SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, JULY 6, 1899.

Published by Authority.

WELLINGTON, THURSDAY, JULY 6, 1899.

Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 5th July, 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. 11566.—27th April, 1899.—ARTHUR KITSON, of 213, West Upsal Street, Germantown, Philadelphia, United States of America, Engineer. Improvements in vapour-burning lamps and stoves.

Claims.—(1.) In a vapour-burning lamp, the combination of the burner and connections, the incandescent mantle therefor, the translucent airtight globe enclosing said incandescent mantle, the reflector mounted over said burner and resting on said globe, and having a central opening for the exit of hot gases, and the vapourising-tube extending across the said opening, as described and illustrated in the drawings. (2.) A vapour-burning attachment for gas-fixtures, consisting of the combination of a vapourising-tube supported over said fixture, and the mixing-tube extending from a point in front of the end of the vapourising-tube to the burner, the burner mounted on the gas-fixture, and a passage-way discharging gas into said burner, as described and illustrated in the drawings. (3.) In a vapour-burning lamp the combination of the vapour-burner, the vapourising-tube, and electrical means for vapourising oil for the purpose of starting the lamp into action, substantially as described. (4.) In a vapour-burning lamp, the combination of the vapour-burner, the incandescent mantle therefor, the enclosing airtight casing having only an outlet of restricted cross-section for the gases of combustion just sufficient to carry off said gases, but not large enough to permit the entry of outside air, and the mixing-tube which extends from the exterior of the casing and connects to the burner, substantially as described. (5.) In a vapour-burning apparatus, the combination of the burner, the enclosing casing, the alcohol-cup adjacent to said burner, and the wick of absorbent incombustible substance extending from the alcohol-cup to and through the enclosing casing, substantially as described. (6.) In a vapour-burning apparatus, the combination of the burner, the enclosing casing, the alcohol-cup adjacent to said burner, and the wick of absorbent incombustible substance extending from the alcohol-cup to and through the enclosing casing, together with the feeding-funnel mounted on the exterior of the enclosing casing and connected by a tube with the alcohol-cup, in which feeding-funnel the outer end of the above-described wick is placed, substantially as described. (7.) In a vapour-burning lamp, the combination of the vapour-burner, the incandescent mantle therefor, the enclosing airtight casing having an outlet for the gases of combustion, the mixing-tube extending from the exterior of the casing and connecting with the burner, the alcohol-cup adjacent to the burner, the feeding-funnel mounted on the exterior of the casing and connected by a tube with the alcohol-cup, and the wick of absorbent incombustible material extending from the feeding-funnel to the alcohol-cup, substantially as described. (8.) In a vapour-burning lamp, the combination of the vapour-burners, mantles therefor, the enclosing casing, the chimney, the smoke-bell of greater diameter than the chimney, and the curved wire-gauze extending outwardly from the upper end of the chimney and upwardly to the smoke-bell, substantially as described. (9.) In a vapour-burning lamp, the combination of the burner, the mixing-tube, the oil-pocket directly beneath the point of connection between mixing-tube and burner, and a mass of absorbent material in said pocket, substantially as described. (10.) In a vapour-burning lamp, the combination of the burner, the mixing-tube, the oil-pocket directly beneath the point of connection between mixing-tube and burner, and a mass of absorbent material in said pocket, said oil-pocket having an outlet from the bottom, substantially as described. (11.) In a vapour-burning lamp, the combination of the burner, the mixing-tube, the oil-pocket directly beneath the point of connection between mixing-tube and burner, and a mass of absorbent material in said pocket, said oil-pocket having an outlet from the bottom, together with the removable gauze thimble in the burner-tube, substantially as described. (12.) In a vapour-burning apparatus, the combination of the double burner, the mixing-tube extending under and connecting with each burner-tube, and the baffle-plate located in said mixing-tube between said burner-tubes, as described. (13.) In a vapour-burning apparatus, the combination of the double burner, the mixing-tube extending under and connecting with each burner-tube, and the baffle-plate located in said mixing-tube between said burner-tubes, together with the oil-pocket in said mixing-tube directly beneath said baffle-plate, and a mass of

absorbent material in said pocket, substantially as described. (14.) In a vapour-burning apparatus, the combination of the mixing-tube, the vapourising-tube extending into the same at an angle thereto, and provided with a recess on its exterior adjacent to said mixing-tube, and a ring adapted to slip over said mixing-tube and engage said recess on the vapourising-tube, substantially as described. (15.) The combination in a vapour-burning lamp of the supporting-frame, the mixing-tube, and the vapourising-tube, each of said parts interlocking with another, but devoid of permanent fastenings one to another, substantially as described. (16.) The combination in a vapour-burning lamp of the supporting frame, and a removable vapourising-tube provided with a longitudinally extending feather which engages a slot in the supporting-frame, substantially as described. (17.) The combination in a vapour-burning lamp of the supporting-frame, and a removable vapourising-tube provided with a feather which engages a slot in the supporting-frame, said vapourising tube being provided with a discharge-opening on one side whereby the feather serves to fix the direction of the jet discharged from said opening, substantially as described. (18.) The combination in a vapour-burning lamp of the reflector, chimney, and heat-shield, riveted together to form a supporting-frame, the vapourising-tube extending across the base of the chimney under the heat-shield, and the hanging rod attached to said heat-shield, substantially as described. (19.) The method of burning hydrocarbon vapour, which consists in the following steps: First, vapourising the hydrocarbon by heat; second, mixing the vapour with the necessary quantity of air to support combustion prior to such combustion; third, burning the mixture in an airtight casing having only an outlet of restricted cross section for the discharge of the gases of combustion, said outlet being just large enough to carry off said gases, but not large enough to permit the entry of outside air. (20.) As an article of manufacture, a vapourising-tube for vapour-burning apparatus, closed at the discharge-end, and having a discharge-opening in its side consisting of a re-entrant portion of the wall of the tube, conical in shape, and perforated at its apex, substantially as described. (21.) As an article of manufacture, a vapourising-tube for vapour-burning apparatus, having a discharge-opening which flares outward only, substantially as described. (22.) The combination of the vapourising tube and the internal filler of a diameter slightly less than the internal diameter of the tube, the filler being closed to the passage of gas therethrough, substantially as described. (23.) The combination of the vapourising-tube and the internal filler of a diameter slightly less than the internal diameter of the tube, together with the gauze strainers located in each end of the tube, substantially as described. (24.) As a filler for a vapourising-tube, a tube of less length and diameter, plugged, and having its ends split and expanded, substantially as described. (25.) In a vapour-burning apparatus, the combination of the vapourising-tube exposed to the direct action of the burner, the oil-supply tube, and the needle-valve controlling the passage of oil from the supply-tube to the vapourising-tube, the discharge-orifice of the needle-valve being cone-shaped, with the apex pointing towards the exterior of the valve, substantially as described. (26.) In a vapour-burning apparatus, the combination of the vapourising-tube, the oil-supply tube, and the needle-valve controlling the passage of oil from the supply-tube to the vapourising-tube, and adapted to discharge the oil into the vapourising-tube in the form of a fine jet or spray, together with the wire-gauze within the vapourising-tube on which said jet or spray impinges, substantially as described. (27.) In a vapour-burning apparatus, the combination of the vapourising-tube, the oil-supply tube, and the needle-valve controlling the passage of oil from the supply-tube to the vapourising-tube, and adapted to discharge the oil into the vapourising-tube in the form of a fine jet or spray, together with the wire-gauze within the vapourising-tube on which said jet or spray impinges, and the filler located in the tube beyond said gauze, substantially as described. (28.) In a vapour-burning apparatus, the combination of the vapour-burner and connections, the vapourising-tube within the heating zone thereof, the mixing-tube into which the vapourising-tube discharges, and the muffler formed of non-resonant material placed over the air-inlet to said mixing-tube, substantially as described. (29.) In a vapour-burning apparatus, the combination of the vapour-burner and connections, the vapourising-tube within the heating zone thereof, the mixing-tube into which the vapourising-tube discharges, and the muffler formed of non-resonant material placed over the air-inlet to said mixing-tube, together with means for breaking up the inrushing current of air into a number of separate streams, substantially as described. (30.) The combination with a vapour-burning apparatus of an air-and-vapour-mixing-tube formed of non-resonant materials substantially as described. (31.) The combination of the feeding-funnel, the loose plunger normally closing the discharge-orifice of said funnel, and the spring clip on the funnel, which holds said plunger in such normal position of closing, substantially as described. (32.) In a vapour-burning apparatus, the combination of the vapour-burner and connections, the incandescent mantle therefor, the vapourising tube above the mantle, the alcohol-cup beside the burner, and the gauze shield which surrounds said cup and the base of the incandescent mantle, and concentrates the flame on the mantle and vapourising-tube, substantially as described. (33.) In a vapour-burning apparatus, the combination with the fireback of refractory material of the burner-tube adjacent to the lower part of the fireback, and the vapourising-tube located above the burner-tube, and also adjacent to the fireback, substantially as described. (34.) In a vapour-burning apparatus, the combination with the fireback of refractory material of the burner-tube provided with a series of perforations at its upper side adjacent to the lower part of the fireback and the vapourising-tube located above the burner-tube, and also adjacent to the fireback, substantially as described. (35.) In a vapour-burning apparatus, the combination with the fireback of refractory material of the burner-tube provided with a series of perforations in its upper side adjacent to the lower part of the fireback and the vapourising-tube located above the burner-tube, and also adjacent to the fireback, together with an alcohol-trough extending along the side of the burner-tube, substantially as described. (36.) In a vapour-burning apparatus, the combination of the fireback, the vapourising-tube adjacent to the fireback, the mixing-tube into which the vapourising-tube discharges, the burner-tube provided with a line of perforations in its upper side adjacent to the lower part of the fireback, and into which burner-tube the mixing-tube discharges, and the gauze diaphragm in said burner-tube, near the end to which the mixing-tube is connected, substantially as described. (37.) In a vapour-burning apparatus, the combination of the stove-body having an open front, a fireback set in said stove-body and inclined forwardly, a vapourising-tube in front of and adjacent to said fireback, the burner-tube adjacent to and in front of the lower part of the said fireback, and the connections between said tubes, substantially as described. (38.) The combination of the stove-body having an open front, a fireback set in said stove-body and inclined forwardly, a vapourising-tube in front of and adjacent to said fireback, the burner-tube adjacent to and in front of the lower part of said fireback, and the connections between said tubes, together with a diaphragm extending from the bottom of the fireback to the front of the stove-body, substantially as described. (39.) The combination of the stove-body having an open front, a fireback set in said stove-body and inclined forwardly, a vapourising-tube in front of and adjacent to said fireback, the burner-tube adjacent to and in front of the lower part of said fireback, and the connections between said tubes, together with a diaphragm extending from the bottom of the fireback to the front of the stove-body, a discharge-opening in the upper part of the back of the stove-body, and an opening in the bottom of said stove-body, substantially as described.

