

# SUPPLEMENT

TO THE

# NEW ZEALAND GAZETTE

# THURSDAY, JUNE 13, 1901.

Published by Anthority.

# WELLINGTON, THURSDAY, JUNE 13, 1901.

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Notice of Acceptance of Complete Specifications.

Patent Office.

Patent Office, Wellington, 12th June, 1901. COMPLETE specifications relating to the under-men-tioned 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 *Gasette*, 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. 12892.—17th August, 1900.—WILLIAM BROMILEY, of Dunedin, New Zealand, Miner. Improved vessel for containing material for killing moths and the like.\*

-The device for containing material for killing Claim. moths and the like consisting of a vessel provided with a dome or hood, and a hook whereby said vessel may be sus-pended from the branch of a tree, substantially as specified and illustrated.

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

No. 12901. — 22nd August, 1900. — CHARLES HARRISON WARD, of 60, Queen Street, Melbourne, Victoria, Metallur-gist. An improved process of and furnace for chloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatilising and separating their constituents.\*

Claims.—(1.) An improved process of chloridizing or of drying or roasting ores or other metalliferous materials, and volatilising and separating their constituents, consisting in subjecting them in a furnace to the action of a pulsating or intermittent current of air or gas passing through the hearth, then drawing off the vaporised constituents succes-sively through one or more independent exits according to their respective volatilising-points, substantially as and for the purposes described and explained. (2.) Subjecting ores or other metalliferous material in a furnace to the action of

a pulsating or intermittent current of air and (or) gas passed through the hearth, substantially as and for the purposes specified. (3.) In a furnace for chloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatil-ising and separating their constituents, an adjustable shak-ing or vibrating hearth, in combination with means for sup-plying air and (or) gas therethrough to the material under treatment, substantially as and for the purposes specified, and as illustrated in the drawings. (4.) In a furnace for chloridizing or for drying or roasting ores or other metalli-ferous materials, and (or) volatilising and separating their constituents, a hearth having numerous air- or gas-supply ports or passages, as b, arranged approximately horizontally or at only a slight incline through said hearth, and with or without baffles as b', substantially as and for the purposes specified, and as illustrated in the drawings. (5.) In a furnace for chloridizing or for drying, roasting, and (or) volatilising and separting metals and (or) other materials in ores and ore-concentrates, a hearth whose surface consists of a series of shallow steps, with a number of approximately horizontal holes or passages allowing the passage of air and (or) gas from air-cumbers d through the "risers" of said steps, and either with or without baffles or deflectors, as b', near the discharge-ends of said holes or passages, substantially as and for the purposes specified, and illustrated in Fig. 4 of the draw-ings. (6.) In a furnace for chloridizing of for drying or oast-ing ores or other metalliferous materials, and (or) volatilising and separating their constituents, the combination with a hearth having numerous air- or gas - supply ports or passages, as b, arranged approximately horizontally or at a slight incline therethrough, of practically air-tight chambers, as d, arranged beneath the hearth and communicating with the perforations or passages in separate sections thereof, sub-stantially as and for the pur a pulsating or intermittent current of air and (or) gas passed slight incline therethrough, of practically air-tight chambers, as d, arranged beneath the hearth and communicating with the perforations or passages in separate sections thereof, sub-stantially as and for the purposes specified, and as illustrated in the drawings. (7.) In a furnace for chloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatilising and separating their constituents, a hearth having numerous air- or gas-supply ports or passages, as b, arranged approximately horizontally or at only a slight incline therethrough, said hearth being suspended or sup-ported so that its inclination can be adjusted, and so that it can be vibrated or shaken, said hearth being connected by a pipe or pipes having ball-and-socket and telescopic joints with an air- or gas-supply pipe whereby a current of air or gas, preferably pulsating or intermittent, may be supplied to the material under treatment, substantially as and for the purposes specified, and as illustrated in the drawings. (8.) In a furnace for chloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatilising and separating their constituents, the combination with a hearth having an air- or gas-supply thereto of partitions extending through the furnace into a number of chambers or compartments each having a separate exit or exits, sub-stantally as and for the purposes specified, and as illustrated in the drawings. (9.) In a furnace for chloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatilising and separating their constituents, the combination with a hearth having an eir- or gas-supply thereto of partitions itically divide the furnace into a number of chambers or compartments each having a separate exit or exits, sub-stantally as and for the purposes specified, and as illustrated in the drawings. (9.) In a furnace for chloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatilising and separating their constituent

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arranged that they are approximately horizontal at that ( in the respective printing-machine. The above-mentioned part upon which the material usually rests whilst under treatment, substantially as and for the purposes specified, and as illustrated in Fig. 8 of the drawings. (10.) In a furnace for chloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatilising and the parts thereof may be applied to other linotype machines. arranged that they are approximately horizontal at that [ part upon which the material usually rests whilst under treatment, substantially as and for the purposes specified, and as illustrated in Fig. 8 of the drawings. (10.) In a furnace for ohloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatilising and separating their constituents, a rotating hearth having air-or gas-supply perforations or passages so arranged that they are approximately horizontal at that part upon which the material under treatment usually rests, in combination with a series of air- or gas-supply chambers or compartments, as d, arranged segmentally around the hearth, substantially as and for the purposes specified, and as illustrated in Fig. 8 of the drawings. (11.) In a furnace for chloridizing or for drying or roasting ores or other metalliferous materials, and (or) volatilising and separating their constituents, a series of adjustable hearths provided with chambers and perfora-tions, each hearth capable of independent adjustment and motion, including that of a vibratory or shaking character, tions, each hearth capable of independent adjustment and motion, including that of a vibratory or shaking character, and projecting alternately from opposite sides of the interior of a tower, so that the ore or other material being fed from the top falls upon and passes over in succession each hearth, through which it is subjected to the action aforesaid of a current or currents of air and (or) gas, substantially as and for the purposes specified, and as illustrated in Fig. 9 of the drawings.

drawings. (Specification, 8s. 6d.; drawings, 2s.)

No. 12955.—3rd September, 1900.—JAMES HAIR, of Tyne Street, Oamaru, New Zealand, Blacksmith. Improvements in whippletrees.\*

[Note.-The title in this case has been altered. See list Provisional Specifications, Gasette No. 80, of the 13th September, 1900.]

visional Specifications, Gasette No. 80, of the 13th September, 1900.] Claims.--(1.) The combination with a whippletree of a spring pin, and bracket or the like for attaching the trace thereto, substantially as described. (2.) The combination with a whippletree of a pin sliding in a recess in the end thereof, of a bracket or the like with which the said pin can engage, and of a spring for normally holding the said pin in engage, and of a spring for normally holding the said pin in engage, and of a spring for normally holding the said pin in engage, and of a spring for normally holding the said pin in engage, and of a spring for normally holding the said pin can engage, of a spring for normally holding the said pin in engagement with the bracket, and of means such as a thumb-piece for withdrawing this pin into the whipple-tree end, substantially as described. (4.) The attachment for whippletrees comprising the pin sliding in a recess in the whippletree end, a bracket having a hole for receiving the pin, the spring for normally holding the pin in engagement with the hole in the bracket, and the thumb-piece for with-drawing the pin within the recess in the whippletree end, substantially as described. (Specification, 2s.; drawings, 1s.)

No. 18116.—30th October, 1900.—HARRY SHAW, of the Torpedo Corps, Wellington, New Zealand, Engineer. An improved knife-cleaning machine.\*

Improved knife-cleaning machine." Claims.—(1.) An endless oblong box, the bottom of which is provided with longitudinal slats or runners, and the side of which is pierced with a number of holes, in combination with a pair of boards fitting within the box and capable of sliding upon the slats or runners, the adjacent surfaces of such boards being covered with layers of felt or other suit-able material, as and for the purposes set forth. (2.) In knife-cleaning machines, a pair of boards placed one above the other, the bottom one of which is provided with up-wardly projecting ends between which the top board fits, and the adjacent surfaces of which are covered with layers of felt or other suitable material, such boards fitting and capable of sliding within an oblong endless box, as specified. (3.) The general arrangement, construction, and combina-tion of parts in my improved knife-cleaning machine as de-soribed and explained, as illustrated in the drawings, and for the purposes set forth. (Specification, 2s. 3d.; drawings, 1s.)

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

No. 13263.—20th December, 1900.—EDWARD WATERS, Jun., a member of the firm of Edward Waters and Son, Patent Agents, of 131, William Street, Melbourne, Victoria (nominee of the Linotype Company, Limited, of 188, Fleet Street, London, England, assignees of William Henry Lock and Philip Charles Lawless, both of 188, Fleet Street, Lon-don, aforesaid, Frank Cuttriss Dolby, of the Premier Cycle Works, Coventry, England, Richard Cornelius Elliott and Charles Holliwell, both of the Linotype Works, Broadheath, Chester, England). Improvements in linotype machines.

Extract from Specification.—The present invention relates to improvements in linotype machines, in late news lino-types, and in means for holding the latter in working position

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

(Specification, £3 5s.; drawings, 18s.)

No. 13264.—20th December, 1900.—EDWARD WATERS, Jun., a member of the firm of Edward Waters and Son, Patent Agents, of 131, William Street, Melbourne, Victoria (nominee of the Linotype Company, Limited, of 188, Fleet Street, London, England, assignees of Isaiah Hall, formerly of 84, Manchester Road, Preston, Lancaster, England, but presently of the Mergenthaler Setz Maschinen Fabrik, 17 and 18, Chaussee Strasse, Berlin, Germany). Improvements in the mould of linotype machines.

18, Chaussee Strasse, Berlin, Germany). Improvements in the mould of linotype machines. *Extract from Specification*.—The present invention relates to improvements in moulds for casting lines of types, or lino-types, as they are generally called, and which term is herein-after used as including printing-bars for borders and the like. It also includes the improved linotypes made by the above-mentioned improvements, and the object of it is to do away with the necessity which at present exists in the case of any linotype machine of changing the mould or of altering the thickness of the mould-cavity in the mould for each change of fount. Thus, up to the present time, the thickness of a body of a linotype has always been in proportion to the height of the type, a nonpariel linotype being thicker than a ruby one, a brevier linotype thicker than a nonpariel, and so on. Further, a machine that has been working on brevier has a mould for a brevier mould must be taken off, and a pioa mould substituted for it; or, if the mould is in itself capable of adjustment for changes of fount, that dimension of it that corresponds with thickness of linotype must be est larger. Each change of fount, resulting, as just explained, in a thicker or a thinner linotype, has hitherto necessitated the substitution of a correspondingly thicker or thinner ejector-blade. A linotype mould for its printing-edge fitting up to the front of it, and the metal-pot and pump that supply the necessary molten metal fitting up to the back of it, they having been moved up to it for that purpose. After a lino-type has been cast, the pot and pump are moved back again, and to prevent this rearward motion tending to draw the newly cast linotype out of the mould the latter has hitherto been tapered in the direction of its width, being narrower behind than in front. According to the present invention, no newly cast linotype out of the mould the latter has hitherto been tapered in the direction of its width, being narrower behind than in front. According to the present invention, no change of mould is necessitated by any change of fount, the improved mould being capable of having linotypes of any fount cast in it; no change of ejector-blade is necessary, because all the bodies are of the same thickness across their feet; and there is a special provision for preventing the linotypes being drawn backwards, that will allow of the sides of the mould being exactly parallel with each other.

