

## SUPPLEMENT

TO THE

## NEW ZEALAND GAZETTE

OF

THURSDAY, JUNE 7, 1900.

Published by Authority.

WELLINGTON, THURSDAY, JUNE 7, 1900.

*Notice of Acceptance of Complete Specifications.*Patent Office,  
Wellington, 6th June, 1900.

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. 11728.—16th June, 1899.—ARTHUR EBENEZER HIGHT, of Brookside, Canterbury, New Zealand, Farmer. An appliance for cleaning watercourses.\*

*Description.*—The appliance is for cleaning watercourses by horse, steam, or other power. The drag to consist of a centre bar, a number of tines, two V-shaped bows, and a chain to draw by. The centre bar to be straight, with a number of square holes in it for the tines to be fixed in. The tines to be made of iron or steel, on one end of which a nut is screwed or riveted to secure it to the centre bar; the portion which passes through the centre bar to be squared and slightly dovetailed to hold the tine securely in its place; the tine to project for a distance from the centre bar and then curved to an angle downwards to form the drag, as shown in drawings. The V-shaped bows are to draw from; to have a hole in each end to pass on to the tines so that it can be securely fixed to the centre bar by the tine-nuts or rivet. The chain to be attached to the V-shaped bows at the junction by a shackle to draw by.

*Claim.*—The drag for cleaning watercourses, substantially as described, and as illustrated by drawings.  
(Specification, 1s. 3d.; drawings, 3s.)

No. 11855.—3rd August, 1899.—WILLIAM BURRELL, of 193, Abbotsford Street, North Melbourne, Victoria, Stonemason, and JAMES WILLIAM STORY, of 201, William Street, Melbourne aforesaid, Merchant. An improved rabbit-export crate, and mode of packing same.\*

*Claims.*—(1.) An improved rabbit-export crate, having longitudinal or transverse bars B, B (or the like), supporting hooks C engaging in the slits in the bellies, air-spacing battens D, and pieces E cut away at their outer edges as at e, and bars F, all arranged substantially as and for the purposes specified, and as illustrated in the drawings. (2.) The

A

mode or method of packing rabbits for refrigeration and export consisting in arranging them in two parallel rows, those in each row being placed alternately one back outwards and one belly outwards, and maintaining an air-passage on both sides of each row, substantially as and for the purposes specified. (3.) In packing rabbits for refrigeration and export, the method of suspending same in rows by hooks engaging in the slits of the bellies, substantially as specified.

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

No. 11870.—5th August, 1899.—PIERCE LANIGAN, of Rose Road, Surrey Hills, Auckland, New Zealand, Contractor. An improved gold-dredging diving-gear.\*

*Description.*—I provide an air-chamber of suitable material and dimensions, which I lower into the river-bed or other desired locality, such air-chamber being capable of accommodating within it one or more workmen, with the necessary tools and other appliances which may be required, and also capable of being charged with atmospheric air from the surface and of discharging its foul air when submerged. This air-chamber may have strong glass windows for the admission of light, or it may be lighted by means of suitable electric lamps or by other means.

*Claim.*—A vessel or apparatus (containing an air-chamber) constructed substantially as and for the purposes described.

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

No. 11955.—4th September, 1899.—WILLIAM HENRY HEARD, of 357, Richmond Street, London, Ontario, Canada, Plumber. Improvements in spray-pumps.\*

*Claims.*—(1.) In a pump, a base casting having two passages formed therein, in combination with a plunger-tube and suction-tube connecting with one passage, an air-chamber and a discharge-pipe connecting with the other passage, a valve between the two passages, a valve between the first-mentioned passage and the opening of the suction-pipe, and a pipe communicating with the said passage, substantially as and for the purpose specified. (2.) In a pump, a base casting having two passages formed therein, in combination with a plunger-tube and suction-tube connecting with one passage, an air-chamber and a discharge-pipe connecting with the other passage, a valve between the two passages, a valve between the first-mentioned passage and

the opening of the suction-pipe, a pipe communicating with the said passage, and a regulating-valve in the said pipe, substantially as and for the purpose specified. (3.) A pump provided with a suction-tube, and a valve closing the said tube thereof, in combination with a tube opening into the pump above the said valve, and a regulating-valve in the said tube, substantially as and for the purpose specified. (4.) In a pump, a base casting, two lugs formed thereon, a suction-tube, and an air-chamber connected thereto, in combination with a pump-handle pivoted upon the air-chamber, an agitator sleeved upon the said suction-pipe, and a rod connected to the said agitator pivoted to the said handle and passing between the aforesaid lugs, substantially as and for the purpose specified. (5.) In a pump, a valve-cage made removable and having a seat in its lower portion, in combination with a plug closing an opening in the top of the cage, and provided with a seat similar to the aforesaid seat, and a ball between the said seats free to move in all directions, substantially as and for the purpose specified. (6.) In a pump, a base casting having two passages formed therein, in combination with a plunger-tube and suction-tube connecting with one passage, an air-chamber and a discharge-pipe connecting with the other passage, a valve between the two passages, and a valve between the first-mentioned passage and the opening of the suction-pipe, each valve comprising a cage screwed into a suitable opening, and having an opening in its lower portion closed by a valve, and a screw-plug closing an opening in the top of the cage, substantially as and for the purpose specified. (7.) In a pump, the suction-tube D, in combination with the strainer N, provided with the ribs *i*, wire gauze *h*, and lugs *j*, and bent wire *k*, substantially as and for the purpose specified. (8.) In a pump, the suction-tube D, in combination with the strainer N, provided with the wire gauze *h*, lugs *j*, and bent wire *k*, substantially as and for the purpose specified. (9.) In a pump, an agitator sleeved upon the suction-tube and partly split, in combination with an agitator-rod, having its ends inserted between the parts, and a clamping-bolt adapted to clamp the parts together, substantially as and for the purpose specified. (10.) In a pump, and in combination with the discharge-pipe thereof, a valve normally held closed by spring-pressure, in combination with a cam pivoted to the end of the spindle *a*, and bearing against the end of the valve-mounting, and two lever-handles connected to the said cam, substantially as and for the purpose specified. (11.) In a pump, a drip-cap having a sleeve thereon, in combination with a metal tube secured within the sleeve, and a bamboo tube surrounding the metal tube, and having its end inserted in a recess in the drip-cap, substantially as and for the purpose specified. (12.) In a pump, a metal tube and a nozzle, in combination with a drip-cap flared downward and outward, secured in position at or about the junction of the two, substantially as and for the purpose specified. (13.) In a pump, a nozzle, and a tube to which the said nozzle is secured, in combination with a drip-cap having a sleeve thereon, within which the said sleeve is secured, substantially as and for the purpose specified. (14.) In a pump, a plunger comprising two parts longitudinally movable upon one another, and so shaped as to form between them an external recess, in combination with spring mechanism tending to draw the parts of the plunger together, substantially as and for the purpose specified. (15.) In a pump, a plunger comprising two parts longitudinally movable upon one another, and so shaped as to form between them an external recess with bevelled sides, in combination with spring mechanism tending to draw the parts of the plunger together, substantially as and for the purpose specified. (16.) In a pump, a plunger comprising two parts, made longitudinally movable upon one another, and so shaped as to form between them an external recess with bevelled sides, in combination with a spindle rigidly connected to one part of the plunger and extending through a shouldered hole formed in the other part, a nut upon the end of the spindle, and a spring upon the spindle between the nut and the shoulder within the said hole, substantially as and for the purpose specified. (17.) In a pump, the combination of the following elements: comprising a plunger, the part *e'* having the sleeve *g'* formed thereon, and provided with shoulders *i'* and *j'*, the part *d'* recessed to receive the sleeve *g'*, the nut shaped to engage the shoulder, and the spring engaging the nut and the shoulder, each part of the plunger being so shaped as to form between them an external recess for packing, substantially as and for the purpose specified. (18.) A pump provided with a suction-tube, and a valve closing the said tube thereof, in combination with a tube opening into the pump above the said valve, and a regulating-valve in the said tube, comprising a valve-seat, a ball fitting said seat, a cage containing the said ball, a spring-actuated plug movable within the said cage and adapted to restrain the lift of the ball, and means for vertically adjusting the said plug, substantially as and for the purpose specified. (19.) A pump provided with a suction-tube, and a valve closing the said tube thereof, in

combination with a tube opening into the pump above the said valve, and a regulating-valve in the said tube, comprising a valve-seat, a valve fitting said seat, a cage containing the said valve, a spring-actuated plug movable within the said cage and adapted to restrain the lift of the valve, and means for vertically adjusting the said plug, substantially as and for the purpose specified. (20.) In a pump, the combination of a small pipe entering the pump above the lower valve thereof and a valve located in the said pipe, comprising a valve-seat, a valve fitting said seat, a cage containing the said valve, a plug movable within the said cage and adapted to restrain the lift of the valve, and means for vertically adjusting the said plug, substantially as and for the purpose specified. (21.) The combination, with a pump having a valve adapted to close the inlet-pipe and a valve closing the outlet through which liquid is forced to the discharge, of a pipe communicating with the interior of the pump between the said valves, and a regulating-valve adapted to control the admission of liquid through the said pipe, substantially as and for the purpose specified. (22.) In a pump, a spray-nozzle, comprising a casing internally threaded and provided with a water-inlet in one side thereof and a water-outlet in one end, in combination with a spindle passing through a suitable packing in the other end of the casing, and provided with a square portion and a needle on its end, a nut threaded to screw loosely within the casing and having a recess formed therein to fit the squared part on the plunger, and a coil spring bearing against the head of the spindle and the casing, substantially as and for the purpose specified. (23.) In a pump, a spray-nozzle, comprising a casing internally threaded and provided with a water-inlet in one side thereof and a water-outlet in one end, in combination with a spindle provided with a square portion and a needle on its end, a nut threaded to screw loosely within the casing and having a recess formed therein to fit the squared part on the plunger, a washer on the spindle with a bevelled recess, a coil spring between the washer and the nut, and a coil spring bearing against the head of the spindle and the casing, substantially as and for the purpose specified. (Specification, 12s.; drawings, 16s.)

