewage-distribution, Self-flushing time-valve for	E. S. Baldwin and H. H. Rayward	15418	18 Sept. ..	78	2 Oct.
Sewing machine, Welt-	United Shoe Machinery Company	15206	2 Aug. ..	67	21 Aug.
Sewing-palm, Attachment to	F. Haar	14333	16 Dec., 1901	71	4 Sept.
Shaft-bush, Removable	T. Stevenson	15419	17 Sept. ..	78	2 Oct.
Shaft, Support-bearing for	J. A. Moyes and J. Hopkirk ..	15147	23 July ..	..	..
Sharpener, Knife-	S. Nicolson	15276	20 Aug. ..	71	4 Sept.*
Shear-regulator	W. Borlase	15172	22 July ..	63	7 Aug.*
Shearing-machine	C. Tandy	14244	20 Nov., 1901	71	4 Sept.
Shearing-tool, Transmitting motion to cutter of	J. K. Stewart	15091	10 July ..	83	16 Oct.
Shears. (See Sheep-shears.)					
Sheep-shears	H. Burgon	15122	17 July ..	63	7 Aug.
Sheep-shears	R. Featherstone	15282	22 Aug. ..	71	4 Sept.
Sheep-shears	O. Börs	15420	19 Sept. ..	78	2 Oct.*
Sheep-shears	T. McGee	15066	1 July ..	57	10 July.*
Sheep-shears	C. J. Shipway and H. May ..	15161	24 July ..	63	7 Aug.
Sheet-metal, Bending	T. Danks	15382	9 Sept. ..	83	16 Oct.
Shipping and transferring coal ..	Sir W. G. Armstrong, Whitworth, and Co., Limited	15139	17 July ..	63	7 Aug.
Shoulder-strap for school-bag	G. Goosman	15196	28 July ..	67	21 Aug.*
Show-case, Axe	E. O. Risstrom	15385	11 Sept. ..	78	2 Oct.
Shrinking cloth, &c.	M. B. Silk	15166	24 July ..	63	7 Aug.
Shutter. (See Window-shutter.)					
Signalling by electro-magnetic waves ..	E. Waters, jun.	15374	6 Sept. ..	78	2 Oct.
Signalling by electro-magnetic waves ..	E. Waters, jun.	15375	6 Sept. ..	78	2 Oct.
Signalling by electro magnetic waves ..	E. Waters, jun.	15394	10 Sept. ..	78	2 Oct.
Silt from tanks, Automatically ejecting ..	R. H. Coltman	15281	22 Aug. ..	78	2 Oct.
Single-ball ore-pulverizer	T. H. Hicks	15096	10 July ..	60	24 July.
Siphon	D. Seymour	15302	26 Aug. ..	71	4 Sept.
Skirt. (See Ladies' skirt.)					
Skiving-machine	United Shoe Machinery Company	15203	2 Aug. ..	67	21 Aug.*
Skiving-machine	United Shoe Machinery Company	15204	2 Aug. ..	67	21 Aug.*
Skiving machine, Leather-	United Shoe Machinery Company	15207	2 Aug. ..	67	21 Aug.*
Slag, Utilising heat of	G. Mitchell and L. D. Copeland	15424	19 Sept. ..	78	2 Oct.
Sliding rod vehicle-wheel lock ..	T. Firth	15369	9 Sept. ..	75	18 Sept.*
Sluice-box, Breaking clay in	C. T. Swanell and W. Lee ..	15182	24 July ..	67	21 Aug.*
Smoke-cooling attachment, &c., to tobacco-pipe	W. A. Ede-Clendinnen ..	15384	11 Sept. ..	78	2 Oct.
Smoke-consumer	R. D. Brett and T. P. Wood ..	15229	7 Aug. ..	71	4 Sept.
Smoke-consumer	W. H. Atkin	15219	2 Aug. ..	71	4 Sept.*
Snatch-block	E. Smyth and F. Currie ..	15252	12 Aug. ..	67	21 Aug.*
Sole, Divided, for boot, &c.	E. Dimant	15101	10 July ..	60	24 July.*
Sole-laying machine, Pressing-form for ..	United Shoe Machinery Company	15228	7 Aug. ..	67	21 Aug.
Sole. (See also Boot-sole.)					
Spanner attachments	P. Rayson	15159	24 July ..	63	7 Aug.
Spark-arrester	J. Whitehouse	15429	22 Sept. ..	78	2 Oct.*
Spark-arrester	N. Watt	15362	5 Sept. ..	75	18 Sept.*
Spark-arrester	J. Mallett	15315	27 Aug. ..	75	18 Sept.*
Spark-arrester	R. Hollis, J. A. Cockburn, and C. E. Grindrod	15167	24 July ..	63	7 Aug.*
Spark-preventer, &c.	C. Rillstone	15112	8 July ..	60	24 July.*
Spraying-machine	C. A. Loader	14313	4 Dec., 1901	75	18 Sept.