Claims.—(1.) The described combination of mould-cavity and series of grooves. (2.) The described combination of mould-cavity, single grooves communicating with the said cavity, and series of grooves. (3.) The described combination of mould-cavity, series of grooves, and ejector-blade. (4.) The described combination of mould-cavity, single groove communicating with the said cavity, series of grooves, and ejector-blade. (5.) The described combination of mould-cavity, series of grooves, ejector-blade, and adjustable trimming knife. (6.) The described combination of mould-cavity, single groove communicating with the said cavity, series of grooves, ejector-blade, and adjustable trimming-knife. (7.) The described improved linotype capable of being trimmed down to the desired thickness. (Specification, 5s.; drawings, 1s.)

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

No. 13308.—10th January, 1901.—EDWARD WATERS, a member of the firm of Edward Waters and Son, Patent Agents, of 131, William Street, Melbourne, Viotoria (nominee of the Linotype Company, Limited, of 188, Fleet Street, London, England, assignees of William Henry Lock, of 188, Fleet Street, London, aforesaid, and Ferdinand John Wich, of the Linotype Works, Broadheath, Chester, England). Im-provements in linotype machines.

Claims.—(1.) The described combination of a series of magazines, magazine-carriage, and bearing surfaces for it to move on. (2.) The described combination of a series of magazines capable of a horizontal motion to effect change of fount and register, flat plate to close the top mouths of the series, and slot therein to establish communication between

the magazine-entrance and the magazine in register. (3.) The described combination of series of magazines capable of a horizontal motion to effect change of fount and register, flat plate to close the top mouths of the series, slot therein to establish communication between the magazine-entrance and the magazine in register, and the improved front and back plates of the said magazine-entrance. (4.) The deback plates of the said magazine-entrance. (4.) The de-scribed combination of a series of magazines capable of a horizontal motion to effect change of fount and register, pivoted guide to engage with the mouths of the magazine in register, hand-lever and connections by which the operator can place any magazine in the series in register, means for rocking the said guide out of the way in time and for re-turning it, and means for automatically looking the series in the scheded acception of a the selected position. (5.) The described combination of a series of magazines capable of a horizontal motion to effect change of fount and register, pivoted guide to engage with change of fount and register, pivoted guide to engage with the mouths of the magazine in register, hand-lever and con-nection by which the operator can place any magazine in the series in register, means for rocking the said guide out of the way in time and for returning it, means for auto-matically locking the series in the selected position, flat plate to close the top mouths of the magazines, slot therein to establish communication between the maga-ine end the magazine in provider and the implate to close the top mouths of the magazines, slot therein to establish communication between the maga-zine-entrance and the magazine in register, and the im-proved front and back plates of the said magazine-entrance. (6.) The described combination of fount-distinguisher and series of magazines. (7.) The described combination of fount-distinguisher, series of magazines, magazine-carriage, and means for moving the said carriage to effect change of fount and register. (8.) The described combination of escapements, escapement springs and levers, escapement-rods, slotted horizontal bar through which they pass, and keyboard. (9.) The described combination with the vice, assembler-gong, and line-shifter of a linotype machine, of means by which the adjustment of the vice for length of linotype automatically adjusts the said gong and shifter for the same length. (10.) The combination in a linotype machine of the backing-up nut of the adjustable vice-jaw, gong-mechanism, continuous rod connecting the said vice-jaw and gong-mechanism, assembler-bar dog to actuate the gong, arm pivoted on the said bar to hold back the shifter-finger, and connection between the said arm and the as-sembler-box to actuate the said arm. (11.) The combination in a linotype machine of the adjustable vice-jaw, gong-mechanism, continuous rod connecting the said vice-jaw, gong-mechanism, continuous rod connecting the said vice-jaw, gong-mechanism, continuous rod to stop the assembler-bar, arm pivoted on the said bar to hold back the shifter-funger, and connection between the said arm and the as-sembler-box to actuate the said arm in the prometion in a linotype machine of the adjustable vice-jaw, gong-mechanism, continuous rod to stop the assembler-bar, arm pivoted on the said bar to hold back the shifter-finger, and connection between the said arm and the assembler-bar, arm stop on the continuous rod to stop the assembler-bar, arm pivoted on the said bar to hold back the shifter-finger, and connection between the said arm and the assembler-box to actuate the said arm. (12.) The described combination with the line-shifter of a linotype machine, of arm adapted to be rocked into the assembler-box to adjust the shifter-arm and to be disengaged therefrom by the assembler-box. (13.) The described combination with the adjustable jaw of the vice of a linotype machine of going machine con-(13.) The described combination with the adjustable jaw of the vice of a linotype machine, of gong-mechanism, con-tinuous rod connecting the two, assembler-bar, and dog thereon to actuate the gong. (14.) The described combina-tion with the adjustable jaw of the vice of a linotype machine, of gong-mechanism, continuous rod connecting the two, assembler bar, dog thereon to actuate the gong, and stop on the continuous rod to stop the assembler-bar. (Specification, 12s.; drawings, 12s.)

No. 13334.—28th January, 1901.—LOOP-LOCK MACHINE COMPANY, of Boston, Massachusetts, United States of America (assignees of Edwin Eaton Bean, of Warner, New Hampshire, United States of America). Improvements in boot- and shoesewing machines.

Claims.—(1). A looping hook adapted to move in the same plane as that of the needle-path, and so operated that it will pass through the needle-thread loop from a point outside of the needle-path and will engage with the looking-thread lying across and within the needle-path, and will draw a loop of the latter through the needle-thread loop, substantially as described, and for the purpose specified. (2). The looping-hook pivotally suspended from a crank arm, and connected below said point of suspension to a rod, the said crank-arm and rod being actuated by suitable mechanism for impartbelow said point of suspension to a rod, the said crank-arm and rod being actuated by suitable mechanism for impart-ing to the hook a vertical reciprocating and swinging move-ment in the plane of the needle-path, substantially as and for the purpose specified. (3). The combination with the said looping-hook of a cast-off device adapted to receive a move-ment in the plane of the path of the said hook and of the needle, substantially as and for the purpose specified. (4.) The cast-off device mounted on a stationary pivot and adapted to receive a swinging movement from the aforesaid crank-arm, substantially as and for the purpose specified. (5.) The work-feeding device comprising gripping-jaws pivot-ally mounted on an axle upon which they are adapted to slide laterally, the grip of said jaws being controlled by a resilient pressure except at the time the needle is being thrust through the work, substantially as and for the pur-

pose specified. (6.) The aforesaid gripping-jaws provided with sleeves, one of which fits upon the other and is main-tained in such position by a tongue and annular groove or other suitable means, one of the jaws also having a seg-mental flange adapted to loosely engage with a horizontally or laterally swinging arm, substantially as and for the pur-pose specified. (7.) The combination with the aforesaid gripping-jaws of an adjustable spring-controlled rod con-necting the back jaw with the mechanism by which it is swung or oscillated, and of a stop-piece which is adapted to come into the path of a shoulder on said back jaw at the time the needle is being thrust through the work, substantially as and for the purpose specified. (8.) The oscillatory curved and barbed needle acting in conjunc-tion with a thread-guide and an auxiliary finger, which receive a compound vertical and horizontally in the barb a loop of the waxed or needle thread horizontally in the barb a loop of the waxed or needle thread horizontally in the baro of the needle, substantially as described. (9.) A horizontally or laterally swinging arm furnished with the aforesaid thread-guide and auxiliary finger, and formed with a slot for the reception of a fixed pin, in combination with a reciprocating slide which is connected with a stationary pivot by a friction-device to permit of the said slide tilting vertically to a limited extent at the commencement of its vertically to a limited extent at the commencement of its reciprocations, substantially as and for the purpose specified. (10.) The channel-guide formed with an aperture for the locking-thread to pass through, the position of said aperture being such that said thread will be laid approximately at right angles to the needle-path by the feeding of the work through the machine, substantially as and for the purpose specified. (11.) The reciprocating presser-finger adapted to co-operate with the aforesaid back jaw of the work-feeding device, and to press the upper against the sole with a resilient pressure just prior to the passage of the needle through the work, substantially as and for the purpose specified. (12.) The combination with the aforesaid presser-finger of a reciprocating slide, slotted at its forward end to finger of a reciprocating slide, slotted at its forward end to receive a stationary pin and adapted to participate in a certain amount of independent movement against an adjustable spring which bears upon its rear end, substantially as and for the purpose specified. (13.) A boot- and shoe-sewing machine having its parts constructed, arranged, and combined to operate substantially as described with refer-ence to the drawings for the purpose specified. (Specification, £1 7s.; drawings, 5s.)

No. 13339.—28th January, 1901.—JOHN CARLISLE BLAIR, Dentist, and ROBERT WEDEKIND, Capitalist, both of Louis-ville, Kentucky, United States of America. Improvements in fountain spittoons.

Claims.—(1.) Providing a spittoon-bowl with an internal disk having prongs or fingers resting on the bowl, and which is held down by an adjustable flanged water-conductor passing through it, at the centre, substantially as specified. (2) In a spittoon, application to the disk of a device termed a spreader, which is adjustable vertically, and provided with a top flange above the disk, also with lateral water-discharge openings below said flange, substantially as specified. (3.) In a spittoon, providing a water-conductor and spreader for the disk which have a screw-valve for regulating flow of water, and whose head extends over discharge orifices, so as to break the current of water, substantially as described. (4.) In a spittoon, combining with the disk and water-con-ductor a vertically adjustable spreader which has a top flange and lateral discharge orifices, and a screw-valve which is also adjustable, as specified. (5.) In a spittoon, arranging a deodorant, a pan-like deodorant-holder directly beneath the disk in the bowl, substantially as described. (6.) In a spittoon, providing a water seal or trap, which is located in the bowl below the disk, and comprises an inverted cup and pendent water tube having lateral openings, as described. (Specification, 4s.; drawings, 1s.) Claims.-(1.) Providing a spittoon-bowl with an internal

No. 13388. — 9th February, 1901. — WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of Arthur Charles Cavendish Liardet, of 16, Broad Street, New York, United States of America, Gentleman). Improvements relating to bottles and similar liquid-containing vessels.

Claims.—(1.) A hollow float-valve, having a pointed upper part and a semi-spherical self-heating lower part, substan-tially as and for the purpose specified. (2.) The con-struction of the said float-valve to contain liquid, or shot, or other mobile substance, for the purpose speci-fied. (3.) The combination with the hollow float-valve of a weight connected therewith by a flexible cord ex-tending from the lower end of the valve to the lower end of the weight, substantially as and for the purpose specified. (4.) The hollow weight formed with open ends and with a conical or inclined portion on its exterior, substantially as and for the purposes specified. (5.) The combination with the aforesaid float-valve and its weight of

a tube entirely open at both ends, said tube being formed with lateral openings, and provided at its upper end with a seat for the said valve, substantially as described. (6.) A baffle or plug provided with sockets or recesses for containing loose bodies or locking-members which are adapted to engage with a groove or grooves in the bottle-neck, substantially as and for the purpose specified. (7.) The baffle or hollow plug constructed with grooves and passages substantially as described, and operating in conjunction with the said valve for the purpose specified. (8.) An apparatus or device having its parts constructed, arranged, and operating substantially as described with reference to the drawings, for the purpose specified. for the purpose specified. (Specification, 10s. 6d.; drawings, 1s.)