No. 11973.—11th September, 1899.—MATTHEW BELK, of Palmerston North, New Zealand, Engineer. An improved brand for meat.\*

[NOTE.—The title in this case has been altered. (See list Provisional Specifications, Gazette No. 50, of 26th September, 1899.)]

*Claims.*—(1.) In a brand, the employment of a dome or cup, domes or cups, cylinder, valve, and a block or blocks, for the production of raised impressions by means of suction of air, substantially as illustrated and described and for the purposes set forth. (2.) In a brand, the arrangement of a dome or cup, domes or cups, cylinder, valve, and a block or blocks, for the production of raised impressions by means of suction of air, substantially as illustrated and described and for the purposes set forth. (3.) A brand for the production of raised impressions by means of the suction of air, substantially as illustrated and described and for the purposes set forth. (Specification, 5s. 9d.; drawings, 5s. 6d.)

No. 12159.—10th November, 1899.—FRANK EUGENE MUNN, of 326, Fifth Avenue, New York, United States of America, Manufacturer. Improvements in machines for wiring blanks.

*Description.*—My invention relates particularly to the attachment of wire openers to blanks from which are to be made, or which are to be attached to, envelopes, wrappers, boxes, or other articles of paper, cardboard, wood, cloth, or other readily severable material, by the use of which such material may be readily cut on a desired opening-line, and the package formed thereby opened; and my invention includes the devising and adaptation of mechanism whereby such wire may be mechanically attached to the blank with which it is to be used, in such a manner as to enable the wire to be used in cutting the blank for opening the package by pulling on the wire. While wire openers such as I have above referred to have been heretofore suggested, no mechanism, so far as I am aware, has been devised for mechanically attaching them to blanks. I use the term "mechanically attaching" in this specification and the claims to distinguish from attaching a wire opener to a blank by glue or other similar material, as in the case of the string openers applied by such means, for which work machines have been patented, and by which machines it has been suggested that wires might be similarly secured. My invention also includes the organization of a machine wherein the several operations which require to be performed in connection with the attachment of the wire opener to the paper may be automatically carried out. Thus it is generally necessary to apply gum or other adhesive material to the paper blank for

making the package, and it is desirable, in order to produce a completed product in one operation, that the gumming-mechanism should be a part of the same machine as the wiring-mechanism. It is also frequently desirable to fold the paper after the wire is applied thereto, in order to form it into a receptacle. My present invention therefore includes the devising of an organized machine having in combination mechanism for performing all of these three functions, or the wiring in combination with either a gumming or a folding mechanism, and also mechanism for transferring the blank from each of said mechanisms to the next. It will, however, be understood that I do not limit myself to the use of a gumming or a folding mechanism in connection with the wiring-mechanism, or to the use of either of these mechanisms in connection therewith. If it is desired, the wiring-mechanism may be used by itself or in combination with a gumming-mechanism, or in combination with a folding-mechanism, or, as I have shown it, in combination with both. As I am the first, so far as I am aware, to combine mechanism for mechanically attaching a wire opener with either a gumming or a folding mechanism, or with both of them, I intend to claim these combinations broadly, and without reference to the special construction of any of the mechanisms. While it is not essential to my invention, broadly considered, that any special type of machine for mechanically attaching the wire opener to the blank, or a machine for making such attachment in any special manner, should be employed, still it is a part of my invention, considered within narrower limits, to provide a machine which shall be capable of attaching the wire by causing it to penetrate the material twice, and bending it down thereafter, so that there shall be three parallel strands of wire at the point of attachment to the paper. To this end my invention includes means for feeding the wire, cutting therefrom a proper length, bending down the ends or an end thereof, and causing the same to penetrate the paper, used in connection with mechanism for causing the bent portion of the wire to again penetrate the paper, and for thereafter bending over the end thereof and clinching the same. While it is generally desirable to attach both ends of the wire to the envelope in order that it may not be necessary for the person using the opener to make a selection between the ends, nevertheless I do not wish to limit myself to mechanism for attaching both ends, and I intend to include the adaptation of my invention to the attachment of the opener to the blank at one of its ends. Further, some other portion or portions of the wire opener besides the end or ends thereof may be utilised for the attachment of the opener to the blank without departing from my invention. My invention also includes certain details of construction which will be fully determined in the specification and pointed out in the claims. My invention may be used for attaching a wire opener to any sort of a blank, to be used for any purpose. This blank is usually and preferably of paper, but may be of any other suitable material, as cardboard, thin wood, or cloth. The blanks so wired may be applied to any of a large variety of uses, among which I may specify envelopes, newspaper-wrappers, labels or sealing-strips for boxes, &c.

(Specification, £2 5s. ; drawings, £10 10s.)

[NOTE.—The number and length of the claims in this case preclude them from being printed, and the foregoing general description is inserted instead.]

No. 12493.—30th March, 1900.—GEORGE THOMAS SMITH and WILLIAM GARDNER, of Bristol Road, Gloucester, England, Milling Engineers. An improved scalper, grader, and dresser, preferably combined with a purifier.

*Claims.*—(1.) The improved combined scalper, grader, and dresser constructed and operating substantially as specified, and as shown in the drawings. (2.) The improved combined scalper, grader, dresser, and purifier, constructed and operating substantially as specified, and as shown in the drawings. (3.) The improved combined scalper, grader, dresser, purifier, and dust-collector, with a return-air device, constructed and operating substantially as specified, and as shown in the drawings. (4.) The improved carrier for flour or other products consisting in an endless travelling chain of overlapping slats working over chain wheels or pulleys, substantially as described, and as shown in the drawings.

(Specification, 7s. 3d. ; drawings, £1 1s.)

No. 12624.—18th May, 1900.—WILLIAM PARKER, of Victoria Buildings, 80, Swanston Street, Melbourne, Victoria, Civil and Hydraulic Engineer (nominee of Donald Cameron, of 1, Sylvan Road, Pennsylvania, Exeter, Civil Engineer ; Frederick James Commin, of 7, Bedford Circus, Exeter, Fellow of the Institute of Surveyors ; and Arthur John Martin, of Bradninch House, Exeter, Civil Engineer, all in England). Improvements in apparatus for the treatment of sewage or other liquids.

*Claims.*—In apparatus for the treatment of sewage or other liquids: (1.) The combination with two or more receptacles of a pair of valves for controlling the supply and discharge to each receptacle, each pair of valves being actuated by an independent pair of buckets, the bucket whose descent controls the supply receiving the overflow from another receptacle, and the other bucket which controls the discharge being filled by the overflow from the same receptacle which it discharges, substantially as specified. (2.) The combination with a receptacle which is alternately filled and discharged, of a bucket or buckets receiving liquid for the purpose of effecting such discharge, and an aperture for regulating the flow into such bucket, so that the filling of the same may occupy a certain desired time, substantially as specified. (3.) The combination with a receptacle which is alternately filled and discharged, of a bucket or buckets receiving liquid for the purpose of effecting such discharge, an aperture for regulating the flow into such bucket or buckets, so that the filling of the same may occupy a certain desired time, and means for varying such aperture either by means of a cock or a detachable nozzle, substantially as specified. (4.) A regulating cock or nozzle on the pipe supplying the bucket which controls the discharge of a receptacle, so as to enable the period between the filling and the discharge of the latter to be varied, substantially as specified. (5.) The combination with a number of receptacles, each having separate apparatus for effecting the supply thereto and the discharge therefrom, of a series of overflow-pipes, each fed from one receptacle and conveying liquid for operating the apparatus, whereby the supply to another receptacle is effected, so that several such receptacles are filled and discharged in rotation, substantially as specified. (6.) Overflow-pipes proceeding from the whole of a set of receptacles to be filled and discharged, and connected in a continuous ring, such pipes having branches through each of which a passage to a bucket for regulating the filling of a receptacle is opened or closed by a three-way cock, which may be turned to divert the overflow from the bucket which it would otherwise supply, and thereby cutting out the receptacle, whose filling or discharge is controlled by such bucket from the set, substantially as specified. (7.) The combination with a number of receptacles, each having separate apparatus for effecting the supply thereto and the discharge therefrom, of a series of overflow-pipes for conveying liquid for operating such apparatus, valves or cocks whereby the overflow to one or more sets of apparatus may be prevented, thereby cutting the receptacles to which such apparatus belongs out of the working set, and valves or cocks whereby such overflow may be sent past the receptacle or receptacles so cut out, and to operate the apparatus of another receptacle or other receptacles, substantially as specified. (8.) The combination with the branches leading from a set of receptacles to be filled and discharged to the continuous ring of overflow-pipes, of a check-valve to prevent liquid passing back from the ring into the receptacle which has been cut out, substantially as specified. (9.) The combination with a number of receptacles each having separate apparatus for effecting the supply thereto and the discharge therefrom, of a series of overflow-pipes for conveying liquid for operating such apparatus, and valves or cocks for cutting out a receptacle or receptacles, a check-valve or check-valves on the overflow pipe or pipes of the receptacle or receptacles so cut out, whereby the passage of overflow liquid back into such receptacle or receptacles is prevented without interfering with the overflow therefrom, substantially as specified. (10.) The combination with a discharge-orifice of a receptacle to be filled and discharged, of a valve which is opened by the pressure of the liquid in such receptacle when same has risen to a given height, substantially as specified. (11.) The combination with a receptacle which it is desired to empty when it has filled to a certain height, of a valve or valves arranged to be opened by the pressure of the liquid in the receptacle, and weighted so as to resist such pressure until the liquid has risen to the desired height, substantially as specified. (12.) The combination with a receptacle which it is desired to empty when it has filled to a certain height, of a valve or valves arranged to be opened by the pressure of the liquid in the receptacle, and weighted so as to resist such pressure until the liquid has risen to the desired height, and a valve or valves or other suitable means for filling such receptacle, operated by the motion of such discharge-valves, substantially as specified. (13.) The combination of a valve and means for opening and closing the same, and a dashpot or equivalent device to render such opening or closing gradual, substantially as specified. (14.) The combination with a receptacle which it is desired to empty when it has filled to a certain height, of a valve or valves arranged to be opened by the pressure of the liquid in the receptacle, and weighted so as to resist such pressure until the liquid has risen to the desired height, and a dashpot or equivalent device to regulate the opening of such valve or valves, substantially as specified. (15.) The combination with a lever connected with the discharge-valve of a