(Specification, £1 4s.; drawings, £1 7s. 6d.)

No. 11572.—27th April, 1899.—JAMES HENRY POMEROY, of 53, Esk Street, Invercargill, New Zealand, Gardener. Improved ventilated double crate for freezing, conveying, and exposing for sale frozen animals and the like.

Claim.—(1.) In crates for holding, securing, conveying, and exposing frozen animals, such as rabbits, for export and sale, the combination of a crate with battens for securing the halves of the crate apart, such as A, and further battens for securing the contents in position for allowing the current of air to circulate freely between as well as all round the contents, substantially as described, and as explained and as illustrated in the drawing.

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

No. 11635.—19th May, 1899.—HARRY RAMSEY, of Bridge Street, Eltham, Taranaki, New Zealand, Plumber. Improvements in apparatus for cooking vegetables and the like.*

[NOTE.—The title in this case has been altered. See list, Provisional Specifications, *Gazette* No. 48, of the 8th June, 1899.]

Claims.—(1.) In a cooking apparatus, in combination, a steam-generator supported in a stand, a fire-grate and chimney to the stand, a vessel for holding the articles to be cooked, a pipe connecting the generator to the vessel, and a pipe for introducing water into the generator and preventing the pressure in the generator rising too high, substantially as set forth. (2.) In a cooking apparatus, in combination, a steam generator supported on a stand, a flue through the

generator, a fire-grate and chimney to the stand, a water-heating vessel upon the chimney, a vessel for holding articles to be cooked, a pipe connecting the generator to the vessel, and a pipe for introducing water to the generator and preventing the pressure in the generator rising too high, substantially as set forth. (3.) The improvements in cooking apparatus consisting of parts constructed, arranged, operating, and combined substantially as set forth.

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

No. 11647.—25th May, 1899.—DANIEL WARNER AYLWORTH, of South Haven, Michigan, United States of America, Manufacturer (assignee of Noble Burton Leslie, of South Haven aforesaid, Manufacturer). Improvements in fence-clamps.

Claims.—(1.) The described clamp for securing crossed fence-wires and the like together by clamping one of them, consisting of a sheet-metal plate provided with a central longitudinal groove in which one of said wires rests, and with parallel detached portions at other side of the said groove, said side portions being bent over to form loops for the reception of the other wire, the axes of said loops being aligned with one another and arranged at right angles to the said longitudinal groove, substantially as described. (2.) The described clamp for securing crossed fence-wires and the like together consisting of a sheet-metal plate provided with a central longitudinal groove in which one of the said wires rests, and with parallel cuts or slots extending from one end of the plate along the sides of the groove whereby detached side portions are formed, said side portions being bent over to form loops, the axes of said loops being aligned with one another to receive the other wire, and the grooved portion of the plate and wire resting therein being crimped as and for the purpose set forth.

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

No. 11649.—25th May, 1899.—BICKFORD AND HUFFMAN COMPANY, of Macedon, New York, United States of America, Manufacturers (assignees of Ernest Baseman, of Macedon aforesaid, Inventor). Improvements in agricultural implements, more particularly applicable to seeding-machines or grain-drills.

Claims.—(1.) In an agricultural implement, the frame composed of metal bars having a projecting web, and the angular corner connecting-plates bolted to the webs of the bars and having flanges engaging the edges of the bars. (2.) In an agricultural implement, the frame composed of the metal bars having a projecting web, and the angular corner connecting-plates bolted to the webs of the bars, and formed with flanges engaging the edges of the bars and filling-blocks at the corners. (3.) In an agricultural implement, the frame composed of the bars having a projecting web, and the angular connecting-plates bolted to the bars, and formed with corner filling-blocks and a vertical projection of substantially the thickness of the web. (4.) In an agricultural implement, the frame having a channelled cross-bar, and a wood or other filling-strip arranged in its channel, together with a bracket resting on the bar and secured thereto by bolts passing through the bar and filling-strip. (5.) In an agricultural implement, in combination, the frame, the angular rock-shafts, the intermeshing gears on the shafts provided with sleeves fitting the shafts, bearings for the sleeves, and means for preventing longitudinal movement of the sleeves in the bearings. (6.) In an agricultural implement, in combination, the main frame, the angular rock-shafts, the intermeshing gears provided with sleeves fitting on the shafts, and the two part bearings for said sleeves, one of said parts having fingers engaging the gears to prevent longitudinal movement. (7.) In an agricultural implement, the combination with an angular operating shaft, and a sleeve fitting on said shaft and having a cylindrical exterior, of a bearing for said sleeve, and means for preventing its longitudinal movement relative to the bearing. (8.) In an agricultural implement, the combination with the main frame, the depending brackets having bearings at the ends, the rock-shafts operating in the bearings and connected for simultaneous operation, of the central bearing for said shafts, and the depending perforated clevis bracket connected to the main frame and also to the central shaft bearing. (9.) In a seeding-machine, the combination with the hoes, a rock-shaft provided with arms, links connected with the hoes, and by a loose connection with the arms, of the springs interposed between the arms and hoes, whereby the hoes may be raised by a positive connection between the arms and the hoes and depressed by the movement of the arms through the medium of the springs. (10.) In a seeding-machine, the combination with the hoe and the rock-arm of the link having a sliding connection with the arm and connected to the hoe, and the spring interposed between the arm and link, substantially as described. (11.) In a seeding-machine, the combination with the hoe and the link pivoted thereto of the rock-arm, the sleeve pivoted thereon, and the spring arranged between the sleeve and link whereby the hoe may be held yieldingly in the ground by the depression of the rock-arm. (12.) In an agricultural implement, the combination with an angular shaft, of a clip adapted to be secured thereto, formed with arms having seats or surfaces for the flat sides of the shaft, and provided with a bolt connecting said arms. (13.) In an agricultural implement, the combination with an angular shaft, of a clip adapted to be secured thereto, formed with arms having seats or surfaces arranged at an angle to each other and to the opening between the arms, and provided with a bolt connecting said arms. (14.) In a seeding-machine, the combination with the angular rock-shaft, of the hoes, the drag-bars, and the clips connected to the drag-bars, and having arms provided with angular seats between them for the shaft, and the bolt connecting said arms. (15.) In an agricultural implement, the combination with an angular rock-shaft, and a sleeve fitting the shaft and having a cylindrical exterior, and a flange at one end provided with a notch, of the cylindrical bearing for the sleeve provided with a finger adapted to pass through the notch and engage the flange when the latter is inserted and rotated. (16.) In a seeding-machine, the combination with the main frame, the hoes, an angular rock-shaft, and connections between it and the hoes for raising and lowering the latter, of the bearing-sleeves fitting the shaft and having cylindrical exteriors, and bearings for said sleeves. (17.) In combination, the main frame, the hoes, the rock-shaft connected to the hoes for raising and lowering them, an arm attached to the rock-shaft, a rod connected with the arm and having an abutment thereon, and a spring arranged between said abutment and the frame. (18.) The combination with the main frame, and the rock-shaft for raising and lowering the hoes, of the operating lever connected with the said shaft, and the folding handle connected with said lever. (19.) The combination with the main frame, and the rock-shaft for raising and lowering the hoes, of the operating lever connected with said shaft, and the folding operating handle connected to said lever, and arranged to be operated from the rear of the frame, substantially as described. (20.) In an agricultural implement, the combination with an operating lever, of an operating handle pivoted thereto, and a catch for holding said handle in operative position, substantially as described. (21.) In an agricultural implement, the combination with an operating lever and a locking bolt thereon, of a handle pivoted on the lever, a grip-lever on the handle for operating the locking-bolt, a pivotal connection between said grip lever and the bolt, and a catch for locking the handle and lever together in operative position. (22.) The combination with the pivoted operating lever having a spring-operated bolt, and the catch having a bevelled face, of the handle pivoted on the lever and adapted to fold at an angle thereto, and means on said handle for operating the bolt. (23.) In a seeding-machine, the combination with a seed-hopper having an aperture in its bottom, and a spout-holder arranged beneath the hopper, of an adjustable spout having a flange at its end arranged at an angle to the plane of the spout and adapted to be engaged and held by the spout-holder. (24.) In a seeding-machine, the combination with a seed-hopper having an aperture in its bottom, a spout-holding clip arranged beneath the hopper and provided with bifurcated fingers, of a rotarily adjustable spout having the circular flange at its upper end arranged at an angle to the plane of the spout, and adapted to be engaged and held by the clip-fingers against the hopper-bottom. (25.) In an agricultural machine, the combination of an angular shaft, the thimbles at its ends formed with angular recesses to engage the shaft, smooth exteriors to engage the bearings, and flanges to prevent longitudinal movement, and a bearing-sleeve for the shaft intermediate the ends thereof, also formed with an angular recess and smooth exterior, together with bearings for said sleeve and thimbles. (26.) In an agricultural machine, the combination with an angular shaft, and a thimble at the end having an angular recess for the shaft and a smooth exterior, of a bearing for said thimble, and means for preventing the longitudinal movement of the shaft and thimble. (27.) In an agricultural machine, the combination with the main frame, the horizontal axle, and the tubular bearing-sleeve having a cylindrical exterior and arranged at an angle to the horizontal, of the dished wheel thereon provided with rollers in its cylindrical hub, and suitable connections between the axle and wheel. (28.) In a seeding-machine, in combination, the hoes, the rock-shaft connected to the hoes for raising and lowering them, means for operating the rock-shaft from the rear of the machine detachably connected to said rock-shaft, and also means for operating the rock-shaft from the front of the machine detachably connected to the rock-shaft, whereby by detaching one or the other it may be operated by either as desired. (29.) In a seeding-machine, in combination, the hoes, the rock-shaft connected to the hoes for raising and lowering them, a gear connected to said rock-shaft,

a rack for operating said gear, means for operating the rack from the rear of the machine detachably connected to said rack, and also means detachably connected to the gear for operating the rock-shaft from the front of the machine, whereby by detaching one or the other it may be operated by either as desired.