ALPHABETICAL LIST OF INVENTIONS—*continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Spreading liquid over given areas ..	E. S. Baldwin and H. H. Rayward	15417	18 Sept. ..	78	2 Oct.
Spring-grip dumb-bell	E. N. Keamy	15271	19 Aug. ..	..	..
Spring-hook	L. D. Robertson	15328	26 Aug. ..	75	18 Sept.*
Springs. (See Vehicle-springs.)					
Stage for bushfelling	C. Cross	15450	26 Sept. ..	83	16 Oct.
Staple-drawer and claw-hammer ..	A. Gray	15265	15 Aug. ..	71	4 Sept.*
Staple-drawer, &c.	E. Gifford and R. R. Holmes ..	15253	15 Aug. ..	83	16 Oct.*
Starter. (See Race-starter.)					
Starting-machine. (See Horse-race starter, Trotting-race starter.)					
Steam-boiler furnace	E. Maslin..	15079	3 July ..	60	24 July.
Steam-boiler	L. C. Auldjo	15102	10 July ..	60	24 July.
Steam-condenser	C. E. Nicholas	14583	6 Mar. ..	60	24 July.
Steam-engine, Reversing motion of ..	A. I. Senior	15285	22 Aug. ..	71	4 Sept.*
Steam-generating, Utilising heat of slag for	G. Mitchell and L. D. Copeland..	15424	19 Sept. ..	78	2 Oct.
Steam-turbine, Marine	Hon. C. A. Parsons	15351	4 Sept. ..	75	4 Sept.
Step-ladder, desk, &c.	J. M. Armour	15287	20 Aug.* ..	..	..
Stitch-separating machine	United Shoe Machinery Company	15208	2 Aug. ..	67	21 Aug.
Stone. (See Artificial stone.)					
Stove, Removable flue for	H. W. Campbell	15216	1 Aug. ..	67	21 Aug.*
Strainer. (See Wire-strainer, Rain-water strainer, Milk-strainer.)					
Strainer and frying-pan lid	A. C. Murray	14120	14 Oct., 1901	63	7 Aug.
Straining-pan. (See Milk-straining pan.)					
Street-sweeping machine	W. Waters	15143	17 July ..	63	7 Aug.
Street-sweeper	G. W. Bell	15397	13 Sept. ..	78	2 Oct.*
Striker. (See Match-striker.)					
Suction-pipe, Inlet of	J. Smaill	15334	30 Aug. ..	75	18 Sept.*
Sunshade, verandah-roof, and window-shutter	A. Jones	14123	10 Oct., 1901	60	24 July.
Support-bearing for shaft	J. A. Moyes and J. Hopkirk ..	15147	23 July ..	..	..
Surcingle and girth	J. Moroney	14629	15 Mar. ..	60	24 July.
Suspender	R. Curtis	15083	1 July	71 78	4 Sept.* 2 Oct.
Sweeping. (See Street-sweeping.)					
Sweepings-carrying machine	W. Waters	15143	17 July ..	63	7 Aug.*
Sweetmeats, Manufacture of	W. Leitch	15158	24 July ..	63	7 Aug.
Table desk, &c.	J. M. Armour	15287	20 Aug.* ..	..	..
Table game	J. H. Powell	15224	4 Aug. ..	67	21 Aug.*
Table-tennis, &c., Score-indicator for ..	A. K. Smith	15393	10 Sept. ..	78	2 Oct.
Table. (See Billiard-table, Grading-table, Concentrating-table.)					
Tailings-elevator	F. W. Payne	15343	30 Aug. ..	78	2 Oct.
Tank, Concrete	J. R. Sigley	15301	22 Aug. ..	71	4 Sept.*
Tank, Ejecting silt from	R. H. Coltman	15281	22 Aug. ..	78	2 Oct.
Tank, Preventing refuse passing into ..	H. Hammond	15129	18 July ..	71	4 Sept.
Tank, Water-	J. J. Austin	15171	25 July ..	..	..
Tap	R. Cosslett	15202	30 July ..	67	21 Aug.
Target	F. M. Gaudet	15068	2 July ..	57	10 July.
Target, Operating moving	J. W. Porter	15230	7 Aug. ..	67	21 Aug.*
Target score-indicator	J. McKay..	15354	4 Sept. ..	75	18 Sept.*
Tea. (See Packing tea, &c.)					
Team, Yoking horse-	W. H. Cochrane	15189	29 July ..	67	21 Aug.*
Telegraphy. (See Wireless telegraphy.)					
Telephone exchange, Automatic ..	Strowger Automatic Telephone Exchange	15422	19 Sept. ..	78	2 Oct.
Telephone exchange, Operating ..	L. E. De Mole	15353	4 Sept. ..	75	18 Sept.*
Temperature indicator, Change of ..	R. Keyte	14198	6 Nov., 1901	67	21 Aug.
Tension-bridge	F. Lambert	15238	8 Aug. ..	67	21 Aug.*
Testing foul gas of mines	J. Hylard..	15321	28 Aug. ..	75	18 Sept.*
Thermometer, Electric-alarm.. ..	A. Johnston	15332	28 Aug. ..	75	18 Sept.*
Three-wire system of overhead construction	A. W. Parker	15446	20 Sept. ..	83	16 Oct.*
Timer. (See Race-timer.)					
Time-handicap, Starting horses on ..	A. Cometti	14239	19 Nov., 1901	78	2 Oct.
Tip-dray	G. Burren	15455	30 Sept. ..	83	16 Oct.*
Tires. (See Bicycle-tires, Wheel-tires.)					
Tobacco-pipe, Nicotine-trap, &c., for ..	W. A. Ede-Clendinnen ..	15384	11 Sept. ..	78	2 Oct.
Tobacco box, Transporting-	W. E. Shaw	15209	2 Aug. ..	67	21 Aug.*
Tool-bag, Saddle	A. Gray	15266	15 Aug. ..	71	4 Sept.*
Toy	F. Hornby	14407	8 Jan. ..	71	4 Sept.
Trailed carriage, Connecting bicycle with	A. R. Wilkins and J. W. Odering	15177	26 July ..	63	7 Aug.
Transmitting motion to cutter of shearing-machine	J. K. Stewart	15091	10 July ..	83	16 Oct.
Transmission of power, &c., by electro-magnetic waves	E. Waters, jun.	15375	6 Sept. ..	78	2 Oct.
Trap. (See Animal-trap, Rabbit-trap, Rat-trap.)					
Tray. (See Pot-plant watering-tray.)					
Tread, Divided, for boot, &c.	E. Dimant	15101	10 July ..	60	24 July.*
Trenching-plough	E. T. R. Coates, J. G. Coates, and W. K. Elder	15251	12 Aug. ..	71	4 Sept.