receptacle which is opened by the pressure of the liquid in the latter, of a weight for adjusting the height to which the liquid will rise before such valve is opened, substantially as specified. (16.) The combination with a discharge-orifice of a receptacle of a piston-valve connected to a lever and working within a cylinder, and which valve is opened by the pressure of the liquid in the receptacle, the lever being fitted with a weight to regulate the opening of the valve, whereby the latter will remain in the cylinder until the weight will aid instead of opposing its opening movement, substantially as specified. (17.) The combination with two receptacles which it is desired alternately to fill to a certain height and empty, of one or more valves for each receptacle arranged to open outward by the pressure of the liquid in such receptacle, and a lever or levers whereby the valve or valves of one receptacle in opening are made to close that or those of the other, substantially as specified. (18.) The combination with a set of receptacles to be filled and discharged, of two supply-valves for each receptacle, both of which must be opened before the supply can take place, and each controlled by the overflow from a separate receptacle, substantially as specified. (19.) The combination with three or more receptacles which are successively filled and discharged, of an additional valve or valves on the supply-pipe to each receptacle, the opening and closing of such valve or valves being controlled by the filling of other receptacles, substantially as specified. (20.) The combination with a receptacle to be filled and discharged of an automatic cut-off valve carried by a lever connected with a float or floats which rise when a receptacle is filled to a given height so as to close the cut-off valve, substantially as specified. (21.) In combination with a receptacle or receptacles successively filled and discharged, means for cutting off the supply of liquid to such receptacle or receptacles when filled to a certain desired height, such means consisting preferably of a valve on the supply-passage, such valve being closed by the rising of a float when the receptacle is filled to the desired height, substantially as specified. (22.) The combination with a receptacle which is alternately filled and discharged of a valve for shutting the supply-passage thereto when it is filled to a certain desired height, and an overflow whereby the liquid so impounded may pass by the valve after having accumulated to a certain extent, substantially as specified. (23.) The combination with two receptacles which are alternately filled with liquid and discharged, of buckets for receiving liquid for effecting such filling and discharge, and a common overflow-pipe through which liquid may pass from each receptacle in turn into the opposite bucket, substantially as specified. (24.) The combination with a lever carrying the valves for regulating the supply and discharge of receptacles, of a bucket or buckets suspended from such lever and receiving the overflow from such receptacles so as to control the valves, substantially as specified. (25.) The combination with a bucket to receive liquid for effecting the supply of liquid to a receptacle or its discharge therefrom or both, of a siphon for emptying such bucket, which siphon is brought into action by the successive rise and fall of liquid in the space surrounding such bucket, substantially as specified. (26.) The combination with a bucket to receive liquid for effecting the supply of liquid to a receptacle or its discharge therefrom or both, of a siphon for emptying such bucket, which siphon is brought into action by the successive rise and fall of liquid in the space surrounding such bucket, and an opening in such siphon whereby air may escape so as to admit liquid for charging the same, and means for preventing the ingress of air through such opening, substantially as specified. (27.) The combination of a single bucket for controlling the supply and discharge to and from one receptacle of a set, such bucket being filled by the overflow from another receptacle of such set, substantially as specified. (28.) The combination of valves for effecting the supply of liquid to a receptacle and its discharge therefrom, a bucket or buckets for operating such valves, and pipes or passages for conveying liquid to fill such bucket or buckets and the space surrounding same respectively, substantially as specified. (29.) The combination of valves for effecting the supply of liquid to a receptacle and its discharge therefrom, a bucket or buckets for operating such valves, pipes or passages for conveying liquid to fill such bucket or buckets and the space surrounding the same respectively, a siphon for emptying such bucket and a siphon or valves for emptying the space surrounding such bucket, substantially as specified. (30.) The combination with a receptacle whose contents it is desired to discharge at two or more levels, of two or more valves for discharging such contents at the desired levels, which valves are successively opened by the action of the discharging apparatus, substantially as specified. (31.) The combination with a lever for controlling the supply and discharge of a receptacle, of a second lever connected to the former, and also to valves so as to effect the discharge at different levels, substantially as specified. (32.) The combination with a receptacle whose

contents it is desired to discharge at two or more levels, of two or more valves suspended from a lever or levers, and so adjusted as to weight that in the absence of pressure on them the lower valve will remain open while the upper valve or valves remain closed, but that with a certain pressure of water upon the lower valve an upper valve will open while the lower valve remains closed, substantially as specified. (33.) The combination with a lever for controlling the supply and discharge of a receptacle, of a second lever connected to the former, and also to valves so as to effect the discharge at different levels, the weights of the discharge-valves being so proportioned that when the discharge first begins the higher valve will be opened, and remain open until the level of the liquid falls to such an extent that the weight of the higher valve overcomes that of the lower one, and thus closes the former and opens the latter, substantially as specified. (34.) The combination with the discharge-wells of a pair of filters or other receptacles and a pair of actuating buckets suspended therein, of a siphon serving to convey a portion of liquid from either of the discharge-wells to the opposite actuating bucket, and by its continued action to empty the bucket in the discharge-well from which such liquid passes, substantially as and for the purpose specified. (35.) In combination with a receptacle which is alternately filled and emptied, and automatic means for opening and closing the supply-valve and the discharge-valve thereto, a lever or member to which such valves are loosely connected, communicating motion to such valves in turn, substantially as described. (36.) The combination with two receptacles having each a supply-valve and a discharge-valve which are operated automatically, of weights bearing upon the moving parts during successive stages of their motion, thereby rendering such motion intermittent instead of continuous. (37.) The combination of a receptacle or filter and a discharge-valve so formed as to regulate the rate of discharge in each position of the valve, substantially as described, and as shown in Fig. 3 of the drawings. (38.) The combination of a receptacle or filter and a discharge-valve so formed as to regulate the rate of discharge, together with means for imparting to such valve an intermittent motion and causing it to rise successively, giving a gradually increased opening, substantially as described, and as shown in Figs. 2 and 3 of the drawings. (39.) The combination with a receptacle in which sewage or other liquid accumulates, and from which it is to be delivered to filters or other receptacles, of means for effecting the discharge thereof and for permitting such a quantity of liquid to accumulate in same as will be sufficient to fill one of the filters or other receptacles before such discharge can take place, substantially as specified. (40.) The combination with a receptacle in which sewage or other liquid accumulates, and from which it is to be delivered to filters or other receptacles, of a siphon or siphons for effecting the discharge thereof, the flow through which is stopped, when desired, by the admission of air thereto, substantially as specified. (41.) The combination with a receptacle in which sewage or other liquid accumulates, and from which it is to be delivered to filters or other receptacles, of a siphon or siphons for effecting the discharge thereof, the outer ends of such siphon or siphons dipping into the liquid contained in a tipping-diverter, which delivers the liquid into channels by which it passes to the filters, the motion of said diverter being utilised to admit air to the siphon or siphons to stop the action of the latter when desired, substantially as specified. (42.) The combination with a receptacle in which sewage or other liquid accumulates, and from which it is to be delivered to filters or other receptacles, of a siphon or siphons for effecting the discharge thereof, and means operating on the filling of the filter being supplied to admit air to such siphon or siphons, substantially as specified. (43.) The combination with a receptacle in which sewage or other liquid accumulates and from which it is to be delivered to filters or other receptacles, of a bucket adapted to be tipped or otherwise operated on the level of the liquid in the storage-receptacle reaching the desired height, and thereby open the supply to the filter to be filled, the bucket being retained in its tipped position by a catch during the filling of such filter, and means being provided for releasing the bucket from the catch when this has taken place, substantially as specified. (44.) The combination of a lever operating a valve, an actuating-bucket connected therewith, and a chamber containing liquid into which the bucket descends, such chamber retaining liquid which will retard the descent of the bucket, so as to cause the valve controlled by the latter to be opened and closed gradually, substantially as specified. (45.) The combination with two or more filters or other receptacles through which liquid is successively passed, the discharge-valve of the first filter constituting the supply-valve of the next, of means by which the supply- and discharge-valves are caused to open and close in the proper order and at the proper time, substantially as specified. (46.) The combination with the arrangement specified in the preceding claim of a catch to hold the discharge-valve of each succeeding filter open until the preceding filter is filled and about to be dis-

charged, substantially as specified. (47.) The combination with two or more filters or other receptacles through which liquid is successively passed, of means for actuating the whole of the valves governing the supply of liquid thereto and its discharge therefrom by a single set of actuating-gear, a certain amount of slack motion being given to the connection of some of the valves, substantially as and for the purpose specified. (48.) The combination with a filter or other receptacle for use in the treatment of sewage or other liquids, of a discharge pipe or passage therefrom, and means for aerating the liquid from such filter or receptacle as it passes from or through such discharge pipe or passage, substantially as and for the purpose specified. (49.) The combination with the discharge pipe or passage from a filter or other receptacle, of an end-piece provided with holes or perforations through which the liquid will be forced to pass in the form of spray, substantially as and for the purpose specified. (50.) The combination with the discharge pipe or passage from a filter or other receptacle of air-inlet pipes or tubes opening from the outer air into such discharge pipe or passage, so that the liquid passing through the latter will draw air into and mix it with such liquid, substantially as and for the purpose specified.

(Specification, £2 10s.; drawings, £2 2s.)

