Supplement to Government Gazette

OF

WESTERN AUSTRALIA.

[Published by Authority.]

No. 7. P.O. No. 5. PERTH: FRIDAY, FEBRUARY 2. [1900.

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Note.—Throughout this *Gazette* the names in Italics within parentheses are those of Communicators of Inventions.

Complete Specifications.

Patent Office, Perth,
2nd February, 1900.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the Complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

Application No. 2579.—HARRY PHILLIPS DAVIS, of Pittsburgh, Pennsylvania, U.S.A., Electrical Engineer; GILBERT WRIGHT, of Wilkinsburg, Pennsylvania, U.S.A., Electrical Engineer, and ALEXANDER JAY WURTS, of Pittsburgh, Pennsylvania, U.S.A., Engineer, "*Improvements in Controllers for Electric Motors.*"—Dated 26th June, 1899.

Claims:—

1. A controller for electric motors in which a separate circuit making and breaking switch is provided for automatically breaking the circuit before the connections of the motors can be changed from series to parallel or when the controller is moved backwards.

2. The special devices for automatically operating the circuit making and breaking switch substantially as described with reference to figures 1 to 9 of the accompanying drawings.

3. The combination with a controller for electric motors of a separate circuit making and breaking switch automatically operated by the movement of the controller drum, and with its contacts located in a closed box filled with a suitable liquid such as glycerine, substantially as and for the purpose specified.

4. A controller for electric motors in which a certain amount of lost motion or play is provided between the operating shaft and the drum carrying the movable contacts, and a toothed wheel is provided on the drum co-operating with a spring pawl so that when said drum has been rotated a certain amount by the operating shaft the pawl and wheel act to cause said drum to move quickly and in advance of the movement of the shaft through the next portion of its path for the purpose specified.

5. The combination with a controller for electric motors of a separate circuit making and breaking switch, the shaft of which is connected to the controller shaft through a friction clutch which is arranged to be operative to connect the shafts while the controller is varying the resistance in circuit, but being inoperative while the connection of the motors is being changed from series to parallel, at which time the circuit making and breaking switch is actuated by the agency of a spring to break the circuit.

6. The combination with a controller for electric motors of a separate circuit making and breaking switch operatively connected to the controller shaft and arranged as described with reference to Figures 12 and 13 of the drawings.

Specification, 10s. Drawings on application.

Application No. 2602.—LAMBERT ALLAN MURDOCH MCKAIL, of Auburn, in the Colony of Victoria, Cashier, "*An Improved Sash-fastener.*"—Dated 18th July, 1899.

Claims:—

1. An improved sash-fastener consisting of a bolt-carrier in which slides a bolt having a finger-push and on the front end a lip engaging with a tumbling stop pivotted to a catch bolt all as and for the purposes hereinbefore described and as illustrated in the drawings.

2. An improved sash-fastener consisting of a bolt sliding in a carrier and into a catch and retained in the catch by a front tumbling-stop engaging with a lip and in the carrier by a back tumbling-stop, all as and for the purposes hereinbefore described and as illustrated in the drawings.

3. An improved sash-fastener consisting of a bolt with a finger-push at its top and a lip at its front end, a carrier having a slot to accommodate the finger-push and a tumbling-stop with a finger-push portion at its rear end, and a catch to which is pivotted a tumbling stop, all as and for the purposes hereinbefore described and as illustrated in the drawings.

Specification, 6s. Drawings on application.

Application No. 2642.—BADISCHE ANILIN and SODA FABRIK, of Ludwigshafen-on-Rhine, German Empire (Asignee of RUDOLF KNIETSCH), "*Improvements in the Manufacture of Sulphuric Anhydride.*"—Dated 16th August, 1899.

Claims:—

1. The improvement in the manufacture of sulphuric anhydride consisting in purifying gases containing sulphur dioxide, prior to their use in the contact process, by systematically removing the impurities hereinbefore set forth, whilst preventing the formation of other noxious bodies, until the tests hereinbefore described are satisfied, all substantially as hereinbefore described.

2. The improvement in the manufacture of sulphuric anhydride, consisting in purifying gases containing sulphur dioxide by introducing steam into the hot gases, cooling the gases and then thoroughly washing the gases, whilst preventing the formation of other noxious bodies, until the tests aforesaid are satisfied, all substantially as hereinbefore described.

3. The improvement in the manufacture of sulphuric anhydride by the contact process, consisting in subjecting the contact mass to a regulated cooling so as to remove the excess of heat due to the reaction.

4. The several arrangements or constructions of apparatus substantially as hereinbefore described and severally illustrated in Figures I. to IVA. of the accompanying drawings for the purposes hereinbefore explained.

5. The improvement in the manufacture of sulphuric anhydride by the contact process, consisting in so constructing the apparatus that it can be worked at pressures differing but little from atmospheric pressure the same being attained by arrangement of the contact mass so that it is capable of being effectively cooled, and the layers of which it consists are supported so that they cannot press upon one another and no other path is open to the gases except through the contact mass.

6. For use in the manufacture of sulphuric anhydride a vessel for containing the contact mass such vessel having supported at intervals in its interior perforated, or reticulated trays, or plates, which support layers of the contact mass, the gas passing through the contact mass at approximately atmospheric pressure; substantially as and for the purposes hereinbefore described with reference to Figures V. and VA. of the accompanying drawings.

7. The improvement in the manufacture of sulphuric anhydride by the contact process, consisting in first purifying the gases to be treated until the tests described are satisfied, then passing them into the apparatus containing the contact substance, and removing from it, in a regulated way, the excess of heat due to the reaction.

8. The improved process for the manufacture of sulphuric anhydride which consists in first purifying the gases to be treated till the tests described are satisfied, then passing the said gases through the contact mass, whilst cooling the same in the regulated manner described, the said contact mass being arranged in layers that cannot press upon one another, and leave no path to the gases except through the contact mass; all substantially as hereinbefore described.

9. The improved process of manufacture of sulphuric anhydride which consists in obtaining a substantially quantitative yield, by the combination of:—

(*a.*) The purification of the gases.

(*b.*) The regulated temperature of the contact mass.

10. In the process claimed in the ninth claim the arrangements of the contact mass so as to permit working at pressures differing but little from atmospheric pressure, substantially as hereinbefore described

Specification, £1 12s. Drawings on application.

Application No. 2681.—RICHARD FRANCIS MARSH, of East Maitland, New South Wales, Engineer, "*An improved Rotary Moior, to be operated by fluid pressure.*"—Dated 16th September, 1899.

Claims:—

1. In rotary motors operated by fluid pressure and having an outer casing and revolving disc, a fluid pressure chamber connected with the operating fluid supply pipe and placed in the circumferential portion of such casing and having an outlet slot and a lower projecting lip, either fixed, flexible, or adjustable, to serve as a director plate, as described and shown, and for the purposes set forth.

2. In rotary motors of the class set forth, the combination, with a fluid pressure chamber as claimed in Claim 1, of an adjustable plate for regulating the dimensions of the outlet slot of the said chamber, as described and shown, and for the purposes set forth.

3. In rotary motors of the class set forth, an upper adjustable plate and adjustable side plates, placed within the casing in close proximity to the fluid pressure chamber, as described and shown, and for the purposes set forth.

4. In rotary motors of the class set forth, a projecting lip, a passage in close proximity thereto, an upper and two side directing plates, and serrations constructed upon a rotary disc, all forming a reaction chamber in communication with an outlet slot of a fluid pressure chamber, as herein described and shown, and for the purposes set forth.

5. In rotary motors of the class set forth, the combination with an outer casing provided with pressure chambers, directing plates, and outlet passages and ports, of, a rotary disc having serrations whose impelling and following surfaces are so placed as to obtain reverse movements of the disc, as described and shown.

6. In rotary motors of the class set forth, the combination, with a casing having upper and side adjustable director plates, of, adjustable stuffing boxes and foot plates provided with means for adjusting the position of said casing relatively to an enclosed rotary disc, whose serrations are in contact with a projecting lip of a fluid pressure chamber, as described and shown, and for the purposes set forth.

7. In rotary motors of the class set forth, an outer casing having upper and side director plates, and provided with inner side facing strips, the lower part of such casing being of a diminished thickness so as to form an outlet passage for the expended fluid, and communicating with an exhaust port, as described and shown.

8. The general combination and arrangement of the parts herein described, the whole forming an improved rotary motor operated by fluid pressure, as described and as illustrated in the drawings.

Specification, 8s. Drawings on application.

Application No. 2690.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patent Agent (*Henry James Kimman* and *Edward Nash Hurley*), "*Improvements in Portable Pneumatic Drills and like tools.*"—Dated 19th September, 1899.

Claims:—

1. In a portable pneumatic drilling machine, the combination of at least two sets of fluid pressure cylinders having at least two cylinders in each set arranged substantially parallel with the cylinders in the adjacent set, a reciprocating piston in each cylinder, a crank shaft connected with each piston, a controlling reciprocating valve arranged for each set of parallel arranged cylinders arranged parallel therewith and connected with the crank shaft to admit and exhaust fluid pressure in each line of parallel arranged cylinders, and drill-holding mechanism connected with and adapted to be rotated by the crank shaft, substantially as described.

