SUPPLEMENT

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Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 10th October, 1899.

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

No. 11690.—8th June, 1899.—NORMAN ROWE, of 1215, Wood Street, Wilkinsburg, Pennsylvania, United States of America, Electrical Engineer. Improvements relating to the regulation of electro-motive force.*

My invention relates to the regulation of electro-motive force, and in particular to the regulation of the electro-motive force supplied by the secondary coil of a stationary transformer the primary coil of which is supplied with alternating currents. The object of my invention is to provide for increasing or decreasing the work-circuit electro-motive force gradually over any desired range without undue expense and complication as regards either the structure or operation of the apparatus employed. In carrying out my invention I divide one of the coils of the transformer into sections which can be cut in or out in succession, and at the same time I vary the electro-motive force by means of a magnetic regulator which operates separately for every action. In this way, before a section is cut in or cut out the electro-motive force is adjusted by means of the inductive regulator, so as to approximate to the new electro-motive force existing after the section has been cut in or out.

Claims.—(1.) For varying the electro-motive force supplied by a transformer, a switch the movement of the arm of which varies the active length of one of the transformer-windings, and at the same time varies an inductive regulator, for the purpose specified. (2.) A switch constructed and operating substantially as described.

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

No. 11765.—3rd July, 1899.—ALFRED JACOB STERNE, of 253, Broadway, New York, United States of America, Inventor. An improved igniting-device for gas-burners.

Claims.—(1.) An automatic lighter for a gas-burner consisting of an igniting-body, a thermostat, and means whereby the thermostat causes the igniting-body to move to and from the gas-jet, substantially as described. (2.) An automatic lighter for a gas-burner consisting of an igniting-body, a movable support to carry the igniter to and from a position close to the jet-orifice, a thermostat, and means whereby the thermostat actuates said igniter-support. (3.) An automatic lighter for a gas-burner consisting of an igniting-body, a thermostatic bar arranged to cross the flame near the jet-orifice, and means whereby the contraction and expansion of the thermostatic bar moves the igniter respectively to and from the jet. (4.) An automatic lighter for a gas-burner consisting of an igniting-body containing finely divided platinum, a plurality of fine wires laid on said body, a thermostat, and means whereby the thermostat moves said platinised body and wires to and from the jet. (5.) An automatic lighter for a gas-burner consisting of an igniting-body, a pivoted lever to carry the igniting-body to and from the gas-jet, a thermostat, and a positive actuating connection in both directions of motion between the thermostat and the lever carrying the igniting-body. (6.) In an automatic lighter for a gas-burner, the thin thermostatic bar crossing the jet, and turned in the jet edgewise toward the jet-orifice. (7.) An automatic lighter for a gas-burner consisting of an igniting-body and its movable support, a thermostat, and an intermediate lever connecting the thermostat with the support of the igniting-body, whereby the igniting-body is moved an ample distance from the flame.

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

No. 11875.—9th August, 1899.—P. AND D. DUNCAN (LIMITED), of Tuam Street, Christchurch, New Zealand, Engineers. Improvements in manure-discharge for agricultural drills and sowers.

Claim.—In any drill or sower having for a manure-discharge a bowl rotating horizontally on a bracket below the hopper, arched arms connecting the bowl to the boss as and for the purposes explained, and illustrated in the drawings.

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

No. 11942.—29th August, 1899.—ALBERT POTTER, of Belle Vue Road, Mount Eden, Auckland, New Zealand, Settler. An improved mustard-cup.

Claims.—(1.) A hollow cylinder or drum, with a fixed bottom and movable lid, as per specification, and as illustrated by the drawings. (2.) A spout attached outside the cylinder, with which it is made to communicate, as per specification and drawings. (3.) A spring of wire placed within the cylinder upon which the piston-rod-head operates, as set forth in the specification and illustrated by the drawings. (4.) A piston-rod with piston made and worked in conjunction with the spring, as described in the specification, and illustrated on the drawings. (5.) The spring forcing back the piston-rod above the fluid in the cylinder when relieved of the pressure, causing a vacuum, preventing an excess of fluid flowing out of the spout; all working together substantially as and for the purpose set forth.

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

No. 11968.—6th September, 1899.—HERMAN AUGUST, of Esk Street, Invercargill, New Zealand, Cabinetmaker, and RUDOLF CHARLES MILLER, of Kelvin Street, Invercargill aforesaid, Basketmaker. Gold-prospecting implement.

Claim.—A contrivance to bring to the surface portions of sand, gravel, &c., from river-beds, &c., for the purposes of prospecting for gold, by means of the frame A, B, C, with its covering D attached to the rod A, as shown in the drawings and as described.

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

No. 11995.—18th September, 1899.—CHRISTOPHER TILBURN, of Dunedin, New Zealand, Marine Engineer. An improvement in dredges.

Claims.—(1.) In a dredge, in combination, a centrifugal pump, a suction-pipe provided with a rose or nozzle, a universal joint and a flexible joint, pulleys or sheaves on the ladder and suction-pipe, a wire-rope or the like threaded through the pulleys, and a winch, substantially as set forth. (2.) In a dredge, a suction-pipe extending downwards from a centrifugal pump secured to the deck of the pontoon, and having a rose held near or resting upon the bed of the river or water in which the dredge is working, substantially as set forth. (3.) The improvement in dredges consisting of parts constructed, arranged, and operating substantially as set forth.