No. 12625.—18th May, 1900.—WILLIAM PARKER, of Victoria Buildings, 80, Swanston Street, Melbourne, Victoria, Civil and Hydraulic Engineer (nominee of Donald Cameron, of Sylvan Road, Pennsylvania, Exeter, Civil Engineer; Frederick James Commin, of 7, Bedford Circus, Exeter, Fellow of the Institute of Surveyors; and Arthur John Martin, of Bradninch House, Exeter, Civil Engineer, all in England). The generation of gas for lighting, heating, and power purposes from sewage or other decaying organic matter, and improvements in tanks for the purification of sewage and other liquids.

*Claims.*—(1.) The utilisation of gas generated in covered tanks from sewage or other decaying organic matter, substantially as specified. (2.) The combination of a covered tank for receiving sewage or other decaying organic matter with a gas-holder or gas-holders for receiving and storing the gas generated from the sewage, substantially as specified. (3.) The combination of a covered tank for receiving sewage or other decaying organic matter and one or more gas-holders for receiving and storing the gas generated, with means for returning gas into the tank to admit of the fall of the level of the liquid in the latter, substantially as specified. (4.) The combination with a receptacle containing sewage or other decaying organic matter from which gas is generated, of two chambers, one in free communication with the receptacle and the second communicating with the first through a small aperture, and floats placed in such chambers and connected to valves so that the valves to which they are connected will be operated by the differences in level consequent on the rise and fall of the liquid in the receptacle, substantially as and for the purpose specified. (5.) The combination of a receptacle for receiving sewage or other decaying organic matter, and two gas-holders in communication therewith through pipes controlled by valves operated by the rise and fall of the level of the liquid in the receptacle, so that when one valve is opened gas will pass from the receptacle to one gas-holder, while when the other valve is opened gas will pass from the second gas-holder to the receptacle so as to admit of the fall of the liquid in the latter, substantially as specified. (6.) The combination of a receptacle for receiving sewage or other decaying organic matter and a gas-holder connected therewith, and valves operated by the rise and fall of the level of the liquid in the receptacle, whereby water or other liquid is allowed to flow into or out of a vessel mounted on the gas-holder, so as to vary the pressure of the latter on the contained gas, substantially as specified. (7.) The construction of a tank for the treatment of sewage or other liquids with one or more decks or floors intermediate between the top and bottom of the tank, substantially as and for the purpose specified. (8.) The construction of a covered tank for the treatment of sewage or other liquids with one or more floors intermediate between the top and bottom of the tank, substantially as and for the purpose specified. (9.) The construction of a tank for the treatment of sewage or other liquids with one or more floors intermediate between the top and bottom of the tank, forming two or more spaces through which the liquid shall pass in succession, substantially as and for the purpose specified. (10.) The construction of a tank for the treatment of sewage or other liquids with one or more floors intermediate between the top and bottom of the tank, and also with a depressed portion or sump to receive matter deposited from the liquid, substantially as and for the purpose specified. (11.) The combination with a covered tank, in which gas is generated from sewage or other decaying organic matter, of two or more outlets opening at different levels, the lower ones of which may be closed so as to force

the liquid to rise to a higher level, and so create a pressure in the tank by which the gas may be expelled from the latter, substantially as specified. (12.) The combination of a covered tank, in which gas is generated from sewage or other decaying organic matter, with a pipe leading from the upper part thereof for conveying away the gas generated, a submerged inlet, and two or more submerged outlets opening at different levels, so that when desired, by closing the lower outlet or outlets, the level of the liquid will be caused to rise, and so create a pressure in the tank to expel the gas, substantially as specified. (13.) The combination of a covered tank in which gas is generated from sewage or other decaying organic matter, and a chamber in communication therewith having an outlet for the liquid which is capable of adjustment by means of a float or floats so as to be at a constant level with respect to the liquid in the tank, substantially as specified. (14.) The combination of a covered tank in which gas is generated from sewage or other decaying organic matter, and a chamber in communication therewith having an outlet for the liquid in the form of a siphon, the outer end of which forms the outlet from the chamber, and the height of which in relation to the level of the liquid in the chamber is rendered practically constant by means of a float or floats in such chamber, or in another chamber in communication therewith, such float or floats being under a cover or covers which are in communication with the upper part of the tank, substantially as specified.

(Specification, 11s. 6d.; drawings, 13s.)

No. 12626.—18th May, 1900.—WILLIAM PARKER, of Victoria Buildings, 80, Swanston Street, Melbourne, Victoria, Civil and Hydraulic Engineer (nominee of Donald Cameron, of Sylvan Road, Pennsylvania, Exeter, Civil Engineer; Frederick James Commin, of 7, Bedford Circus, Exeter, Fellow of the Institute of Surveyors; and Arthur John Martin, of Bradninch House, Exeter, Civil Engineer, all in England). Self-acting valves for regulating the discharge of sewage into tidal waters.

*Claims.*—(1.) The improved self-acting valve consisting in a bucket with a small opening in or near the bottom for the admission and escape of liquid, such bucket being suspended from one end of a lever within a chamber in which such liquid rises and falls around the bucket, while the discharge-valve itself is suspended from the opposite end of the lever, all substantially as specified. (2.) A bucket or vessel suspended within a space within which liquid rises and falls, and having a contracted orifice through which liquid may enter or leave the bucket, for the purpose of causing the bucket to rise or fall after the rise or fall of the liquid outside it. (3.) The improved self-acting valve consisting in a bucket with a small opening in or near the bottom for the admission and escape of liquid, such bucket being suspended from one end of a lever within a chamber in which such liquid rises and falls round the bucket, while the discharge-valve itself is suspended from the opposite end of the lever, in combination with a catch for holding the lever in the position it occupies when the discharge-valve is open until such catch is released by the descent of a vessel to which a measured flow of liquid is gradually supplied as soon as such discharge-valve opens, all substantially as specified. (4.) The improved self-acting valve consisting in a bucket with a small opening in or near the bottom for the admission of liquid, such bucket being suspended from one end of a lever within a chamber in which such liquid rises and falls round the bucket, while the discharge-valve itself is suspended from the opposite end of the lever, in combination with a catch for holding the lever in the position it occupies when the discharge-valve is open until such catch is released by the descent of a vessel to which a measured flow of liquid is gradually supplied as soon as such discharge-valve opens, the bucket having a valve which is opened as soon as the catch moves to the position to hold the discharge-valve open, and the vessel having a valve which is opened as soon as the discharge-valve closes, all substantially as specified. (5.) The improved self-acting valve consisting in a stationary vessel having an opening at or near the bottom, and placed in a chamber in which a liquid rises and falls, and in a tube leading from the top of the vessel and passing under a bell, the lower edge of which dips into a liquid, such bell being suspended from a lever to the opposite end of which is suspended a valve, substantially as specified. (6.) A regulator consisting in an inverted bell having its lower edge immersed in liquid, and having a pipe terminating under it, substantially as specified. (7.) The improved self-acting valve consisting in a bucket suspended from one end of a lever to the other end of which a discharge-valve is suspended, in combination with a stationary vessel having an opening at or near the bottom, and placed in a chamber in which a liquid rises and falls,

and with a tube leading from the top of the vessel and passing under a bell the lower edge of which dips into a liquid, such bell being suspended from a lever to the opposite end of which is suspended a valve mounted in a chamber also containing liquid, and from which a pipe leads to the bucket controlling the discharge-valve, substantially as specified. (8.) The combination with a stationary vessel having an opening at or near the bottom, and placed in a chamber within which liquid rises and falls, of a pipe leading from the top of the vessel to the top of a second vessel containing liquid in its lower part, and a pipe leading from the lower part of such second vessel to a chamber containing a float, substantially as specified. (9.) The combination with a stationary vessel having an opening at or near the bottom, and placed in a chamber in which a liquid rises and falls, and a tube leading from the top of the vessel and passing under a bell the lower edge of which dips into a liquid, such bell being suspended from a lever to the opposite end of which is suspended a discharge-valve, of a vessel containing liquid, the pipe from the stationary vessel mounted in the chamber being connected to the top of such vessel containing liquid, and proceeding from the bottom of same to beneath the bell controlling the discharge-valve, substantially as specified. (10.) The combination with a stationary vessel having an opening at or near the bottom, and placed in a chamber in which liquid rises and falls, and a tube leading from the top of the vessel and passing under a bell the lower edge of which dips into a liquid, such bell being suspended from a lever to the opposite end of which is suspended a valve mounted in a chamber also containing liquid, and from which a pipe leads to the bucket controlling the discharge-valve, of a vessel containing liquid, the pipe from the stationary vessel mounted in the chamber being connected to the top of such vessel containing water, and proceeding from the bottom of same to beneath the bell controlling the valve which allows liquid to pass to the bucket controlling the discharge-valve, substantially as specified. (11.) The combination with a stationary vessel having an opening at or near the bottom, and placed in a chamber in which a liquid rises and falls, and a tube leading from the top of the vessel and passing under a bell the lower edge of which dips into a liquid, such bell being suspended from a lever to the opposite end of which is suspended a discharge-valve, of two vessels containing liquid, and which are connected together at or near the bottom, the pipe from the stationary vessel mounted in the chamber being connected to the top of the first vessel containing water, and proceeding from the top of the second vessel beneath the bell controlling the valve which allows liquid to pass to the bucket controlling the discharge-valve, substantially as specified.

(Specification, 11s.; drawings, 13s.)

No. 12627.—16th May, 1900.—DAVID THOMSON, of Middle Park, Winton, New Zealand, Farmer. Improved wire-tightener.

*Claim.*—A wire-tightener: the combination of a reel having a slot and a fixed and an adjustable flange to cause each coil of wire to be above the other, flanges having holes or teeth to carry a pawl, the reel turned by any suitable handle or key, all substantially as shown on the drawings, and as described and explained, and for the purposes set forth.

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

No. 12633.—22nd May, 1900.—GEORGE LEE ANDERS, of 33, Peak Hill Gardens, Sydenham, Surrey, England, Electrical Engineer. An improvement in the adaptation of the telephone to electric-bell pushes such as are used in ordinary bell and indicator systems for private houses, offices, hotels, and the like.