ALPHABETICAL LIST OF INVENTIONS – *continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Trotting-race starter	A. Cometti	14239	19 Nov., 1901	78	2 Oct.
Trough. (See Animal-feeding trough, Watering-trough.)					
Trouser-clip	P. Scoringe	15359	4 Sept.	78	2 Oct.*
Truck and hoist, Portable	M. W. Fleming	15408	13 Sept.	78	2 Oct.*
Truck-coupling. (See Railway-truck coupling.)					
Trueing up surface of flax-stripper drum	J. Anderson	15185	29 July	67	21 Aug.*
Truss for rupture	R. W. Gibbs	15381	8 Sept.	78	2 Oct.
Tub. (See Wash-tub.)					
Tube of tire, Inner pneumatic	C. E. A. Esse	15121	17 July	63	7 Aug.
Tubes and pipes, Bending sheet-metal for	T. Danks	15382	9 Sept.	83	16 Oct.*
Turbine. (See Steam-turbine.)					
Turning boots, &c., Machine for	United Shoe Machinery Company	15103	10 July	60	24 July.*
Typewriter, Paper-feeding attachment to	D. W. McArthur	15430	23 Sept.	78	2 Oct.*
Umbrella	K. Davy	15300	16 Aug.	71	4 Sept.*
Utilising exhaust from oil and gas engine	H. J. Topliss and N. Andrew	15339	1 Sept.	83	16 Oct.*
Utilising heat of slag	G. Mitchell and L. D. Copeland	15424	19 Sept.	78	2 Oct.
Valve	H. L. Wallace	15423	19 Sept.	78	2 Oct.
Valve for ammonia gas-compressor	W. H. Humble	15286	20 Aug,	71	4 Sept.
Valve, Self-flushing time-, for sewage distribution	E. S. Baldwin and H. H. Rayward	15418	18 Sept.	78	2 Oct.
Varnish, Printers' ink and	A. G. Wass	15169	22 July	63	7 Aug.
Vehicle-wheel	H. E. McDonald	15389	12 Sept.	78	2 Oct.*
Vehicle, Attachment to, for use as a sail and advertiser	H. Thatcher	15317	28 Aug.	75	18 Sept.
Vehicles, Outrigger draw-gear for	R. D. Kelly	15254	15 Aug.	67	21 Aug.*
Vehicle-spring	F. S. Potter	15144	17 July	63	7 Aug.*
Vehicles, Spreader for draught-chains of	W. S. Ayson	15190	29 July	67	21 Aug.
Venetian blind. (See under Blind.)					
Ventilating boots, &c.	L. Staples and W. Taylor	15399	12 Sept.	78	2 Oct.*
Ventilator	H. I. M. Ross	14884	14 May	60	24 July.
Ventilator	The Shedd Electric and Manufacturing Company	15443	25 Sept.	83	16 Oct.
Verandah-roof, window-shutter, and sunshade	A. Jones	14123	10 Oct.	60	24 July.
Vote-recorder	F. W. Paterson	15174	23 July	63	7 Aug.*
Wad. (See Ammunition-wad.)					
Walls, &c., Deadening or insulating	F. de J. Clere	15273	20 Aug.	71	4 Sept.*
Wash-tub	J. J. Mason	15181	28 July	71	4 Sept.*