No. 13408.—14th February, 1901.—John KEBWIN STEWART, of 158, East Huron Street, Chicago, Illinois, United States of America, Manufacturer. Improvements in the construction of clippers or shearing-tools.

Claims.—(1.) In a clipper or shearing-tool, in combina-nation with a case or body, the lever for operating the oscillating cutter having an upwardly-facing bearing-sur-face, the upper wall or cap of the case having an aperture above such bearing-surface, and a detachable plate applied at such aperture, and having its lower face in a plane parallel to the plane of contact of the cutters, and arranged to afford bearing for said upwardly-facing surface of the lever. (2.) In a clipper or shearing-tool, in combination with the cutter and the main operating-lever, a lever-arm actuated by said main operating-lever having loose pivotal connection thereto and laterally restrained thereby, but having limited freedom of oscillation about a longitudinal axis, and of vertical movement with respect to said main connection thereto and laterally restrained thereby, but having limited freedom of oscillation about a longitudinal axis, and of vertical movement with respect to said main operating-lever, the latter having an upwardly-facing bear-ing-surface, and the case having a plate with a bearing-surface parallel to the plane of contact of the cutters, against which the bearing-surface of the main lever presses. (3) In a clipper or shearing-tool, in combination with the oscillating cutter, the main operating-lever, a lever-arm having loose pivotal connections to said main operating-lever and laterally restrained thereby, but having a limited free-dom of oscillation about a longitudinal axis, and of vertical movement with respect to said lever, and bearing on the oscillating cutter and constituting the medium by which the main lever actuates said cutter, a screw operating between said main lever and said lever arm, screwed into one of said parts, and impinging against the other to adjust the lever-arm in vertical plane about its pivotal connection to the main operating-lever, the latter having an upwardly-facing bearing-surface and the case having a plate with the bearing-surface parallel with the plane of contact of the cutters, against which the bearing-surface of the main operating-lever is pressed by the action of the screw forcing the cutters is contact. (4) In a clipme are chaving tool facing bearing-surface and the case naving a place with the bearing-surface parallel with the plane of contact of the cutters, against which the bearing-surface of the main operating-lever is pressed by the action of the screw forcing the cutters into contact. (4.) In a clipper or shearing-tool, in combination with the case or body, the oscillating cutter, the main operating-lever fulcrumed on the body, a lever-arm having a stem extending in and laterally restrained by said operating-lever having a loose pivotal connection thereto, and limited freedom of oscillation about the longi-tudinal axis of its stem and of vertical movement with respect to said operating-lever, said lever arm at the forward end bearing on the oscillating cutter and constituting the medium by which the main lever actuates said cutter, and a screw operating between said lever-arm and said operating-lever to adjust the former about its pivot to the latter. (5.) In a clipper or shearing-tool, in combination with the case or body, the oscillating cutter and the main operating-lever, a lever-arm which at the forward end bears upon the oscillating cutter toward the opposite ends of the latter, said lever-finger being pivoted to the main operating-lever for-ward of its pivotal attachment to the lever-arm, and having at its said pivot to the operating-lever limited freedom of oscillation about a longitudinal axis, and an adjusting sorew operating between the rear portion of said lever-arm and the operating-lever, being sorewed into one of said parts and impinging against the other to press the oscillating cutter against the fixed cutter. (6.) In a clipper or shearing-tool, in combination with the case, the oscillating cutter and the main operating-lever, a lever-arm carried by the main operating-lever and laterally restrained thereby, and at its forward end bearing on the oscillating cutter toward the opposite ends of the latter, a supplemental lever-finger pivoted at its rear end to said lever-arm and at its forward end bearing upon the os butter intermediate the ends of the latter, said supplemental lever-finger being pivoted to the operating-lever forward of its pivotal connection to said lever-arm, and having at its said pivotal connection to the operating-lever limited range of oscillation about a longitudinal axis, said operating-lever being pivoted on a pest rigid with the case and having an upwardly-facing bearing-surface, and the case having its plate with the bearing-surface parallel with the plane of con-

tact with the cutter, against which the bearing-surface of th tact with the cutter, against which the bearing-surface of th operating-lever may be pressed, an adjusting-screw operating between the operating-lever and said lever-arm, screwed into one of said parts and impinging against the other to force the oscillating cutter upon the fixed cutter. (7.) In a clipper or shearing-tool, in combination with the case or body having the fixed cutter, the oscillating outter, a main operating-lever fulcrumed on a rigid post of the case, a lever-arm which at its forward end bears upon the oscillating cutter toward the ends of the latter and constitutes the medium by which the operating-lever actuates said cutter, a supplemental lever-finger pivoted to said lever-arm and extending forward from its pivot, and at the forward end bearing upon the oscillating cutter intermediate the ends of the latter, a pivot which connects said lever-finger to the the latter, a pivot which connects said lever-finger to the operating-lever, said pivot extending through the lever-arm. operating-lever, said pivot extending through the lever-arm, the pivot apertures in said lever-arm and said supplemental lever-finger being enlarged both ways from a middle point in the latter to permit said lever-arm and finger to have a limited range of oscillation about a longitudinal axis, and an adjusting-screw operating between said lever-arm and said operating-lever at the rear end of the former to force its for-ward end down upon the oscillating cutter. (Specification, 9s. 6d.; drawings, 1s.)

No. 19431. — 27th February, 1901. — WILLIAM MUNBO WHISHAW, of Palmerston North, New Zealand, Farmer. An improved saucepan.\*

Claim.—In combination with a saucepan, a tap leading from the bottom thereof and placed beneath the handle, and a removable strainer within the saucepan surrounding the intake of the tap, as specified.

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

No. 13461.—7th March, 1901.—WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of the British Motor Traction Company, Limited, of 40, Holborn Viaduct, London, England, assignees of Wilhelm Maybach, of 40, Holborn Viaduct, aforesaid). Improvements in or relating to motors and motor vehicles, and mechanism for use therewith.

bination with an operating lever such as H of a toothed seg-ment for engaging any one of the clutches of the speed-gear as required, with or without a similar toothed segment for operating the nose or cam, and with or without a separate segment for operating reversing-gear, substantially as de-scribed. (7.) In an engaging and disengaging device for gearing, the combination of a friction coupling connected with a shat C, toothed wheels E E<sup>1</sup> sliding on said shaft, a hand-lever H moving within a guide J, a rod E<sup>2</sup> connected to the toothed wheels and to the lower extremity of the hand-lever, a lever G connected to the shaft C, a nose or cam H<sup>2</sup> fixed to the hand-lever H and adapted to operate the lever G, a spring G<sup>4</sup> effecting a tension upon this lever G, a counter-shaft F running in suitable bearings, and toothed wheels F<sup>1</sup>, F<sup>2</sup> rigidly connected to said countershaft, substantially as and for the purpose described. (8.) In an engaging and

disengaging device for gearing, the combination with toothed wheels E, E<sup>1</sup>, a rod E<sup>2</sup> provided with teeth, toothed wheels K, K<sup>1</sup>, a rod K<sup>2</sup> in construction similar to E<sup>2</sup>, a hand-lever H carrying at its lower end a toothed segment H<sup>2</sup>, a guide J provided with four ways or recesses, a countershaft F, and toothed wheels L, L<sup>1</sup> rigidly connected to said countershaft, substantially as and for the purpose described. (9.) In an engaging and disengaging device for gearing, the combination with a hand-lever H moving a guide J having five ways or recesses, a toothed segment Q, a rack R engaging with said segment, a sliding rod S provided with an inclined slot, a pin R<sup>2</sup> sliding within said slot, a bell-crank lever T attached to the sliding rod S, and a toothed wheel U connected to the sliding rod s, substantially as and for the purpose described. (10.) In an apparatus for cooling water for motor vehicles, the combination of a vessel adapted to receive the water, tubes passing through said vessel and open at both ends, and means for effecting a strong draught through said tubes, substantially as and for the purpose described. (11.) In an apparatus for cooling water for motor vehicles, the combination of a vessel adapted to receive the water, tubes passing through said vessel and open at both ends, and means for effecting a strong draught through said tubes, substantially as and for the purpose described. (11.) In an apparatus for cooling water for motor vehicles, the combination of a vessel adapted to receive the water, tubes passing through said vessel and purpose described. (11.) In a substantially as and for the purpose described. (12.) In a substantially as and for the purpose described. (12.) In a substantially as and for the purpose described. (13.) In a substantially as and for the purpose described. (14.) In an apparatus for cooling water for motor vehicles, the combination of a vessel adapted to receive the water, tubes passing through said vessel and the purpose described. (11.) In an apparatus for cooling water for motor vehicles, the combination of a vessel adapted to receive the water, tubes passing through said vessel and open at both ends, a fan arranged so as to draw air through said tubes, and means for operating said fan, substantially as and for the purpose described. (12.) In an apparatus for cooling water for motor-vehicles, the combination of an upright flat vessel adapted to receive the water, a large number of horizontal tubes passing through said vessel and communicating at both ends with the open air, and means for drawing the air through said tubes, substantially as and for the purpose described. (13.) In an explosion motor, the combination with the water-jacket of the cylinder of the same, of a vessel adapted to hold the cooling-water for said jacket, conduits connecting the vessel with the jacket, tubes passing through the vessel and being open at both ends, a fan adapted to draw air through the tubes, and means for connecting the fan to the motor, substantially as and for the purpose described. (14.) The complete water-cooling device for motor-vehicles, substantially as described and illustrated in Figs. 20-22, inclusive, of the drawings. (15.) In motor road-vehicles, the combination with the main driving-shaft of bevel-wheel gearing connected with the vehicle road-wheels, said gearing forming differential gear to permit the turning round of the vehicle and acting simultaneously as impelling mechanism, substantially as and for the purpose described. (16.) In motor road-vehicles, the combination with the driving-shaft of a motor of a divided road-wheel shaft, differential gear carried by the motor driving-shaft and disposed between the ends of the two parts of the road-wheel shaft, and bevel gearing driving the two parts of the road-wheel shaft, and bevel gearing driving the two parts of the roadshaft, differential gear carried by the motor driving-shaft and disposed between the ends of the two parts of the road-wheel shaft, and bevel gearing driving the two parts of the road-wheel shaft, which parts are placed out of line to obtain splaying of the road-wheels, substantially as de-scribed. (17.) The complete driving mechanism for motor vehicles substantially as described and illustrated in Figs. 23 and 24 of the drawings. (18.) In an explosion motor, the combination with the combustion-chamber of the motor of an auxiliary ignition-chamber such as q containing the combination with the combination-enamber of the motor of an auxiliary ignition-chamber such as g containing the sparking-points or ignition-tube, and communicating with the main combustion-chamber by a small passage or orifice, substantially as and for the purpose described. (19.) In an explosion motor, the combination with the main combustion-chamber f of an auxiliary chamber g containing electric explosion motor, the combination with the main combustion-ohamber f of an auxiliary chamber g containing electric ignition-points h and communicating by a small passage or orifice  $g^1$  with the chamber f, substantially as and for the purpose described. (20.) In an electro-magnetic ignition device for explosion motors, the combination with the mechanism for rotating the armature of the magnetic machine of a movable contact piece arranged within the oplinder of the motor, and operatively connected with the mechanism for rotating the armature, substantially as and for the purpose described. (21.) In an electro-magnetic ignition device for explosion motors, the combination of an operating cam j, an arm  $i^2$  secured to the armature-spindle and adapted to be operated by the cam, a rod k pivoted to the arm  $i^2$ , means for normally retaining the rod k, and a movable contact-piece l within the cylinder of the motor and connected with a lever m outside the cylinder adapted to connected with a lever m outside the cylinder adapted to be operated by the tappet on the rod k, and provided with means for returning it to its normal position after displacemeans for returning it to its normal position after displace-ment by the tappet, substantially as and for the purpose described. (22.) The complete electro-magnetic ignition device for explosion engines substantially as described and illustrated in Fig. 26 of the drawings. (Specification, £1; drawings, 4s.)