*Claims.*—(1.) A telephone receiver in which the coils, ringing-key, and terminals are all secured to the circular magnet which forms with its appurtenances a single device independent of the receiver-casing, either with or without a key for the talking-circuit also mounted upon the same magnet. (2.) A microphone transmitter in which the microphone is

mounted in an insulating-ring carrying a pair of clips having a spring contact which breaks the talking-circuit when the receiver is inserted between them. (3.) A telephone transmitter constructed substantially as described with reference to Figs. 8 and 9 of the drawings. (4.) A telephone receiver constructed and operating substantially as described with reference to Figs. 5 to 7 or to Figs. 11 to 13 of the drawings.

(Specification, 8s. 9d.; drawings, £1 16s.)

No. 12641.—22nd May, 1900.—HUGH LAING MAINLAND, of Burke's, New Zealand, Mechanical Engineer, and JOSEPH HARRISON, of Pukerau, New Zealand, Storekeeper. Improvements in suction dredging, especially for cleaning up crevices and the like.

*Claims.*—(1.) In the suction pipe of a suction dredge such as A, the combination of the lower part of the suction pipe such as A<sup>1</sup> with a swivel-ball joint such as A<sup>2</sup>, directed by suitable means such as A<sup>3</sup>, A<sup>5</sup>, and conveying and passing power for driving cutters such as D, D, and water under pressure to nozzles or a nozzle such as C<sup>1</sup>, all substantially as described and explained, and as illustrated in the drawing. (2.) In combination, a suction pipe A, swivelled to a short intake pipe A<sup>1</sup>, carrying revolving knives or cutters, or scrapers, adjustable to each other and to the intake, such as D, D, geared from the dredge by gearing E, E<sup>1</sup>, F, F<sup>1</sup>, F, and also carrying a water-pipe for sluicing crevices or the like, C, C<sup>1</sup>, all substantially as set forth, and for the purposes indicated. (3.) In combination, adjustable cutters D, D, spaced to act as a self-clearing revolving grating with any suction pipe for dredging, A. (4.) The combination of adjustable revolving grating and cutters D, D, with a pipe C and nozzle C<sup>1</sup> or nozzles to dislodge wash from crevices. (5.) In combination, a suction pipe A, with revolving grating composed of cutters D, D, and a nozzle C, C<sup>1</sup>, for the purposes set forth, and substantially as described and shown.

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

No. 12650.—29th May, 1900.—CHARLES JOSEPH COOZE, of Carterton, New Zealand, Carriage-trimmer, and PHILIP LUSCOMBE HOLLINGS, of Masterton, New Zealand, Solicitor. An improved non-refillable bottle.

*Claims.*—(1.) The combination in a non-refillable bottle having the upper part of its neck enlarged to form a shoulder, of a disc secured within the neck, a trap upon the disc, a tube extending above the mouth of the neck and to the bottom of the bottle, substantially as set forth. (2.) The combination in a non-refillable bottle having the upper part of its neck enlarged to form shoulders, of a disc secured within the neck, a trap having serrated rims upon the disc, a tube passing through the disc and extending to the bottom of the bottle, and a perforated disc secured in the neck above the first disc, substantially as set forth. (3.) In devices adapted to be inserted into a bottle-neck, the combination of a disc carrying a trap consisting of a piece of tubing bent into a U-shape and having an inlet beneath the disc and an outlet above the disc, and a tube passing through the disc and extending to the bottom of the bottle, and an attenuated part in the said tube to facilitate breaking at that part, substantially as set forth. (4.) In devices adapted to be inserted into a bottle-neck, the combination of a disc carrying a trap consisting of a piece of tubing bent into a U-shape and having an inlet beneath the disc and an outlet above the disc, and a tube passing through the disc and extending to the bottom of the bottle, and having an obliquely shaped end provided with a ball-valve, and an attenuated part, substantially as set forth. (5.) The improved non-refillable bottle consisting of parts constructed, arranged, combined, and operating substantially as and for the purposes set forth, and illustrated in the drawing.

(Specification, 4s. 3d.; drawings, 10s. 6d.)

No. 12651.—29th May, 1900.—JACOB MORRIS, of 71, Oxford Street, Sydney, New South Wales, Tinware-manufacturer. Improved domestic-refuse bin.

*Claim.*—An improved domestic-refuse bin consisting of a frame, a hinged flap within said frame, and a receptacle or bin removably or otherwise affixed to said flap, as and for the purposes set forth, substantially as described and explained, and as illustrated in the drawings.

(Specification, 2s. 9d.; drawings, 5s. 6d.)

No. 12652.—29th May, 1900.—GEORGE PEACOCK INNES, of 84, Bathurst Street, Sydney, New South Wales, Engineer. An improved device for holding bottles, and allowing liquids to be withdrawn therefrom.

*Claims.*—(1.) An improved device for holding bottles, and allowing liquids to be withdrawn therefrom, the essential features of which are a cap or seating with a passage there-

through, and a bail or staple or yoke adapted to revolve together but eccentrically to one another, for the purposes set forth, substantially as described and explained. (2.) In a device of the class set forth, the combination and arrangement with the cap or seating for the mouth of the bottle of a valve-passage through said cap or seating, having a valve thereon adapted to take internally of the bottle and to move or open the stopper therein, and devices on the stem of said valve externally of the bottle adapted to keep said valve tightly closed and to allow of said valve being opened, substantially as described and explained. (3.) In a device of the class set forth, the combination and arrangement with the cap or seating for the mouth of the bottle of a passage through said cap or seating and extending therefrom and having a valve thereon and adapted with the said valve to pass through the cork of the bottle and to take internally thereof, and devices on the stem of said valve externally of the bottle adapted to keep said valve tightly closed and to allow of said valve being opened, substantially as described and explained. (4.) In a device of the class set forth, the combination and arrangement with cap or seating such as 5, having a valve-passage such as 10, bearings such as 3, and elastic packing such as 6, of a bail such as 21, on pintles such as 4, and a connection such as 20, substantially as described and explained, and as illustrated in the drawings. (5.) In a device of the class set forth, the combination and arrangement with a valve-passage such as 10 of a valve such as 8, having a stem such as 9, a spring thereon such as 13, and a foot such as 12, and devices such as lever 17 and spring 18 for compressing said spring 13, and opening said valve, substantially as described and explained, and as illustrated in the drawing. (6.) In a device of the class set forth, the combination and arrangement with a valve such as 8, having a hollow stem, of the passage such as 28 therethrough and through said valve such as 8, and a nipple or union such as 29, substantially as described and explained, and as illustrated in the drawing.

(Specification, 8s. ; drawings, £1 1s.)

No. 12653.—29th May, 1900.—ARTHUR KITSON, of 32, South Broad Street, Philadelphia, Pennsylvania, United States of America, Mechanical Engineer. Vapour-burning lamps, and automatic valves for use therein.

*Claims.*—(1.) In a vapour-burning lamp, the combination of a condensing-chamber, and a system of vaporizing-chambers located within the heating-zone of the vapour-burners, and all draining into the condensing-chamber. (2.) In a vapour-burning lamp, the combination of a condensing-chamber, and a system of vaporizing-chambers located within the heating-zone of the vapour-burners, and all draining into the condensing-chamber, all said parts being within the lamp-casing. (3.) In a vapour-burning lamp, a filter for the fuel-supply located in the lamp-chimney. (4.) In a vapour-burning lamp, the combination of the vaporizing-tube extending across the lamp-chimney above the vapour-burner, and a preheating tube for the oil also extending across the chimney at a higher point therein. (5.) In a vapour-burning lamp, the combination of the vaporizing-tube extending across the lamp-chimney above the vapour-burner, and a preheating tube for the oil also extending across the chimney at a higher point therein, together with a heat-shield placed over the vaporizing-tube for the purpose of concentrating the greater portion of the heat of the burners on said vaporizing-tube. (6.) In a vapour-burning apparatus, the combination of the vaporizing-tube with a thermostatically operated valve therein, and the filter in the line of the fuel-supply connection to the lamp, in which filter all impurities are collected, and prevented from passing onward to the valve. (7.) In a vapour-burning apparatus, the combination of the vaporizing-tube having a valve located at its inlet end, a thermostatically operated apparatus for opening and closing said valve located in the tube and so constructed that the valve-plunger will be held down to its seat during the initial period of the preheating of the vaporizing-tube, but lifted from its seat when the tube has been raised to the temperature for vaporizing the oil admitted thereto. (8.) A thermostatic-valve-operating rod for vaporizing-tubes composed of two metals of different coefficients of expansion, the metal having the higher coefficient of expansion being in contact with the walls of the tube. (9.) A thermostatic-valve-operating rod for vaporizing-tubes composed of two metals of different coefficients of expansion, the metal having the higher coefficient of expansion being in contact with the walls of the tube, the two metal parts being adjustably connected, and constructed substantially as shown in Figs. III. to VII. (10.) The combination of the vaporizing-tube extending across the lamp-chimney above the vapour-burner, and the thermostatic valve located in the inlet end of the vaporizing-tube outside of the zone of greatest heat, substantially as shown in Figs. I. and X., whereby the valve will not be opened by the

initial heating of the middle portion of the vaporizing-tube, but will be opened by the heat conducted to it after said tube has become heated to a high temperature. (11.) The combination of the vaporizing-tube having a valve-seat at its inlet end, a valve-plunger, a spring holding said plunger against the seat as the vaporizing-tube expands under heat, and a stop for said spring, substantially as shown in Fig. VIII., whereby the valve will be opened only after the tube has been heated sufficiently to expand it a predetermined distance. (12.) The combination of the vaporizing-tube of iron, a valve in its inlet end, a rod of metal having a high coefficient of expansion which extends lengthwise of the tube and reaches nearly to the valve-plunger, as shown in Fig. IX., whereby said rod will lift said valve from its seat when the unequal expansion of the tube and the rod caused by a predetermined degree of heat has brought the end of the rod in contact with the valve-plunger. (13.) A horizontal vaporizing-tube for vapour-burners having a casting screwed to one end, said casting having a discharge-opening in its under-side, and a passage-way extending therefrom to the upper portion of the interior of the tube, as shown in Figs. III., IV., V., and X. (14.) A vaporizing-tube for vapour-burners having a casting provided with discharge passage-ways screwed to one end, a casting having inlet passage-ways and a valve-seat screwed to the other end, and a valve-rod mounted in the first casting, extending lengthwise of the tube and co-operating with the valve-seat in the other end, substantially as shown in Fig. X. (15.) The combination of the vapour-burner, the vaporizing-tube in the heating-zone of the burner, the heating-chamber also in the heating-zone of the burner, and the condensing-chamber located in the line of connections between the heating-chamber and the vaporizing-tube, said condensing-chamber being cylindrical in form, with its axis vertical, and having its inlet from the heating-chamber discharging in a tangential horizontal direction, while its outlet to the vaporizing-tube connects with its upper central portion.