Washing-machine	W. G. Gibbins	14036	4 April, 1901†	60	24 July.
Waste animal-product, Manure from	W. H. Metcalfe	15313	27 Aug.	75	18 Sept.
Water-closet, &c.	H. August	15294	21 Aug.	78	2 Oct.*
Water-closet cistern	W. H. Keon and W. O. Miller	15261	15 Aug.	78	2 Oct.*
Water-closet seat	T. D. C. Maxted	15409	15 Sept.	78	2 Oct.*
Water-heater. (See Feed-water heater.)					
Water-heater	A. A. Campbell	15391	10 Sept.	78	2 Oct.*
Water-tube boiler	J. Cowan	15148	23 July	63	7 Aug.
Watering-tray. (See Pot-plant watering-tray.)					
Watering-trough, Animal	N. W. Griswold	15089	5 July	63	7 Aug.
Waterproofing composition	A. F. Roy	15263	15 Aug.	71	4 Sept.*
Water-sprinkling cart	H. Anscombe and G. Russell	15473	30 Sept.	83	16 Oct.*
Water-wheel	W. Aitken	15080	1 July*	..	..
Weatherproof newspaper-delivery box	J. Sigley	15236	2 Aug.	67	21 Aug.*
Well-driving	G. L. Pearson	14900	23 May	63	7 Aug.
Welt-sewing machine	United Shoe Machinery Company	15206	2 Aug.	67	21 Aug.
Whaling-lance	E. Berg	14042	24 Sept.	57	10 July.
Wheel lock, Vehicle-	A. Cooper	15232	7 Aug.	67	21 Aug.*
Wheel-lock	T. Firth	15223	6 Aug.	67	21 Aug.
Wheel-lock	T. Firth	15369	9 Sept.	75	18 Sept.*
Wheel. (See Water-wheel.)					
Wheel-tire compressing apparatus	J. M. Chambers	15078	3 July	60	24 July.
Wheel of boot-finishing machine	G. H. Catt	15350	4 Sept.	75	18 Sept.*
Wheel, Vehicle-	H. E. McDonald	15389	12 Sept.	78	2 Oct.*
Wick, Lamp	R. L. Suckling	15307	25 Aug.	75	18 Sept.
Window-blind	T. McMillan	15427	20 Sept.	78	2 Oct.*
Window, Securing	J. D. Tripe	15244	11 Aug.	67	21 Aug *
Window-sash fastener	G. Simpson	15337	30 Aug.	75	18 Sept.
Window-sash fastener	J. G. Reilly	15441	25 Sept.†	83	16 Oct.*
Window-shutter, sunshade, and verandah-roof	A. Jones	14123	10 Oct.	60	24 July.
Wire, Attaching, to bedsteads	E. J. Restorck	15168	24 Feb.	63	7 Aug.
Wire-coiler and uncoiler	..	..	..	..	..
Wire-cutter, &c.	E. Gifford and R. R. Holmes	15253	15 Aug.	83	16 Oct.*
Wire-fence strainer	J. F. Kilburn	15123	17 July	63	7 Aug.*
Wire mattress	H. J. Brundell	15452	26 Sept.	83	16 Oct.*
Wire mattress	W. A. Garrett	15357	3 Sept.	83	16 Oct.
Wire mattress	W. T. Riley	14219	14 Nov.	60	24 July.
Wire mattress and bedstead	H. A. Robinson and S. Robinson	15333	30 Aug.	75	18 Sept.*
Wire, Running-out barb	N. C. Innes	15191	29 July	71	4 Sept.*