No. 13486.-22nd March, 1901.-Solar Motor Company a corporation organized under the laws of the State of New Jersey, and doing business at 186, Devonshire State of New Massachusetts, United States of America, Manufacturers (assignees of Aubrey George Eneas, of 186, Devonshire Street, Boston aforesaid, Gentleman). Improvements in solar generators.

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Claims.-(1.) A solar generator comprising a reflector, a support therefor, and means for changing the position of said reflector, said reflector having a conical form open at top and bottom, being truncated above its apex at such a distance as to provide a relatively large opening as and for the purpose described, and steam-generating apparatus located in the focus of said reflector. (2) A solar generator comprising a reflector in the form of a cone, a support therefor, and means for changing the position of said reflector, said reflector having a truncated form open at top and bottom, and made up of a multitude of facets each curved very slightly with respect to two axes, and the whole having the general curva-ture of the truncated cone, and a boiler and water-circula-tion apparatus extending co-axially of said reflector. (3.) A solar generator comprising a reflector having a curved re-flecting surface focussing at all points along a straight line or a focal axle, pivotal fixed supports for said reflector at oppo-site sides thereof for the diurnal movement of the reflector, and means for varying the angle of the focal axis relatively to provide a relatively large opening as and for the purpose site sides thereof for the diurnal movement of the reflector, and means for varying the angle of the focal axis relatively to the said fixed pivotal diurnal axis of the reflector, accord-ing to the declination of the sun. (4.) A solar generator comprising opposite fixed supports set in alignment with the meridian of the place, said supports containing fixed pivotal bearings at unequal heights, the axial line of said bearings extending at an angle corresponding to the latitude of the place, a reflector mounted at its opposite sides to turn on said bearings, said reflector having curved walls of the conical type described, and means for tipping said reflector so as to vary the angle of the focal axis thereof relatively to said type described, and means for tipping said reflector so as to vary the angle of the focal axis thereof relatively to said pivotal line, and means to turn said reflector on said bear-ings. (5.) In a solar generator, a reflector having at opposite sides approximately vertical tracks, fixed supports, each of said supports being provided with pivotal bearings for said reflector, and connections between said pivotal supports for moving said tracks relatively to said pivotal bearings. (6.) In a solar generator, independent supports each provided with a pivotal bearing, said pivotal bearings being in longitudinal alignment, a reflector mounted on said pivotal bearings and having its centre of gravity approximately in the line of said pivotal bearings, means for shifting said reflector relatively to said pivotal bearings, said reflector being maintained with its centre of gravity in the said pivotal line in all the chang-ing positions of the reflector. (7.) A solar generator com-prising a reflector of the conical type desoribed, automatio means for giving said reflector a diurnal movement at a uniform rate of speed corresponding to the apparent diurnal prising a reflector of the conical type described, automatic means for giving said reflector a diurnal movement at a uniform rate of speed corresponding to the apparent diurnal travel of the sun, and means for varying the length of time required to pass from sunrise position to sunset position, and intermediate positions, according to the different periods of the year, without adjusting the clock or controlling-device. (8.) In a solar generator, a reflector, a track, a pivot on which the reflector may turn, and a trolley carried by said pivot to engage said track, said trolley comprising pairs of wheels adapted to engage the front side and back side of said track. (9.) In a solar generator, a reflector having at its opposite sides pivotal supports, guiding-devices to hold said reflector in position relatively to said supports, declina-tion - wheels mounted in fixed position, direction - pulleys mounted on the reflector, and a cable fastened at its ends to the reflector and passing about said declination-wheels and said direction-pulleys whereby a movement of the cable will simultaneously move the opposite sides of the reflector in opposite directions. (10.) In a solar generator, a reflector having at its opposite sides pivotal supports, guiding-devices to hold said reflector in position relatively to said supports, declination - wheels mounted in fixed position, direction-pulleys mounted on the reflector, and a cable fastened at its ends to the reflector and passing about said declination-wheels and said direction-pulleys whereby a movement of the cable will simultaneously move the opposite sides of the reflector in opposite directions. (10.) In a solar generator, a reflector having at its opposite sides pivotal supports, guiding-devices to hold said reflector in position relatively to said supports, declination - wheels mounted in fixed position, direction-pulleys mounted on the reflector, and a cable fastened at its ends to the reflector and passing about said declinationpulleys mounted on the reflector, and a cable fastened at its ends to the reflector and passing about said declination-wheels and said direction-pulleys, and other direction-pulleys mounted on the reflector opposite the first-mentioned direc-tion-pulleys, and a steadying cable secured in fixed position at its ends and passing over said second-mentioned direction-pulley. (11.) In a solar generator, a reflector of the conical type described, pivotal supports therefor permitting said re-flector to follow the diurnal movement of the sun, a steam-generating apparatus in the focus of the reflector, said steam generating apparatus having a lower portion to regenerating apparatus in the focus of the reflector, said steam generating apparatus having a lower portion to re-ceive water to be converted into steam and an upper portion to receive the steam and water, said boiler being tipped with the reflector, and means for preventing the water from escaping with the steam through the top of the steam-generating apparatus when the latter is tipped into approximately horizonal position. (12.) In a solar generator, a reflector of the conical type described, pivotal supports therefor permitting said reflector to follow the diurnal movement of the sun, a steam-generating apparatus in the focus of the reflector, said steam-generating apparatus in the a lower portion to receive water to be converted into steam and an upper portion to receive the steam and water, said and an upper portion to receive water to be converted into steam and an upper portion to receive the steam and water, said boiler being tipped with the reflector, and means for prevent-ing the water from escaping with the steam through the top of the steam generating apparatus when the latter is tipped into approximately horizontal position, said means including a steam outlet on the upper side of the top of the steam-generating apparatus, and a pipe in the form of a loop extending substantially across the steam-generating appa-ratus for the escape of the steam. (13.) In a solar generator, a steam-generating apparatus comprising a boiler having concentric surfaces and a series of vertically disposed spring strips or plates between said two surfaces, and pressing yield-ingly against the same, for conducting the heat from the outer surface to the inner surface. (14.) In a solar gene-rator, a reflector having endless converging walls, and a tension frame for maintaining the curvature of said walls, said tension-frame comprising a central strain-ring and wires or their equivalents extending from said strain-ring to the periphery of the reflector. (15.) In a solar generator, a re-flector having endless converging walls, and a tension-frame comprising a central strain-ring to the periphery of the reflector. (15.) In a solar generator, a re-flector having endless converging walls, and a tension-frame comprising a central strain-ring to the periphery of the reflector and strain-ring to the periphery of the reflector. (15.) In a solar generator, a re-flector having endless converging walls, and a tension-frame comprising a central strain-ring to the periphery of the reflector reflector. frame comprising a central strain-ring and wires or their equivalents extending from said strain-ring to the periphery of the reflector, and means at one end of said wires for independently tightening the same. (16.) In a solar gene-rator, a central axial boiler, a reflector for directing the sun's rays on to said boiler, said reflector comprising a trun-cated cone of rigid construction open at top and bottom, radial tension members at the top and bottom openings extending from said boiler to the sides of the reflector, and a transverse compression-truss including diametrical top and bottom members, and vertical end uprights at diametrically opposite sides of the reflector, the reflector being mounted on opposite independent trunnions in the plane of said trans-verse truss. verse truss

(Specification, 17s.; drawings, 5s.)

No. 13617.—16th May, 1901.—Автнив Іовwевтн Јозерн, of "Penshurst," Neutral Bay, Sydney, New South Wales, Gentleman. Improvements in and relating to updraught

Claims.—(1.) In an updraught cowl, the combination with a shaft having a trumpet end, of a cone with an upwardly projecting rim, whose orifice is of greater area than the orifice of a superimposed cone, as described and shown, and for the purposes set forth. (2.) In an updraught cowl, the combination with a trumpet-shaped shaft provided with a cone having a projecting rim, of a superimposed cone, a perforated encircling band provided with a sinkage, lower and upper ourved surfaces, and an upwardly projecting rim, as described and shown, and for the purposes set forth. (3.) In an updraught cowl, the combination with a main shaft having a cone attached thereto, of a superimposed cone provided with an inner ourved plate, as described and shown, and for the purposes set forth. (4.) In an updraught cowl, an encircling band constructed as described and shown, and for the purposes set forth. (5.) In an updraught cowl, the comthe purposes set forth. (5.) In an updraught cowl, the com-bination with an encircling band of the class described, of the purposes set forth. (5.) In an updraught cowl, the com-bination with an encircling band of the class described, of a superimposed metal cap having a curved rim, as and for the purposes described. (6.) In an updraught cowl, the com-bination with an encircling band of the class described, of a superimposed cap constructed partly of metal and partly of glass, as and for the purposes set forth. (7.) In the construction of a cowl-cap composed partly of glass and partly of metal, the combination of metal channelled supporting-bars having stops for retaining the glass in position, a central metal cap, and olamping-plates, as described and shown, and for the purposes set forth. (6.) An updraught cowl comprising a shaft having a trumpet end, a cone with an upwardly projecting rim secured to said shaft, a superimposed cone with an upwardly projecting rim and an inner curved plate, an encircling band with lower and upper ourved surfaces, an upwardly projecting rim and a sinkage with perforations therein, and a superimposed cap composed either wholly of metal or partly of metal and partly of glass, the whole secured with strengthening-ribs and supporting-devices, as described and shown, and for the purposes set forth. (Specification, 4s. 6d.; drawings, 1s).

No. 13632.—22nd May, 1901.—HOBACE WIMSETT, of 6, King Street, Wellington, New Zealand, Farmer. The cure and prevention of sand-cracks in horses' feet, corns and sores attending thereto.

Claim.—An ointment for the cure of cracks in horses' feet, corns, and any disease relating thereto, consisting of beeswax, resin, lard, Jeyes' Fluid, Friar's Balsam, and Stock-holm tar, substantially in the proportions as set forth. (Specification, 1s.)

No. 13637.—23rd May, 1901.—HABOLD JAMES BETTANY, of Nelson, New Zealand, Carpenter. An automatically operated reel for builders' lines, measuring-tapes, and other purposes.

Claims.-(1.) A hollow drum loosely mounted upon a spindle fixed in a frame, and upon the outside reriphery of

which a line or tape is wound in combination with a coiled spring and train of cog-wheels mounted within the drum, and gearing with a pinion secured upon the inside thereof, as and for the purposes set forth. (2) An oblong frame to which a spindle is rigidly secured, a hollow drum loosely mounted upon the spindle and provided with means whereby the drum may be automatically caused to rotate in combination with a spring pawl normally engaging with the teeth of a ratchet-wheel fast upon the spindle and provided with means a spring pawl normally engaging with the teeth of a ratobet-wheel fast upon the spindle, and provided with means whereby the pawl may be kept from engagement with the ratohet, as specified. (3.) An oblong frame to which a spindle is rigidly secured, a hollow drum loosely mounted upon the spindle, and upon the outside periphery of which a line or tape is wound, in combination with a grooved pulley loosely mounted upon a spindle fixed to the frame beneath the drum, as set forth. (4.) The general arrangement, con-struction, and combination of parts in my automatically operated reel for builders' lines, measuring-tapes, and other purposes as described and explained, and as illustrated in the sheet of drawings. (Specification, 4s.; drawings, 1s.)