(Specification, 1s. 9d.; drawings, 6s.)

No. 11996.—18th September, 1899.—HENRY NORTH, of Victoria Street, Wellington, New Zealand, Upholsterer. An improvement in wire-mattresses.

Claims.—(1.) In a spring-mattress and frame, elastic cables attached at their extremities to the end-bar and sliding-bar of the frame, and drawn towards the centre of the mattress by spiral springs, substantially as set forth. (2.) The improvement in wire-mattresses consisting of parts constructed and arranged substantially as set forth.

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

No. 12008.—22nd September, 1899.—JETHRO JOHN PEARSE, of Hay Street, Perth, Western Australia, Ironmonger. An improved grid or broiler.

Claims.—(1.) The pan or tray N with lip J, substantially as shown and described. (2.) The grid or broiler K, substantially as shown and described. (3.) The projecting pins M, M, with bevelled slots G, and hook H by which the grid or broiler is attached to the pan or tray N, or may be released therefrom, substantially as shown and described. (4.) The combination of the pan or tray N and the grid or broiler K, with attachments thereto, the pins M, M, the bevelled slots G, and the hook H, substantially as shown and described, for the purpose of making an improved grid or broiler for effectually grilling meat on any description of fuel, and without damage or inconvenience to the stove used, and without tainting the meat by the fumes of the fuel used.

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

No. 12012.—20th September, 1899.—WALTER CUTTEN, of Princes Street, Dunedin, New Zealand, Consulting Engineer. Improved appliance for replacing buckets on the lower tumbler of a dredge.

Claims.—(1.) In bucket-dredges, the method of and appliance for replacing the chain of buckets on the tumblers consisting of a drum such as B, B^1, a rope such as C, and a winch-end such as D, the whole to be used substantially as set forth. (2.) In a dredge, the combination of a drum having a few turns of rope wound on it with a winch-end such as B, B^1, C, D, all substantially as set forth in the drawings, and as described and explained, for the purpose set forth.

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

No. 12022.—28th September, 1899.—WALTER EVANS, of Kingsbury House, Birchfield, Warwick, England, Manufacturer. Improvements in tills, and in means for registering cash-receipts.

Claims.—(1.) An improved construction of till substantially as described. (2.) The indicators E and F, having hinged bottoms connected together by rods, and retained in the closed position by springs, and capable of being simultaneously opened by a press-knob, substantially as and for the purposes set forth. (3.) The combination with a coin-assorter of the guides D for each denomination of coins to be assorted, as and for the purposes set forth. (4.) The arrangement of a lever between the guides such as D, so as to be operated by a coin in its descent, the weight for returning said lever to its normal position, and suitable parts therewith, for the purpose of actuating registering mechanism, substantially as set forth. (5.) The registering mechanism for cash-receipts substantially as set forth. (6.) In registering mechanism for cash-receipts, the lever L and bell-crank N on the oscillating bar L^1, and weight L^2 connected therewith, the pawl O on bell-crank to engage the ratchet-wheel P, and suitable registering-wheels, all arranged and operated substantially as set forth. (7.) In registering mechanism for cash-receipts, the bell-crank N, having its free end to bear upon the pawl O so as to prevent the ratchet-wheel P turning further than the proper distance in one direction, and the pawl V to prevent the said wheel P turning in the opposite direction, substantially as set forth. (8.) In registering mechanism for cash-receipts, the pinion-wheel having every alternate tooth shorter than the others, arranged so that two of the long teeth bear on the periphery of a registering-wheel, in order to prevent the pinion from turning and imparting movement to toothed wheel such as R^1, and consequently the registering-wheel connected therewith, until engaged by a U-shaped lug, substantially as set forth.

(Specification, 7s. 9d.; drawings, £1 6s.)

No. 12024.—3rd October, 1899.—JOHN ALSTINE SECOR, of 1177, Dean Street, Brooklyn, New York, United States of America, Engineer. Improvements in means for marine propulsion.