ALPHABETICAL LIST OF INVENTIONS – *continued.*

Invention.	Name.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Wire-strainer	H. F. Stewart	15198	29 July	71	4 Sept.*
Wire-strainer	J. Sadlier	15264	15 Aug.	71	4 Sept.*
Wire-strainer	C. A. Bergersen	15406	16 Sept.	99	27 Nov.
Wire-strainer	W. A. Tuck, jun.	14357	16 Dec., 1901	78	2 Oct.
Wire-strainer, &c.	E. Gifford and R. R. Holmes	15253	15 Aug.	83	16 Oct.*
Wire-twister, file, and rule	A. Gray	15267	15 Aug.	71	4 Sept.*
Wireless telegraphy, Receiver for	Sir O. J. Lodge, A. Muirhead, and E. E. Robinson	15383	11 Sept.	78	2 Oct.
Writing-desk, &c.	J. M. Armour	15287	20 Aug.*	..	..
Yoking horse-team	W. H. Cochrane	15189	29 July	67	21 Aug.*

List of Applicants for Registration of Designs.

ALPHABETICAL list of applicants for registration of designs for quarter ending 30th September, 1902 (including also applications lodged prior to but gazetted during the quarter).

Name and Address.	No. of Class.	Design. No.	Design. Date.	*Gazette.* No.	*Gazette.* Date.
Bacon, R. H., Brisbane, Queensland	4	163	11 Jan.	67	21 Aug.
Eller and Son, Wellington, N.Z.	3	170	23 Sept.	87	30 Oct.
Kirkman and Denison, Auckland, N.Z.	2	161	23 July	63	7 Aug.
Lewis, J., Greytown North, N.Z.	1	159	15 July	63	7 Aug.
Ranger, H. J., Christchurch, N.Z.	1	162	28 July	67	21 Aug.
Robinson, J., Christchurch, N.Z.	3	160	21 July	63	7 Aug.