No. 13649.—27th May, 1901.—FREDERICK JONES, of 4, Home Street, Wellington, New Zealand, Salesman. An improved cover for the tires of cycles or other vehicles.

Extract from Specification. -- The tire to be made of Extract from Specification. — The tire to be made of chrome-dressed kip, or any other suitable material, cut out in a circle the size required, and blocked into shape without seams or joins, fixed to circular bands made of linen 1 in. wide, or any other suitable width, with a turnover of  $\frac{1}{2}$  in. to cover the wires. The wires are made by taking a piece of fine steel wire three or four times the circumference of the size required, and, forming the size of the circle, commence by twisting the ends until they finish into a circle of twisted wire, as shown in the drawings.

Claim.-In a leather tire for bioycles and the like vebicles, consisting of parts constructed and arranged sub-stantially as illustrated and set forth. (Specification, 1s. ; drawings, 1s.)

No. 13654.—29th May, 1901.—ALEXANDER RATTRAY AYSON, of Gore, New Zealand, Farmer. An improved device for attaching handles to kerosene-tins, buckets, and the like.

Claims.—(1.) The improved attachment for the purposes indicated, comprising a clip perforated to receive the end of the handle and provided with a tightening-bolt and nut, substantially as described and illustrated. (2.) In combina-tion with a kerosene tin and the like, a clip provided with a tightening-bolt and nut, and a handle fitting into holes in the olip, substantially as and for the purposes set forth. (3.) The improved attachment for the purposes indicated consisting of parts constructed, arranged, and operating substantially as specified. (Specification, 1s. 3d.; drawings, 1s.)

No. 13655.--29th May, 1901.-JAMES THOMAS HUNTER, of Queen's Chambers, Wellington, New Zealand, Engineer (nominee of William Chapman, of 5, Norfolk Street, Strand, Westminster, England, Electrical Engineer). Improvements in insulators.

Claims.-(1.) An insulator of the kind described, and having an upstanding flange on its upper part, either with or with-out an external or internal overhanging lip, the space within the said flange being filled or not with insulating material, for the purpose specified. (2.) Insulators constructed sub-stantially as described, and shown in the drawings. (Specification, 2s. 9d.; drawings, 1s.)

No. 13656.—29th May, 1901.—HENRY CLAY BULL, of 15, West Square, Lambeth, London, England, Engineer, and ARTHUR WATLING, of 59 and 60, Chancery Lane, London aforesaid, Land Agent. Improvements in the extraotion of gold from sea-water.

Claims.—(1.) The method of extracting gold from sea-water consisting in adding to and mixing with the sea-water to be treated a quantity of lime sufficient to precipitate the gold which it contains in a metallic condition, substantially as described. (2.) The method of extracting gold from sea-water consisting in allowing the sea-water to flow into a tank and at the same time mixing therewith a proportion of milk-of-lime, which reacts upon the iodide of gold contained by the sea-water to form iodide of calcium and liberate the gold, the sludge formed by the reaction being allowed to settle and the water from the tank being then drawn off and the sludge collected for treatment to extract the metallic gold therefrom, substantially as described. (3.) Apparatus for the extraction of gold from sea-water by the methods claimed in the preceding claiming clauses, comprising a water-tank, means for introducing sea-water into the said tank, means for allowing the water to be discharged from its surface, a lime-tank and means for adding to the sea-water

as it enters the water-tank a proportion of milk-of-lime, and a pit or well into which the deposit resulting from the reaction of the milk-of-lime upon the sea-water can be introduced, substantially as described. (Specification, 4s. 6d.; drawings, 1s.)

No. 13662.—30th May, 1901.—RICHARD HENRY VESEY, of 742, South Ninth Street, Miner; KATHRYN MARIE BEN-NETT, of 842, Eleventh Street, Lady; LELAND DAVID SPAULD-ING, of 34, West First Avenue, Grocer; HERMAN HENRY MUND, of 100, W. Colfax Avenue, Capitalist; CLARA MARIE WEBB, of 124, West Third Avenue, Lady; GEORGE SCOTT SANDEBSON, of 120, West Third Avenue, Merchant; and WALTEE SCOTT SANDEBSON, of 1337, Corona Street, Mer-chant; all of Denver, Arapahoe, Colorado, United States of America. Improvements in tamping-plugs.

America. Improvements in tamping-plugs. Claims.-(1.) A tamping-plug provided with a fuse-opening extending longitudinally therethrough, said plug being sawed diagonally nearly through, enough material being left uncut to hold the two wedge-shaped parts together, the saw-cut extending into the fuse-opening, the arrangements being such that when the two parts are separated the portion of the fuse-opening in one part is open on one side to allow the said part to move away from the fuse without disturbing the latter. (2.) A tamping-plug having a fuse-opening ex-tending longitudinally therethrough, said plug being com-posed of two parts having inclined engaging faces, the fuse-opening in one part being open on one side adjacent the inclined face to allow the said part to move away from the fuse without disturbing the latter during the tightening operation. (3.) A tamping-plug having a fuse-opening ex-tending longitudinally therethrough, said plug being com-posed of two parts having inclined engaging faces. (4.) A tamping-plug having a fuse-opening ex-tending longitudinally therethrough, said plug being com-posed of two parts having inclined engaging faces. (4.) A tamping-plug having a fuse-opening extending longitudinally therethrough, said plug being composed of two parts having inclined engaging faces, and a suitable means for temporarily connecting the two parts together. (Specification, 3\*. 6d.; drawings, 1s.)

No. 13663.--30th May, 1901.-JAMES GRESHAM, Director of the firm of Gresham and Craven, Limited, of Craven Iron-works, Salford, Lancaster, England, Engineer, and FRANK JAMES GRESHAM, of the same place, Engineer. Improve-ments in or applicable to injectors.

Extract from Specification.-Our invention relates to Extract from Speculcation.—Our invention relates to improvements upon certain injectors by combining there-with a valve through which the water supplied to the in-jectors passes, this valve being automatic, opening to allow water to pass and closing against its return, the valve being also so arranged that the extent of its opening can be regu-lated, and so that it may be prevented from opening when desired desired.

Claims.--(1.) The combination, arrangement, and con-struction of injectors substantially as described, and illus-trated by Figs. 1 and 2 of the drawings. (2.) The combina-tion, arrangement, and construction of injectors substantially as described, and illustrated by Figs. 3 and 4 of the drawings.

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

No. 13664.—30th May, 1901.—HARRY GULLIVER, of 411, Chapel Street, South Yarra, Victoria, Builder. Improvements in railway signalling and communicating apparatus.

ments in railway signalling and communicating apparatus. Claims.-(1.) Railway signalling and communicating apparatus consisting of a wire or wires stretched parallel with the railway-track upon insulated stanchions, and a contact-brush upon the locomotive, said wire or wires being in electrical communication with the signal-box, and said brush being in electrical communication with a being and indicator upon the locomotive, substantially as and for the purposes specified. (2.) In railway signalling and com-municating apparatus, a wire or wires stretched parallel with the railway-track upon insulated stanchions, and a contact-maker operated by a signal-lever in the cabin, substantially as and for the purposes specified. (3.) In railway signalling and communicating apparatus, a bell upon the loco-motive, whereby electrical communication may be completed between the signal-box and said locomotive, substantially as and for the purposes specified. (4.) In railway signalling and communicating apparatus, a mechanically operated bell upon the locomotive, a brush making contact with a wire stretched parallel with the railway-track, an indicator, electric bell, and telephone, also carried by said locomotive, the whole being arranged and operating substantially as and for the purposes specified. (5.) In railway signalling and communicating apparatus, a rotating brush consisting of a number of short lengths of wire projecting from a spindle mounted in bearings carried by adjustable brackets projecting downwardly from the locomotive, substantially as and for the purposes specified. (6.) In railway signalling and communicating apparatus, a cotating brush consisting of a number of short lengths of wire projecting from a spindle mounted in bearings carried by adjustable brackets projecting downwardly from the locomotive, substantially as and for the purposes specified. (6.) In railway signalling

and communicating apparatus, a contact-brush in which a number of short lengths of wire are clamped in a socket carried by a bracket adjustably mounted upon the loco-motive, substantially as and for the purposes specified. (Specification, 10s.; drawings, 3s.)

No. 13666.-30th May, 1901.-JAMES PALMER CAMPBELL, of Wellington, New Zealand, Registered Patent Agent (nominee of William Chapman, of 5, Norfolk Street, Strand, Westminster, England, Electrical Engineer). Improvements in or relating to track-construction for electric railways operated on the conduit system.

Claims.-(1.) A conduit electric railway in which the underground construction at switches, turn outs, and cross-ings is carried out by means of cast yokes, substantially as Inderground construction at swhenes, unin-outs, and obse-ings is carried out by means of cast yokes, substantially as described. (2.) For a conduit railway, a cast yoke having two orifices, substantially as described. (3.) For a conduit railway, a yoke formed of two parts, each having a conduit orifice, said parts being separated by a distance-piece, to which they are secured, and the width of which can be varied as the tracks diverge, substantially as described. (4.) For a conduit railway, a yoke containing three conduit orifices, and formed of parts each containing one conduit orifices, and formed of parts each containing one conduit orifices, and separated or not by distant-pieces, substantially as described. (5.) A yoke for use at a crossing in which the tracks make a large angle with each other, and having ex-tensions for supporting the points of the conduit slots, sub-stantially as described with reference to Figs. 22 to 24 of the drawings. (6.) In a conduit railway, diverting the slot from the central position at or near a switch or turn-out for the purpose specified. (7.) Conduit yokes, constructed sub-stantially as described with reference to any of the forms illustrated in Figs. 2 to 15 or 17 to 20 of the drawings, for the purpose specified. purpose specified. (Specification, 8s. 6d.; drawings, 3s.)

No. 13667.—30th May, 1901.—JAMES PALMER CAMPBELL, of Wellington, New Zealand, Registered Patent Agent (nominee of George Westinghouse, of Westinghouse Building, Pittsburg, Pennsylvania, United States of America, Manu-facturer). Improvements in draught appliances for railwayvehicles.

Claims.—(1.) In a coupling for railway-vehicles, a pivot-block rigidly connected to the movable part of the draw-gear, having a semi-cylindrical pivotal face and sides tapered towards the front end, fitting freely in a vertical central re-cess in the coupler-shank, so as to permit an angular motion of the coupler-shank in a horizontal plane around the said semi-cylindrical pivotal face of the block, substantially as decoribed (0). In a coupling for railway-vehicles a coupler described. (2.) In a coupling for railway-vehicles, a coupler-shank pivotally connected to the movable portion of the draught-gear, and so constructed that a lateral movement beyond a certain distance in either direction compresses the veyond a certain distance in either direction compresses the draught and operating-spring, whereby the said spring tends to return the coupler-head to its normal position, substan-tially as described. (3.) Couplings for railway-vehicles con-structed and operating substantially as described with re-ference to the drawings. (Specification, 5s. 6d.; drawings, 1s.)