2. In a portable pneumatic drilling machine the combination of a casing provided with two sets of fluid pressure cylinders arranged in parallel lines and having at least two cylinders in each set arranged substantially at right angles with the other cylinder in the set, a reciprocating piston in each cylinder, a rotating crank shaft connected with the piston in each cylinder, a controlling valve for each line of parallel arranged cylinders and arranged parallel therewith to cut off fluid pressure from and admit it to each cylinder in the line of parallel arranged cylinders, and drill-holding mechanism connected with and adapted to be rotated by the crank shaft, substantially as described.

3. In a portable pneumatic drilling machine the combination of a casing provided with two sets of fluid pressure cylinders arranged in parallel lines having at least two cylinders in each set substantially at right angles with each other, a reciprocating piston in each cylinder, a crank shaft provided with a crank arranged opposite each set of cylinders and connected with the pistons in the cylinders of each set, a controlling piston valve arranged parallel with and for each line of parallel arranged cylinders and connected with the crank shaft to be operated thereby provided with annular and longitudinal passages to regulate the admission and exhaust of the fluid pressure during the motions of the controlling valve to and from each line of parallel arranged cylinders and drill-holding mechanism connected with and adapted to be rotated by the crank shaft, substantially as described.

4. In a portable pneumatic drilling machine the combination of a casing provided with at least two sets of fluid pressure cylinders arranged in parallel lines having two cylinders in each set substantially at right angles with each other, a reciprocating piston in each cylinder, a crank shaft provided with a crank arranged opposite each set of cylinders and connected with the movable pistons therein; a valve casing forming a cap for the cylinder casing and provided with a fluid pressure chamber and valve chambers arranged at right angles to each other one for each line of parallel arranged cylinders, a reciprocating piston valve in each valve chamber connected with the crank shaft and provided with annular longitudinal passages or chambers, channels leading from each valve chamber to each cylinder in the line of parallel arranged cylinders so as to provide for and cut off communication with the fluid pressure chamber and each cylinder in the set during the reciprocation of the controlling piston valve, and drill-holding mechanism connected with and adapted to be rotated by the crank shaft, substantially as described.

5. In a portable pneumatic drilling machine, the combination of a casing provided with at least two sets of fluid pressure cylinders arranged in parallel lines, having two cylinders in each set substantially at right angles with each other, a reciprocating piston in each cylinder, a crank shaft provided with a crank arranged opposite each set of cylinders and connected with the movable pistons therein, a valve casing forming a cap for the cylinder casing and provided with a fluid pressure chamber and valve chambers arranged at right angles to each other, one for each line of parallel arranged cylinders: a reciprocating piston valve in each valve chamber connected with the crank shaft and provided with annular and longitudinal passages or chamber, channels leading from each valve chamber to each cylinder in the line of parallel arranged cylinders so as to provide for and cut off communication with the fluid pressure chamber of the valve casing and each cylinder in the set during the reciprocations of the controlling piston valve, a cap for each valve chamber provided with an opening through which fluid pressure may be exhausted, and drill-holding mechanism connected with and adapted to be rotated by the crank shaft, substantially as described.

6. In a machine of the class described a supply pipe provided with a rotary throttle valve in which there is combined a supply pipe, an inwardly axial projecting tubular extension thereof perforated and immovably connected therewith so as to provide an annular chamber between it and the supply pipe, a rotary valve in the inwardly extending portion provided with a perforation adapted to register with the perforation in the extension and a rotatable shell or handle portion surrounding the supply pipe and extension thereof and connected with the valve so as to rotate both of such parts simultaneously, substantially as described.

7. In a portable pneumatic drill, the combination of a rotatable sleeve having a tapered recess adapted to receive the shank of a drill or similar tool, fluid pressure cylinders and intermediate mechanism adapted to transform the energy in such cylinders into rotations of the tool holder, a tubular extension on such tool holder provided with an internally threaded and axial opening, a movable pin in such opening, and a threaded plug adapted to operate the pin backwardly and forwardly, substantially as described.

Specification, 13s. Drawings on application.

Application No. 2704.—DAVID GILMOUR, of Trenton, Canada, Lumber Manufacturer, "*Improvements in the Manufacture of Lumber.*"—Dated 26th September, 1899.

Claims:—

1. As an article of manufacture, lumber composed of two parts as A and B, both tongued and grooved to fit each other, combined with a suitable glue or cement and welded and condensed, substantially as described.

2. As an article of manufacture, lumber composed of two tongued and grooved parts, the grooves having small lateral grooves with the fibre of the tongues pressed laterally thereinto, substantially as described.

Specification, 7s. Drawings on application.

Application No. 2818.—ALEXANDER IMSCHENETZKY, of No. 20 Snamenskaia, St. Petersburg, Russia, Colonel, "*Improvements in and relating to the manufacture of Fire-resisting Materials.*"—Dated 12th January, 1900.

Claims:—

1. The improved method of introducing silica into asbestos or other sheets, consisting in causing the reacting liquids for forming silica to mix in proper proportions upon the constituent webs or layers of the sheet during the formation thereof, substantially as described.

2. The combination, in a machine for manufacturing asbestos cardboard and like material, in the manufacture of fire-resisting materials useful for building purposes and the like, of rollers, each of which is supplied with one of the reacting liquids for forming silica, adapted to successively engage with the drum or cylinder on which the cardboard is formed, so as to deposit the reacting liquids for forming silica in proper proportions upon the constituent webs or layers of the cardboard in course of formation, substantially as and for the purposes hereinbefore described.

Specification, 6s. 6d.

Application No. 2819.—WILHELM SCHMIDT, of Wilhelmshöhe, near Cassel, German Empire, "*Improved Arrangement for Drying and Superheating Wet Steam.*"—Dated 12th January, 1900.

Claim:—

In steam boilers having superheaters, the arrangement of a coil of superheating pipes, arranged in such a manner as to raise up to the middle of the chamber in spiral form, then being conducted straight upwards and descending again in spiral form, whereby the fire gases effect the drying of the steam within the superheating pipes at the bottom of the chamber, whilst the superheating proper takes place in the upper portion, for the purpose to attain a thoroughly dried and superheated steam, substantially as described.

Specification, 2s. 6d. Drawings on application.

Application No. 2820.—WILHELM SCHMIDT, of Wilhelmshöhe, near Cassel, German Empire, Engineer, "*Arrangement for Regulating Superheated Steam in Compound Engines.*"—Dated 12th January, 1900.

Claim:—

In a regulator for superheated steam in compound engines, the combination with a high and a low pressure cylinder, a receiver, connections between the latter and that cylinder, a superheater arranged within such receiver, a connection between said superheater and the high pressure cylinder, means for regulating the way of the live steam, for the purpose and substantially as described.

Specification, 4s. 6d. Drawings on application.

Application No. 2821.—WILHELM SCHMIDT, of Wilhelmshöhe, near Cassel, German Empire, Engineer, "*Improvements in Compound Machines.*"—Dated 12th January, 1900.

Claim:—

In a compound engine with differential pistons, the combination with an intermediate chamber u^1 constantly being in connection with the upper side of the large piston F^1, the ring surface of said piston alternatively being in communication with the intermediate chamber and the exhaustor, first for attaining a double-acting machine and second for attaining an effective initial heating of cylinder and piston for the purpose as described.

Specification, 2s. 6d. Drawings on application.

Application No. 2822.—JAMES GALLOWAY, of 20 Leith Walk, Leith, Scotland, and WILLIAM WORK SLATER, of 13 Rutland Square, Edinburgh, Scotland, "*Improvements in Apparatus for the economical treatment of Auriferous Matters.*"—Dated 12th January, 1900.

Claims:—

1. In an amalgamator the combination of a horizontal mercury chamber, a vertical inlet chamber, a sloping outlet chamber, agitators in the mercury chamber, lateral ribs on the bottom of the chamber, a central gutter and depending baffles on the top and cover of the chamber, substantially as hereinbefore described.

2. A concentrator having a table which is shaken by means of mechanism substantially as hereinbefore described.

3. The construction of amalgamator substantially as hereinbefore described with reference to drawings annexed.

4. The construction of concentrator substantially as hereinbefore described with reference to the drawings annexed.

Specification, 7s. 6d. Drawings on application.

Application No. 2823.—HENRY NIELD BICKERTON, Engineer, and HENRY WENTWORTH BRADLEY, Engineer, both of Wellington Works, Ashton-under-Lyne, Lancashire, England, "*Improvements in Oil and Gas Engines.*"—Dated 12th January, 1900.

Claims:—

1. In oil or gas engines, a separate vapourising or gas chamber, permanently open to the combustion chamber, into which separate chamber the oil or gas is introduced and allowed to remain partly or wholly separated from the air charge during compression; means of displacing the vapour or gas into the combustion chamber at or near the completion of compression, by air under pressure, to form combustible mixture; and means of igniting when the mixture is formed, as herein set forth.