(Specification, 14s. ; drawings, 13s.)

No. 12654.—29th May, 1900.—ARTHUR KITSON, of 32, South Broad Street, Philadelphia, Pennsylvania, United States of America, Mechanical Engineer. Vapour-burning lamps, and preheating device therefor.

*Claims.*—(1.) In a vapour-burning lamp, the combination of the vaporizing-tube, the vapour-burner, and a separate Bunsen gas-burner located in operative relation to the vaporizing-tube, and connected to a gas-supply pipe whereby a gas-flame may be employed to effect the preheating of the vaporizing-tube necessary to effect the initial vaporization of oil therein. (2.) The combination of a vapour-burning lamp having a straight vaporizing-tube, a Bunsen burner supported by the lamp-frame at one end of the vaporizing-tube, and arranged to project a flame parallel to and below the vaporizing-tube, and a connection for supplying gas to said Bunsen burner. (3.) The combination of a vapour-burning lamp having a vaporizing-tube, a Bunsen burner supported by the lamp-frame and arranged to project a flame parallel to and below the vaporizing-tube, and a connection for supplying gas to said Bunsen burner, said Bunsen burner being located outside of the lamp-chimney, and having its discharge end opposite an opening in said chimney beneath the vaporizing-tube. (4.) The combination of a vapour-burning lamp having a vaporizing-tube, a Bunsen burner supported by the lamp-frame and arranged to project a flame parallel to and below the vaporizing-tube, and a connection for supplying gas to said Bunsen burner, said Bunsen burner being located outside of the lamp-chimney and having its discharge end opposite an opening in said chimney beneath the vaporizing-tube, the outer portion of the Bunsen-burner tube being bent at an angle to the inner or discharge end thereof. (5.) The combination of a vapour-burning lamp having a vaporizing-tube, a Bunsen burner supported by the lamp-frame and arranged to project a flame parallel to and below the vaporizing-tube, and a connection for supplying gas to said Bunsen burner, said Bunsen burner being located outside of the lamp-chimney, and having its discharge end opposite an opening in said chimney beneath the vaporizing-tube, together with a pilot-burner arranged in operative relation to the Bunsen burner, and a separate connection for supplying gas to said pilot-burner. (6.) The combination of a vapour-burning lamp having a vaporizing-tube, a Bunsen burner supported by the lamp-frame and arranged to project a flame parallel to and below the vaporizing-tube, and a connection for supplying gas to said Bunsen burner, said Bunsen burner being located outside of the lamp-chimney, and having its discharge end opposite an opening in said chimney beneath the vaporizing-tube, together with a cylinder arranged to telescope up into said chimney, and provided with an opening which comes opposite the discharge end of the Bunsen burner only when the said cylinder is lowered. (7.) In a vapour-burning lamp, the combination

of the lamp-frame and chimney, the burners, the vaporizing-tube extending across the chimney above the burner, the inner cylinder telescoping into said chimney, and means for raising and lowering said inner cylinder, said means comprising a cross-piece extending diametrically across the upper end of the inner cylinder, and a crank-shaft journaled in the upper portion of the chimney and co-operating with said cross-piece. (8.) In a vapour-burning lamp, the combination of the lamp-frame and chimney, the burners, and incandescent mantle supported over each burner, a vaporizing-tube extending across the chimney above the mantles, the bridge-piece extending across the chimney near the top thereof, the hanging-rod connected to said bridge-piece, the inner cylinder arranged to telescope into said chimney, a cross-piece extending diametrically across the inner cylinder and having a sliding connection with the hanging-rod, the crank-shaft journaled in the upper portion of the chimney and bearing on the under-side of the cross-piece, and means, external of the chimney, for giving said crank-shaft a partial rotation. (9.) In a vapour-burning lamp, the combination of the lamp-frame and chimney, the burners, an incandescent mantle supported over each burner, a vaporizing-tube extending across the chimney above the mantle, a bridge-piece extending across the chimney near the top thereof, the hanging-rod connected to said bridge-piece, the inner cylinder arranged to telescope into said chimney, a cross-piece extending diametrically across the inner cylinder and having a sliding connection with the hanging-rod, the crank-shaft journaled in the upper portion of the chimney and bearing on the under-side of the cross-piece, and means, external of the chimney, for giving said crank-shaft a partial rotation, the above-described cross-piece being so shaped as to present a recess on its under-side into which the crank-shaft may drop when the cylinder is in its uppermost position.

(Specification, 7s. ; drawings, 16s.)

No. 12655.—29th May, 1900.—GEORGE CROCKER SMITH, of 57, Odessa Street, St. Kilda, Victoria, Mechanic, New or improved grip or fastening-apparatus for the windows and louvres of railway-carriages, tram-cars, and other vehicles, and also applicable to drawers, gates, and the like.

*Claims.*—(1.) In combination, a segmental gripper as L, a shaft on which said gripper is mounted as K, a screw-threaded shaft as D and corresponding bearing for the screw to work in, means for operating the shafts so as to partly revolve and allow them the forward-and-backward movement, and a pressure spring, the whole being mounted upon suitable lugged plate as A, substantially as and for the purposes set forth. (2.) In combination, a slotted metal plate as A, upon which are mounted bearings as B and C, a multiple-screw shaft as D, a handle as E, a slot in the plate A as H, means for securing the handle to the shaft D, substantially as and for the purposes set forth. (3.) In combination, a shaft as K, bearing as M, expansion spring as N, and a segmental gripper as L, a chamber as S in which L is arranged to work mounted upon said shaft K, means for securing K to operating-mechanism, substantially as and for the purposes set forth. (4.) In combination, two shafts as D, D1, placed in line, bearings as B, B, and C, C, springs as J, J, operating-handle as E, a shank E1 arranged to operate said shafts, substantially as and for the purposes set forth. (5.) In combination, a window-sash having a chamber as S cut therein to permit a segmental grip as L to work in spring as N, bearing as M, and shaft as K, substantially as and for the purposes set forth. (6.) In combination, a shaft as D having at one end thereof a male-screw thread engaging with female-screw-thread bearing as B, and being cylindrical and smooth and revolving in a plain parallel bearing as C at the other end, means for operating such shaft so as to cause it to partly revolve, and spring as J, the whole forming an actuating-mechanism for securing or releasing the gripping- or locking-appliance substantially as and for the purposes set forth. (7.) In combination, a shaft as D, one end of which carries means for forming an articulation with another shaft as K, a multiple-screw thread mounted upon one portion of said shaft as D, and corresponding multiple-female-screw bearing as B, a slotted metal plate as A carrying the screw bearing B and smooth parallel bearing as C, means for moving D backward and forward in its respective bearings, a gripper or locking-shaft as K provided with a gripping-device at its end, substantially as and for the purposes set forth. (8.) In combination, a slotted plate as A, operating-shank as E1, shaft as D, and locking-bar as R, and means for operating the said bar R so as to block the movement of the shank E1, substantially as and for the purposes set forth. (9.) In combination, an exterior handle E4, shank E5 operating through a slot as X, interior handle E3, shank E1, and shaft as D, and its bearings, the whole arranged to actuate a shaft as K upon or to which a gripping-device is attached, substantially as

and for the purposes set forth. (10.) In combination, a frame as T, having at one side a pressure plate O, and upon the other side a gripper operated by shafts as K and D, means for rotating or partially rotating said shafts so as to cause a counter-pressure between said plate O and the gripper, and thus cause the frame to be firmly held in position, substantially as and for the purposes set forth. (11.) The general combination and arrangement of the several parts set forth in Figs. 1 to 6, inclusive, on the drawings, forming a complete gripping- or fastening-apparatus, substantially as and for the purposes set forth. (Specification, 9s. 6d. ; drawings, 8s.)

No. 12656.—29th May, 1900.—GEORGE WESTINGHOUSE, of Westinghouse Building, Pittsburg, Pennsylvania, United States of America, Engineer. Improvements in draught appliances and couplings for railroad-cars.

*Claims.*—(1.) The combination, with a car-frame, of a pressed-metal channel-casing, secured to the central frame-members, and having abutments within it upon which draught and buffing strains are received, and through which they are transmitted to the car-frame, substantially as and for the purposes described. (2.) The arrangement on a car-frame of coupler-heads adapted to be coupled either to automatic or link couplings, and buffer-blocks adapted at will to be readily connected to or disconnected from the buffer-beams, substantially as and for the purposes described. (3.) In a car-coupling, the combination of a coupler-head, a knuckle pivoted thereto, a shank fixed thereto and having a vertical socket adjacent to its inner end, a draught strap or yoke having its outer end bar fitted freely in said socket, and a removable section connected to the draw-bar shank and maintaining the draught-strap in connection therewith, substantially as described. (4.) In a car-coupling, the combination of a coupler-head, a knuckle pivoted thereto, a draught strap or yoke pivotally connected to the coupler-head, springs bearing on the shank of the coupler-head and normally maintaining it in the longitudinal central plane of the car, and stops rigidly connected to the draught-strap and limiting the lateral movement of the draw-bar, substantially as described. (5.) In a car-coupling, the combination of a coupler-head, a knuckle pivoted therein, a spring-pressed pressure-block fitting in a lateral guide-socket in one side of the coupler-head, and a vertical abutment on the opposite side of the coupler-head, and a coupling-hook pivoted horizontally thereto, substantially as and for the purposes described. (6.) In draught appliances and couplings for railroad-cars, the arrangement and construction of parts substantially as described, and illustrated in the drawings. (Specification, 14s. ; drawings, £2 2s.)