No. 13668.—29th May, 1901.—WILLIAM BARKER, of Grattan Street, off Wellington Street, Auckland, New Zealand, Leather-cutter. An apparatus for the cutting of boot or other leather leads other leather laces.

Claim.—Plate with slots and the knives to work therein, substantially as described, and illustrated in the drawings. (Specification, 18. 6d.; drawings, 18.)

No. 13676. - 3rd June, 1901. - JOHN LORD, of Waipawa, lawke's Bay, New Zealand, Schoolmaster. Devices for holding door-mats in position.

Claims. — (1.) The device described, and illustrated in Figs. 1 to 7 (both inclusive) of the drawings, for holding door-mats in position—that is to say, a strip of steel, brass, or other elastic metal, the ends of which are sprung either into suitable staples affixed to the jambs of a door or into mortises out in the said jambs, so as to cause the said strip of metal to bear firmly upon the mat used with the said door, and thus hold the said mat in position, essentially as described. (2.) The device described, and illustrated in Figs. 8, 9, and 10 of the drawings, for holding door-mats in position—that is to say, a wire stretched tightly over the mat, to be so held, one end of the said wire being attached to a sorew-eye screwed into one of the door-jambs, and the other end of the said wire being gripped by a holdfast or grip affixed to the other door-jamb, all essentially as de-cribed. (Specification, 5s.; drawings. 3a

(Specification, 5s.; drawings, 3s.

No. 13686.—EDWARD WATERS, Jun., a member of the firm of Edward Waters and Son, Patent Agents, of 414-418, Collins Street, Melbourne, Victoria (nominee of the Linotype Company, Limited, of 188, Fleet Street, London, England, the assignces of William Henry Look, of 188, Fleet Street, London, aforesaid, William Fletcher, of Mercers Buildings, Endell Street, Long Acre, Middlesex, England, and Harry Lawrence Cox, formerly of 1, Swanage Road, Wandsworth, but presently of Lower Tooting, Surrey, England). Improvements in linotype machines.

England). Improvements in linotype machines. Claims.—(1.) In a linotype machine, the combination of metal-pot throat, mouthpiece having a slot and an undercut groove opening out into each other, and a series of slides each adapted to fit the said groove and having a row of metal-ports, the lengths of the several rows differing from each other to correspond with the working length of the respective mould. (2.) In a linotype machine, the combination of metal-pot throat, mouthpiece having a slot and an undercut groove opening out into each other, a series of slides each adapted to fit the said groove and having a row of metal ports, the lengths of the several rows differing from each other to corre-spond with the working length of the respective mould, and a device for withdrawing it from the said groove. (3.) In a linotype machine, the combination of metal-pot throat, mouthpiece having a slot and an undercut groove opening out into each other, a series of slides each adapted to the several rows differing from each other to corre-spond with the working length of the respective mould, and a device for withdrawing it from the said groove, (3.) In a linotype machine, the combination of metal-pot throat, mouthpiece having a slot and an undercut groove opening out into each other, a series of slides each adapted to fit the sald groove and having a row of metal ports, the lengths of the several rows differing from each other to correspond with the working length of the respective mould, a device for withdrawing it therefrom. (4.) The described combination of withgrawing it through its down and up travels. (6.) The described combination of wiper, wiper-carrier, vertical wiper-guide, lever, and link pivotally connected by its ends to the wiper-guide and lever respectively. (8.) The described combination of wiper, wiper-carrier, vertical wiper-guide, link pivotally connected by one end to the wiper-guide, transverse sleeve in the opposite end of the said link, rod in the said sleeve, transverse sleeve in the opposite end of the said link, rod in the said sleeve, cam-surface on the rear end of the said rod, spring between the said rear end and the link to keep the former in the path of the said lever, cam-surface to move the said rear end of the rod out of the path of the said lever, and spring to put the wiper through its return travel as soon as the rear end of the said rod is out of the path of the lever. (9.) The combination with each measure in a com-posed line of matrices for tabular matter, of an abutment inter-mediate of it and the next one, means for holding the said abutment in the proper position whilst the said line is being justified, and means for justifying each measure indepen-dently of the other measures in the line. (10.) The com-bination with a line of matrices composed for tabular work, of an abutment at and for each end of the said line at a distance from each other equal to the standard length of line, an abutment intermediate of each measure and the next one, means by which the said abutments are held in their respectively proper positions whilst the said line is being justified, and means for justifying each measure inde-pendently of the other measures in the line. (11.) The combination of measure-quad, socket in the mould-block to hold the same against vertical or horizontal movement during the act of justification, means for enabling the mould-block to engage the said measure-quad, and an inde-pendent plate on the justifying-plate for each measure. (12) The combination of measure-quad an independent plate on the justification, means for enabling the mould-block to engage the said measure-quad an independent plate on the same against vertical or horizontal movement during the act of justification, means for enabling the same against vertical or horizontal movement during the act of justification, means for enabling the mould-block to engage the said measure-quad an independent plate on the justifying-plate for each measure. (13.) The combina-tion of measure-qu posed line of matrices for tabular work. (15.) The described measure-quad adapted to act as an abutment for and as a character matrix at one end of a measure in a composed line of matrices. (16.) The combination of a line of matrices composed in measures for tabular work, a measure-quad adapted to act as an abutment between each measure, an abutment at each end of the composed line, a space-bar in each measure, and an automatic justifying-plate carrying a spring-supported justifying-plate for each of the said measures. (17.) The combination of a line of matrices composed in measures for tabular work, a measure-quad

situated between each two adjacent measures to act as an abutment there for them both, means for holding the said abuttment there for them both, means for holding the said measure-quads in their respectively proper positions in the said line whilst the latter is being justified, an abuttment at each end of the composed line separated from its fellow by a distance equal to the standard length of the line, a space-bar in each measure, and an automatic justifying-plate carrying a spring-supported justifying-plate for each of the said measures.

(Specification, 14s. 6d.; drawings, 6s.)

No. 13693.—8th June, 1901.—FREDERICK LAMBERT LOR-DEN, of Wellington, New Zealand, Draughtsman. An improved machine for cutting tobacco.

Claims.—(1.) The combination and arrangement of parts comprising my machine for cutting tobacco, substantially as and for the purposes set forth. (2.) In a machine for cutting tobacco, in combination, a disc provided with knives and sloping faces for the knives, slots in the disc, a handle to turn the disc, and a box for receiving the cut tobacco attached to the disc, substantially as and for the purposes set forth. (3.) A machine for cutting tobacco comprising in combination a disc provided with knives and sloping faces for the knives, slots in the disc, a handle to turn the disc, a box for receiving slots in the disc, a handle to turn the disc, a box for receiving the cut tobacco attached to the disc, a bracket to which the slots in the disc, a handle to turn the disc, a box for receiving the cut tobacco attached to the disc, a bracket to which the disc is pivoted, and a mouthpiece placed centrally in rela-tion to the disc, substantially as and for the purposes set forth. (4.) A machine for cutting tobacco comprising in combination a disc provided with knives and sloping faces for the knives, slots in the disc, a handle to turn the disc, a box for receiving the cut tobacco attached to the disc, a bracket to which the disc is pivoted, an adjustable mouth-piece placed centrally in relation to the disc, and means for securing the bracket to a table or the like, substantially as and for the purposes set forth. (5.) A machine for cutting tobacco comprising in combination a disc provided with knives and sloping faces for the knives, slots in the disc, a handle to turn the disc, a box for receiving the cut tobacco attached to the disc revolves sorewed into the bracket and secured by a lock-nut, a loop for holding the pin from turning while screwing up the lock-nut, an adjustable mouthpiece placed centrally in relation to the disc, and are mp formed on the lower part of the bracket with a sloping screw and a bevelled washer with a flat side bearing against the face of the bracket, substantially as and for the purposes ext for the bracket, more subting tobacco with a sloping screw in the bracket is provided with a flat side bearing against the face of the bracket, substantially as and for the purposes screw and a bevelled washer with a flat side bearing against the face of the bracket, substantially as and for the purposes set forth. (6.) In a machine for outting tobacco, in combina-tion, a disc provided with knives having their back edges turned up and sloping faces for the knives, slots in the disc, a handle to turn the disc, and a box for receiving the cut tobacco hinged to the handle and secured by a spring catch, substantially as and for the purposes set forth. (Specification, 4s.; drawings, 1s.)

No. 13695.—8th June, 1901.—HYBUM SMITH WOOLLEY, of Paris, State of Idaho, United States of America, Mining Engineer. Improvements in and relating to furnaces.

Claims.--(1.) In a furnace, the combination of a primary combustion chamber, a secondary combustion-chamber, an imperforate air feeding conduit extending from below the secondary combustion-chamber to within the same, and forming with the walls thereof a restricted passage, and a grate for the primary combustion-chamber adapted to direct the incandescent fuel against the imperforate air-feeding conduit. (2.) In a furnace, the combination of a primary combustion chamber, a secondary combustion-chamber situ-ated above and centrally of the primary combustion-chamber, a grate for the primary combustion-chamber sloping towards the centre thereof, and an imperforate air feeding conduit extending from the centre of the grate to sloping towards the centre thereof, and an imperforate air-feeding conduit extending from the centre of the grate to within the secondary combustion-chamber, and forming with the walls of said chamber a restricted passage. (3) In a furnace, the combination of a primary combustion-chamber, a secondary combustion-chamber situated above and centrally of the primary combustion-chamber, an im-perforate conical air-feeding conduit extending from below the secondary combustion-chamber to within the same, and forming with the walls thereof a restricted passage, and a grate for the primary combustion-chamber adapted to direct the incandescent fuel against the imperforate conical air-feeding conduit. (4.) In a furnace, the combination of a primary combustion-chamber, a secondary combustion-chamber, an imperforate air-feeding conduit extending from below the secondary combustion-chamber to within the chamber, an imperiorate air-feeding conduit extending from below the secondary combustion-chamber to within the same, and forming with the walls thereof a restricted passage, a grate for the primary combustion-chamber adapted to direct the fuel against the imperforate air-feeding conduit, and means for controlling the delivery of air through said conduit. (5.) In a furnace, the com-bination of a primary combustion-chamber, a secondary

combustion-chamber, an imperforate conical air-feeding con-duit extending from below the secondary combustion-chamber to within the same, and forming with the walls thereof a restricted passage, said conduit being of sectional construction whereby the upper section may be removed and other sections of different diameter substituted to vary the area of the restricted passage, and a sloping grate for the primary combustion-chamber. (6.) In a furnace, the com-bination of an upper secondary combustion-chamber, a lower bination of an upper secondary combustion-chamber, a lower primary combustion-chamber having a crown sloping to the secondary combustion-chamber, an imperforate conical air-feeding conduit extending from below to within the secondary combustion-chamber, and forming with the walls thereof a restricted passage, and a grate for the primary combustion-chamber sloping to the air-feeding conduit. (7.) In a fur-nace, the combination of a primary combustion-chamber, a secondary combustion-chamber, an air-feeding conduit extending vertically through the primary combustion-cham-ber and into the secondary combustion-chamber, and ber and into the secondary combustion chamber, and a grate for the primary combustion-chamber sloping toward the air feeding conduit, and formed of segments each having transversely sloping portions flanking a longitudinally sloping portion.