(Specification, 17s. 6d.; drawings, £1 11s.)

No. 11682.—6th June, 1899.—JOSEPH GOMMESEN, of Wilson Street, Newtown, near Sydney, New South Wales, Engineer. Improvements in centrifugal apparatus for the separation of fats or grease from liquors containing same.

Claims.—(1.) In centrifugal apparatus of the class set forth, the combination and arrangement with the revolving pan or basin of one or more discharge-orifices (or, as substitutes therefor, one or more inserted pipes) at or near the upper part thereof, substantially as described and explained. (2.) In centrifugal apparatus of the class set forth, the combination and arrangement with the revolving pan or basin having one or more orifices at or near its upper part of automatically operating discharge- or snifting-valves in or on such orifices, substantially as described and explained. (3.) The combination and arrangement together of the mechanical parts (or their modifications) forming a centrifugal apparatus for the separation of fats or grease from liquors containing same, substantially as described and explained, and as illustrated in the drawings.

(Specification, 4s. 3d.; drawings, 5s. 6d.)

No. 11684.—6th June, 1899.—EDWARD WATERS, Jun., a member of the firm of Edward Waters and Son, of 131, William Street, Melbourne, Victoria, Patent Agents (nominee of Emile Bede, of 10, Square Guttenberg, Brussels, Belgium, Engineer). Improvements connected with electric traction.

Claims.—(1.) A conduit placed on the ground-level along one of the rails of the track, and presenting in front of this rail holes closed by indiarubber plugs (or other similar elastic and insulating material), through which pass contact-pieces, which, when their heads are pressed by a current-collector drawn along between the conduit and the rail by an electromotor car, come in contact with the main current-conductor located in the said conduit, whilst the elasticity of the india-rubber separates the said pieces when the current-collector ceases to press upon them, substantially as set forth. (2.) A conduit which can be formed of two angle-iron bars, and the vertical wall of which opposite the rail is made with holes closed by the said indiarubber plugs, which conduit encloses an insulated cable, upon the metal of which are fixed at intervals in front of the described holes contact-pieces surrounded by indiarubber sheaths provided with lateral short tubes or necks secured in the said holes by the bases of the plugs so that the contact-pieces of the latter are opposite and very near to contact-pieces carried by the cable, and that the whole is well insulated, and protected from penetration of water, substantially as set forth. (3.) A conduit formed of one of the rails of the track and of iron bands which are attached thereto, and a conductor formed of copper bars insulated by sheaths of indiarubber or other insulating material provided with holes opposite the contact-pieces, substantially as set forth. (4.) A current-collector suitable to the conductors hereinbefore specified, consisting of a plough attached to an electromotor car, and formed of a plank of wood (or other insulating and flexible material) provided with a copper band sliding against the heads of the contact-pieces and pressed against them by springs or weights, the said plough being forced down into the channel in which it moves by springs or weights to a depth determined by stops which are attached to it, and being maintained in a vertical position by guides attached to the car, substantially as set forth. (5.) For the purpose of allowing the passage into the switches without interrupting the current, the use of pins, which pass through indiarubber sheaths fixed in holes made through the switches, and which press upon the contact-pieces of the conductor in such a manner that the plough in travelling along the switch makes contact through the medium of the said pin with the cable of the conduit corresponding to the rail that it has left, substantially as set forth. (6.) For cleaning the channel in which the current-collector moves, a circular rotary brush suspended freely from the car, and the axis of which is provided with a brake which prevents it from turning as quickly as if the wheel were entirely free upon the said axis, substantially as set forth. (7.) In cases where no special conductor serves for the return of the current, careful electrical connection between the parts of the conduit, so as to allow the same to serve as a principal conductor for the return of the current, and thus prevent induction on the telephone-wires and injurious derivations in the ground, substantially as set forth.

(Specification, 12s. drawings, 13s. 6d.)

No. 11698.—8th June, 1899.—THE AUTOMATIC TELEPHONE COMPANY (LIMITED), of 13 and 14, Abchurch Lane, London, England (assignees of Gustave Seligmann-Lui, of 78, Rue Mozart, Paris, France, Gentleman). An improved system of automatic telephone exchange.

Claims.—(1.) In an automatic telephone-exchange system wherein the subscribers' lines are divided into groups, the lines of each group being presented on its own pair of "calling" and "called" line coupling-boards (or a combined "calling" and "called" line coupling-board) by line-contacts, in pairs whose members correspond to the two members of a line, and are accompanied by distinct contacts for the service of the exchange mechanisms, said line- and service-contacts being regularly arranged in series of rows, so as to be accessible by a plurality of coupling-devices located at the several coupling-boards,—the combination with the pairs of line- and service-contacts presented on the coupling-boards of a plurality of coupling-devices, each comprising two independently movable, electrically propelled, and electrically associated mechanisms termed "couplers" (said couplers being respectively appropriated, the one for making connection with a called line, and the other for making connection with a calling line), each coupler being adapted to move across its board and being provided with a plurality of sets of line- and service-contact fingers, said sets respectively corresponding to the several series of rows of contacts on the coupling-board, each set comprising a pair of line-fingers whose members are appropriated to make contact respectively with the members of a pair of line-contacts, and a service-finger appropriated to make contact with the service-wire corresponding to such pair of line-contacts, so that each set of line- and service-fingers is adapted to make contact with the line- and service-contacts of one or another row of contacts of the series to which that set corresponds; all the fingers of like function in the one coupler being in electrical connection with each other, and being connected at predetermined moments with the fingers of corresponding function of the associated coupler through the agency of a magnetically operated multiple switch or distributer in connection with the called-line coupler, there being as many couplers of each function located at each coupling-board of similar function as there are groups of lines, the couplers (of the kind appropriated to make connection with calling lines) which are located at any one calling-line coupling-board being electrically associated with couplers (of the kind appropriated to make connection with called lines) which are severally located at called-line coupling-boards severally appertaining to different groups of lines; so that each said coupling-device is adapted to telephonically couple together any two lines on the coupling-boards at which the two couplers forming said coupling-device are respectively situated. (2.) In an automatic telephone-exchange system in which the subscribers' lines are divided into groups, the lines of each group being presented by line- and service-contacts (on coupling-boards or pairs of coupling-boards respectively representing different groups of lines), and in which there is combined with the boards a plurality of coupling-devices each composed of two electrically associated mechanisms or couplers each provided with a plurality of sets of line- and service-contact fingers, there being so many such coupling-devices, and the location of their constituent couplers relatively to the coupling-boards being such, that those couplers which appertain to any one group of lines are electrically associated with couplers which severally appertain to different groups of lines,—the combination, to form a coupling-device, of two electrically operated couplers (respectively distinguished as called-line coupler and calling-line coupler), said couplers being independently and electrically movable each across a coupling-board, and each comprising a plurality of sets of electrically controlled contact-fingers, the fingers of like function of all the sets comprised in each coupler being electrically connected, and the fingers of the called-line coupler being electrically connected at predetermined moments with the fingers of like function of the calling-line coupler through the agency of a multiple switch or distributer, by which also the movements of the called-line coupler as a whole are controlled, the sets of fingers of the called-line coupler being under the control of an electrically operated selector, and the sets of fingers of the calling-line coupler being respectively controlled each by an electro-magnetic mechanism in the circuit of the service-finger of its set, each such electro-magnetic mechanism being dependent for its action (on the one hand) on the action of the distributer of the called-line coupler and (on the other hand) on the completion of its own circuit by the service-finger of the corresponding set of fingers of the calling-line coupler making contact with the service-contact (of the calling-line) which has been earthed, through the operation of an electro-magnetic commutator or connector appertaining to that line, there being such a commutator in connection with each line. (3.) In an automatic telephone-