F. WALDEGRAVE,  
Registrar.

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

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

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

#### Provisional Specifications.

Patent Office,

Wellington, 6th June, 1900.

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

No. 12582.—3rd May, 1900.—ALEXANDER ANDERSON, Machineman, WILLIAM ROSS, Papermaker, and HERBERT WALTON, Clerk, all of Matura, Southland, New Zealand. Improved ripple-mat for gold-saving purposes.

No. 12595.—11th May, 1900.—FREDERICK WILLIAM MARCHANT, of Timaru, New Zealand, Member of the Institute of Civil Engineers. Improvements in dredges for gold-saving and the like.

No. 12608.—12th May, 1900.—PERCY WILLIAM FRYER, of Prebbleton, Canterbury, New Zealand, Farmer. Apparatus for automatically regulating the speed of a belt-driven countershaft.

No. 12610.—14th May, 1900.—EDWARDS ALBERT GEORGE HAMLIN, of Reefton, New Zealand, Cabinetmaker. A method of marking meat and some other materials.

No. 12621.—16th May, 1900.—WILLIAM ALFRED ELLIS, of Stratford, Taranaki, New Zealand, Chemist. An improved branding-fluid for branding cattle, horses, and other animals.



No. 12623.—15th May, 1900.—JOHN HUGH ALEXANDER MCPHREE, of Leith House, Howe Street, Dunedin, New Zealand, B.A., Teacher. Improvement in gold-saving apparatus.

No. 12629.—16th May, 1900.—FREDERICK BENJAMIN CAVE ALLEN, of York Street, Newton, Auckland, New Zealand, Architectural Draughtsman. Improvements in incinerators.

No. 12630.—19th May, 1900.—WILLIAM BONE SUTTLE, of Onehunga, Auckland, New Zealand, Boot-manufacturer. An improved legging-boot.

No. 12631.—19th May, 1900.—GEORGE DAVID JONES, of 140, Colombo Road, Sydenham, Christchurch, New Zealand, Tailor and Draper. Improvements in trousers for cyclists.

No. 12632.—22nd May, 1900.—ERNEST ROWLAND HILL, of 814, Maple Avenue, Wilkingsburg, Pennsylvania, United States of America, Electrical Engineer. Improvements in electro-pneumatic controlling apparatus.

No. 12634.—22nd May, 1900.—ACHESON OVEREND, of Bowen Hills, Brisbane, Queensland, Contractor. Improvements in the construction of suction dredges for the recovery of gold, other minerals, or precious stones.

No. 12635.—22nd May, 1900.—RICHARD CHAMBERS, of Egmont Street, New Plymouth, New Zealand, Commission Agent. Improvements in friction hoists.

No. 12636.—23rd May, 1900.—GEORGE ALLEN, of Masterton, New Zealand, Blacksmith. An invention for fixing brackets or shelves to the wall without screws or nails or damaging the paper.

No. 12637.—23rd May, 1900.—PATRICK WOODS, of Kawakawa, Auckland, New Zealand, Saddler. Improvements in riding-saddles.

No. 12638.—21st May, 1900.—JOHN WILLIAM STONYER, of Linwood, Christchurch, New Zealand, Machinery Expert. Improved multi-furrow plough.

No. 12639.—23rd May, 1900.—CHARLES BRISTOW, of White Hart Hotel, Christchurch, New Zealand, Machinery Expert. An envelope-opener.

No. 12640.—19th May, 1900.—HENRY NOY, Sen., Ottama House, Great King Street, Dunedin, New Zealand, Engineer. An invention for extinguishing sparks from the funnels of locomotive, traction, and other steam-engines.

No. 12642.—23rd May, 1900.—CHARLES SUTTLE, of Onehunga, Auckland, New Zealand, Tanner. An improved roller crushing- or grinding-mill for crushing or grinding mineral or other substances.

No. 12643.—23rd May, 1900.—CHARLES SUTTLE, of Onehunga, Auckland, New Zealand, Tanner. Improvements in sole-leather-rolling machines.

No. 12644.—23rd May, 1900.—HILARY QUERTIER, of Matura, New Zealand, Dredgemaster. An improved gold-saving appliance for a dredge.

No. 12645.—25th May, 1900.—EPHRAIM BARBOUR MCKAY, of Invercargill, New Zealand, Storeman (nominee of Ernest Robert Godward, of Invercargill aforesaid, Engineer). Improved fire-alarm and temperature-indicator.

No. 12647.—23rd May, 1900.—SIDNEY CHAYTOR ROSSE TREVOR, of Mangawhare, Auckland, New Zealand, Chemist. A process for the extraction and manufacture of spirits and oils from kauri soil and refuse.

No. 12648.—29th May, 1900.—WILLIAM HAMILTON WILSON, of Heaton Park, Bull's, Wanganui, New Zealand, Farmer. Improvements in iron or steel fencing-standards and droppers.

No. 12649.—30th March, 1900.—WALTER MILNER, of Warrington, Lancaster, England, Secretary of the Whitecross Company, Limited. A new or improved tool for closing and opening fence-dropper tongues.

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

No. 12657.—26th May, 1900.—LAWFORD GODFREY REEVES, of Dunedin, New Zealand, Accountant. The construction of pontoons or hulls for gold-dredges or other purposes.

No. 12661.—2nd June, 1900.—CALEB YEOMAN DALLY, of Apati, Feilding, New Zealand, Builder. Improvement in oil-caps for oiling the axles of vehicles.

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 25th May, 1900, to the 6th June, 1900, inclusive:—

- No. 11883.—J. Greenslade, seed-dressing apparatus.
- No. 11710.—T. L. Taylor, advertising-device.
- No. 11873.—A. Maltman, slime-separator.

B

No. 12228.—R. Perkins and J. Swann, loading drays, &c.

No. 12255.—V. Poulsen, speech-recorder.

No. 12278.—E. Thomson, horse-collar.

No. 12328.—R. Skelton, cycling-skirt.

No. 12350.—H. E. Gresham, railway-brake.

No. 12370.—W. H. Goodwin, chart-blank.

No. 12371.—C. H. Taylor, rotary engine.

No. 12373.—W. J. Davy and C. W. Milne, electric arc-lamp.

No. 12374.—E. N. Moyer, chart-drawing instrument.

No. 12381.—Hurry and Seaman's Patents, Limited, manufacture of cement (E. H. Hurry and H. J. Seaman).

No. 12382.—Hurry and Seaman's Patents, Limited, manufacture of cement (E. H. Hurry and H. J. Seaman).

No. 12383.—Hurry and Seaman's Patents, Limited, furnace-lining (E. H. Hurry and H. J. Seaman).

No. 12384.—A. McDonald and E. E. Turner, tobacco-cutter (H. Jones).

No. 12387.—M. C. Jackson, J. McDonough, and A. J. Clark, rock-drill.

No. 12388.—J. Ross and W. D. Cairney, explosive.

No. 12389.—Darling's Patent Automatic Coupling, Limited, coupling (J. and J. Darling).

No. 12409.—H. L. Spring, filtro-amalgamator (H. T. Rigg).

No. 12410.—H. L. Spring, ore-crusher (H. T. Rigg).

F. WALDEGRAVE,  
Registrar.

*Letters Patent on which Fees have been paid.*

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

SECOND-TERM FEES.

NO. 8500.—R. J. L. Hildyard, axle and axle-box (J. Tagell). 11th May, 1900.

No. 8512.—The Smelting Company of Australia, Limited, manufacturing zinc-oxide (W. H. Moseley—T. A. de Wolf). 22nd May, 1900.

No. 8513.—The Smelting Company of Australia, Limited, extracting silver (W. H. Moseley—W. A. Harper). 22nd May, 1900.

No. 8557.—W. A. Dimick, horse-cover. 28th May, 1900.

THIRD-TERM FEES.

Nil.

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. 6538.—The English De Laval Steam Turbine Company, Limited, of 84, Armley Road, Leeds, England, turbine-wheel. [C. G. P. de Laval.] 31st May, 1900.

No. 6586.—The English De Laval Steam Turbine Company, Limited, of 84, Armley Road, Leeds, England, supporting rotating bodies. [C. G. P. de Laval.] 31st May, 1900.

No. 8384.—The Maypole Company (1899), Limited, of 98 and 99, High Holborn, London, England, soap. [G. Stecken.] 23rd May, 1900.

No. 10746.—The New South Wales Fresh Food and Ice Company, Limited, being a new company incorporated under that name under the provisions of "The Companies Act, 1899," of New South Wales, and having its registered office situate in Sydney, New South Wales, butter printing and portioning machine. [A. Christie.] 29th May, 1900.

No. 11166.—William Fairhead, of Broad Street, Palmerston North, New Zealand, Joiner, bench-crap. *A half-interest.* [R. C. Humphreys.] 17th May, 1900.

No. 11549.—Louis Hubert Spanswick, of Chatswood, New South Wales, Esquire, sheep-medicine. *A four-tenths share and interest.* [R. Evens.] 31st May, 1900.

No. 11651.—The Protective Packing-paper Company, Limited, of 28, Finsbury Pavement, London, England, Manufacturers, paper-corrugating machine. [G. Leske.] 23rd May, 1900.