2. In oil or gas engines; the forming of a local compression space between the cylinder and piston by means of a projection upon the latter fitting into an aperture in a partition in the former, or *vice versa*, when approaching the end of the stroke, whereby the charge of oil or vapour or gas may be forced through a passage leading from the confined space so formed to the rear of the piston for the purpose of there or otherwise firing the same, in manner substantially as herein shown and described.

3. In oil or gas engines; the forcing of oil, vapour or gas, at or toward the end of the compression stroke of the piston, into the explosion chamber of the cylinder, for the purpose and in manner substantially as herein shown and described.

4. In combination with the foregoing; the employment of a heated block or other obstacle in the explosion chamber at the rear of the piston upon which the oil, vapour or gas may be sprayed, for the purpose and in manner substantially as herein shown and described.

Specification, 6s. Drawings on application.

Application No. 2824.—BERNHARD HOFFMANN, Engineer, of 1 rue Marché aux Herbes, Luxembourg (Assignee of QUINTIN MARINO), "*Improvements in the Composition of Baths for Electrolysis.*"—Dated 13th January, 1900.

Claim:—

The process for the preparation of electrolytic baths characterised by the water in the said baths being replaced by a proportion of pure glycerine for salts directly soluble in the latter, or by a mixture of glycerine with a requisite proportion of water or other solvent in which salts slightly or not at all soluble in glycerine have been previously dissolved, said mixture not being decomposable by the current owing to the presence of glycerine, substantially as described and for the purpose specified.

Specification, 6s. 6d.

Application No. 2825.—ROBERT TINDALE, of 384 Murray Street, Perth, Modeller, "*An Improved Ventilator.*"—Dated 16th January, 1900.

Claim:—

In an improved ventilator, the details of construction separately and in combination particularly as described in the specification and illustrated in the drawings.

Specification, 1s. Drawings on application.

Application No. 2826.—HENRY BRABY, of Ayr, Queensland, Consulting Engineer, "*Improvements in Steam Generators.*"—Dated 16th January, 1900.

Claims:—

1. In a steam generator, a plate or block of copper, gun-metal, or other good heat-conducting material having ways therein for the circulation of water and steam, and capable of being subjected to heat from a furnace or other source of heat, substantially as hereinbefore described.

2. In a steam generator, a plate or block of copper, gun-metal, or other good heat-conducting material having water-ways therein and provided with caps for returning the water-ways and capable of being subjected to heat from a furnace or other source, substantially as hereinbefore described.

3. In a steam generator a plate or block of copper, gun-metal, or other good heat-conducting material having ways therein for the circulation of the water and steam and holes therethrough for passage of the furnace heat, substantially as hereinbefore described.

4. In a steam generator, the combination with one or more plates of copper, gun-metal, or other good heat-conducting material having ways therein for the circulation of water and steam, of a feed-pump, injector or other means whereby the forced circulation of water is maintained, substantially as hereinbefore described and explained.

5. In a steam generator the combination of a series of plates or blocks of good heat conducting material having ways therein for the circulation of the water and steam, one or more of the said plates being perforated or not, an equaliser or dome such as G, inlet valve such as E, and outlet valve such as F, substantially as hereinbefore described and explained and as illustrated in the drawings.

6. The improved generator consisting of the combination and arrangement of the parts substantially as hereinbefore described and explained and as illustrated in Figs. 1 to 7 of the drawings.

7. The improved generator consisting of the combination and arrangement of the parts substantially as hereinbefore described and explained and as illustrated in Figs. 8 and 9 of the drawings.

Specification, 8s. Drawings on application.

Application No. 2827.—GEORGE WEBSTER, of Parramatta, New South Wales, Engineer, "*Improvements in machines for extracting gold from finely divided metalliferous materials.*"—Dated 16th January, 1900.

Claims:—

1. In machines for extracting gold from finely divided metalliferous materials the combination with a feeding hopper and a catching or receiving depression of a comparatively long and shallow closely covered-in passage or chamber, having a fabric or similar lining on its bottom, substantially as herein described and explained.

2. In machines for extracting gold from finely divided metalliferous materials the combination with a comparatively long and shallow passage or chamber, having a fabric-lined bottom of a top or cover, whose under surface is silvered or amalgamated, substantially as herein described and explained.

3. In machines for extracting gold from finely divided metalliferous materials, the combination with a comparatively long and shallow passage or chamber of water pipes partially sunk into the bottom of said passage or chamber, substantially as herein described and explained, and as illustrated in the drawings.

4. The combination and arrangement all together of the mechanical parts set forth and explained forming an improved machine for extracting gold from finely divided metalliferous material substantially as herein described and explained, and as illustrated in the drawings.

Specification, 6s. Drawings on application.

Application No. 2828.—HENRY JAMES KIMMAN and EDWARD NASH HURLEY, both of Chicago, Illinois, U.S.A., Manufacturers, "*Improvements in direct-acting Engines, principally for use in connection with pneumatic hammers.*"—Dated 18th January, 1900.

Claims:—

1. In a pneumatic hammer having an inlet passage for the admission of the motive fluid, the combination with the throttle valve controlling said passage, of a sleeve in which said valve is mounted, and means for adjusting said sleeve so as to change the relation of the port openings therein relative to said throttle valve substantially as described.

2. In a pneumatic hammer having an inlet passage for the admission of the motive fluid, the combination with the throttle valve controlling said passage, of a spring for pressing said valve in a direction to close said passage, a sleeve in which said valve is mounted and means for adjusting said sleeve so as to change the position of ports therein relative to said valve, substantially as described.

3. In a pneumatic hammer having an inlet passage for the admission of the motive fluid, the combination with the throttle valve controlling said passage, of a spring for pressing said valve in its closed position, a sleeve in which said valve is mounted, a plug having a threaded engagement with said sleeve whereby said sleeve is adjusted longitudinally its axis, and means for locking said plug in a rotatably adjustable position, substantially as described.

4. In a pneumatic hammer having an inlet passage for the admission of the motive fluid, the combination with the throttle valve controlling said passage, of means for pressing said valve in one direction to close said passage a lever for moving said valve in the opposite direction for opening said passage and an adjustable sleeve enclosing said valve, substantially as described.

5. In a pneumatic hammer having an inlet passage for the admission of the motive fluid, the combination with the throttle valve controlling said passage, of a spring for pressing said valve in a direction to close said passage a sleeve enclosing said valve, said sleeve containing ports, a plug having a threaded connection with said sleeve for adjusting the same longitudinally, and means for holding said plug in its different rotatory positions, substantially as described.

6. In a pneumatic hammer having an inlet passage for the admission of the motive fluid, the combination with a reciprocating throttle valve for controlling said passage of means for pressing said valve in one direction to close said passage, a lever for moving said valve in an opposite direction to open said passage, a sleeve enclosing said valve, an adjustable screw plug engaging said sleeve to move the same longitudinally, and means for locking said screw plug in its different adjusted positions, substantially as described.

7. In a pneumatic hammer the combination of the handle having an inlet passage extending through it, the throttle valve arranged to reciprocate in a bore of said handle for controlling said inlet passage, an adjustable sleeve enclosing said valve, and provided with ports which are constantly in register with the inlet passage through the handle, and other ports which are constantly in register with the supply passage to the engine, means in engagement with said sleeve for adjusting the same longitudinally, and a lever for operating said valve independently of said sleeve; substantially as described.

8. In a pneumatic hammer the combination with the handle provided with an inlet passage for the motive fluid of a sleeve introduced into said passage, and provided with suitable port openings for the admission of pressure from said passage into said sleeve, means for adjusting said sleeve, a throttle valve arranged in said sleeve, and means for operating said valve independently of said sleeve, substantially as described.

9. The combination with a cylinder provided with a flange on its rear end, of a coupling sleeve co-operating with said flange and provided with a threaded groove, a handle base formed with a tangential opening, a bolt which passes through said opening and engages with the threaded groove of the coupling sleeve for locking the same against rotary movement relative to the cylinder, substantially as described.

10. The combination with a handle base formed with a smooth tangential bore, of a collar or coupling sleeve having a threaded connection with said base, the periphery of said coupling sleeve being provided with a threaded groove and a screw bolt which is introduced into the bore in the handle base, where it is free to be thrown to engage the threaded groove of the coupling sleeve, substantially as described.

11. In a pneumatic hammer the combination with a handle base, of a coupling sleeve having a threaded connection therewith, a screw bolt which is received by a plain bored opening in said handle base and which engages with a threaded groove in the coupling sleeve in such manner that when said bolt is rotated it will have a tendency to force said coupling sleeve to its home position; substantially as described.

12. In a pneumatic hammer the combination with a handle base formed with a tangential bore, of a collar or coupling sleeve, which is secured in said handle base the periphery of said sleeve being provided with a threaded groove, and a screw bolt, which is introduced into the bore in the handle base for engaging the threaded groove of the coupling sleeve, and locking the parts against independent rotation, substantially as described.

13. In a pneumatic hammer the combination with the cylinder and its piston, of a cylindrical valve comprising a hollow body portion, open at one end, and an enlarged head at the other end of said body portion, said head being closed, said valve admitting and exhausting pressure to and from the ends of said cylinder to throw said piston and ports controlled by said piston for intermittently admitting and exhausting pressure, to the enlarged closed end of said valve, substantially as described.