exchange system in which the subscribers' lines are divided into groups, the lines of each group being presented by line- and service-contacts, and in which there is combined therewith a plurality of coupling-devices, each composed of two electrically associated mechanisms or couplers, independently and electrically movable across the line- and service-contacts of a group of lines (the one of such associated couplers being appropriated for making connection with a called line, and the other for making connection with a calling line), each such coupler being provided with a plurality of sets of line- and service-contact fingers, the fingers of like function of all the sets of the one coupler being electrically connected with each other, and connected at predetermined moments with the fingers of like function of all the sets of the associated coupler, through the agency of a multiple switch or distributer in connection with the called-line coupler,—the combination with the sets of contact-fingers of each coupler of the one kind (that appropriated to make connection with called lines) of contact-fingers' selecting mechanism electrically operated or controlled, said mechanism being constituted by a plurality of members, the operations of the several members being so co-ordinated that by their conjoint action one only of the several sets of contact-fingers will be enabled at one time to make operative contact with a set of line- and service-contacts. (4.) In an automatic telephone-exchange system in which the subscribers' lines are divided into groups, the lines of each group being presented by line- and service-contacts, and in which there is combined therewith a plurality of coupling-devices, each composed of two electrically associated mechanisms or couplers independently and electrically movable across the line- and service-contacts of a group of lines (the one of such associated couplers being appropriated for making connection with a called line and the other for making connection with a calling line), each such coupler being provided with a plurality of sets of line- and service-contact fingers, the fingers of like function of all the sets of the one coupler being electrically connected with each other, and connected at predetermined moments with the fingers of like function of all the sets of the associated coupler, through the agency of a multiple switch or distributer in connection with the called-line coupler,—the combination with the sets of contact-fingers of each coupler of the one kind (that appropriated to make connection with called lines) of contact fingers' selecting mechanism, the said selecting mechanism being constituted by a pair of cam-like retaining-plates for each set of contact-fingers, the plates of each acting independently on the contact-fingers of a set, and being themselves actuated by independently operated cam-shafts common to all the pairs of plates of a coupler, the operation of the cams being so co-ordinated that by their conjoint action one only of the several sets of contact-fingers will at one time be enabled to make operative contact with a row of line- and service-contacts. (5.) In an automatic telephone-exchange system in which the subscribers' lines are grouped on coupling-boards as described, and in which there is combined with the coupling-boards a plurality of coupling-devices each composed of two electrically associated mechanisms or couplers independently and electrically movable each across a coupling board, and provided each with a plurality of sets of contact-fingers electrically associated as described, the two couplers of a coupling-device being adapted, the one to make contact with calling lines and the other with called lines, and the contact-fingers of the coupler for making contact with a called line being under the control of an electrically operated contact-fingers' selector,—the combination with each such called-line coupler of electrically operated combined escapement and propelment mechanisms, the escapement mechanism being adapted to throw the propelment mechanism out of action and to permit of the said coupler moving step by step across the coupling-board in the one direction, and to control the extent of such movement, and the propelment mechanism being adapted to cause the said coupler to return step by step in the opposite direction. (6.) In an automatic telephone-exchange system in which the subscribers' lines are grouped on coupling-boards as described, and in which there is combined with the coupling-boards a plurality of coupling-devices, each such coupling-device being constituted by two electrically operated couplers (respectively distinguished as called line coupler and calling-line coupler), said couplers being independently and electrically movable each across a coupling-board, and each comprising a plurality of sets of electrically controlled contact-fingers, the fingers of like function of all the sets comprised in each coupler being electrically connected,—the combination with each coupler appropriated to make contact with called lines of a rotary multiple switch or distributer, and circuit-connections with the combined escapement and propelment mechanisms of the called-line coupler, the connections being such that the movement of the coupler as a whole will be controlled by said distributer; and of circuit connections of the said distributer with the respective members or operative mechanisms of a contact-fingers' selector adapted to determine the bringing into operative position any one set of contact-fingers of the called line coupler, the circuit-connections being such that the co-ordinated operation of the mechanisms of the said contact-fingers' selector will also be controlled by said distributer; and of circuit-connections of the said distributer with the service-contact finger, and with the actuating mechanism of the line-contact fingers of the calling-line coupler (associated with the called-line coupler to which said distributer appertains) the connections being such that the fingers of the called-line coupler will be electrically connected at predetermined moments with the corresponding fingers of the calling-line coupler. (7.) In an automatic telephone-exchange system in which the subscribers' lines are grouped on coupling-boards as described, and in which there is combined with the coupling-boards a plurality of coupling-devices, each composed of two electrically associated couplers independently and electrically movable across a coupling-board, and provided each with a plurality of sets of contact-fingers electrically associated as described, the two couplers of a coupling-device being respectively adapted to make contact with calling and called lines, and the contact-fingers of the coupler for making contact with a called line being under the control of an electrically operated contact-fingers' selector, — the combination with each such calling-line coupler of electrically operated mechanism adapted to set the calling-line coupler in motion across the coupling-board by a current transmitted to said mechanism through the distributer appertaining to the associated called-line coupler and through the selector- and service-circuit by which the associated couplers are connected; and of electrically operated mechanisms adapted to arrest the motion of the calling-line coupler when actuated by a current transmitted to such mechanism through the service-finger circuit of the calling-line coupler, on the completion of said circuit by a service-finger of the calling-line coupler meeting a service-wire which has been put to earth by the previous operation of the electro-magnetic commutator or connector appertaining to the line to which such service-wire belongs. (8.) In an automatic telephone-exchange system in which the subscribers' lines are divided into groups, the lines of each group being presented by line- and service-contacts to coupling-devices composed of pairs of electrically operated coupler-mechanisms, each having sets of contact-fingers, those of the one coupler being selectively controlled and being electrically associated at predetermined moments with those of the other coupler by the action of a multiple switch or distributer, the several pairs of associated couplers being located with regard to the groups of lines in the manner described, and in which there is connected with each subscriber's line an electro-magnetic multiple commutator, designated a connector, adapted to establish at the required moment temporary connections of the line-wires and service-contacts (of the line to which it appertains) with the various elements of electro-magnetic apparatus at the central station,—the combination with each group of lines of a combination of electro-magnetic apparatus for use in common by all the lines of the group, such combination comprising an electro-magnetically actuated rotary main distributer or multiple switch, formed of a plurality of sets of pairs of contacts and of a plurality of brushes revolved together as one over the pairs of contacts, whereby to effect a plurality of circuit changes at each step made by the brushes, the brushes being actuated by a propelment-mechanism in response to successive signals of one kind; a main selector comprising a plurality of circuits and a plurality of movable contacts, whereof groups are controlled by a plurality of electro-magnetically operated mechanisms, to each of which in turn the signals sent are switched by the main distributer, the individual action of each such mechanism depending on the nature of the signals, and the action of the several mechanisms being so co-ordinated that their conjoint action will have for effect to complete one out of a number of selector circuits, which circuits are respectively connected to the operative mechanisms of different coupling-devices; and a manipulator formed of relays and batteries adapted to transmit through the selector-circuit completed, local currents corresponding to the signals which the manipulator receives through the main distributer, substantially as specified. (9.) In an automatic telephone-exchange system in which groups of subscribers' lines are presented, along with service-wires, to coupling-devices arranged as described with regard to the groups of lines, said coupling-devices being composed of pairs of electrically operated couplers, having sets of electrically associated and selectively controlled contact-fingers, and in which there is provided for each line an electro-magnetic multiple commutator, designated a connector, and adapted to connect the line-wires and service-contacts of the lines to which it appertains with the various elements of a set of electro-magnetic apparatus for common use by the lines of a group

—the combination with each group of lines and their connectors, and with the main distributer, main selector, and manipulator for common use by a group, of a rotary return-to-rest distributer or multiple switch formed of a plurality of sets of pairs of contacts and of brushes electro-magnetically revolved together as one, whereby to concurrently effect various circuit changes; and of electro-magnetically operated mechanisms to which local currents are sent through said return-to-rest distributer, said mechanisms being respectively adapted to return to initial position the line-connector which has been operated, and the main distributer, main selector, and manipulator of the group to which that line belongs. (10.) In an automatic telephone-exchange system in which the subscribers' lines are divided into groups, and presented by line- and service-contacts to coupling-devices composed of pairs of electrically operated couplers, having sets of contact-fingers selectively controlled and electrically associated at predetermined moments as described, the several pairs of associated couplers being located with regard to the groups of lines in the manner described; and in which there is connected with each subscriber's line an electro-magnetic multiple commutator, designated a connector, adapted to act as described, and in which there is combined with each group of lines a set of electro-magnetic apparatus (for use in common by all the lines of the group), comprising an electro-magnetically actuated rotary main distributer or multiple switch, constructed and adapted to act as described; a main selector, comprising electro-magnetically operated mechanisms, to each of which in turn the signals sent are switched by the main distributer, the action of the said mechanisms being so co-ordinated that their conjoint action will have for effect to complete one out of a number of selector-circuits; and a manipulator formed of relays and batteries adapted to transmit through the selector-circuit completed, local currents corresponding to the signals which the manipulator receives through the main distributer,—the combination, with each circuit controlled by the main selector, of a double polarised receiver, two rotary distributers or multiple switches, and two different called-line couplers (designated twin-couplers) located at different coupling-boards, and each provided with electro-magnetically operated mechanism controlling its motion across the coupling-board, and with a contact-fingers' selecting mechanism determining the bringing into operation of one or other of its sets of contact-fingers, the circuit-connections of the double polarised receiver with the distributers, and of the distributers with the mechanisms of the respective couplers, being such that the one or other distributer and the one or other coupler will be actuated according to the polarity of the first current by which the polarised receiver is influenced, whilst the other distributer and the other coupler are blocked in position of rest. (11.) In an automatic telephone-exchange system in which the subscribers' lines are divided into groups, and presented by line- and service-contacts to coupling-devices composed of pairs of electrically operated couplers having sets of contact-fingers, selectively controlled and electrically associated at predetermined moments as described, the several pairs of associated couplers being located with regard to the groups of lines in the manner described; and in which there is connected with each subscriber's line an electro-magnetic multiple commutator, designated a connector, adapted to act as described; and in which there is combined with each group of lines a set of electro-magnetic apparatus (for use in common by all the lines of the group), comprising an electro-magnetically actuated rotary main distributer or multiple switch, constructed and adapted to act as described, a main selector comprising electro-magnetically operated mechanisms, whose action is so co-ordinated as to complete one out of a number of selector-circuits, and a manipulator, adapted to transmit through the selector-circuit completed, local currents corresponding to the signals which it receives; and in which there is combined with each such circuit a double polarised receiver, two rotary distributers or multiple switches, and two different called-line couplers (designated twin-couplers), located at different coupling-boards, and each provided with electro-magnetically operated actuating mechanism and with a contact-fingers' selecting mechanism, the circuit-connections of the double polarised receiver with the distributers and mechanisms of the twin couplers being such that the one or other will be actuated according to the polarity of the first current by which the polarised receiver is influenced,—the combination with each of the twin called-line couplers controlled through the same selector-circuit of a calling-line coupler; each of such two calling-line couplers (designated quasi-twins) being provided with electrically-operated mechanism adapted to set the coupler in motion by a current transmitted to said mechanism through the distributer appertaining to the associated called-line coupler, and through the line-finger circuit of the associated couplers; each calling-line coupler being also provided with electrically operated mechanisms adapted to arrest the motion of the coupler by the action of a current transmitted to such mechanism through the service-finger circuit of the calling-line coupler on the completion of said circuit by a service-finger of the calling-line coupler meeting a service-wire which has been put to earth by the previous operation of the connector appertaining to the line to which such service-wire belongs. (12.) In an automatic telephone-exchange system in which the subscribers' lines are divided into groups, and presented by line- and service-contacts to coupling-devices composed of pairs of electrically operated couplers having sets of contact-fingers selectively controlled and electrically associated at predetermined moments as described, the several pairs of associated couplers being located with regard to the groups of lines in the manner described; and in which there is connected with each subscriber's line an electro-magnetic multiple commutator designated a connector, adapted to act as described, and in which there is combined with each group of lines a set of electro-magnetic apparatus (for use in common by all the lines of the group) comprising an electro-magnetically actuated rotary main distributer or multiple switch, constructed and adapted to act as described, a main selector comprising electro-magnetically operated mechanisms to each of which in turn the signals sent are switched by the main distributer, the action of the said mechanisms being so co-ordinated that their conjoint action will have for effect to complete one out of a number of selector-circuits, and a manipulator formed of relays and batteries adapted to transmit through the selector-circuit completed, local currents corresponding to the signals which the manipulator receives through the main distributer; and in which there is combined with each such circuit a double polarised receiver, two rotary distributers, and two called-line couplers (designated twin-couplers) located at different coupling-boards, the circuit-connections of the double polarised receiver with the distributers and mechanisms of the twin-couplers being such that the one or other will be actuated according to the polarity of the first current by which the polarised receiver is influenced; and in which there is combined with each of the twin called-line couplers controlled through the same selector-circuit a calling-line coupler, each of such two calling-line couplers (designated quasi-twins) being adapted to be set in motion by a current transmitted to its mechanism through the distributer appertaining to the associated called-line coupler, and through the line-finger circuit of the associated couplers; such calling-line coupler being also adapted to be arrested by the action of a current transmitted to its mechanism through the service-finger circuit of the calling-line coupler,—the combination with the line-connectors, and with the main distributer, main selector, and manipulator common to the group, and with the mechanisms of the called-line couplers (designated twins) that are controlled through the same selector-circuit, of two return-to-rest rotary distributers, each formed of a plurality of brushes electro-magnetically revolved over a plurality of sets of pairs of contacts, of which the circuit-connections (with the mechanisms of the called-line couplers, with the connectors of the lines of the group, and with the main distributer, the main selector, and the manipulator common to the group) are such that the action of the one or other return-to-rest distributer will be dependent on the previous operation of the distributer of the twin called-line coupler with which such return-to-rest distributer is associated, and will have for effect to transmit local currents to the several mechanisms with which it is combined, whereby to return to initial position the line-connector, main distributer, main selector, and manipulator appertaining to the group.