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

No. 13696.—6th June, 1901.—JOHN CROOK, of Murdoch Road, Grey Lynn, Auckland, New Zealand, Mechanical Engineer. A tap adjustment or device for regulating supply through tap of liquids, gases, and suchlike.

Claims.—(1.) In a device for regulating the supply of liquid, gas, or suchlike through a tap, adjusted to said tap a flauged disc having a screw set in same, with a circular hole in centre of said disc, and carrying a slotted slide fitted to said screw with a stop or raised end for the purpose set forth, substantially as described and illustrated. (2.) In a device for regulating the supply of liquid, gas, or suchlike through a tap, a slotted slide having a stop or raised end and fitted to screw fixed in flanged disc, said disc having a circular hole in its centre and adjusted to said tap for the purpose set forth, substantially as described and illustrated. (3.) In combination, a slotted slide having a stop or raised end, said slide fitted at its slot to screw fixed in flauged disc, flauged disc having screw set therein with circular hole in centre of said disc, said flanged disc fastened to tap, with handle of and having solve set therein with characteria hole in centre of said disc, said flanged disc fastened to tap, with handle of tap turning over said slotted slide and flanged disc and engaging said stop or raised end, all for the purpose set forth, substantially as described and illustrated. (Specification, 3s.; drawings, 1s.)

No. 13698.—7th June, 1901.—JOSEPH GARSIDE, of Dunedin, New Zealand, Brass-founder. An improved individual communion-cup holder.

Claims.—(1.) In brackets for temporarily holding church individual cups or glasses, the combination with the seat-back of the bracket B,  $B^1$ , and the heel-rests C, C, adapted for being fixed to a board and holding the glass substantially as described and explained, and as illustrated in the drawing. as described and explained, and as illustrated in the drawing. (2.) In temporary rests for church individual glasses, the combination with such glass of a bracket adapted to hold same and so formed as to be attached to and be removable from the seat-end of a church seat, substantially as set forth and as shown on the drawing. (3.) In combination, tempo-rary metal brackets having the ends bent and pointed as claws or bent to hook into a staple or eye and formed for holding the church glasses, with the seat-ends and table-cloths all substantially as described and explained, and for the purposes set forth. the purposes set forth.

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

No. 13704.—10th June, 1901.—JAMES CHARLES BARNES, of Sydney, New South Wales, Settler. Improvements in apparatus for operating machine sheep shears.

Claims.—(1.) In machine sheep-shears, a flexible guide comprising a coil spring, thimble, and socket, substantially as set forth. (2.) In machine sheep-shears, an axle provided with a square hole at one end, a key to fit said hole, and means for securing the axle, substantially as set forth. (3.) In machine sheep-shears, an axle provided with a square hole at one end, a key to fit said hole, a boss on the casing of the machine, a hole through the boss and axle, and a pin fitting the said hole, substantially as set forth. (4.) In machine sheep-shears, in combination, a drum operated by the tension of a flexible cord, a spur-wheel, and slides for adjusting the position of the spur-wheel, substantially as set forth. (5.) In machine sheep-shears, the combination of a drum operated by the tension of a flexible cord, a spur-wheel, ratchet-wheel, spring-actuated pawls, a pinion, bevel-toothed wheels, and a spring for coiling the cord, with an axle pro-B в

vided with a square hole at one end, a key to fit said hole, a boss on the casing of the machine, a hole through the boss and axle, and a pin fitting the said hole, substantially as set and axle, and a pin fitting the said hole, substantially as set forth. (6.) In machine sheep-shears, the combination of a drum operated by the tension of a flexible cord, a bevel-toothed wheel, a ratchet-wheel, spring-actuated pawls, a bevel-toothed wheel on the cutter-spindle, and a spring for re-coiling the cord, with an axle provided with a square hole at one end, a key to fit said hole, a boss on the casing of the machine, a hole through the boss and axle, and a pin fitting wid hole, substituting a cat forth (7.1) In machine sheep said hole, substantially as set forth. (7.) In machine sheep-shears, in combination, a ratchet-wheel fixed to the cutter-spindle, a drum of small diameter mounted revolvably on the said spindle, spring-actuated pawls, a flexible cord, a spring for re-coiling the cord mounted on an arbor fixed in spring for re-coning the cord moduled on an abor factor in the boss of the cap of the machine, a slot in the said arbor to receive a screw-driver, a hole through the boss of the cap and axle to receive a pin, a grooved pulley, and a flexible guide, substantially as set forth. (8.) In machine sheep-shears, the combination and arrangement of the whole of the parts sub-tractically as described and as illustrated in the damingen stantially as described, and as illustrated in the drawings. (Specification, 6s. 9d.; drawings, 4s.)

### J. C. LEWIS Deputy Registrar.

An asterisk (\*) denotes the complete specification of an in-vention for which a provisional specification has been already

lodged. Note.-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 notes for the cost of copying. The date of acceptance of each application is given after the number.

### Provisional Specifications.

### Patent Office,

Wellington, 12th June, 1901. PPLICATIONS for Letters Patent, with provisional specifications, have been accepted as under :---

No. 13621.—15th May, 1901.—DIRK PIHL, of Ohoka, Canterbury, New Zealand, Farmer, Sheep-dealer and Meat-excorter. Improved branding of meat-bags, whereby ownership, grade, and quality of each carcase of mutton and lamb can easily and without further knocking and twisting about

bed dig inguished at once in dark stores or ship's hold. No. 13627.—20th May, 1901.—CHARLES EDWARD WILD-BORE, of Pobangina, Manawatu, New Zealand, Farmer. A

detonating fire-alarm. No. 13629.—21st May, 1901.—GEORGE HYDE, of Masterton, New Zealand, Cabinetmaker. Jam, honey, and pre-

ton, New Zealand, Cabinetmaker. Jam, honey, and pre-serves spoon. No. 13652.—29th May, 1901.—WILLIAM CATTO GREIG, of Wilson's Road, Christchurch, New Zealand Commercial Traveller, and ARTHUR CHARLES ANDREWS, of Christchurch aforesaid, Bookbinder. Improved pencil-sharpener, and means for attaching same to a school slate. No. 13653.—29th May, 1901.—FRANK KETTLE, of High Street, Roslyn, New Zealand, Wool-buyer. Improved ma-chine for sweeping, scraping, and cleaning roads and the like

like

chine for sweeping, scraping, and cleaning roads and the like.
No. 13657.—29th May, 1901.—WILLIAM PHILLIPS THOMPSON, of 6, Lord Street, Liverpool, Lancaster, England. Improvements in or relating to lighting, heating, and to apparatus relating thereto, or for obtaining power.
No. 13659.—30th May, 1901.—RICHARD WILLIAM JONES, of Invercargill, New Zealand, Engineer and Machinist. Improvements in knife-cleaners.
No. 13660.—30th May, 1901.—ALFRED GRA ROSSER, of William Street, Fremantle, Western Australia, Gentleman. A railway spike and wedge lock for same.
No. 13665.—29th May, 1901.—HERBERT JAMES HARDING-HAM, of Christchurch, New Zealand, Tinsmith. An improved apparatus for cooling or aerating milk and the like.
No. 13669.—31st May, 1901.—ALFRED JOHN CRAIG, of Dannevicke, New Zealand, Engine-driver. Improved means for preventing the "racing" of steamship engines and for governing the supply of steam to the cylinders thereof.
No. 13670.—31st May, 1901.—ALFRED BENJAMIN JACKSON, of Tuparoa, New Zealand, Saddler; CARL LUDWIG HANSEN, of Port Awanui, New Zealand, Blacksmith; and ARTHUR PERCY DURRANT, of Waipiro Bay, New Zealand, Storeman. Improved means for locking window-sashes at any desired height.
No. 13673.—3rd June. 1901.—JAMES TRENT, of Christheight.

No. 13673.—3rd June, 1901.—JAMES TRENT, of Christ-church, New Zealand, Gentleman. An improvement in plush for saving gold and the like. No. 13674.—3rd June, 1901.—COLIN MACDONALD, of Ryal Bush, Southland, New Zealand, Farmer. Improvements in wagons, trollies, and the like, for loading and unloading the same.

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No. 13677.-- 5th June, 1901.-- ARTHUR SELDON PIKE, of 168, Tinakori Road, Wellington, New Zealand, Engineer. An improved butter printing and weighing machine. No. 13678.-- 3rd June, 1901.-- JOHN O'NEIL, of Colombo Street, Christchurch, New Zealand, Hotelkeeper. An im-

No. 13670. — Strate June, 1901. — ERNEST GEORGE RAWNSLEY, No. 13670. — St. June, 1901. — WILLIAM HEALEY, of Staveley, Canterbury, New Zealand, Miner. Improved means for the distribution of mechanical power. No. 13680. — 6th June, 1901. — ERNEST GEORGE RAWNSLEY, of 11 St. Junga Strate Jungaba Chaiteburgh New Zeal

of 11, St. James Street, Linwood, Christchurch, New Zea-land, 'Accountant. The improved sowing of agricultural land, Accountant. seeds.

No. 13681.-5th June, 1901.-THOMAS HALL, of Heriot,

New Zealand, Accountant. Safe pocket. No. 13682.—6th June, 1901.—JOHN CRAWFORD MCBRIDE, of Queenstown, New Zealand, Hotel-proprietor. Improve-

ments in totalisators. No. 13685.—6th June, 1901.—WILLIAM ALSOF castle, near Sydney, New South Wales, Engineer. -WILLIAM ALSOP, of New-Wales, Engineer. Improve-

ments in rotary engines. No. 13689.—3rd June, 1901.-No. 13689.— 3rd June, 1901.—ALBERT POTTER, of Bellevue Road, Mount Eden, Auckland, New Zealand, Settler. A non-poisonous liquid and powder that will control and de-stroy the codlin moth and other insects and larva that infest lands, manures and other substances, also full-trees and plants without injurn to the full trees along to the trees the plants, without injury to the fruit, trees, plants, or their roots.

roots. No. 13690.—3rd June, 1901.—GEORGE STURTEVANT, of Devon Street, Auckland, New Zealand, Draughtsman; JOHN MANNERS MORRAN, of Mount Eden, Auckland aforesaid, Manufacturer; and ANDREW GORDON FRENCH, of Thames, New Zealand, Consulting Chemist. An improvement in separating and classifying kauri-gum nuts and chips. No. 19691.—8th June, 1901.—ALEXANDER TAYLOR, of Wai-kari, Dunedin, New Zealand, Attendant. An improved insole for boots and shoes and the like. No. 13692.—5th June, 1901.—RICHARD STEVENS, of Ferry

No. 13692.—5th June, 1901.—RICHARD STEVENS, of Ferry Road, Linwood, Canterbury, New Zealand, Cooper. Cooling Cooling milk or any other liquid. No. 13694.—8th June, 1901.—ROBERT MILLAR, of Dunedin,

New Zealand, Storeman. Improved means for using the action of waves as a motive-power. No. 13697.—6th June, 1901.—Tom ERNEST WOODROFFE, of Opotiki, Auckland, New Zealand, Storekeeper. An improved

lampless incubator.