Claims.—(1.) In an apparatus for propelling vessels by the reactionary force of explosive gases, a submerged water-conduit, an explosion-cylinder communicating with said conduit, a charging- and compressing-piston in the cylinder, and a valve controlling the conduit so constructed and timed as to open the conduit to fill the same while the charge is being drawn in and compressed, whereby the greater period of time in the cycle of operation is simultaneously utilised to prepare the gas and water for action, as set forth. (2.) In an apparatus for propelling vessels by the reactionary force of explosive gases, a submerged water-conduit, an explosion-cylinder communicating with said conduit, a reciprocating piston in the cylinder having a continuous movement in one direction for drawing in the charge and an intermittent movement in the other direction for compressing the charge and driving out the products of combustion, and a valve controlling the conduit so constructed and timed as to open the conduit to fill the same while the charge is being drawn in and compressed, as set forth. (3.) In an apparatus for propelling vessels by an explosive force, an explosion-cylinder wherein the compression and ignition take place and wherein the explosive is ignited without transfer or expansion after compression, combined with a submerged water-conduit, said cylinder and conduit communicating with each other, and the cylinder having a valved exhaust-port leading to the conduit for opening and closing the communication, as set forth. (4.) In an apparatus for propelling vessels by an explosive force, a submerged water-conduit, an explosion-chamber having a compressing-piston, an inlet for explosive material and an outlet for products of combustion communicating with said conduit, said inlet and outlet being fitted with suitable valves and operating means therefor, as set forth. (5.) In an apparatus for propelling vessels by the reactionary force of explosive gases, a cylinder wherein the explosive is compressed and ignited, having a reciprocating piston and devices for arresting said piston at a desired position of its compression-stroke and locking the same during the interval of explosion, as set forth. (6.) In an apparatus for propelling vessels by the reactionary force of explosive gases, an explosion-cylinder having a reciprocating piston, devices for giving the same an intermittent movement during one stroke and a continuous movement during the other stroke, and devices for admitting and igniting the explosive, whereby a new charge is admitted during one stroke and is compressed, ignited, and expelled during the other stroke, as set forth. (7.) In an apparatus for propelling vessels by means of the reactionary force of explosive gases upon a body of water, a submerged conduit, a chamber wherein the explosive gases are compressed and ignited, provided with a release-valve opening to said conduit

and a supplemental reversing-valve located in the conduit, as set forth. (8.) An apparatus for propelling vessels by the reactionary force of explosive gases upon a body of water, a submerged conduit communicating intermediately with a chamber wherein the gases are exploded and having branch-passages in opposite directions, a reversible valve-device interposed at the junction of the passages, operated to close the passage from the conduit to the explosion-chamber and also the inlet-branch of the conduit in either direction desired, and to open the passage from the explosion-chamber to the outlet-branch, as set forth. (9.) The combination with an explosion-cylinder of a communicating submerged conduit with inlet and outlet passages and an interposed and reversible valve-device that operates to open the communicating-passage between the cylinder and the outlet of the conduit to expel the water, to close the communicating-passage between the inlet and outlet branches of the conduit during the action of the explosive and expulsion of the water and gases, to close the passage between the cylinder and the conduit, and to open the passage between the inlet and outlet of the conduit to admit the water thereto at each interval of explosive action in the cylinder, as set forth. (10.) An apparatus for propelling vessels by means of the reactionary force of explosive gases consisting essentially in an explosion-cylinder having a reciprocating compressing-piston and a submerged water-conduit communicating therewith, and valve-devices for governing the respective inlets and outlets of said cylinder and conduit, operated by an independent source of power, as set forth. (11.) In an apparatus for propelling vessels by an explosive force, an explosion-chamber having a piston with an intermittent movement, and a water-conduit communicating with said chamber that is filled and exhausted during each cycle of movement of said piston, fitted with a valve-device that is operated to open for the inlet of the water to said conduit during the greater part of said cycle of movement of the piston, and closed during the remainder or lesser part, whereby the entering water is given an extended period to fill the conduit at each double stroke of the piston, as set forth.

(Specification, 12s.; drawings, £4 12s. 6d.)

No. 12025. — 28th September, 1899. — Wright's Taper-roller Bearings Syndicate (Limited), of 1 and 2, Great Winchester Street, London, England (assignees of William Hamilton Wright, of Bridgeburg, Ontario, Canada, Manufacturer). Improvements in or relating to roller-bearings.