(Specification, £4 15s.; drawings, £5 5s.)

No. 11719.—16th June, 1899.—HENRY GEORGE BEDELL, Plumber, and JOHN WELSBY, Engineer, both of 54, Lambton Quay, Wellington, New Zealand. Improvements in ball-cocks for water-cisterns.

Claims.—(1.) In a ball-cock, in combination, a body part screwed to a cup, a valve opening with the pressure of the water in the main, a valve-seat, a valve-stem guided above and below the valve, and a lever and float ball to operate the valve, substantially as set forth. (2.) In a ball-cock, in combination, a body part screwed to a cup, a valve, and a valve seat, a valve-stem guided above and below the valve, a chamber below the valve-seat to hold water, a lever and float-ball to operate the valve, substantially as set forth. (3.) A ball-cock made in two parts for convenience and ease of manufacture, and so united that the float-ball and lever may be made to operate in any desired part of the cistern, and so that the said two parts may be readily separated for examination, repair, or renewal, substantially as set forth. (4.) A ball-cock for water-cisterns, consisting of parts in combination, constructed, arranged, and operating substantially as set forth.

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

No. 11729.—20th June, 1899.—CHARLES MORRIS NEWSON, of 103, Queen Street, Auckland, New Zealand, Builder. Improved tell-tale and burglar-alarm.

Claims.—(1.) The combination with a bell having a striking-hammer driven by a motor of a slide actuated by the opening of a door or the like to which the apparatus is applied, whereby a mechanical member normally restraining said motor is operated, and an alarm is sounded upon the bell, substantially as set forth and illustrated. (2.) In apparatus for the purpose described, a slide operated by the opening of a door or the like to which the apparatus is applied, a cam upon said slide operating a sliding spindle at right angles thereto, said spindle carrying a cam which normally engages with and retains a motor-driven member by which an alarm is sounded, substantially as specified. (3.) In apparatus for the purpose described, a slide *n* made of bent wire, a cam *q* formed thereon, a loop threaded upon the slide forming a lifting-bracket, a sliding spindle operated thereby, and a cam upon said spindle normally engaging with the tail of a hammer, said hammer being caused by clockwork mechanism to strike upon a bell, when slide *n* is operated, substantially as set forth and illustrated. (4.) In apparatus such as described, the means by which an alarm is continuously sounded upon a bell until the motive-power is exhausted consisting of a motor-driven bell, a sliding spindle carrying a cam engaging with a mechanical member and retaining the motor, a slide operated by the opening of a door or the like to which the apparatus is applied, said slide having a cam actuating said sliding spindle, and a pin adapted to be passed beneath and across the slide, whereby when said slide is operated the motor is released and allowed to run continuously, substantially as set forth and illustrated. (5.) An improved tell-tale and burglar-alarm consisting of the mechanical parts arranged, combined, and operating substantially as and for the purposes described, and illustrated in the drawings.

(Specification, 4s. 9d.; drawings, 3s.)

No. 11732.—22nd June, 1899.—THOMAS HENRY PATCHING, of Strathfield, New South Wales, Tailor. An automatic coupling for use on railway-carriages and the like.

Claims—(1.) In an automatic coupling for use on railway carriages and the like, a pawl revolving on and operated by an eccentric, substantially as described and as illustrated in the drawings. (2.) In an automatic coupling for use on railway carriages and the like, the combination and arrangement of a toothed bar, hinged to a draw-bar, with a pawl revolving on and operated by an eccentric, substantially as described and as illustrated in the drawings. (3.) In an automatic coupling for use on railway carriages and the like, the combination and arrangement of a toothed bar such as *d* with a pawl, such as *k*, revolving on an eccentric, such as *m*; supported by trunnions, such as *n n*, between the side-bars of a female coupling, substantially as described and as illustrated in the drawings.

(Specification, 3s. 3d.; drawings, 5s. 6d.

No. 11733.—22nd June, 1899.—ROBERT KERR, of Wellington, New Zealand, Contractor (assignee of Kate Plummer, of Gisborne, New Zealand). An improved composition for cleansing clothes and for other purposes.

Claim.—The improved composition consisting of refined tallow, borax, caustic soda, ammonia, bitter almonds, turpentine, citronelle, in the proportions for the purpose substantially as described.

(Specification, 1s.)

No. 11736.—22nd June, 1899.—STEPHEN JOHN HOLLAND, of 103, Queen Street, Auckland, New Zealand, Tinsmith. Improved apparatus for cooking alimentary substances.

Claims.—(1.) The improved apparatus for cooking alimentary substances constructed, arranged, and operating substantially and for the purposes described, and illustrated in the drawings. (2.) In apparatus for the purpose described, a receptacle mounted upon legs and adapted to be placed within an ordinary saucepan or the like, and provided with lifting handles substantially as specified. (3.) In apparatus for the purpose described, a receptacle mounted upon legs adapted to be placed within a saucepan or similar cooking utensil, said receptacle having a perforated false bottom substantially as specified and illustrated.

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

No. 11738.—21st June, 1899.—WILLIAM J. MCVEIGH, of Berry, New South Wales, Manager of the Berry Central Butter Factory, and GEORGE LYELL, jun., of Aitken Street, Gisborne, Victoria, Manufacturer. Improvements in and connected with the testing of milk, skim-milk, and cream for butter-fat, and the bottles therefor.

Claims.—(1.) The improved milk, skim-milk, and cream testing bottle having a neck which, in internal diameter and length, bears the proportion described and illustrated to the volume of the bulb beneath it, all as and for the purposes set forth, and as shown in each figure of the drawings. (2.) The improved milk, skim-milk, and cream testing bottle having a neck of small diameter and beneath it a bulb on the shoulders of which bulb is a filling-hole with an outwardly protruding neck, all as and for the purposes described, and as illustrated in the drawings. (3.) In bottles for testing milk, skim-milk, and cream, a rubber or other stopper or piston having a bevelled bottom and an increased taper around its top, by the movement of which in the outwardly projecting neck of a filling-hole the height of the butter-fat column in the neck can be adjusted for reading, all as and for the purposes described, and illustrated in the drawings. (4.) In the bottles used for testing milk, skim-milk, and cream, the combination of a bulb having a filling-hole and an outwardly projecting neck with a rubber or other stopper or piston having a bevelled bottom and an increased taper around its top, all as and for the purposes described and as illustrated in the drawings. (5.) In the testing of milk, skim-milk, and cream, a bottle having a relationship between the bulb volume and the neck diameter and length as described and illustrated, in which bulb is proportionately placed 17·5 c.c.m. of the sample to be tested, 17·5 c.c.m. of sulphuric acid, 2 c.c.m. of amyl alcohol (in the case of cream only 1 c.c.m.), and a filling of hot water, all as and for the purposes described and as illustrated in the drawings. (6.) In the testing of milk, skim-milk, and cream, the combination of a bottle having the proportions and graduations specified, with a mixture of the following proportions: Sample, 17·5; sulphuric acid, 17·5; amyl alcohol, 2, and a filling of hot water, all as and for the purposes described and as illustrated in the drawings. (7.) In the testing of milk, skim milk, and cream, the test completed in one operation by test-bottles having the relative proportions and graduations shown and set forth, the bulbs containing in the proportions given: Sample, 17·5; sulphuric acid, 17·5; amyl alcohol, 2, and a filling of hot water, all as and for the purposes described, and as illustrated in the drawings.

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

No. 11740.—23rd June, 1899.—CHARLES ADAMS, of Raincliff, Pleasant Point, Canterbury, New Zealand, Shepherd. Improved wire-strainer.