14. The combination with a cylinder having a bore of the same diameter through its length, of a piston arranged therein, which piston is formed with a reduced portion intermediate its ends, a differential valve for admitting and exhausting pressure to and from the ends of said cylinder, said valve comprising a hollow body portion open at one end and an enlarged head at the other end of said body portion, said head being closed, ports are controlled by the reduced portion in said piston for admitting and exhausting pressure to and from the outer face of the enlarged closed head portion of said valve, a port for admitting constant pressure against the inner face of the shoulder of the head of said valve, and a port leading from the outer or small end of the valve chamber, which last-named port is constantly open to the exterior, substantially as described.

15. The combination with a cylinder having a bore of uniform diameter throughout its length, of a piston arranged in said cylinder, and formed with a reduced portion intermediate its ends, a hollow valve, formed with an enlarged closed head at one end, said valve admitting and exhausting pressure to and from the ends of the cylinder to throw said piston, a constantly open port leading from the end of the valve chamber of small diameter, and from the hollow body portion of the valve and communicating with the exterior suitable ports leading behind the larger or closed head portion of said valve, and which are controlled by the reduced portion of said piston for intermittently admitting and exhausting pressure to and from said larger or closed head portion of the valve, and a port for admitting constant pressure to the inner face of the shoulder of the head of said valve, substantially as described.

16. The combination with a cylinder and its piston, a hollow valve comprising a body portion and an enlarged closed head portion, said body portion being externally reduced near said head, and suitable ports, whereby said valve admits pressure to one end of the cylinder while exhausting pressure from the opposite end of said cylinder, and *vice versa*, said valve being thrown in proper position to accomplish the admission and exhaust of pressure to and from the ends of the piston, by the piston, substantially as described.

17. The combination with a cylinder and its piston, said piston being formed with a reduced portion of a hollow valve comprising a body portion and an enlarged closed head at one end, said body portion being reduced externally near said head, a valve block containing a chamber bored to two different diameters, in which said valve reciprocates ports in said valve near its end for exhausting pressure from the rear end of the cylinder ports controlled by said reduced portion in the valve for admitting pressure to the front end of the cylinder and a port controlled by the head of said valve for admitting pressure to the rear end of the cylinder, substantially as described.

18. The combination with a cylinder and its piston, of a differential valve for controlling the movements of said piston, the movement of said valve in one direction being controlled by said piston, suitable port arrangements co-operating with said valve and piston for accomplishing the above, one of which ports h^1 is located some distance from the end of the cylinder, to provide a cushion of dead air for the piston, substantially as described.

19. The combination with a cylinder and its piston, of a differential valve, said valve comprising a hollow body portion, and an enlarged head at one end of said body portion, said head being closed, said valve controlling the movement of said piston, said piston in turn admitting and exhausting pressure from one end of said valve, and a chisel shank introduced into the end of the cylinder forming part of the end wall of said cylinder, substantially as described.

20. The combination with a cylinder and its piston, of a differential valve for admitting and exhausting pressure to and from each end of said cylinder, said valve comprising a hollow body portion and an enlarged head at one end of said body portion, said head being closed, a chisel shank which is introduced into the cylinder to form part of its end walls, whereby upon the removel of said chisel shank pressure will blow through the opening provided to receive the same, substantially as described.

21. The combination with a cylinder and its piston formed with a reduced portion of a differential valve formed with a reduced portion, and suitable ports or openings, said valve being hollow and formed with an enlarged closed head at one end, admission and exhaust passages in said cylinder which are controlled by said valve for admitting and exhausting pressure to and from the ends of said cylinder a passage communicating with the space behind the enlarged or closed head portion of said valve and entering the cylinder at different points to co-operate with the reduced portion of said piston, and a chisel shank loosely inserted in said cylinder, substantially as described.

22. The combination with a cylinder formed with exhaust ports h^1 and h^9, a port h^{11}, which intermittently admits and exhausts pressure to the forward end thereof, a port h^7, which is constantly open to pressure, ports h^5 and h^4 connecting the bore of the cylinder with the passage h^6, for intermittently admitting and exhausting pressure to one end of a controlling valve, a piston formed with a reduced portion for co-operating with the ports h^5, h^6, h^7, h^8, and h^9, and a differential valve for opening and closing the exhaust port h^1, intermittently admitting and exhausting pressure through the port h^{11}, and intermittently admitting pressure through the port g^{11}, substantially as described.

Specification, £1 2s. 6d. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Patent Office, Perth,
26th January, 1900.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

For particulars of claims, vide Gazette No. 4, 26th January, 1900.

Application No. 2594.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patent Agent (*Harry Phillips Davis* and *Frank Conrad*), "*Improvements in Electrical Measuring Instruments.*"—Dated 8th July, 1899.

Specification, 3s. Drawings on application.

Application No. 2619.—JOHN FAIRFAX CONIGRAVE, of Hay Street, Perth, Western Australia, Licensed Patent Agent (*Harry Phillips Davis*), "*Improvements in Fuse Blocks for Electric Circuits.*"—Dated 31st July, 1899.

Specification, 3s. 6d. Drawings on application.

Application No. 2620.—JOHN FAIRFAX CONIGRAVE, of Hay Street, Perth, Western Australia, Licensed Patent Agent (*Benjamin Garver Lamme*), "*Improvements in Dynamo-Electric Machines.*"—Dated 31st July, 1899.

Specification, 4s. Drawings on application.

Application No. 2627.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patent Agent (*Harry Phillips Davis* and *Gilbert Wright*), "*Improvements in Circuit Breakers.*"—Dated 5th August, 1899.

Specification, 3s. 6d. Drawings on application.

Application No. 2635.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patent Agent (*Ralph Davenport Mershon*), "*Improvements relating to the Distribution of Electrical Power.*—Dated 15th August, 1899.

Specification, 10s. Drawings on application.

Application No. 2644.—JOHN FAIRFAX CONIGRAVE, of Eagle Chambers, Hay Street, Perth, Western Australia, Licensed Patent Agent (*Harry Phillips Davis* and *Gilbert Wright*), "*Improvements in Controllers for Electric Motors.*"—Dated 21st August, 1899.

Specification, 7s. Drawings on application.

Application No. 2651.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patent Agent (*Harry Phillips Davis*), "*Improvements in Fuse-blocks for Electric Circuits.*"—Dated 26th August, 1899.

Specification, 2s. Drawings on application.

Application No. 2661.—JOHN FAIRFAX CONIGRAVE, of Perth, Western Australia, Licensed Patent Agent (*Gilbert Wright* and *Christian Aalborg*), "*Improvements in Switches for Electric Circuits.*"—Dated 2nd September, 1899.

Specification, 9s. Drawing on application.

Application No. 2674.—JOHN FAIRFAX CONIGRAVE, of Hay Street, Perth, Western Australia, Licensed Patent Agent (*Benjamin Garver Lamme*), "*Improvements in Systems of Electrical Distribution.*"—Dated 11th September, 1899.

Specification, 2s. 6d. Drawings on application.

Application No. 2683.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patent Agent (*Benjamin Garver Lamme* and *John Purington Mallett*), "*Improvements in Electrical Machines.*"—Dated 16th September, 1899.

Specification, 5s. Drawings on application.

Application No. 2685.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patent Agent (*Benjamin Garver Lamme*) "*Improvements in Single Phase Alternating Current Generators.*"—Dated 16th September, 1899.

Specification, 2s. Drawings on application.

Application No. 2706.—SOREN LEMVIG FOG, Engineer, and AAGE GEORG KIRSCHNER, Chemist, both of Copenhagen, Denmark, "*A Process for making Headless Matches.*"—Dated 27th September, 1899.

Specification, 4s. 6d. Drawings on application.

Application No. 2805.—WILLIAM PERCY JONES, of Manaccan Board School, St. Martins, R.S.O., in the County of Cornwall, Schoolmaster, and HENRY MONTAGUE BATES, of 31 Elgin Crescent, Bayswater, in the County of London, England, Gentleman, "*A new or improved Match.*"—Dated 19th December, 1899.

Specification, 3s. 6d. Drawings on application.

Application No. 2807.—VALDEMAR POULSEN, of 17 Alhambravej, Copenhagen, Denmark, Engineer, "*A method of and apparatus for effecting the Storing up of Speech or Signals by magnetically influencing magnetisable bodies.*"—Dated 19th December, 1899.

Specification, £1 10s. Drawings on application.

Application No. 2808.—THE MOULDING SYNDICATE, LIMITED, of 101 Grosvenor Road, London, England, Manufacturers (Assignee of HARRIS TABOR and EDGAR HUIDEKOPER MUMFORD), "*Improvements in Moulding Machines for making Metal Castings.*"—Dated 19th December, 1899.

Specifications, 18s. Drawings on application.

Application No. 2810.—JAMES SWINBURNE, Engineer, and EDGAR ARTHUR ASHCROFT, Mining Engineer, Grosvenor Mansions, 82 Victoria Street, Westminster, London, England, "*Improvements in the treatment of Sulphide Ores.*"—Dated 11th July, 1899. (Filed under Section 3 of Amendment Act, 1894.)