List of Applicants for Registration of Trade Marks.

ALPHABETICAL list of applicants for registration of trade marks for quarter ending 30th September, 1902 (including also applications lodged prior to but gazetted during such quarter).

Name.	Address.	Class.	Application. No.	Application. Date.	*Gazette.* No.	*Gazette.* Date.
Abraham F., and Co.	London	42	3889	19 Aug.	75	18 Sept.
Alaska Packers' Association	San Francisco	42	3897	22 Aug.	71	4 Sept.
Anderson and Shaw	Glasgow	43	3722	21 March	60	24 July.
Armour, A. B., and another	Blackstone Hill, N.Z.	47	3866	30 July	67	21 Aug,
Ashwin, M. M. B.	Waiheke Island, Auckland	42	3915	1 Sept.	71	4 Sept.
Ballantyne, J., and Co.	Christchurch	38	3864	26 July	63	7 Aug.
Bamford, C. E.	Hautapu, N.Z.	50	3886	16 Aug.	67	21 Aug.
Barker, G. H.	Wellington	43	3888	18 Aug.	71	4 Sept
Beath, Schiess, and Co.	Melbourne	38	3950	25 Sept.	87	30 Oct.
Bell, C. S., and another	Christchurch	3	3860	24 July	63	7 Aug.
Bennett, E. W.	San Francisco	50	3885	16 Aug.	..	..
Bidder, B. P.	London	50	3560	18 Oct., 1901	57	10 July.
Borax, Consolidated, Limited	London	1, 2, 3	3850, 1, 2	10 July	67	21 Aug.
Borax. (See Patent Borax Company, Limited.)						
Breeze, E. G., and another	Christchurch	3	3930	12 Sept.	75	18 Sept.
Brown, Barrett, and Co. (See J. M. Geddes.)						
Campbell, W.	Wellington	42	3946	24 Sept.	..	..
Carr Bros. and Ash, Limited	London	42	3878	14 Aug.	..	..
Castle Tea Company	Wellington	42	3861	25 July	67	21 Aug.
Chapman, J. R.	Christchurch	39	3908	28 Aug.	..	..
Chapman, J. R.	Christchurch	39	3949	25 Sept.	78	2 Oct.
Colegrove, G. H.	Wellington	42	3898	23 Aug.	75	18 Sept.
Colegrove Tea Company. (See G. H. Colegrove.)						
Connell, J., and Co., Proprietary, Limited	Melbourne and Sydney	42	3901	26 Aug.	71	4 Sept.
Connell, J., and Co., Proprietary, Limited	Sydney	42	3876	13 Aug.	67	21 Aug.
Cook, J. F. W.	Auckland	3	3884	16 Aug.	78	2 Oct.
Cox, J. and G., Limited	Edinburgh	42	3856, 7	23 July	..	..
Cremers, G. G. G. C., and another	Culemborg, Holland	43	3869	2 Aug.	75	18 Sept.
Crosfield, J., and Sons, Limited	Warrington, Eng.	47	3920	4 Sept.	75	18 Sept.
Curtis's and Harvey, Limited	London	20	3928	8 Sept.	75	18 Sept.