Claims.—(1.) A wire-strainer consisting of a drum mounted in a casing, chains attached to the drum at one end, and having grips upon their outer extremities, and a ratchet-wheel upon the drum-axle engaged by retaining pawls, substantially as specified and illustrated. (2.) With a wire-strainer consisting of a drum journalled in a casing, chains attached to the drum at one end, having grips at their outer extremities, the combination of a dog or clamp received by a notch in the casing for holding the wires while they are being spliced, substantially as described and illustrated. (3.) The improved wire-strainer, constructed, arranged, and operating substantially as described, and illustrated in the drawing.

Specification, 2s. 6d.; drawings, 3s. 6d.

No. 11741.—23rd June, 1899.—THE DOE PORTABLE ELECTRIC LIGHT AND POWER SYNDICATE, LIMITED, whose registered office is at Broad Street House, New Broad Street, London, England (assignee of Walter Scott Doe, of 222, Monticello Avenue, Jersey City, State of New Jersey, United States of America, Electrician). Improvements in galvanic batteries.

Claims.—(1.) In a galvanic battery the combination with a tubular perforated carbon cathode mounted upon a perforated tubular holder having a conductive wire of platinum stretched across and extending up within it, of an anode of zinc resting merely by its own weight on the said wire and making rubbing contact with the said wire throughout its length substantially as specified. (2.) In a galvanic battery the combination with a tubular perforated carbon cathode mounted upon a perforated tubular holder having a conductive wire of platinum stretched across and extending up within it, of an anode of zinc resting merely by its own weight on the said wire and making rubbing contact with the said wire throughout its length, the anode being in the form of a complete tube open at the ends and exposed to the action of the electrolyte both on its inner and outer surfaces, as specified. (3.) In a galvanic battery the combination with a perforated tubular holder of insulating material suspended from the top cover of the casing of a perforated tubular cylinder of carbon supported exteriorly on

said holder, and of a zinc anode resting loosely on and in contact with a platinum wire stretched across the said holder and extending up the inside thereof, substantially as specified. (4.) The combination with the described battery of a vent plug constructed as described, so as to be adapted to permit the escape of gases without allowing the electrolyte to overflow.

(Specification, 4s. 9d.; drawings, 8s.)

No. 11743.—24th August, 1898.—JOSEF FRANZ BACHMANN, Engineer, of VII. Kaiserstrasse 81, ADOLF VOGT, Engineer, of I. Lothringerstrasse 5, CARL CAMILLE WEINER, Gentleman, of I. Elisabethstrasse 3, all of Vienna, Austria; ALBERT KÖNIG, Banker, of Buda-Pest, Hungary; Dr. JOSEF KIRCHNER, Chemist, of I. Elisabethstrasse 3, Vienna aforesaid; and Dr. ALEXANDER JÖRG, Chemist, of I. Opernring 1, Vienna aforesaid. Electrical resistances of artificial-stone composition.

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

Claims.—(1.) Adjustable electrical resistances in which the resistance consists of one or more rods, plates, tubes, or rings of material such as specified, mounted with adjustable contacts so as to vary the resistance, either (*a*) by varying the length of the current-path, or (*b*) by varying the cross-section of the conducting resistance, or (*c*) by varying the specific resistance of the conducting portion of such resistance, or (*d*) by a combination of two or more of the above modes of varying the resistance, substantially as described. (2.) Adjustable electrical resistances constructed as described, and shown in the drawings.

(Specification, 9s. 6d.; drawings, 16s.)

No. 11744.—24th August, 1898.—JOSEPH FRANZ BACHMANN, Engineer, of VII. Kaiserstrasse 81, ADOLF VOGT, Engineer, of I. Lothringerstrasse 5, CARL CAMILLE WEINER, Gentleman, of I. Elisabethstrasse 3, all of Vienna, Austria; ALBERT KÖNIG, Banker, of Buda-Pest, Hungary; Dr. JOSEF KIRCHNER, Chemist, of I. Elisabethstrasse 3, Vienna aforesaid; and Dr. ALEXANDER JÖRG, Chemist, of I. Opernring 1, Vienna, Austria. Electrical heating appliances formed of artificial stone.

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

Claims.—(1.) Apparatus for converting electricity into useful heat for the purpose of heating a metal body from within outwards, consisting of a resistance body *a* of rod or tubular form, which is introduced into the metal body *f*, such resistance body being made of a mixture of non-conducting and conducting materials formed into an artificial stone, and being insulated by means of an insulating coating, a glazing or air insulation, or by first heating the body to a high degree by an electric current, so as to burn out the conducting material from the surface of a porous heating body, and then soaking it in a liquid insulating material, substantially as described with reference to Figs. 2 to 5. (2.) Apparatus for heating, cooking, baking, and smelting purposes, made of artificial stone of the described nature, the heating surfaces of which are formed with grooves in which are imbedded contact wires *b*, and which are then glazed, and are galvanized on the outer side or on both sides, the outer side being provided with a metal covering, and, if required, enclosed in a casing protecting against loss of heat, substantially as described. (3.) The heating, cooking, baking, and smelting apparatus described.

(Specification, 8s. 9d.; drawings, 10s. 6d.)

No. 11746.—26th June, 1899.—HERBERT PARK, of Sydney, New South Wales, Civil Engineer. Improvements in gold-dredges.

Claims.—(1.) In gold-dredges, first separating the larger particles of the dredged material from the smaller, passing the smaller particles into a hopper or special receptacle to receive them, separating the bulk of the water from the smaller particles, and then elevating the smaller material in order to reunite it to the previously separated larger material, as set forth. (2.) In gold-dredges, first separating the larger particles of the dredged material from the smaller; then passing the smaller particles over suitable tables for the purpose of separating the auriferous materials mixed with them, while the residuum, or tailings, will fall into a hopper or special receptacle to receive them, separating the bulk of the water from the smaller particles, and then elevating such tailings in order to reunite them with the previously separated larger material, as specified. (3.) In gold-dredges, a suitable screen or screens and a suitable concentrating table or tables, in combination with a hopper to receive the tailings and an elevator to raise the tailings and reunite and stack them with the previously separated grosser particles, as set forth. (4.) The general arrangement, construction, and combination of parts in the improvements in gold-dredges, as described, and for the purposes set forth.

(Specification, 3s. 3d.; drawings, 8s. 6d.)

No. 11750.—23rd June, 1899.—ROBERT COCKERELL, of 31, Moray Place, Dunedin, New Zealand, Blacksmith. Improved sectional gold-saving tables.

Claim.—In gold-saving tables, the combination with the usual boxes of smaller side-boxes, such as *a*, having perforations for guiding the stuff on to the tables, with tables and wells such as B, C, laid level so as to discharge from both ends, substantially as described and explained, and as illustrated in the drawing.

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

No. 11761.—30th June, 1899.—THOMAS STEVENSON, of 31, Moray Place, Dunedin, New Zealand, Mechanical and Electrical Engineer. Improvements in centrifugal pumps.

Claim.—In any centrifugal pump, such as A, B, C, D, the combination of such pump with a removable portion or cover, such as C^1, large enough to allow of the inspection and removal of the working-parts, such as A, B, without disturbing the main connections of the pump, substantially as described, and as explained, and as illustrated in the drawing.

(Specification, 1s. 3d.; drawings, 5s. 6d.)

No. 11762.—3rd July, 1899.—ROBERT WILLIAM GREEN, of Baynton, Victoria, Farmer. Improved combined race and register for counting sheep.

Claims.—(1.) In a counting apparatus of the class indicated, the combination with a race or passage-way, such as A^a, of a pair of spring-gates, one of which is connected to counting-mechanism, and the other of which is adapted to yield to facilitate the passage of animals larger than ordinary, all substantially as and for the purposes set forth. (2.) The combination of a race or passage-way as A^a, gates as B^a, C^a, quadrants and springs as D^a, E^a, a horn as U^3, and a connection from said horn to counting-mechanism, substantially as and for the purposes set forth. (3.) The combination with a train of wheels connected with a suitable dial or dials, and actuated (when released by an escapement) by a spring, of the parts set forth in claim 2, whereby the passing of an animal through the race will be indicated upon the dial or dials, substantially as set forth. (4.) The combination with a train of wheels, connected with a suitable dial or dials, and actuated, when released by an escapement, by a spring, of bevel-wheels W and Y, and a spring-controlled shaft Y^1, with a suitable handle, whereby the dial pointer or pointers may be set in position, substantially as set forth. (5.) The general arrangement and combination as a whole of all the parts above described, which are illustrated in the drawings.

(Specification, 3s. 9d.; drawings, 5s. 6d.)

No. 11763.—3rd July, 1899.—LEOPOLD HESSE, of 123, City Road, South Melbourne, Victoria, Manufacturing Chemist. An improved method of and apparatus for utilising the waste products of coffee during roasting.

Claims.—(1.) The described method of utilising the waste products when roasting coffee, consisting in conducting the vapours from the roasting coffee into and through a vessel containing chicory, malt, or other suitable absorbent material, substantially as and for the purposes described and explained. (2.) The described method of utilising the waste products when roasting coffee, consisting in conducting the vapours from the roasting coffee into and through a vessel containing chicory, malt, or other suitable absorbent material, and subsequently passing the escaping vapours into a condenser, substantially as and for the purposes described and explained. (3.) In apparatus for utilising the waste products of coffee during roasting, a roaster, as *a*, in combination with an impregnator, as *r*, and either with or without a two-way cock or valve inserted in the pipe connecting them, substantially as and for the purposes described and explained. (4.) In apparatus for utilising the waste products of coffee during roasting, a roaster and impregnator combined with a condenser, the latter being connected with a safety-valve upon said impregnator, substantially as and for the purposes described and explained. (5.) In apparatus for utilising the waste products of coffee during roasting, a roaster, as *a*, and an impregnator, as *r*, together with a pump or fan for forcing the vapours generated in the former into or through the latter, in combination with a collector, as *n*, for intercepting the solid particles given off from the

berries during the roasting, substantially as and for the purposes described and explained.