Claims.—(1.) In a roller-bearing, the combination with a sleeve such as C, carrying two cones such as D, each cone forming the inner wall of a roller-race, and a casing having two taper surfaces such as A^1, each surface forming the outer wall of the same, of two full series of taper rollers, each series having a free way in its race, and the rollers being in continuous line-contact with the walls of the race, substantially as described. (2.) In a roller-bearing, a sleeve such as C, which carries the roller-cones D, whereby the bearing is rendered self-contained, and can be removed from the shafting without disturbance of its parts. (3.) In a roller-bearing, the combination with the shaft of a sleeve such as C, which carries the various parts of the bearing, and is capable of slight longitudinal movement along the shaft. (4.) A roller-bearing comprising a sleeve C, adjustable cones D, with bearing-surfaces D^1, lock-nuts F, feathered washers F^1, a casing with taper surfaces A^1, and caps G^2, washers G, G', two full series of rollers E, and retaining-devices E^1, E^2, E^3, or H, H^1, H^2, substantially as described. (5.) In a roller-bearing, the combination with one series of rollers adapted to receive the axial load of another series of rollers adapted to receive the end-thrust. (6.) The complete roller-bearing substantially as described, or illustrated in Fig. 1 of the drawings. (7.) The complete thrust-bearing substantially as described, or illustrated in Fig. 2 of the drawings. (8.) The complete car-journal box substantially as described, or illustrated in Fig. 3 of the drawings. (9.) In a roller-bearing for vehicles, the combination with an adjustable cone such as D^x, forming one bearing-surface of a roller-race, of a locking-device comprising an adjustment-ring D^2, locking-ring D^3, both screwed within the cone, and a feathered washer between D^2 and D^3, substantially as described. (10.) In a roller-bearing for vehicles, the combination with an adjustable cone such as D^x, forming one bearing-surface of a roller-race, of a locking-adjustment device D^2, D^3, D^4, screwed in one direction within the cone, and a lock-nut D^7 screwed in the reverse direction outside the same, and washer D^8, substantially as described. (11.) In a wooden vehicle-hub having a rim-band and a bearing-casing, covering the wooden surface exposed between the band and the casing by a metal ring, substantially as described. (12.) In a wooden vehicle-hub, the combination with a bearing-casing inside the wood of a metal ring such as A^3, having a flange such as A^4, threaded externally to screw into the bearing-casing, and threaded internally to receive the end-cap, substantially as described. (13.) In a roller-bearing, a cage such as H, H^1, H^2, substantially as and for the purpose described, or as illustrated in Figs. 10, 11, and 12 of the drawings. (14.) In a vehicle-hub, the combination with a bearing-casing of an end-cap, substantially as described, or illustrated in Figs. 6 or 7 of the drawings. (15.) In a roller-bearing for vehicles, the combination with a felt or similar split washer such as G^7 of a spring such as G^8, for closing it, substantially as described. (16.) In a roller-bearing for vehicles, the combination with a series of tapered rollers and a casing forming the outer bearing-surface of a roller-race of a sleeve such as K, substantially as described. (17.) In a roller-bearing for vehicles, a sleeve such as K, which carries the various parts of the bearing, whereby the bearing is rendered self-contained, and can be removed from the axle without disturbance of its parts. (18.) The complete vehicle-hub and axle-bearing substantially as described, or illustrated in Fig. 4 or in Fig. 9 of the drawings. (19.) In a thrust-bearing for a propeller-shaft, the combination with a disc secured on the shaft, and having an annular race bearing-surface on each face and two adjustable discs secured in the casing, one face of each adjustable disc forming one of the outer bearing-surfaces of the said races, of two series of tapered rollers, substantially as described. (20.) A thrust-bearing having two series of rollers to take the thrust, one in each direction. (21.) In a thrust-bearing, the combination with two series of rollers of a disc or collar rotating between them with the shaft. (22.) In a thrust-bearing, the combination with two outer adjustable races such as E^{10}, E^{11}, and two series of rollers such as D^y, of a disc or collar such as C^y, secured upon the shaft and rotating therewith between the two series of rollers. (23.) A thrust-bearing for a propeller-shaft comprising a casing B^y, a central disc C^y secured on the shaft, two adjustable discs E^{10}, E^{11}, secured in the casing-washers G^{10}, G^{11}, locking-rings F^{10}, F^{11}, and caps J, J', packing H^y, two full series of tapered rollers D^y, and retaining-flanges D^{30}, D^{40}, substantially as described. (24.) The complete thrust-bearing substantially as described, or illustrated in Figs. 13 and 14 or in Fig. 15 of the drawings. (25.) In a stern-tube bearing for a propeller-shaft, the combination with a series of tapered rollers of a sleeve secured on the shaft, and forming one bearing-surface for the rollers, and an adjustable casing forming the other bearing-surface, substantially as described. (26.) In a stern-tube bearing for a propeller-shaft, the combination with tapered rollers of a casing, comprising a bearing-chamber and a packing-chamber, and adjustable longitudinally relative to the rollers, substantially as and for the purpose described. (27.) A stern-tube bearing for a propeller-shaft comprising a sleeve secured on the shaft, a full series of tapered rollers L, retaining-flanges L^3, L^4, and a casing having a tapered bearing-surface K^5, a packing-portion K^2, adjusting- and lock-nuts K^9, K^{11}, and end-caps K^4, K^6, substantially as described. (28.) The complete stern-tube bearing substantially as described, or illustrated in Fig. 16 of the drawings.

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

No. 12033.—30th September, 1899.—Henry Mark Levinge, Medical Practitioner, and Jessie Levinge, wife of Henry Mark Levinge, of Halcombe, Rangitikei, New Zealand. An invention for the making of ink, suitable for writing, from the products obtained from the destructive distillation of wood.

This product, obtained by the destructive distillation of wood, is less volatile than the other products so obtained, so that a second distillation evaporates off the other constituents, leaving behind a greenish-yellow matter which, exposed to the air or contact with certain chemicals, turns intensely black. The ink may be made by evaporating this difficultly volatile product to dryness, then adding sufficient water to redissolve, and filtering, or, having evaporated to dryness, adding sufficient water to redissolve, with a little alkali, potash, or soda.

(Specification, 1s.)

No. 12044.—2nd October, 1899.—Roland Philip Fincham, of Prospect Terrace, Mount Roskill, Auckland, New Zealand, Publisher's Agent. An improved knife-cleaner.

The cleaner is formed of a number of strips of wood so arranged that, when joined together and doubled over in the form of a book, the strips on one side will be at right angles to those on the other side. Fibrous material is secured inside the cover to form the cleaning-surface for the knives.

Claims. — (1.) The combination and arrangement of the materials as and for the purpose described, and illustrated in the drawings. (2.) The use and arrangement of the fibrous material for the purpose described. (3.) Specially the arrangement of the woodwork or other suitable material, such arrangement insuring complete flat contact of both sides of the knife-blade at once with the cleaning material

during the process of cleaning, and obviating the possibility of the apparatus becoming inefficient through the warping or sagging of the covers.