Specification, 7s. Drawings on application.

Application No. 2813.—WILHELM WITTER, of Hohe Bleichen 36, Hamburg, Germany, Engineer, "*Process for producing a Solution of Cyanogen Chloride or Bromide, and applying the same for the Extraction of Precious Metals from their Ores.*"—Dated 30th December, 1899.

Specification, 4s. Drawings on application.

Application No. 2814.—VICTOR BELANGER, of Sea View, Marshfield, Massachusetts, U.S.A., gentleman, "*Spinning or Twisting Machines.*"—Dated 5th January, 1900.

Specification, £1 1s. Drawings on application.

Application No. 2815.—HENRY JAMES KIMMAN, Machinist, of Chicago, Illinois, U.S.A., "*Improvements in and relating to Pneumatic Drills and the like.*"—Dated 5th January, 1900.

Specification, 7s. Drawings on application.

Application No. 2816.—S. H. JOHNSON AND COMPANY, LIMITED, of Stratford, Essex, England (Assignee of SAMUEL HENRY JOHNSON and HENRY LIVINGSTONE SULMAN), "*Improvements in or relating to the Extraction of Metals from Ores or Slimes, and apparatus therefor.*"—Dated 6th January, 1900.

Specification, 15s. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Patent Office, Perth,
19th January, 1900.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the Complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

For particulars of claims, vide Gazette No. 3, 19th January, 1900.

Application No. 2796.—EDWARD WATERS, jun., a member of the firm of Edward Waters and Son, Patent Agents, of No. 131 William Street, Melbourne, in the Colony of Victoria (*The Linotype Company, Limited*), "*Improvements in Machines for making Printing Bars.*"—Dated 6th December, 1899.

Specification, £20 16s. 6d. Drawings on application.

Application No. 2806.—JOHN WILDRIDGE, of 97 Pitt Street, Sydney, New South Wales, Engineer, "*Improvements in Sub-aqueous Dredgers.*"—Dated 19th December, 1899.

Specification, 4s. Drawings on application.

Application No. 2817.—EWEN MCGREGOR, of Mangaonoho, New Zealand, Sawmiller, "*An improved apparatus for Excavating, Dredging, Transporting and Elevatng Earth, and similar operations.*"—Dated 9th January, 1900.

Specification, 9s. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Patent Office, Perth,
12th January, 1900.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

For particulars of claims, vide Gazette No. 2, 12th January, 1900.

Application No. 2467.—ANATOLE BARGIGLI, of 9 Avenue de la Bourdonnais, Paris, France, Engineer, "*A new or improved process and apparatus for or connected with the Amalgamation of Gold Ores, Tailings, and other Metals capable of amalgamation.*—Dated 15th April, 1899.

Specification, 12s. Drawings on application.

Application No. 2540.—BENJAMIN GARVER LAMME, of 230 Stratford Avenue, Pittsburgh, in the County of Allegheny, State of Pennsylvania, United States of America, Electrical Engineer, "*Improvements in Systems of Electrical Distribution and Regulation.*—Dated 27th May, 1899.

Specification, 8s. 6d. Drawings on application.

Application No. 2567.—THOMAS STEEL PERKINS, State of Pennsylvania, United States of America, Electrical Engineer, "*Improved Starting Mechanism for Electric Motors.*"—Dated 17th June, 1899.

Specification, 4s. 6d. Drawings on application.

Application No 2568.—BENJAMIN GARVER LAMME, of 230 Stratford Avenue, Pittsburgh, in the County of Allegheny, State of Pennsylvania, United States of America, Electrical Engineer, "*Improvements in Rotary Transformers and Synchronous Motors.*"—Dated 17th June, 1899.

Specification, 4s. Drawings on application.

Application No. 2609.—CHARLES FELTON SCOTT, of 6214 Sellers Street, Pittsburgh, in the County of Allegheny, State of Pennsylvania, United States of America, Electrical Engineer, "*Improvements in Systems of Electrical Distribution.*"—Dated 24th July, 1899.

Specification, 3s. 6d. Drawings on application.

Application No. 2787.—SIDNEY TRIVICK, of "Durham House," Clapham Common, in the County of Surrey, Metallurgist, "*Improvements in and connected with Solvents for Metals, and the Treatment of Gold and other Ores for the Extraction of the contained Metals.*"—Dated 1st May, 1899.

Specification, 15s. 6d. Drawings on application.

Application No. 2799.—JOSEPH GEORGE NASH, of Hindmarsh Square, Adelaide, in the Province of South Australia, Engineer, "*Improvements in Furnaces for the Treatment of Sulphide Ores.*"—Dated 12th December, 1899.

Specification, 8s. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Patent Office, Perth,
5th January, 1900.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the Complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

For particulars of claims, vide Gazette No. 1, 5th January, 1900.

Application No. 2802.—ERNEST BURTON, of Wickham Terrace, Brisbane, Queensland, Dentist, and RICHARD BOYD ECHLIN, of Toowong, near Brisbane aforesaid, Journalist, "*An improved Judges' Recorder for Sports and Race Meetings.*" Dated 18th December, 1899.

Specification, 5s. 6d. Drawings on application.

Application No. 2803.—ERNEST BURTON, of Wickham Terrace, Brisbane, Queensland, Dentist, and RICHARD BOYD ECHLIN, of Toowong, near Brisbane, aforesaid, Journalist, "*An improved Scratching Board for Sports and Race Meetings.*"—Dated 18th December, 1899.

Specification, 11s. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Patent Office, Perth,
29th December, 1899.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the complete specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

For particulars of claims, vide Gazette No. 52, 29th December, 1899.

Application No. 2791.—JOHN WILSON, of "The Firs," South Woodford, Essex, England, Civil Engineer, and WILLIAM PUGH, of 19 Ross Street, Mill Road, Cambridge, England, Signal Fitter, "*An improvement in or connected with the Locking Bars of Railway Point and Signal Apparatus.*—Dated 5th December, 1899.

Specification, 7s. 6d. Drawings on application.

Application No. 2798.—DANIEL MCRORIE, of 273 and 275 Flinders Lane, Melbourne, in the Colony of Victoria, Importer (JOSEPH HUSBANDS), "*Improvements in or relating to Umbrellas and the like.*"—Dated 12th December, 1899.

Specification, 9s. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Patent Office, Perth,
22nd December, 1899.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

For particulars of claims, vide Gazette No. 51, 22nd December, 1899.

Application No. 2596.—WILLIAM LINGARD, of 54 Lambton Quay, Wellington, New Zealand, Insurance Manager, "*Improvements in Boots and Shoes.*"—Dated 11th July, 1899.

Specifications, 4s. Drawings on application.

Application No. 2780.—MAURICE BARNETT, of Mosman Street, Charters Towers, in the Colony of Queensland, Watchmaker, "*Automatic Enumerating Machine, and Apparatus for Embossing and Issuing Checks or Tickets.*"—Dated 21st November, 1899.

Specification, 11s. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Patent Office, Perth,
15th December, 1899.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

For particulars of claims, vide Gazette No. 50, 15th December, 1899.

Application No. 2693.—WRIGHT'S TAPER ROLLER BEARINGS SYNDICATE, LIMITED, of 1 and 2 Great Winchester Street, London, England (Assignee of WILLIAM HAMILTON WRIGHT), "*Improvements in or relating to Roller Bearings.*"—Dated 25th September, 1899.

Specifications, £1 9s. Drawings on application.

Application No. 2726.—FRANK ARTHUR BLAKESLEE, of Kalgoorlie, Western Australia, Engineer, "*An improved Condenser.*"—Dated 12th October, 1899.

Specification, 6s. 6d. Drawings on application.

Application No. 2772.—GEORGE GARIBALDI TURRI, of Queen Street, Melbourne, Victoria, Patent Agent (*American Lithographic Company*, Assignee of Edward Hett) "*Improvements in Transferring and Printing and Mechanisms therefor.*"—Dated 21st November, 1899.

Specification, £3 7s. Drawings on application.

Application No. 2773.—GEORGE GARIBALDI TURRI, of Queen Street, Melbourne, Victoria, Patent Agent (*American Lithographic Company*, Assignee of EDWARD HETT), "*Improvements in making Printing Surfaces, and Mechanisms therefor.*"—Dated 21st November, 1899.

Specification, £2 1s. Drawings on application.

Application No. 2774.—GEORGE GARIBALDI TURRI, of Queen Street, Melbourne, Victoria, Patent Agent (*American Lithographic Company*, assignee of EDWARD HETT), "*Improvements in Printing and Mechanisms therefor.*"—Dated 21st November, 1899.

Specification, £9 4s. Drawing on Application.

Application No. 2782.—HARRY JAMES BUCHAN, of Redfern, near Sydney, New South Wales, Plumber, "*Improvements in Acetylene Generators.*"—Dated 21st November, 1899.

Specification, 9s. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Patent Office, Perth,
8th December, 1899.

NOTICE is hereby given that the undermentioned applications for the Grant of Letters Patent, and the complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose any of such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the first appearance of this advertisement in the Western Australian *Government Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

For particulars of claims, vide Gazette No. 49, 8th December, 1899.