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

F. WALDEGRAVE,
Registrar.

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.

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

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

Provisional Specifications.

Patent Office,
Wellington, 5th July, 1899.

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

No. 11610.—11th May, 1899.—SAMUEL FENTON ALLEN, of Chicago, Illinois, United States of America, Machinist. An improved machine for shearing animals.

No. 11665.—29th May, 1899.—EWEN MCGREGOR, of Orangepongo, Mangaonoho, New Zealand, Sawmiller and Farmer. An improved wire-rope tramway for conveyance of timber and other material, and skids for use therewith.

No. 11687.—2nd June, 1899.—DAVID MOORE, of Timaru, Canterbury, New Zealand, Implement Agent. An improved feed-run for sowing small seeds, such as turnip, rape, or the like.

No. 11688.—2nd June, 1899.—ANDREW BUCHANAN, of Terrace Street, Palmerston North, New Zealand, Merchants' Representative. Improved ventilated insoles for boots and shoes.

No. 11726.—14th June, 1899.—DAVID MCDONALD, of Epsom, near Auckland, New Zealand, Nurseryman. An improved rivet.

No. 11728.—16th June, 1899.—ARTHUR EBENEZER HIGHT, of Brookside, Ellesmere, Canterbury, New Zealand, Farmer. An appliance for cleaning watercourses.

No. 11730.—17th June, 1899.—DAVID RANKEN SHIRREFF GALBRAITH, of Ladies' Mile, Remuera, Auckland, New Zealand, Analytical Chemist. Improvements in filters more particularly applicable to water-supply from roofs before it enters tank or cistern.

No. 11731.—22nd June, 1899.—HARRY PHILLIPS DAVIS, of 327, Neville Street, Pittsburg, Pennsylvania, United States of America, Electrical Engineer; GILBERT WRIGHT, of 409, Ross Avenue, Wilkinsburg, Pennsylvania aforesaid, Electrical Engineer; and ALEXANDER JAY WURTS, of Fifth Avenue, Pittsburg aforesaid, Engineer. Improvements in controllers for electric motors.

No. 11742.—26th June, 1899.—WILLIAM DABB, of "Starcross," Oxford Road, Croydon, Victoria, Mechanical Engineer. An improved mop for household and other purposes, having a rotatable head.

No. 11745.—26th June, 1899.—JACOB BROWN and ARTHUR BROWN, both of 2, Downing Street, Manchester, Lancashire, England, Special-apparatus Manufacturers. Improvements in and relating to saucepans and other receptacles for heating and boiling milk and other liquids.

No. 11747.—26th June, 1899.—THOMAS BALLANTINE, of Grant Street, South Melbourne, Victoria, Engineer. Child's carriage or perambulator.

No. 11748.—23rd June, 1899.—ROBERT FELLOWES WEBSTER, of Pukekohe, Auckland, New Zealand, Saddler. An improved horse-cover.

No. 11751.—27th June, 1899.—GEORGE JOHN LEECH, of 183, Hereford Street, Christchurch, New Zealand, Flax-miller. Improved flax-dressing apparatus.

No. 11757.—28th June, 1899.—DAVID RANKEN SHIRREFF GALBRAITH, of Ladies' Mile, Remuera, Auckland, New Zealand, Analytical Chemist. Improvements in bread-making.

No. 11758.—28th June, 1899.—JOHN WILLIAM BUCKLEY, of 183, Hereford Street, Christchurch, New Zealand, Labourer. Improved means of and apparatus for attaching a second seat and luggage-carrier to an ordinary bicycle.

F. WALDEGRAVE,
Registrar.

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

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

Letters Patent sealed.

LIST of Letters Patent sealed from the 17th June, 1899, to the 5th July, 1899, inclusive:—

No. 10482.—S. S. Bastard, treating flax.

No. 10701.—J. Dallimore, name-and-weight-registering apparatus.

No. 10918.—J. K. Tullis, treating hides and skins.

No. 11095.—H. G. Bedell and J. Welsby, water-closet siphon.

No. 11096.—H. G. Bedell and J. Welsby, ball-cock for cistern.

No. 11231.—H. G. Bedell and J. Welsby, valve.

No. 11354.—B. G. Lamme, system of electrical distribution.

No. 11368.—G. C. Clark, concentrator.

No. 11397.—Türr's Acetylene Gas Syndicate, Limited, burner (R. Türr).

No. 11407.—A. Lavery, wire-strainer.

No. 11412.—J. L. Ferrell, impregnating wood, &c., with preservatives.

No. 11415.—The New Steam Stamp-mill Syndicate, stamp-mill (F. A. Parnell and C. S. Madan).

No. 11416.—J. C. W. Stanley and the Fish-oil and Guano Company, Limited, extracting oil.

No. 11417.—E. Norton, machine for hermetically sealing cans.

No. 11418.—G. Barthel, O. Henckels, and W de Haas, burner.

No. 11424.—The General Liquid Air and Refrigerating Company, air-refrigerating apparatus, (O. P. Ostergren and M. Burger).

No. 11425.—G. Wright, switch for electric circuit.

No. 11426.—G. Fischer, concentrator and amalgamator.

No. 11433.—W. E. Kimber, machine for sharpening rock-drill.

No. 11434.—P. E. Malmstrong and O. W. Ackerman, carbonating liquids.

No. 11438.—G. Siemsglüss and G. Daseking, milking-machine.

No. 11439.—G. Siemsglüss and G. Daseking, milking-apparatus.

No. 11452.—F. L. Bartlett, concentrator.

No. 11453.—H. S. Chipman, burner.

No. 11454.—F. Walton, machine for making mosaic floor-cloth.

No. 11455.—A. C. Thomas and J. E. Atkinson, billiard-chalk suspender.

No. 11458.—E. W. McKenna, machine for renewing old steel rails.

No. 11459.—E. W. McKenna, apparatus for charging rails into furnaces (D. H. Lentz).

No. 11460.—E. W. McKenna, machine for straightening rails (D. H. Lentz).

No. 11461.—The Simultaneous Colour Printing Syndicate, Limited, and H. de Montin, polychrome-printing machine.

No. 11474.—The Preiss Electric Storage Syndicate, Limited, secondary battery (A. Preiss).

No. 11479.—D. Parker, gold separator and amalgamator.

F. WALDEGRAVE,
Registrar.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

NO. 7705.—W. Angell, covering furniture. 26th June, 1899.

No. 7723.—The Saunders Rapid Ore-stamp Company Limited, stamper-battery (A. G. Saunders). 3rd July, 1899.

No. 7732.—D. Strang, blending cocca and coffee. 3rd July, 1899.

No. 7756.—A. T. Timewell, sack filling and sewing machine. 22nd June, 1899.

No. 7801.—H. W. Godfrey, C. F. Leake, and C. E. Lucas, machinery for manufacturing floor-cloth. 26th June, 1899.

THIRD-TERM FEES.

No. 5626.—H. Dixson, cigarette-machine. 20th June, 1899.

No. 5659.—J. Tyrrell, kerosene-pump. 3rd July, 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. 7867.—Frank Giles Howser, of 204, Dearborn Street, Chicago, Cook County, Illinois, United States of

America, centrifugal separation of ores (O. B. Peck). 29th June, 1899.

No. 7868.—Frank Giles Howser, of 204, Dearborn Street, Chicago, Cook County, Illinois, United States of America, centrifugal separator (O. B. Peck). 29th June, 1899.

No. 7869.—Frank Giles Howser, of 204, Dearborn Street, Chicago, Cook County, Illinois, United States of America, centrifugal separator (O. B. Peck). 29th June, 1899.

F. WALDEGRAVE,
Registrar.

Clerical Errors corrected.

THE request to correct clerical errors in Specification No. 11392—D. McGill and F. W. Tannett-Walker, refrigerating-machine—advertised in the Supplement to *New Zealand Gazette*, No. 41, of the 11th May, 1899, has been allowed.

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent lapsed.

LIST of applications for Letters Patent (with which complete specifications have been lodged) lapsed from the 22nd June, 1899, to the 5th July, 1899, inclusive:—

No. 10251.—G. Bowron and W. C. Greig, washing-board.
No. 10259.—D. C. Simson, asthma-cure.
No. 10269.—F. J. Leonard and G. B. Hutton, soap-holder.

F. WALDEGRAVE,
Registrar.

Letters Patent void.

LIST of Letters Patent void through non-payment of fees from the 22nd June, 1899, to the 5th July, 1899, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 7508.—W. Anderson, J. M. Toomey, and W. F. Schey, testing whether wool is wet or dry.
No. 7509.—C. J. Wollaston, electric battery.
No. 7510.—C. Dargie and S. Cooke, sash-fastener.
No. 7511.—F. Lassetter and Co., Limited, machine for distributing pasty material in fields (J. A. Gunn).
No. 7512.—S. W. Vale, E. W. Griffiths, and H. E. Moore, concentrator.
No. 7515.—F. H. Davis and H. H. Knapp, candle- or lamp-holder (T. W. Hickson).
No. 7518.—E. R. Groves, hydraulic-injector funnel.
No. 7519.—G. Lewis, boot.
No. 7523.—G. J. Altham, fuel.
No. 7525.—D. H. and E. J. Burrell, cheese-press (C. J. Lundstrom).
No. 7527.—A. H. Hansen, vinegar.
No. 7530.—W. V. Treseder, axle-box.
No. 7533.—F. Phelps and P. Daw, window.
No. 7534.—R. A. Hervey, nut-lock.
No. 7541.—A. N. Whitney, clay pigeon.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

Nil.

F. WALDEGRAVE,
Registrar.

Design registered.

A DESIGN has been registered in the following name on the date mentioned:—

No. 108.—George Schütze, of 17–19, Royal Arcade, Melbourne, Victoria; Class 10; 26th June, 1899.

F. WALDEGRAVE,
Registrar.

Application for Registration of Trade Marks.

Patent Office,
Wellington, 5th July, 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: 2640.
Date: 21st April, 1899.

TRADE MARK.

"BRUHN'S OINTMENT."