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

Name.	Address.	Class.	Application.		*Gazette.*	
			No.	Date.	No.	Date.
Downer, W. H.	Christchurch	47	3931	12 Sept.	..	..
Dresden Pianoforte Manufacturing and Agency Company, Limited	Dunedin	9	3896	20 Aug.	71	4 Sept.
Driver, H.	Thames, N.Z.	42	3848	8 July	60	24 July.
Dutton, P.	South Dunedin	3	3855	17 July	60	24 July.
Dutton, P.	South Dunedin	3	3914	1 Sept.	71	4 Sept.
Dutton, R. A.	Auckland	3	3929	11 Sept.	78	2 Oct.
Everett and Co. (See B. P. Bidder.)						
Ferguson, J., and Co.	Glasgow and Melbourne	43	3868	2 Aug.	..	..
Fresh Food and Frozen Storage Company, Limited	Melbourne	42	3859	24 July	63	7 Aug.
Geddes, J. M.	Auckland	42	3932	13 Sept.	..	..
Germinal Sociedad Anonima	El Admor Gerente, Manila	45	3858	24 July	63	7 Aug.
Gilberd and Sons, J. B.	Wanganui	47	3846	3 July	..	..
Gregory, S. E., and another	Sydney	48	3442	28 June, 1901	75	18 Sept.
Griffin, J. H. and G. R.	Nelson	42	3389	25 May, 1901	67	21 Aug.
Hall, G., and Sons	Norwood, S.A.	43	3867	2 Aug.	63	7 Aug.
Harvey, A., and Sons	Auckland	13	3927	6 Sept.	..	..
Hearne, W. G.	Geelong	3	3853	17 July	..	..
Horrockses, Crewdson, and Co., Limited	London	24	3872	7 Aug.	67	21 Aug.
Hoytema, Van. (See under V.)						
Hudson, G. I.	Ipswich, Queensland	3	3847	3 July	75	18 Sept.
Hudson, R. W.	Liverpool	47	3943, 4	19 Sept.	..	..
Hudson, R. S. (See R. W. Hudson.)						
Imperial Tobacco Company, Limited	Bristol	45	3873	7 Aug.	99	27 Nov.
Jansen, H.	Langehaven, Holland	43	3877	14 Aug.	67	21 Aug.
Keystone Watch-case Company, The	Philadelphia	10	3432	22 June, 1901	71	4 Sept.
Lightband, C. D., and another	Christchurch	3	3860	24 July	63	7 Aug.
Linotype Company, Limited, The	London	6, 13	3924, 5	4 Sept.	75	18 Sept.
Linotype Company, Limited, The	London	5	3923	4 Sept.	..	..
Lloyd, E.	Gore	42	3862	25 July	67	21 Aug.
Lloyd and Co., E. (See E. Lloyd.)						
Locke, W.	Dunedin	3	3936	15 Sept.	75	18 Sept.
Lubriphite Company, The	New York	47	3922	4 Sept.	75	18 Sept.
Lysnar, W. D.	Gisborne	42	3947, 8	24 Sept.	83	16 Oct.
McConnochie, W., and another	St. Bathan's, N.Z.	47	3866	30 July	67	21 Aug.
McIntyre, D. C.	Christchurch	42	3863	25 July	..	..
McLeod Bros., Limited	Dunedin	48	3883	15 Aug.	67	21 Aug.
Molassine Company, Limited	London	42	3843	2 July	63	7 Aug.
Muntz's Metal Co., Limited	Smethwick, Eng.	5	3879	14 Aug.	75	18 Sept.
Muralo Company, The	New York	1	3841	2 July	57	10 July.
Nathan and Co., Limited, J.	Wellington	5	3926	5 Sept.	75	18 Sept.
Nicol, R.	Auckland	50	3874	13 Aug.	..	..
Ogden's, Limited	Liverpool	45	3921	4 Sept.	..	..
Oppenheimer and Co., A.	London	50, 40, 39	3880, 1, 2	14 Aug.	67	21 Aug.
Osborne, H.	Ashburton	42	3900	22 July	78	2 Oct.
Partridge, H. E.	Auckland	45	3895	21 Aug.	71	4 Sept.
Partridge, H. E.	Auckland	45	3890, 1, 2, 4	21 Aug.	78	2 Oct.
Partridge, H. E.	Auckland	45	3893	21 Aug.	..	..
Partridge, H. E.	Auckland	45	3945	24 Sept.	78	2 Oct.
Patent Borax Company, Limited	Birmingham	2, 3, 47, 48	3349, 3350, 1, 2	4 April, 1901	57	10 July.
Peek, Frean, and Co.	London	42	3296	7 Feb., 1901	60	24 July.
Peryer, M.	Christchurch	50	3899	25 Aug.	71	4 Sept.
Pidgeon and Co., Limited, E. W.	Christchurch	45	3870	4 Aug.	63	7 Aug.
Powley and Keast	Dunedin	43	3911	29 Aug.	75	18 Sept.
Pretty and Sons, Limited, W.	Ipswich, Eng.	13	3933	13 Sept.	75	18 Sept.
Pretty and Sons, Limited	Ipswich, Eng.	13, 38	3934, 5	13 Sept.	..	..
Rice, W. S.	New York	3	3842	2 July	63	7 Aug.
Richards, W. O., and another	Sydney	48	3442	28 June, 1901	75	18 Sept.
Ross Antidote Company, Limited	Hampden, N.Z.	2, 3	3909, 3910	29 Aug.	75	18 Sept.
Rudge-Whitworth, Limited	Coventry	22, 40, 22, 40	3916, 7, 8, 9	4 Sept.	75	18 Sept.
Sargood, Son, and Ewen	Wellington	38	3951	26 Sept.	78	2 Oct.
Sargood, Son, and Ewen	Wellington	38	3952	29 Sept.	83	16 Oct.
Sharland and Co., Limited	Auckland and Wellington	50	3942	18 Sept.	78	2 Oct.
Smidth and Co., F. L.	Copenhagen, Denmark	6	3875	13 Aug.	67	21 Aug.
Somerville, W.	Burnley	47	3412	8 June, 1901	75	18 Sept.
Sterling Remedy Company	Chicago	3	3494	15 Aug., 1901	75	18 Sept.
Stratford Farmers' Co-operative Association, Limited	Stratford, N.Z.	42	3941	18 Sept.	83	16 Oct.