Application No. 2659.—GEORGE GARIBALDI TURRI, of Salisbury Building, Queen Street, Melbourne, in the Colony of Victoria, Patent Agent (*George Archibald Lowry*), "*Apparatus for making Grass Twine.*"—Dated 2nd September, 1899.

Specification, £1 17s. Drawings on application.

Application No. 2660.—GEORGE GARIBALDI TURRI, of Salisbury Building, Queen Street, Melbourne, in the Colony of Victoria, Patent Agent (*George Archibald Lowry*), "*Apparatus for Compressing Fibrous or other Material.*"—Dated 2nd September, 1899."

Specification, £1 13s. Drawings on application.

Application No. 2775.—SYDENHAM OXENHAM, of Poverty Bay, in the Colony of New Zealand, Brickmaker, "*Appliance for Straining Water before it enters a Storage Tank.*"—Dated 21st November, 1899.

Specification, 2s. 6d. Drawings on application.

Application No. 2776.—SYDENHAM OXENHAM, of Poverty Bay, in the Colony of New Zealand, Brickmaker, "*An improved Automatic Mode of and Apparatus for Ejecting Silt and Deposit from Tanks and Cisterns.*"—Dated 21st November, 1899.

Specification, 5s. Drawings on application.

Application No. 2777.—SYDENHAM OXENHAM, of Poverty Bay, in the Colony of New Zealand, Brickmaker, "*An improved Guard to protect House-Guttering from the intrusion of small birds and the deposit of refuse matter.*"—Dated 21st November, 1899.

Specification, 3s. 6d. Drawings on application.

Application No. 2778.—ADELPHE LEON PHILARETE CHASLES, of Orleans, in the Department of the Loiret, in the Republic of France, Gentleman, "*New or improved Facing for the Pedals of Bicycles, the Steps of Carriages, the Steps of Staircases, and the like.*"—Dated 21st November, 1899.

Specification, 8s. Drawings on application,

Application No. 2779.—Isaac Smith, of the firm of Sydney Smith & Sons, of Basford Brass Works, Nottingham, England, Brassfounders, "*Improvements in apparatus for use as a Meter, Motor Pump, and similar purposes.*"—Dated 21st November, 1899.

Specification, 5s. 6d. Drawings on application.

Application No. 2781.—Rudolph Menz, of 19 Royal Exchange, King William Street, Adelaide, in the Province of South Australia, Watchmaker, "*Improvements in Cooling Safes or Chambers.*"—Dated 21st November, 1899.

Specification, 12s. Drawings on application.

Application No. 2783.—George Henry Green, of Unley Road, Unley, in the Province of South Australia, Accountant, "*Improved Mechanism for Fare Boxes and Tills for Receiving and Automatically Registering and Recording Fares.*"—Dated 22nd November, 1899.

Specification, £1. Drawings on application.

Application No. 2784.—Richmond Gold and Silver Cigarette Company, of 15 Broad Street, New York, U.S.A. (Assignee of Cassius Montezuma Richmond), "*Improvements in Cigarette Wrappers.*"—Dated 25th November, 1899.

Specification, 4s. 6d. Drawings on application.

Application No. 2785.—Desrumaux's Automatic Water Softener and Purifier, Limited, of Greek Street Chambers, Greek Street, Leeds, in the County of York, England (Assignee of Henri Desrumaux), "*Improvements in Apparatus for Purifying Water and other Liquids.*"—Dated 25th November, 1899.

Specification, 17s. 6d. Drawings on application.

MALCOLM A. C. FRASER,
Registrar of Patents.

Trade Marks.

Patent Office, Trade Marks Branch,
Perth, 2nd February, 1900.

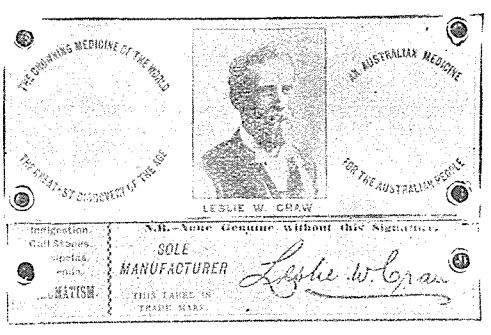
IT is hereby notified that I have received the undermentioned Applications for the Registration of Trade Marks.

Any person or persons intending to oppose any of such applications must leave particulars in writing, in duplicate (on Form F), of his or their objections thereto, within two months of the first advertisement of the applications in the Western Australian *Government Gazette*.

A fee of £1 is payable with such notice.

MALCOLM A. C. FRASER,
Registrar of Designs and Trade Marks.

Application No. 1774, dated 25th October, 1899.—Leslie W. Craw, trading as "Cura Vitæ Proprietary," of 229 Elizabeth Street, Melbourne, in the Colony of Victoria, Manufacturer, to register in Class 3 in respect of Chemical Substances prepared for use in medicine and pharmacy, a Trade Mark, of which the following is a representation :—



The essential particulars of the Mark are (1) *the copy of the written signature, and* (2) *the photographic representation, and any right to the exclusive use of the added matter is disclaimed by the applicant.*

This Mark was first advertised in the Western Australian *Government Gazette* of the 8th of December, 1899, *vide* notice at head of Trade Mark advertisements.

Application No. 1781, dated 14th November, 1899.—Messrs. A. M. Bickford & Sons, of Currie Street, Adelaide, in the Province of South Australia, Pharmaceutical Chemists, to register in Class 43, in respect of Fermented Liquors and Spirits, a Trade Mark, of which the following is a representation :—

The essential particulars of the Trade Mark are the words "Kingfisher," "Our Jack," and the device of the Laughing Jackass or Kingfisher, and the applicants disclaim any right to the exclusive use of the added matter.

This Mark was first advertised in the Western Australian *Government Gazette* of 8th December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1793, dated 28th November, 1899.—The British Uralite Company, Limited, of 37 Lombard Street, in the City of London, Manufacturers, to register in Class 17, in respect of Compounds of Asbestos and Silica for use in Building and Decoration, a Trade Mark, of which the following is a representation :—

URALITE.

This Mark was first advertised in the Western Australian *Government Gazette* of the 8th December, 1899—*vide* notice at head of Trade Mark advertisements.

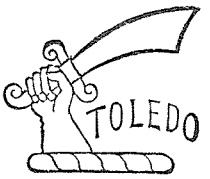
Application No. 1794, dated 28th November, 1899.—The British Uralite Company, Limited, of 37 Lombard Street, in the City of London, Manufacturers, to register in Class 17, in respect of Compounds of Asbestos and Silica for use in Building and Decoration, a Trade Mark, of which the following is a representation :—

IMSCHEN.

This Mark was first advertised in the Western Australian *Government Gazette* of the 8th December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1797, dated 8th December, 1899.—Jno. Hy. Andrew & Co., Limited, Toledo Steel Works, Sheffield, England, Manufacturers, to register in Class 5, in respect of Iron and Steel, both raw and in bar, and Rail, Bolt, and

Rod, Sheets, Plates, and Hoops, a Trade Mark, of which the following is a representation :—



The said Trade Mark having been used by the Applicants and their predecessors in business in respect of the said goods since upwards of 15 months before the 1st January, 1885.

This Mark was first advertised in the Western Australian *Government Gazette* of the 15th December, 1899, *vide* notice at head of Trade Mark Advertisements.

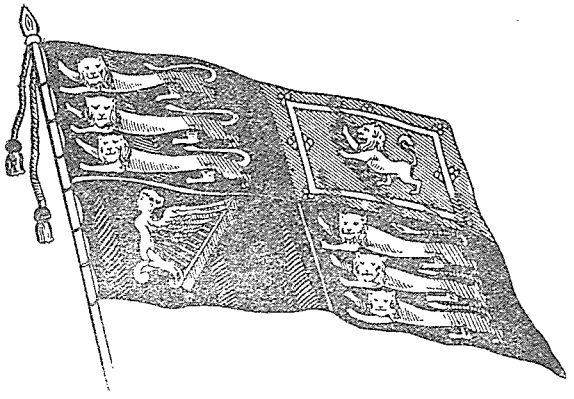
Application No. 1798, dated 8th December, 1899.—JNO. HY. ANDREW & Co., Limited, Toledo Steel Works, Sheffield, England, Manufacturers, to register in Class 5, in respect of Steel, a Trade Mark, of which the following is a representation :—

The said Trade Mark having been used by the applicants and their predecessors in business in respect of the said goods since upwards of 25 years before the 1st January, 1885.

This Mark was first advertised in the Western Australian *Government Gazette* of the 15th December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1769, dated 10th October, 1899.—Messrs. PATERSON, LAING, & BRUCE, LIMITED, of Melbourne, Victoria, Manufacturers, to register in Class 38, in respect of Articles of Clothing, excepting Boots and Shoes, a Trade Mark, of which the following is a representation :—

STANDARD

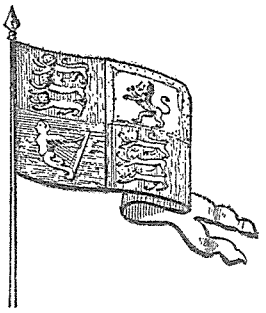


The above Trade Mark having been used by them upwards of one year before the first day of January, 1885.