E. Bruhns

The essential particular of this trade mark is the signature "E. Bruhns"; and any right to the exclusive use of the word "Ointment" is disclaimed.

NAME.

ELIZA BRUHNS, of Hanover Farm, Hyde, Otago, New Zealand.

No. of class: 3.
Description of goods: Medicines, to wit, ointment

No. of application: 2655.
Date: 12th May, 1899.

TRADE MARK.

The essential particulars of the trade mark are the following—the combination of devices and the words "Bank Note"; and the applicants disclaim any right to the exclusive use of the added matter except in so far as it consists of their own name.

NAME.

SALMON AND GLUCKSTEIN, LIMITED, of 41, Clerkenwell Road, London, England, Tobacco-manufacturers.

No. of class: 45.
Description of goods: Tobacco, whether manufactured or unmanufactured.

No. of application: 2656.
Date: 12th May, 1899.

TRADE MARK.

The essential particulars of the trade mark are the following — the combination of devices and the words "Dandy Fifth"; and the applicants disclaim any right to the exclusive use of the added matter except in so far as it consists of their own name and address.

NAME.

SALMON AND GLUCKSTEIN, LIMITED, of 41, Clerkenwell Road, London, England, Tobacco-manufacturers.

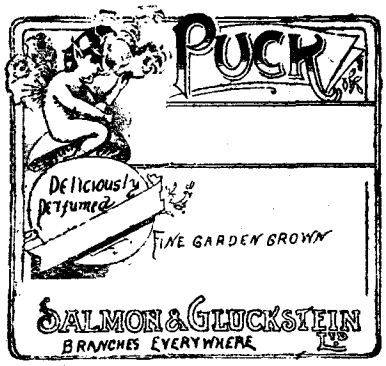
No. of class: 45.

Description of goods: Tobacco, whether manufactured or unmanufactured.

No. of application: 2657.

Date: 12th May, 1899.

TRADE MARK.



The essential particulars of the trade mark are the following — the combination of devices and the word "Puck"; and the applicants disclaim any right to the exclusive use of the added matter except in so far as it consists of their own name.

NAME.

SALMON AND GLUCKSTEIN, LIMITED, of 41, Clerkenwell Road, London, England, Tobacco-manufacturers.

No. of class: 45.

Description of goods: Tobacco, whether manufactured or unmanufactured.

No. of application: 2672.

Date: 25th May, 1899.

TRADE MARK.

NAME.

OSMONDS, LIMITED, The Tower, Bagot Street, Birmingham, Warwickshire, England, Manufacturers.

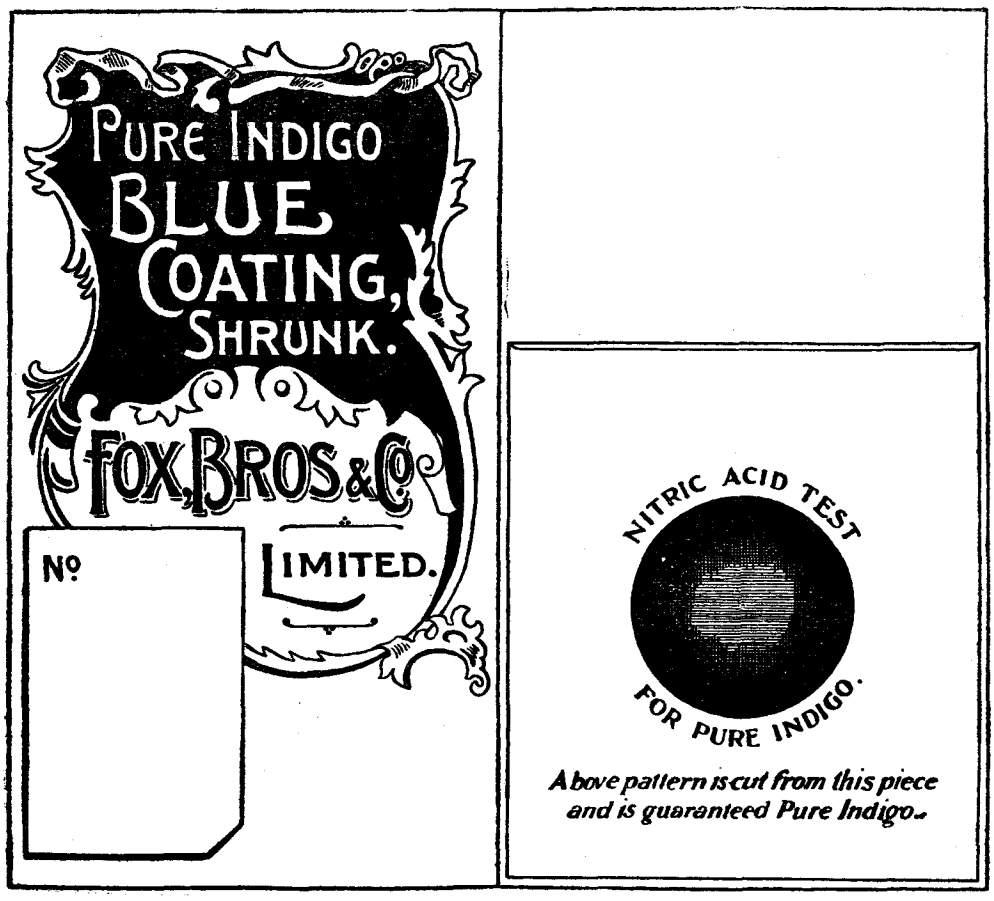
No. of class: 22.

Description of goods: Cycles.

No. of application: 2677.

Date: 6th June, 1899.

TRADE MARK.



The essential particulars of this trade mark are the combination of devices, including the representation of a pocket having a hole in the front thereof, showing therethrough a portion of pure indigo-blue coating inserted in the pocket, with a yellow patch and tempered-green edge; and the applicants disclaim any right to the exclusive use of the added matter, save and except their own name.

NAME.

FOX BROTHERS AND CO., LIMITED, of Wellington, Somerset, England, Manufacturers.

No. of class: 34.

Description of goods: Cloth and stuffs of wool, worsted, or hair.

No. of application: 2678.
Date: 7th June, 1899.

TRADE MARK.

The word

DAYLIGHT.

NAME.

WILLIAM HILL DOWNER, of Riccarton, Christchurch, New Zealand, Candle-, Soap-, and Tallow-manufacturer.

No. of class: 47.
Description of goods: Common soap.

No. of application: 2689.
Date: 16th June, 1899.

TRADE MARK.

"BIG TREE" BRAND

The essential particulars of this trade mark are the device and the words "Big Tree"; and any right to the exclusive use of the word "Brand" is disclaimed.

NAME

GRIERSON, OLDHAM, AND CO., LIMITED, of "Big Tree" Wine Store, Waterloo Bridge, London, England, Wine Merchants and Shippers.

No. of class: 43.
Description of goods: Fermented liquors and spirits.

No. of application: 2690.
Date: 22nd June, 1899.

TRADE MARK.

The word

DAYLIGHT.

NAME.

WILLIAM HILL DOWNER, of Riccarton, Christchurch, New Zealand, Candle-, Soap-, and Tallow-manufacturer.

No. of class: 48.
Description of goods: Perfumed or toilet soap.

No. of application: 2691.
Date: 26th June, 1899.

TRADE MARK.

MITRE BRAND.

The essential particulars of this trade mark are the representation of a mitre, and the word "Mitre"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

BISHOP AND ROBSON (late Bishop and Gardner), of 184, Armagh Street, Christchurch, New Zealand, Wine and Spirit Merchants, &c.

No. of class: 43.
Description of goods: Fermented liquors and spirits, such as beer, cider, wine, whiskey, liqueurs.

No. of application: 2692.
Date: 26th June, 1899.

TRADE MARK.

The word

SIRDAR.

NAME.

ARTHUR BAUME (trading as "Baume and Co."), of 21, Hatton Garden, London, England, Watch Manufacturer and Importer.

No. of class: 10.
Description of goods: Watches.

No. of application: 2693.
Date: 27th June, 1899.

TRADE MARK.

The word

OPALITE.

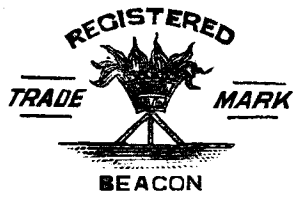
NAME.

HENRY BROOKS AND CO., of 70, Bishopsgate Street, London, England, and also of 65, Elizabeth Street, Melbourne, Victoria, Glass, Oil, and Colour Merchants.

No. of class: 16.
Description of goods: Glazed bricks, tiles, and similar articles.

No. of application: 2695.
Date: 3rd July, 1899.

TRADE MARK.



The essential particulars of this trade mark are the device as depicted, and the word "Beacon"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

EDWARD REECE AND SONS, of Colombo Street, Christchurch, New Zealand. Ironmongers.

No. of class: 10.

Description of goods: Horological instruments.

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 22nd June, 1899, to the 5th July, 1899, inclusive:—

No. 2069; 2624.—Grimble and Co., Limited; Class 42. (*Gazette* No. 33, of the 13th April, 1899.)

No. 2070; 2627.—Tweedie and McLean; Class 42. (*Gazette* No. 28, of the 30th March, 1899.)

No. 2071; 2632.—J. Bartram and Son; Class 42. (*Gazette* No. 33, of the 13th April, 1899.)

No. 2072; 2587.—H. J. Hall; Class 3. (*Gazette* No. 6, of the 19th January, 1899.)

F. WALDEGRAVE,
Registrar.

Subsequent Proprietor of Trade Mark registered.

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

NO. 89/323.—The American Tobacco Company, a corporation organized and existing under and by virtue of the laws of the State of New Jersey, United States of America, having its principal place of business outside of said State at Nos. 507 to 529, West Twenty-second Street, New York, State of New York, United States of America, trading as Tobacco-manufacturers at Factories in New York and in other States of the said United States of America. [W. Duke, Sons, and Co.] 24th June, 1899.

F. WALDEGRAVE,
Registrar.

By Authority: JOHN MACKAY, Government Printer, Wellington.