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

No. 12047.—4th October, 1899.—GEORGE BOARDMAN WEBB, of Westfield, New Jersey, United States of America, Mechanical Engineer. Improvements in measuring-faucets.

Claims.—(1.) A measuring-faucet comprising an approximately horizontal rear portion or shank, a forward and downwardly inclined portion or spout, an upwardly directed cylindrical extension containing registering mechanism and a dial-plate, a fan-wheel revolubly mounted in the passage of the spout, and having its shaft directed upwardly into the extension and operatively connected with the mechanism therein, and a valve or stopcock at the junction of the rear portion, the front portion, and the upper extension of said faucet, and adapted to shut off the faucet rearward of the mechanism thereof, substantially as set forth. (2.) A measuring-faucet comprising a body-portion having angled members *b* and *c*, and an upwardly directed extension *a''*, a fan wheel in the member *b*, mounted upon an inclined shaft entering the extension *a''*, and having a worm thereon, a vertical arbor mounted in said extension, and provided with a worm-wheel engaging the worm, a hand or indicator upon said arbor, and a dial-plate beneath said hand, said faucet being provided with a stopcock rearward of the registering mechanism, substantially as set forth. (3.) A measuring-faucet comprising a body-portion having angled members *b* and *c*, an extension *a''*, a fan-wheel revolubly mounted in the member *b*, registering mechanism, and a dial-plate located in the extension *a''* and actuated by said fan-wheel, a stopcock rearward of said mechanism, a movable and adjustable strip 26 arranged in front of said stopcock to regulate the flow of liquid, and an adjusting-screw in the side of the faucet to manipulate said strip, substantially as set forth. (4.) A measuring faucet provided with a tubular portion having a fan-wheel longitudinally pivoted therein, a bearing-ring inserted in a recess formed in the interior surface of said tubular body-portion, said bearing-ring consisting of an elastic strip of metal bent to conform to the walls of the passage in said tubular body, and having a loop or fold projecting radially inward from the circumference, with an eye or socket at the end of said loop or fold for said fan-wheel, substantially as set forth. (5.) The measuring-faucet described, having a body-portion having an upper chamber, a lower flow-passage, and a perforated integral partition between said chamber and passage, a fan-wheel arranged in said passage, and having its shaft projecting through the perforation in said partition into said chamber, a bearing-ring for said shaft arranged in said passage, and an arm projecting from the inner surface of said chamber, and providing bearings for the upper end of the said shaft, substantially as set forth. (6.) A measuring-faucet comprising an elbow-shaped tubular body-portion adapted to be connected at one end to the source of supply and to discharge liquid from the other end, a chamber for registering mechanism formed above the bend in said body-portion, and registering mechanism therein, a fan-wheel pivoted in the forwardly and downwardly inclined arm of the body-portion, and having a shaft extending upward through the wall of the flow-passage into said chamber, and connecting with the registering mechanism, the perforation for said shaft being enlarged for a short distance in from the flow-passage, and communicating with the open air by a lateral aperture, an elastic ring arranged inside of the forwardly and downwardly inclined passage, and providing a bearing for the lower end of the fan-wheel shaft, a regulating-strip fastened at one end flatwise against the interior wall of the flow-passage, and an adjusting screw for forcing the other end out from the wall to obstruct the flow-passage, and a stopcock for shutting off the flow of liquid at a point nearer the source of supply than said regulating-strip, fan-wheel shaft, perforation, and fan-wheel, substantially as set forth.

(Specification, 11s.; drawings, 11s.)

No. 12051.—2nd October, 1899.—THOMAS SHALE, of Fairfield, near Dunedin, New Zealand, Farmer. Improved apparatus for pasteurising and cooling milk.

Claims.—(1.) In sterilising or pasteurising milk and cooling same, the combination of a flat corrugated surface over which the milk passes, such as C, C^3, C^5, being heated in passing by steam, with a similar flat corrugated surface over which the milk also passes, such as E, E^3, E^5, being cooled in passing by cold water, all substantially as described and explained, and as shown on the drawing. (2.) The combination with a boiler such as K, L, M, K^1, N, N^1, N^2, N^3, N^5, C^1, of the heating apparatus such as C, C^3, C^5, H, I, J, and the cooling apparatus such as E, E^3, E^5, I, H, J, all substantially as described, and for the purposes set forth.

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

F. WALDEGRAVE,
Registrar.

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

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

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

Provisional Specifications.

Patent Office,
Wellington, 10th October, 1899.

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

No. 11966.—6th September, 1899.—WILLIAM EDWARD RAMSAY, of Abberley Road, St. Albans, Canterbury, New Zealand, Builder. The improvement of sash-weights.

No. 11972.—8th September, 1899.—ERNEST GEORGE RAWNSLEY, of New Zealand Loan and Mercantile Agency Company, Limited, of Christchurch, New Zealand, Accountant. An improved manure- and seed-sower.

No. 12017.—27th September, 1899.—CHARLES OAKE ROSENBERG, of Wellington, New Zealand, Law Clerk. A subdivider for the use of artists when sketching.