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

Name.	Address.	Class.	Application.		*Gazette.*	
			No.	Date.	No.	Date.
Taylor, T. E.	Akaroa	42	3940	16 Sept. ..	78	2 Oct.
Tracker Company. (See M. D. Wreathall and E. G. Breeze.)						
Tucker, W. F.	Auckland	3	3954	30 Sept. ..	83	16 Oct.
Tullis and Son, Limited, J. ..	Glasgow	37, 37, 37, 37, 40	3902, 3, 4, 5, 6	26 Aug. ..	71	4 Sept.
Turnbull and Co., W. and G. ..	Wellington	48	3845	2 July ..	57	10 July.
Turnbull and Co., W. and G. ..	Wellington	47	3844	2 July ..	57	10 July.
Turnbull and Co., W. and G. ..	Wellington	42	3937, 9	16 Sept. ..	87	30 Oct.
Turnbull and Co., W. and G. ..	Wellington	42	3938	16 Sept. ..	..	..
Van Hoytema, D., and another ..	Culemborg, Holland ..	43	3869	2 Aug. ..	75	18 Sept.
Van Hoytema and Co. (See D. Van Hoytema and G. G. G. C. Cremers.)						
Wailes, Dove, and Co., Limited ..	Newcastle-on-Tyne ..	1	3436	27 June, 1901	71	4 Sept.
Ward and Co., J. G.	Invercargill	42	3887	18 Aug. ..	71	4 Sept.
Warnock Bros.	Auckland	47	3865	25 July ..	67	21 Aug.
Weingarten Bros.	New York	38	3907	27 Aug. ..	..	..
Wellington Fresh Food and Ice Company, Limited	Wellington	42	3913	1 Sept. ..	75	18 Sept.
Whittome, Stevenson, and Co., Limited	Auckland	42	3953	29 Sept. ..	..	..
Williams Company, T. C.	Richmond, U.S.A. ..	45	3854	21 July ..	71	4 Sept.
Woodyatt and Co., A. R.	Guelph, Canada ..	7	3849	10 July ..	..	..
Wormald, J. D...	Sydney	6	3871	5 Aug. ..	63	7 Aug.
Wormald Bros. (See J. D. Wormald.)						
Wreathall, M. D., and another ..	Christchurch ..	3	3930	12 Sept. ..	75	18 Sept.
Wylie, W.	Wellington	42	3912	1 Sept. ..	71	4 Sept.
Yeatman and Co., Limited ..	London	42	3502	22 Aug., 1901	75	18 Sept.

By Authority: JOHN MACKAY, Government Printer, Wellington.