This Mark was first advertised in the Western Australian *Government Gazette* of the 22nd December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1770, dated 10th October, 1899.—Messrs. PATERSON, LAING, & BRUCE, LIMITED, of Melbourne, Victoria, Manufacturers, to register in Class 38, in respect of Articles of Clothing, excepting Boots and Shoes, a Trade Mark, of which the following is a representation :—

STANDARD



The said Trade Mark having been used by them upwards of one year before the first day of January, 1885.

This Mark was first advertised in the Western Australian *Government Gazette* of the 22nd December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1799, dated 18th December, 1899.—FREDERICK ALBERT LEWIS and JOHN BENJAMIN WHITTY, trading as the "Lubroline Oil and Grease Company," of 339 Flinders Lane, Melbourne, Manufacturers, to register in Class 47, in respect of Starch, Blue, and other preparations for Laundry purposes, a Trade Mark, of which the following is a representation :—

LUBROLINE

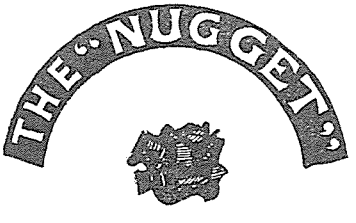
This Mark was first advertised in the Western Australian *Government Gazette* of the 22nd December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1800, dated 18th December, 1899.—SALMON & GLUCKSTEIN, LIMITED, London, England, Merchants, to register in Class 45, in respect of Tobacco, whether manufactured or unmanufactured, a Trade Mark, of which the following is a representation :—

UNEEDA

This Mark was first advertised in the Western Australian *Government Gazette* of the 22nd December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1802, dated 21st December, 1899.—LANE and FITTE, of 331 Kennington Road, London, England, Manufacturers, to register in Class 50, in respect of Leather Polish, Metal Polish, Furniture Polish, Blacking, Black Lead, Knife Polish, Plate Polish, Plate Powder, Polishing Cloths, Emery, Emery Cloth, Glass Cloth, and all other preparations and materials for cleaning, polishing, or preserving Leather Goods, Metal Goods, Glass Goods, and furniture and Brushes, a Trade Mark, of which the following is a representation :—



This mark was first advertised in the Western Australian *Government Gazette* of the 29th December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1803, dated 22nd December, 1899.—The SANDYCROFT FOUNDRY AND ENGINE WORKS COMPANY, LIMITED, of Sandycroft, Flintshire, Wales, Manufacturers, to register in Class 6, in respect of Machinery of various kinds, and parts of Machinery, a Trade Mark, of which the following is a representation:—

SANDYCROFT.

The said Trade Mark having been used by us in respect of the articles mentioned for about five years before the 1st day of January, 1885.

This Mark was first advertised in the Western Australian *Government Gazette* of the 29th December, 1899—*vide* notice at head of Trade Mark advertisements.

Application No. 1804, dated 28th December, 1899.—WILLIAM SANDOVER & Co., of Perth, Merchants, to register in Class 4 in respect of Oils, Mineral and Vegetable (not included in other classes), a Trade Mark, of which the following is a representation:—

LIGHTNING.

This Mark was first advertised in the Western Australian *Government Gazette* of the 5th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1808, dated 29th December, 1899.—THE LOZIER MANUFACTURING COMPANY, of Toledo, County of Lucas, State of Ohio, in the United States of America, Manufacturers, etc., to register in Class 22, in respect of Bicycles and other Carriages, in Class 22, a Trade Mark, of which the following is a representation:—

The essential particulars of the Trade Mark are the combination of devices, and the applicants disclaim any right to the exclusive use of the added matter, except in so far as it consists of their name and address.

This Mark was first advertised in the Western Australian *Government Gazette* of the 5th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1813, dated 30th December, 1899.—BARRETT'S FOOD PROPRIETARY, LIMITED, of Stephenson Street, Richmond, in the Colony of Victoria, to register in Class 42, in respect of Food for Infants and Invalids, a Trade Mark, of which the following is a representation:—

The essential particular of the Trade Mark is the combination of devices, and the applicant Company disclaims any right to the exclusive use of the added matter, save and except the name "Barrett's."

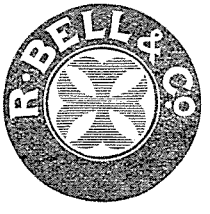
This Mark was first advertised in the Western Australian *Government Gazette* of the 5th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1801, dated 19th December, 1899.—FERNAND LEVIC (trading as "Frossard, Levic, and Co."), of York Street, Sydney, in the Colony of New South Wales, Tobacco and Cigar Merchants, to register in Class 45, in respect of Tobacco, Cigars, and Cigarettes, a Trade Mark, of which the following is a representation:—

The essential particulars of the Mark consist in the combination of devices, and any right to the exclusive use of the added matter is disclaimed.

This Mark was first advertised in the Western Australian *Government Gazette* of the 12th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1806, dated 28th December, 1899.—R. BELL AND COMPANY, LIMITED, of Bromley-by-Bow, London, England, Match Manufacturers, to register in Class 47, in respect of Matches, a Trade Mark, of which the following is a representation:—

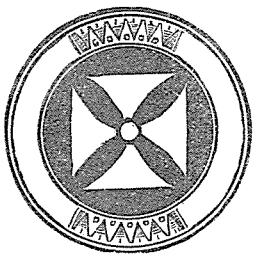


This Mark was first advertised in the Western Australian *Government Gazette* of the 12th January 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1809, dated 30th December, 1899.—THE UNITED ALKALI COMPANY, LIMITED, of 30 James Street, Liverpool, in the County of Lancaster, England, Alkali Manufacturers, etc., to register in Class 1, in respect of Chemical Substances used in Manufactures, Photography, or Philosophical Research and Anticorrosives, a Trade Mark, of which the following is a representation:—

This Mark was first advertised in the Western Australian *Government Gazette* of the 12th January, 1900 - *vide* notice at head of Trade Mark advertisements.

Applications Nos. 1810 and 1811, dated 30th December, 1899.—THE LEYLAND AND BIRMINGHAM RUBBER COMPANY, LIMITED, of 26, 28, and 30, Duke Street, Aldgate, London, England, India Rubber Manufacturers, to register in Class 40, in respect of goods manufactured from India Rubber and Gutta Percha (not included in other classes). Application No. 1811, to register in Class 50, in respect of Mahogany Whip Reels, Brushes (not being artists' brushes or brushes of metal), Brooms, Hose (not included in other classes), Waterproofing Compounds, Asbestos Packing and other Steam Packing, a Trade Mark, of which the following is a representation :—



This Mark was first advertised in the Western Australian *Government Gazette* of the 19th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1814, dated 4th January, 1900.—D. & J. FOWLER, Limited, of No. 6 East India Avenue, London, England, Merchants, to register in Class 42, in respect of Preserved Fish, a Trade Mark, of which the following is a representation :—

AUSONE.

This Mark was first advertised in the Western Australian *Government Gazette* of the 19th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1816, dated 5th January, 1900.—CONDY & MITCHELL, LIMITED, of 65 Goswell Road, London, England, Manufacturing Chemists, to register in Class 2, in respect of Chemical Substances used for Agricultural, Horticultural, Veterinary and Sanitary purposes, a Trade Mark, of which the following is a representation :—

CONDY'S FLUID.

The said Trade Mark has been used by Applicants and their predecessors in business continuously since the year 1856.

This Mark was first advertised in the Western Australian *Government Gazette* of the 19th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1818, dated 6th January, 1900.—LIEBIG'S EXTRACT OF MEAT COMPANY, LIMITED, of 9 Fenchurch Avenue, London, England, and 21 Longue Rue des Claires, Antwerp, Belgium, Manufacturers of Liebig Company's Extract of Meat, and Manufacturers, Shippers, and Importers of South American Produce, to register in Class 42, in respect of Substances used as Food or as Ingredients in Food, a Trade Mark, of which the following is a representation :—

LEMCO

This Mark was first advertised in the Western Australian *Government Gazette* of the 19th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1791, dated 27th November, 1899.—ERNEST MYERS and JACOB MYERS (trading under the name or style of "E. & J. Myers"), of Lake Street, Perth, Western Australia, Cordial, Vinegar, and Sauce Manufacturers, to register in Class 42, in respect of Cordials (non-alcoholic), Vinegars, and Sauces, a Trade Mark, of which the following is a representation :—

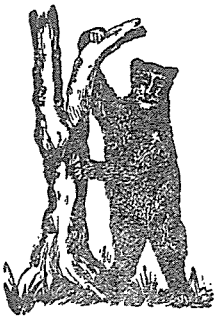
This Mark was first advertised in the Western Australian *Government Gazette* of the 26th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1795, dated 28th November, 1899.—JOHN FRANCIS WEEDON, of Hobart, in the Colony of Tasmania, to register in Class 42, in respect of Dried and Canned Fruits, Jams, and Vegetables, a Trade Mark, of which the following is a representation :—