No. 12018.—27th September, 1899.—THOMAS SPEAR, of Main Street, Gore, Southland, New Zealand, Grocer. Improved gold-saving apparatus.

No. 12019.—28th September, 1899.—WILLIAM EDINBOROUGH CHAMBERLAIN, of Feilding, New Zealand, Mechanical Engineer. An improvement in slashers.

No. 12020.—28th September, 1899.—WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of Benjamin Garver Lamme, of 230, Stratford Avenue, Pittsburg, Pennsylvania, United States of America, Electrical Engineer). Improvement in single-phase alternating-current generators.

No. 12021.—28th September, 1899.—FRANCIS ELLERSHAUSEN, of Broad Street House, London, England, Gentleman. Improvements in the treatment of flue-dust or fumes from metallurgical furnaces.

No. 12026.—28th September, 1899.—JAMES PETCH SIMON and JOHN SIMON, of George Street, Dunedin, New Zealand, Boot Merchants. Improvements in boots and shoes.

No. 12028.—9th October, 1899.—ROBERT MCGREGOR, of Three Channel Flat, Westport, New Zealand, Miner. A revolving sand-dredge and prospecting-pump.

No. 12029.—29th September, 1899.—JAMES PALMER CAMPBELL, of Wellington, New Zealand, Patent Agent (nominee of Benjamin Garver Lamme, of 230, Stratford Avenue, Pittsburg, Pennsylvania, United States of America, Electrical Engineer, and John Purington Mallett, of 6728, Simen Avenue, Pittsburg aforesaid, Electrical Engineer). Improvements in electrical machines.

No. 12030.—29th September, 1899.—JAMES PALMER CAMPBELL, of Wellington, New Zealand, Patent Agent (nominee of Benjamin Garver Lamme, of 230, Stratford Avenue, Pittsburg, Pennsylvania, United States of America, Electrical Engineer). Improvement in alternating-current induction motors.

No. 12031.—28th September, 1899.—HENRY ABEL FLATMAN, of Lincoln Road, Christchurch, New Zealand, Engineer. Improved hydraulic steering-gear for traction-engines.

No. 12032.—27th September, 1899.—ROBERT PEARCE GIBBONS, of Kopu, Thames, Auckland, New Zealand, Timber Merchant. An improved method of circulating water in steam-boilers.

No. 12035.—27th September, 1899.—ALEXANDER HAMILTON CHAPMAN, of Kurow, Otago, New Zealand, Sheep-farmer. An improved method of clearing snow and ice from the cooling-pipes of freezing-chambers, cold-stores, and other places where a low temperature is required.

No. 12036.—29th September, 1899.—WALTER CUTTEN, of Princes Street, Dunedin, New Zealand, Consulting Engineer. An apparatus for the separation from a liquid of suspended solid matter.

No. 12037.—29th September, 1899.—RICHARD TOMLINE and KARL GRAF, both of 204, St. Asaph Street, Christchurch, New Zealand, Engineers. A hillside- and moulding-plough.

No. 12038.—29th September, 1899.—WALTER CUTTEN, of Princes Street, Dunedin, New Zealand, Consulting Engineer. Improvements in lubricating the lower tumblers of dredges.

No. 12040.—2nd October, 1899.—EMILY ELIZA CAMPION, of Wellington, New Zealand, Settler. An apron-bag.

No. 12041.—28th September, 1899.—ALEXANDER GRANT, M.A., of Auckland, New Zealand, Gentleman. An improved method of preserving dead meat and other perishable food-products.

No. 12042.—30th September, 1899.—PERCY ADOLPHUS VAILE, of Auckland, New Zealand, Solicitor. Improvements in pen-nibs.

No. 12046.—4th October, 1899.—ARCHIBALD BRACE RITCHIE, of Sanger Street, Corowa, New South Wales, Plumber. Improvements in means for generating and storing acetylene.

No. 12048.—4th October, 1899.—CHARLES CORNELIUS PALTRIDGE, of Cheltenham Street, Malvern, South Australia, Civil Servant. An improved process for treating paper, whereby it is rendered fit for receiving press-copy impressions without necessitating the subsequent application of moisture thereto.

No. 12049.—4th October, 1899.—WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of Peter Murphy, of Balmain, near Sydney, New South Wales, Plumber). An improved valve for flushing cisterns and the like.

No. 12050.—2nd October, 1899.—JOHN WILLIAM STONYER, of Linwood, Christchurch, New Zealand, Machinery Expert. Improved seed-feeder for agricultural drills.

No. 12052.—5th October, 1899.—LOUIS HORNE, of 60, Queen Street, Melbourne, Victoria, Metallurgist. An improved appliance for stirring or agitating slimes and the like material in the process of cyaniding or like treatment of ores.

No. 12053.—5th October, 1899.—ANDREW FREDERICK CROSSE, of the Standard Bank of South Africa, Limited, Commissioner Street, Johannesburg, South African Republic, Metallurgical Chemist. Improvements relating to cyanide-solutions where zinc precipitation is employed for the recovery of gold or other precious metals.