No. 13699.—7th June, 1901.—REUBEN NICHOLLS, of Auck-land New Zealand, Range-maker. An improved fire escape An improved fire escape

Jand, Dew Zealand, Range-mater. An Improve in comparison of 108, 2000 and 1000 and 10000 and 1000 and 10000 and 1000 and 1000 and 10000 and 1000 and 10000 a

bourne aforesaid, Bootmakerj. A Second Street, No. 18702.—10th June, 1901.—THOMAS CHARLES HEMENT, of Hereford Street, Christchurch, New Zealand, Plumber. An improved hot-water and steam-generating apparatus. No. 18703.—10th June, 1901.—FREDERICK WILLIAM BUR-SILL, of Sedgemere, Awatere, Marlborough, New Zealand. Sheep-farmer. An improved swinger for wire-fences. J. C. LEWIS, Deputy Registrar.

Deputy 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.

IST of Letters Patent sealed from the 30th May, 1901,

to the 8th June, 1901, inclusive :--No. 12376.-S. Oxenham, spouting-hopper. No. 12402.-J. Wright and J. W. Mitchell, brandingapparatus.

No. 12404.—F. J. Olsen and E. H. Whitmore, filter. No. 12406.—P. S. Irwin and S. J. Luke, dredging. No. 12458.—W. Fairhead, hanging sashes. No. 12647.—S. C. R. Trevor, extracting oils from kauri refuse.

No. 13260.—J. Long, bench vice. No. 13332.—J. Jamison, tram-brake. No. 13416.—J. Hall, registering, measuring, counting, and weighing machine.

J. C. LEWIS. Deputy Registrar. Letters Patent on which Fees have been paid.

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

SECOND-TERM FEE. N O. 9596.-T. C. J. Thomas and W. M. Still, gas-lamp. 4th June 1901 4th June, 1901.

THIRD-TERM FEE.

No. 7001.—The National Typographic Company, linotype machine. (E. Waters-O. Mergenthaler.) 30th May, 1901. J. C. LEWIS, Deputy Registrar.

### Subsequent Proprietors, &c., of Letters Patent registerea.

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

No. 4795.-I. and E. Hall (1900), Limited, of 23, St. Swithin's Lane, London, England, Engineers, freez-ing meat. [E. Hesketh and A. Marcet.] 7th June, 1901. No. 11933.-The New Zealand Loan and Mercantile Agency Company, Limited, of Dunedin, New Zealand, seed-sower. Proprietors, excepting as regards the rights retained by Alex-ander Startie to manufacture attach and and and the acid Proprietors, excepting as regards the rights retained by Alexander Storrie to manufacture, attach, and vend the said invention in respect of machines bonâ fide sold by him.
[A. Storrie.] 7th June, 1901.
No. 12087.—The Parish's Patent Steam - jacketed Cooker Company, Limited, of 97B, Queen Victoria Street, London, England, cooking - apparatus. [E. W. Parish.] 4th June, 1901.

1901.

No. 12325.—The International Electric Enameling Com-pany, organized under the laws of the State of New Jersey, and having a place of business at 256, Broadway, New York, United States of America, enamelling. [O. H. Waterman.] 4th June, 1901.

Schled Bisch et al. 1991.
Schled Bisch et al. 1991.
Street, Westminster, England, Manufacturers, igniting-apparatus for internal combustion engine. [J. P. Campbell—W. A. Bole.] 4th June, 1901.
No. 13257.—The British Westinghouse Electric and Manufacturers (Source), Limited, of Westinghouse Building, Norfolk Street, Westminster, England, Manufacturers, gasifier for internal combustion engine. [W. E. Hughes—W. A. Bole and E. Ruud.] 11th June, 1901.
No. 13302.—The British Westinghouse Electric and Manufacturers, Gasinghouse Company, Limited, of Westinghouse Building, No. 13302.—The British Westinghouse Electric and Manufacturers, Gasing Company, Limited, of Westinghouse Building, Norfolk Street, Westminster, England, Manufacturers, fluid-pressure engine. [J. P. Campbell—C. Robinson.] 4th June, 1901.

1901.

# J. C. LEWIS, Deputy Registrar.

Applications for Letters Patent abandoned.

IST of Applications for Letters Patent (with which provisional specifications only have been lodged) aban-doned from the 30th May, 1901, to the 12th April, 1901, inclusive:

No. 12826.—C. E. and F. L. Wildbore, pig-feeder. No. 12826.—C. E. and F. L. Wildbore, pig-feeder. No. 12828.—E. Clark, horse-collar. No. 12839.—W. E. Lewis, jug-lid. No. 12840.—J. B. Cameron and P. R. Sutherland, safety device for mining-cage (H. Turner).

No. 12841.-T. B. Dineen, fuel-economizer. No. 12842.-D. Edwards, target.

No. 12845.-R. F. Hobson, envelope-opener and advertis-

- extinguisher.
  - No. 12861.—A. Adams, clothes-strainer for washing-boiler. No. 12862.—H. R. Walker, operating semaphores. J. C. LEWIS,

Deputy Registrar.

#### Applications for Letters Patent lapsed.

IST of applications for Letters Patent (with which com-

gold-wash.

J. C. LEWIS,

Deputy Registrar.

# THE NEW ZEALAND GAZETTE.

### Letters Patent void.

IST of Letters Patent void through non-payment of fees from the 30th May, 1901, to the 12th June, 1901, inclusive :-

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 9310.—W. W. Barnes, furnace. No. 9312.—A. Legg and C. W. Weston, sewing-machine. No. 9313.—E. Andreoli, recovering gold from cyanide-solu-

tions. No. 9314.-G. G. M. Hardingham, rotary engine (H. L.

Webster).
No. 9320.—W. T. Murray, concentrated milk.
No. 9322.—F. D. Fergusson, calculating-apparatus.
No. 9323.—E. Waters, preventing accumulations of sand,
&c., in harbours (P. O'Meara).
No. 9325.—A. Manvers, M. Fink, and H. A. D. Sheppard,

tire-shield.

tire-shield.
No. 9328.—The Oppermann-Fischer Patents Proprietary,
Limited, amalgamator (E. L. Oppermann).
No. 9331.—A. L. Heighton, fencing-standard.
No. 9334.—C. J. Grist, waterproofing composition.
No. 9335.—C. Wichmann, extracting gold.
No. 9337.—The American Tobacco Company of New Zealand, Limited, cigarette - arranging mechanism (D. B. Mild, Hindy, Signeton analyzing Leonard Strouse). No. 9342.—G. Haley, steam-boiler (T. Eynon). No. 9353.—J. Roberts, cricket stumps.

THROUGH NON-PAYMENT OF THIRD-TERM FEES. No. 6705.-J. W. Faulkner and Sons, Limited, woven-wire floorcloth (D. Nicolson).

J. C. LEWIS, Deputy Registrar.

### Design registered.

A DESIGN has been registered in the following name, on the date mentioned :--No. 131. - Andrew Billens, of Christchurch, Canterbury, New Zealand, Lamp-maker. Class 10. 31st May, 1901. J. C. LEWIS,

Deputy Registrar.

Applications for Registration of Trade Marks.

Patent Office,

Wellington, 12th June, 1901. A PPLICATIONS for registration of the following trade 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  $\pm 1$ .

No. of application: 2970. Date: 1st March, 1900.

The words

TRADE MARK.

# THE BOVINE.

The applicants claim that the said trade mark has been in use by them and their predecessors in business in respect of the articles mentioned since the year 1884.

NAME.

BOVINE, LIMITED, of 44 to 47, Bishopsgate Street Without, London, E.C., England.

No. of class: 42.

Description of goods: Foods for cattle, horses, poultry, and the like.

No. of application : 3378. Date: 8th May, 1901.



The essential particular of this trade mark is the device, and combination of the letter "L" therewith; and any right to the exclusive use of the words "Ointment" and "Regd" is disclaimed.

#### NAME.

SARAH MARY LINKHORN, MARTIEd Woman, WALTER EDWARD LINKHORN, Confectioner, and HENRY ROBERT LINKHORN, Con-fectioner, all of Kent Street, Auckland, New Zealand.

No. of class: 3. Description of goods: Ointment.

No. of application : 3402. Date: 30th May, 1901.

The word

BULL-DOG.

NAME.

TRADE MARK.

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

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

No. of application : 3404. Date: 30th May, 1901.

TRADE MARK.



NAME. WEBER LOHMANN AND Co., LIMITED, of Bridge Street, Sydney, New South Wales.

No. of class: 12. Description of goods : Cutlery or edge tools.

# THE NEW ZEALAND GAZETTE.

Trade Marks registered. L IST of Trade Marks registered from the 30th May, 1901, to the 12th June, 1901, inclusive :--No. 2596; 3312.-Nicoll B:os. and Oetzes and Gerritsen Class 42. (Gazette No. 26, of the 7th March, 1901.) No. 2597; '3326.-W. J. Matheson and Co., Limited; Class 4. (Gazette No. 30, of the 21st March, 1901.) No. 2598; 3331.-F. Levic; Class 45. (Gazette No. 30, of the 21st March, 1901.) No. 2599; 3130.-The Lavers Manufacturing Company; Class 2. (Gazette No. 77, of the 30th August, 1900.) No. 2600; 3347.-G. T. K. McKenzie; Class 42. (Gazette No. 35, of the 4th April, 1901.) No. 2601; 3173.-Sanitarium Health Foods Company; Class 42. (Gazette No. 80, of the 13th September, 1900.) No. 2602; 3317.-Moore, Eady, and Co.; Class 38. (Gazette No. 35, of the 4th April, 1901.) J. C. LEWIS, Deputy Registrar. IST of Trade Marks registered from the 30th May, No. of application: 3405. Date: 30th May, 1901. TRADE MARK. The word BEESWING NAME. OGDEN'S, LIMITED, of Boundary Lane, Liverpool, England, Tobacco and Snuff Manufacturers. Trade Mark Renewal Fee paid. No. of class: 45. Description of goods : Tobacco, cigars, cheroots, cigarettes, [NOTE.-The date is that of the payment.] and snuff. N<sup>O. 87/1344.-Vereinigte Chemische Werke Actiengesell-schaft. 6th June, 1901.</sup> J. C. LEWIS, Deputy 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. of application : 3410. No. 86/2489.—William Powell Bowman and Frank Boyce, both of Whitehorse Street, Leeds, Yorkshire, England (trading as "Goodall, Backhouse, and Co."), Whole-sale Druggists and Drysalters. [Goodall, Backhouse, and Co.] 4th June, 1901. Date: 7th June, 1901. TRADE MARK. J. C. LEWIS, Deputy Registrar. The words THE "ACTÆON" SPLICED. The essential particular of the trade mark is the word "Actwon"; and any right to the exclusive use of the added matter is disclaimed. Request for Correction of Clerical Errors in Trade Mark Applications. NOS. 3335 and 3336.—(Advertised in Supplement to New Zealand Gazette, No. 35, of the 4th April, 1901.) To alter the name "Ross and Glendining," to "Ross and Glendining (Limited)." NAME. WILLIAM GIBSON AND SON, LIMITED, of Thurland Street and Lincoln Street, Nottingham, England, Hosiery-manufac-J. C. LEWIS, Deputy Registrar. turers. No. of class: 38. Trade Mark removed from Register. Description of goods: Hosiery. N<sup>O.</sup> 1236/1351.-J. A. Jackson and J. Goldsmid. (Appli-cation gazetted, 24th January, 1895; mark removed from Register, 4th June, 1901, by order of the Supreme Court dated 22nd May, 1901.) J. C. LEWIS. Deputy Registrar.

J. C. LEWIS, Deputy Registrar.

By Authority: JOHN MACKAY, Government Printer, Wellington.