JACK

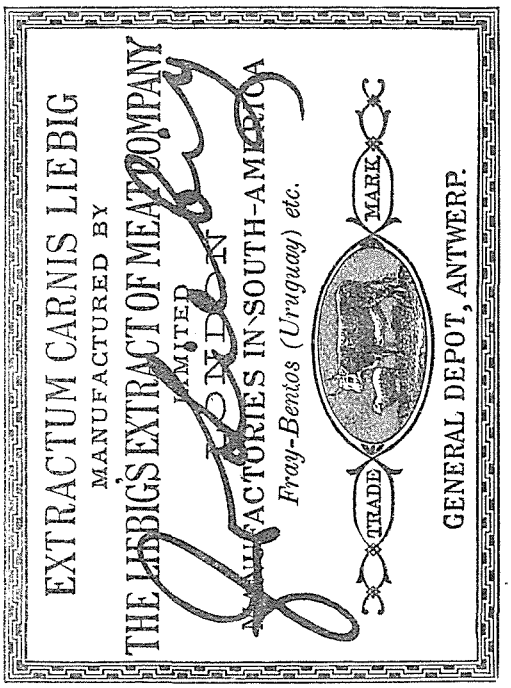
This Mark was first advertised in the Western Australian *Government Gazette* of the 26th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1812, dated 30th December, 1899.—WILLIAM KING, of 11 Queen Victoria Street, London, England, Solicitor, to register in Class 50, s.s. 9, in respect of Hose and Steam Packing, a Trade Mark, of which the following is a representation :—



This Mark was first advertised in the Western Australian *Government Gazette* of the 26th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1817, dated 6th January, 1900.—LIEBIG'S EXTRACT OF MEAT COMPANY, LIMITED, of 9 Fenchurch Avenue, London, England, and 21 Longue Rue des Claires, Antwerp, Belgium, Manufacturers of Liebig Company's Extract of Meat, and Manufacturers, Shippers, and Importers of South American Produce, to register, in Class 42, in respect of Substances used as Food or as Ingredients in Food, a Trade Mark, of which the following is a representation :—



The essential particulars of the Trade Mark are the Ox and Sheep Device and the facsimile signature "J. v. Liebig," and the applicants disclaim any right to the exclusive use of the added matter, except their name.

This Mark was first advertised in the Western Australian *Government Gazette* of the 26th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1819, dated 16th January, 1900.—SAUL PHILIP ARONSON and GEORGE ALFRED ARONSON, trading as "Rosenthal, Aronson, & Co.," Wholesale Jewellers, at 123 William Street, Perth, Western Australia, to register, in Class 10, in respect of Horological Instruments, a Trade Mark, of which the following is a representation :—

VICEROY.

This Mark was first advertised in the Western Australian *Government Gazette* of the 26th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1820, dated 16th January, 1900.—SAUL PHILIP ARONSON and GEORGE ALFRED ARONSON (trading as "Rosenthal, Aronson, & Co."), Wholesale Jewellers, at 123 William Street, Perth, to register in Class 10, in respect of Horological Instruments, a Trade Mark, of which the following is a representation :—

WINDSOR.

This Mark was first advertised in the Western Australian *Government Gazette* of the 26th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1821, dated 16th January, 1900.—ROBERT PORTER & COMPANY, LIMITED, of 39-47, late 77-79, Pancras Road, N.W., London, in England, Bottlers of Ale, Stout, Cider, and Mineral and Aerated Waters, to register in Class 44, in respect of Ginger Ale, Lemonade, Soda Water, Seltzer Water, Quinine Tonic, Sarsaparilla, Champana de Sidra, Sidra Gaseosa, Kola Champagne, and all other Mineral and Aerated Waters (natural and artificial), including Ginger Beer, a Trade Mark, of which the following is a representation :—

The essential particulars of the Trade Mark are the device of a Bull-dog, the words "Bull-dog," the copy of the written signature, "Robert Porter & Co.," our predecessors in business, and the combination of devices; and applicant Company disclaims any right to the exclusive use of the added matter, save and except their name and address.

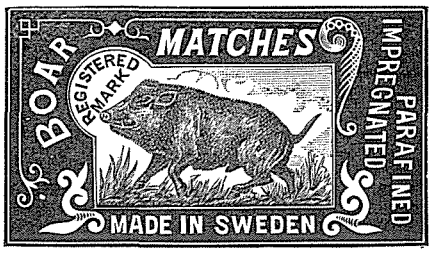
This Mark was first advertised in the Western Australian *Government Gazette* of the 26th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1822, dated 20th January, 1900.—SAMUEL BERGHEIM, of 56 Duke Street, Grosvenor Square, London, England, Merchant, to register in Class 42, in respect of substances used as Food or as Ingredients in Food, a Trade Mark, of which the following is a representation :—

PLASMON.

This Mark was first advertised in the Western Australian *Government Gazette* of the 26th January, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1826, dated 23rd January, 1900.—JÖNKÖPINGS TÄNDSTICKS FABRIKS AKTIE BOLAG ("The Jönköpings Match Manufacturing Company, Limited"), of Jönköpings, Sweden, to register in Class 47, in respect of Matches, a Trade Mark, of which the following is a representation :—



The essential particulars of the above Mark consist of the word "Boar" and the combination of devices, and applicant Company disclaims any right to the exclusive use of the added matter.

This Mark was first advertised in the Western Australian *Government Gazette* of the 2nd February, 1900—*vide* notice at head of Trade Mark advertisements.

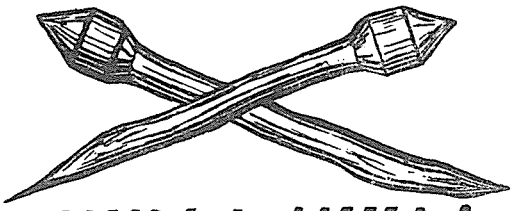
Applications Nos. 1827-8, dated 23rd January, 1900.—LEVER BROTHERS, LIMITED, of Balmain, near Sydney, in the Colony of New South Wales, Soap Manufacturers, to register in Class 47, in respect of Common Soap, Detergents,

Starch, Blue, and all other preparations for Laundry purposes. Application No. 1828, to register in Class 48, in respect of Perfumery (including toilet articles, preparations for the teeth and hair, and perfumed soap), a Trade Mark, of which the following is a representation :—

LUX.

This Mark was first advertised in the Western Australian *Government Gazette* of the 2nd February, 1900—*vide* notice at head of Trade Mark advertisements.

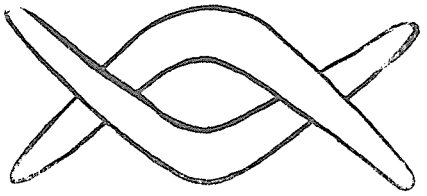
Application 1831, dated 23rd January, 1900.—QUEENSLAND MILD CURE COMPANY, LIMITED, of Creek Street, Brisbane, in the Colony of Queensland, to register in Class 42, in respect of Dried, Smoked, and Cured Meat and Fish, and such like Comestibles, a Trade Mark, of which the following is a representation :—



NULLA NULLA

This Mark was first advertised in the Western Australian *Government Gazette* of the 2nd February, 1900—*vide* notice at head of Trade Mark advertisements.

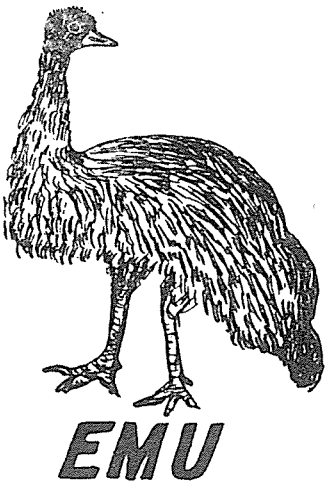
Application No. 1833, dated 23rd January, 1900.—QUEENSLAND MILD CURE COMPANY, LIMITED, of Creek Street, Brisbane, in the Colony of Queensland, to register in Class 42, in respect of Dried, Smoked, and Cured Meat and Fish, and such like Comestibles, a Trade Mark, of which the following is a representation :—



BOOMERANG

This Mark was first advertised in the Western Australian *Government Gazette* of the 2nd February, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1834, dated 23rd January, 1900.—QUEENSLAND MILD CURE COMPANY, LIMITED, of Creek Street, Brisbane, in the Colony of Queensland, to register in Class 42, in respect of Dried, Smoked, and Cured Meat, Fish, and such like Comestibles, a Trade Mark, of which the following is a representation :—



EMU

This Mark was first advertised in the Western Australian *Government Gazette* of the 2nd February, 1900—*vide* notice at head of Trade Mark advertisements.

Application No. 1835, dated 23rd January, 1900.—QUEENSLAND MILD CURE COMPANY, LIMITED, of Creek Street, Brisbane, in the Colony of Queensland, to register in Class 42, in respect of Dried, Smoked, and Cured Meat, Fish, and such like Comestibles, a Trade Mark, of which the following is a representation :—

STAR&CRESCENT

This Mark was first advertised in the Western Australian *Government Gazette* of the 2nd February, 1900,—*vide* notice at head of Trade Mark advertisements.

By Authority: RICHARD PETHER, Government Printer, Perth.