No. 12054.—5th October, 1899.—JOHN GORE MASSIE, of 68, Spencer Street, Melbourne, Victoria, Civil and Mining Engineer. An improved rotary punkah.

No. 12059.—3rd October, 1899.—PERCY ARTHUR HADLEY, of Albert Street, Auckland, New Zealand, Merchant. A new and improved self-winding, hand-governing, all-metallic pocket fire-escape, with weight-registering dial.

No. 12064.—26th September, 1899.—CHARLES JOSEPH COOZE, of Carterton, New Zealand, Carriage-trimmer. An invention for branding sheep or other animals.

F. WALDEGRAVE,
Registrar.

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

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

Letters Patent sealed.

LIST of Letters Patent sealed from the 28th September, 1899, to the 5th October, 1899, inclusive:—

Nil.

F. WALDEGRAVE,
Registrar.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

NO. 7995.—J. G. Oates, windmill. 5th October, 1899.

No. 8037.—W. F. Jobbins, obtaining glycerine (J. Van Ruymbeke and W. F. Jobbins). 5th October, 1899.

No. 8089.—T. Guilleaume, insulating electric conductors. 28th September, 1899.

THIRD-TERM FEE.

No. 5821.—W. Gee, window-blind. 9th October, 1899.

F. WALDEGRAVE,
Registrar.

Subsequent Proprietors of Letters Patent registered.

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

NO. 8268.—The Taranaki Condensed Milk Company, Limited, a company incorporated under "The Companies Act, 1882," and having its registered office in the Borough of New Plymouth, New Zealand, treating skim-milk. [D. Munro.] 26th September, 1899.

No. 8946.—Frank James Denton, of Wanganui, New Zealand, Photographer, bas-relief photograph. *Proprietor so far as regards that portion of the colony which is included in a circle having a radius of twenty miles, measured from the centre of the Chief Post-office of the Town of Wanganui.* [A. Martin.] 6th October, 1899.

No. 10523.—The Gibson Patent Brand Company, Limited, of New Plymouth, New Zealand, a company duly incorporated under "The Companies Act, 1882," branding-composition. [H. Gibson.] 6th October, 1899.

No. 10857.—The Gibson Patent Brand Company, Limited, of New Plymouth, New Zealand, a company duly incorporated under the provisions of "The Companies Act, 1882," branding-composition. [H. W. Scott.] 6th October, 1899.

No. 10974.—The South African and Australasian "Sunlight" Gas Syndicate, Limited, of Commercial Buildings, Dublin, Ireland, Manufacturers, gas-plant. [R. Goodwin.] 6th October, 1899.

No. 11206.—Burgon and Ball, Limited, of Sheffield, England, Sheepshears-manufacturers, sheepshears. *License in respect of the Colony of New Zealand until the expiration of the year 1900, or the assignment to the said company or their assigns of the Letters Patent.* [A. Melchior.] 26th September, 1899.

No. 11207.—Burgon and Ball, Limited, of Sheffield, England, Sheepshears-manufacturers, sharpening cutters of sheepshears. *License in respect of the Colony of New Zealand until the expiration of the year 1900, or the assignment to the said company or their assigns of the Letters Patent.* [A. Melchior.] 26th September, 1899.

No. 11322.—Nernst Electric Light, Limited (a company incorporated under the Companies Acts of Great Britain, 1862 to 1890, and having its registered office at 82, Victoria Street, Westminster, Middlesex, England), electric incandescent lamp. [W. Nernst.] 6th October, 1899.

W. WALDEGRAVE,
Registrar.

Applications for Letters Patent lapsed.

LIST of applications for Letters Patent (with which complete specifications have been lodged) lapsed from the 28th September, 1899, to the 10th October, 1899, inclusive:—

No. 10497.—G. Croll, boiler.

F. WALDEGRAVE,
Registrar.

Letters Patent void.

LIST of Letters Patent void through non-payment of fees from the 28th September, 1899, to the 10th October, 1899, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 7714.—R. L. Christie, staple-hammer.
No. 7715.—R. L. Christie, wire-strainer.
No. 7719.—F. W. Bawden, explosive.
No. 7722.—S. H. Wright, exhausting.
No. 7725.—J. N. Cocker, potato-harvester.
No. 7727.—S. Brown, can.
No. 7728.—C. Phillips, gold-separator.
No. 7736.—W. I. Shanly and D. Macnamara, sprayer.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

No. 5632.—W. Wilson, chimney-cowl.
No. 5633.—B. Greenwood, washing-boiler.
No. 5634.—G. Land and S. J. Heighway, saddle. (R. Latta.)
No. 5638.—J. M. Ponton, vehicle.
No. 5639.—G. H. and H. F. Cook and D. H. Ross, catching whales.

F. WALDEGRAVE,
Registrar.

Applications for Registration of Trade Marks.

Patent Office,
Wellington, 10th October, 1899.

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

No. of application: 2772.

Date: 1st September, 1899.

TRADE MARK.

The word

SOMATOSE.

NAME.

FARBENFABRIKEN VORMALS FRIEDRICH BAYER AND Co., of König Strasse, 27, Elberfeld, Germany, Chemical Manufacturers.

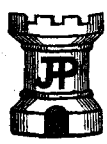
No. of class: 42.

Description of goods: Substances used as food or as ingredients in food.

No. of application: 2804.
Date: 22nd September, 1899.

TRADE MARK.

CASTLE BRAND.



NAME.

JAMES PATERSON (trading as "The New Zealand Paint and Varnish Manufacturing Company"), of Thames, New Zealand, Paint- and Varnish-manufacturer.

No. of class: 1.

Description of goods: Paints, varnishes, stains, dyes, lacquers, polishes.

No. of application: 2807.
Date: 8th September, 1899.

TRADE MARK.

The essential particulars of this trade mark are the device of a mariner's compass, and general arrangement of the whole label; and the applicants disclaim any right to the exclusive use of the added matter except their name.

NAME.

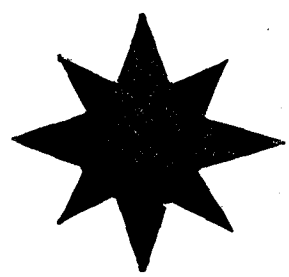
WILLIAM GREGG AND Co., LIMITED, of Rattray Street, Dunedin, New Zealand.

No. of class: 42.

Description of goods: Arrowroot.

No. of application: 2810.
Date: 29th September, 1899.

TRADE MARK.



NAME.

DIRK PIHL, of Ohoka, Canterbury, New Zealand, Dealer and Farmer.

No. of class: 42.

Description of goods: Frozen mutton and frozen lamb.

No. of application: 2811.
Date: 29th September, 1899.

TRADE MARK.

The words

RED CAP.

NAME.

VINOLIA COMPANY, LIMITED, of Malden Crescent, London, England, Manufacturing Chemists, Perfumers, and Soapmakers.

No. of class: 47.

Description of goods: Candles, common soap, detergents; illuminating, heating, or lubricating oils; matches; and starch, blue, and other preparations for laundry purposes.

No. of application: 2812.
Date: 29th September, 1899.

TRADE MARK.

The words

RED CAP.

NAME.

VINOLIA COMPANY, LIMITED, of Malden Crescent, London, England, Manufacturing Chemists, Perfumers, and Soapmakers.

No. of class: 48.

Description of goods: Perfumery (including toilet articles preparations for the teeth and hair, and perfumed soap).

No. of application: 2823.
Date: 5th October, 1899.

TRADE MARK.

The essential particulars of the trade mark are the device of the Eiffel Tower, and the words "Eiffel Tower"; and the applicants disclaim any right to the exclusive use of the added matter except where the same consists of their name and address.

NAME.

G. FOSTER CLARK AND Co., of Maidstone, Kent, England, Manufacturers.

No. of class: 42.

Description of goods: Fruit juices and essences, lemonade-powder, non-alcoholic wine preparations, blanc-mange powders, fruit-jellies in slabs cuttings and crystals, custard-powders, cake-flour, potted meats and fish, ginger-beer powders, corn-flour, desiccated cocoanut, fruit-jujubes, health salt, aerated pastry-flour, prepared soup, herb-beer in powder, pea-flour, baking-powder, and egg-powder.

No. of application: 2824.
Date: 9th October, 1899.

TRADE MARK.

The word

AJAX.

NAME.

ARTHUR BRISCOE AND Co., of Princes Street, Dunedin, New Zealand, Iron and Hardware Merchants.

No. of class: 47.

Description of goods: Lubricating-oils.

No. of application: 2825.
Date: 9th October, 1899.

TRADE MARK.

The word

TRIDENT.

NAME.

ARTHUR BRISCOE AND Co., of Princes Street, Dunedin, New Zealand, Iron and Hardware Merchants.

No. of class: 47.

Description of goods: Lubricating-oils.

No. of application: 2827.
Date: 9th October, 1899.

TRADE MARK.

The word

AMBERINE.

NAME.

ARTHUR BRISCOE AND Co., of Princes Street, Dunedin, New Zealand, Iron and Hardware Merchants.

No. of class: 47.

Description of goods: Lubricating-oils.

No. of application: 2829.
Date: 9th October, 1899.

TRADE MARK.

The word

ZAIROID.

NAME.

WILLIAM PRETTY AND SON, of Ipswich, Suffolk, England, Corset-manufacturers.

No. of class: 13.

Description of goods: Metal goods included in this class.

No. of application: 2830.
Date: 9th October, 1899.

TRADE MARK.

The word

ZAIROID.

NAME.

WILLIAM PRETTY AND SON, of Ipswich, Suffolk, England Corset-manufacturers.

No. of class: 38.

Description of goods: Corsets, and belts being in the nature of corsets; and other articles of clothing.

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 28th September, 1899, to the 10th October, 1899, inclusive:—

No. 2118; 2681.—A. B. Newing; Class 1. (*Gazette* No. 63, of the 20th July, 1899.)

No. 2119; 2691.—Bishop and Robson; Class 43. (*Gazette* No. 59, of the 6th July, 1899.)

No. 2120; 2695.—E. Reece and Sons; Class 10. (*Gazette* No. 59, of the 6th July, 1899.)

F. WALDEGRAVE,
Registrar.

By Authority: JOHN MACKAY, Government Printer, Wellington.