No. 11868.—Henry Curnow, of Stratford, New Zealand, Bank-manager, milk-aerator. *One-sixth share.* [A. Billens.] 25th May, 1900.

No. 11868.—Alfred Billens, of Christchurch, New Zealand, Carriage-lamp Maker, milk-aerator. *One-sixth share.* [A. Billens.] 25th May, 1900.

No. 12161.—The Avery Drill Company, of San Francisco, United States of America, rock-drill. [R. Avery and H. C. Campbell.] 29th May, 1900.

F. WALDEGRAVE,  
Registrar.

*Applications for Letters Patent abandoned.*

LIST of applications for Letters Patent (with which provisional specifications only have been lodged) abandoned from the 25th May, 1900, to the 6th June, 1900, inclusive:—

- No. 11824.—W. Cable, wire-strainer.
- No. 11828.—E. Richardson, jun., rifle.
- No. 11830.—B. G. A. Harkness, water-heater.
- No. 11831.—B. G. A. Harkness, hoist.
- No. 11837.—G. B. Beere, railway coupling.
- No. 11839.—R. J. Farmer, non-refillable bottle.
- No. 11840.—J. A. Park and E. C. Reynolds, sifting-screen.
- No. 11846.—W. Tyree, acetylene-generator.
- No. 11851.—W. H. Boyens, fountain-pen.
- No. 11854.—D. and J. Avery, recovering gold and silver from solutions.
- No. 11859.—D. A. McLeod, removing sand, &c., from river-beds.
- No. 11861.—T. Dawes, gardening-tool.
- No. 11876.—T. Sandiant, propeller.

F. WALDEGRAVE,  
Registrar.

*Applications for Letters Patent lapsed.*

LIST of applications for Letters Patent (with which complete specifications have been lodged) lapsed from the 25th May, 1900, to the 6th June, 1900, inclusive:—

- No. 11209.—T. R. Alexander, bicycle driving gear.

F. WALDEGRAVE,  
Registrar.

*Letters Patent void.*

LIST of Letters Patent void through non-payment of fees from the 25th May, 1900, to the 6th June, 1900, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

- No. 8300.—E. J. T. Ford, combined writing-tablet and door for telephone.
- No. 8311.—W. J. Davison, wool-dryer.
- No. 8313.—J. Brown, hoe.
- No. 8315.—W. Wratten, fencing-standard (G. and G. Wratten).
- No. 8316.—Deere and Co., disc plough (S. D. Poole).
- No. 8319.—L. P. Jacobs, M. M. Levinson, and A. Gross, cigar-machine (F. R. Keyes and C. A. Baker).
- No. 8325.—W. Silver, railway-axle lubricator.
- No. 8330.—W. W. Curties, bicycle driving-mechanism.

THROUGH NON-PAYMENT OF THIRD-TERM FEE.

- No. 6076.—B. Dawson, meat-label.

F. WALDEGRAVE,  
Registrar.

*Applications for Registration of Trade Marks.*

Patent Office,  
Wellington, 6th June, 1900.

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: 2988.  
Date: 23rd March, 1900.

TRADE MARK.

"BOOMERANG"



NAME.

JOSHUA BROTHERS PROPRIETARY, LIMITED, of 4, St. James Building, William Street, Melbourne, Victoria, Distillers.

No. of class: 43.  
Description of goods: Brandy, whisky, wines, and liqueurs.

No. of application: 2989.  
Date: 23rd March, 1900.

TRADE MARK.

"BOOMERANG"

AS SUPPLIED TO THE HOUSE OF COMMONS.

*Australian Brandy*  
*Joshua Brothers* PROPRIETARY LIMITED  
*Melbourne*

The essential particulars of the trade mark are as follows—the device and the word "Boomerang"; and applicant company disclaims any right to the exclusive use of the added matter, save and except their name and address.

NAME.

JOSHUA BROTHERS PROPRIETARY, LIMITED, of 4, St. James Building, William Street, Melbourne, Victoria, Distillers.

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

No. of application: 3005.  
Date: 7th April, 1900.

TRADE MARK.

TRADE MARK.



NAME.

THE SALT UNION, LIMITED, of 40 to 45, Tower Buildings, Liverpool, England, Salt Manufacturers and Merchants.

No. of class: 42.  
Description of goods: Salt.

No. of application: 3008.  
Date: 12th April, 1900.

TRADE MARK.

The words

TWO FLAGS.

NAME.

NEILL AND Co., LIMITED, of Dunedin, New Zealand, Merchants.

No. of class: 42.  
Description of goods: Tea.

No. of application : 3041.  
Date 18th May, 1900.

TRADE MARK.



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

NAME.

HAYWARD BROTHERS, of Christchurch, New Zealand, Pickle and Sauce Manufacturers.

No. of class : 42.  
Description of goods : Baking-powder.

No. of application : 3049.  
Date : 25th May, 1900.

TRADE MARK.

The word

**WIKOMIGHT.**

NAME.

FRANK WIGHT, of Akaroa, New Zealand, Storekeeper.

No. of class : 50.  
Description of goods : A composition for preserving boots and rendering them waterproof.

No. of application : 3056.  
Date : 29th May, 1900.

TRADE MARK.



NAME.

RECRITT AND SONS, LIMITED, of 423, Kent Street, Sydney, New South Wales, and of Hull, in Yorkshire, England, Starch, Blue, and Black-lead Manufacturers.

No. of class : 50.  
Description of goods : Black-lead (for polishing).

No. of application : 3057.  
Date : 31st May, 1900.

TRADE MARK.

The word

**JUBILEE.**

NAME.

THE CROWN IRONWORKS COMPANY, LIMITED, of Armagh Street, Christchurch, New Zealand, Ironfounders.

No. of class : 18.  
Description of goods : Cooking-ranges.

No. of application : 3058.  
Date : 2nd June, 1900.

TRADE MARK.

The word

**FEROCAL.**

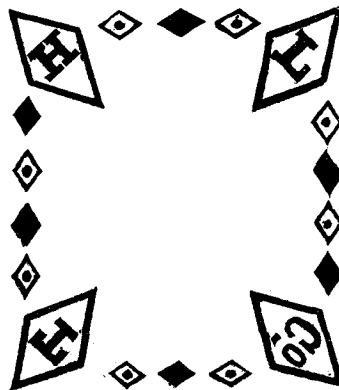
NAME.

SQUIRE AND SONS, of 413, Oxford Street, London, England, Wholesale and Manufacturing Chemists.

No. of class : 3.  
Description of goods : Chemical substances prepared for use in medicine and pharmacy.

No. of application : 3059.  
Date : 4th June, 1900.

TRADE MARK.



NAME.

GEORGE T. K. MCKENZIE, trading as "The Hondai Lanka Tea Company," of Dowling Street, Dunedin, New Zealand.

No. of class : 42.  
Description of goods : Tea.

F. WALDEGRAVE,  
Registrar.

*Trade Marks registered.*

**L**IST of Trade Marks registered from the 25th May, 1900, to the 6th June, 1900, inclusive:—

No. 2333; 2613.—Coombs's Eureka Aerated Flour Company, Limited; Class 42. (*Gazette* No. 21, of the 15th March, 1900.)

No. 2334; 2936.—C. J. Badham; Class 2. (*Gazette* No. 21, of the 15th March, 1900.)

No. 2335; 2948.—Farquhar and Gill; Class 1. (*Gazette* No. 21, of the 15th March, 1900.)

No. 2336; 2949.—J. Watson and Co., Limited; Class 43. (*Gazette* No. 21, of the 15th March, 1900.)

No. 2337; 2971.—Davy, Hill and Son, Yates, and Hicks; Class 3. (*Gazette* No. 21, of the 15th March, 1900.)

No. 2338; 2972.—Société Anonyme de la Distillerie de la Liqueur Bénédicte de l'Abbaye de Fécamp; Class 43. (*Gazette* No. 21, of the 15th March, 1900.)

No. 2339; 2959.—H. E. Partridge; Class 45. (*Gazette* No. 21, of the 15th March, 1900.)

No. 2340; 2975.—Reckitt and Sons, Limited; Class 47. (*Gazette* No. 21, of the 15th March, 1900.)

No. 2341; 2923.—A. Briscoe and Co.; Class 47. (*Gazette* No. 6, of the 18th January, 1900.)

No. 2342; 2984.—Thompson and Hills; Class 42. (*Gazette* No. 25, of the 29th March, 1900.)

F. WALDEGRAVE,  
Registrar.

*Subsequent Proprietors of Trade Marks registered.*

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

**N**O. 879/729.

No. 880/730.

No. 881/731.

No. 882/732.

No. 883/733.

No. 884/734.

No. 885/735.

No. 886/736.

No. 887/737.

No. 1766/1683.

No. 1767/1684.

No. 1768/1685.

J. and J. Colman, Limited, whose registered offices are at Carrow Works, Norwich, England, Mustard, Starch, Washing-blue and Cornflour Manufacturers, Millers, and Merchants. [J. and J. Colman.] 31st May, 1900.

No. 1199/921.—The Magnolia Metal Company, incorporated under the laws of the State of West Virginia, United States

of America, of 266, West Street, New York, United States of America. [The Magnolia Anti-friction Metal Company.] 30th May, 1900.

No. 1625/1318. } The Maypole Company (1899), Limited, of  
No. 1624/1328. } 98 and 99, High Holborn, London, Eng-  
No. 1658/1331. } land, Merchants. [The Maypole Com-  
pany, Limited.] 23rd May, 1900.

No. 86/2613.—John Lysaght, Limited, whose registered office is at Bristol, England, Iron Manufacturers and Galvanisers. [Redcliffe Crown Galvanised Iron Company.] 23rd May, 1900.

F. WALDEGRAVE,  
Registrar.

**C**OPIES of "The Patents, Designs, and Trade Marks Act, 1889," with Regulations thereunder, and printed forms of application and specification, can be obtained from the Patent Office, the Government Printer, Local Patent Offices, or Money-order Offices.

Local Patent Offices for the reception of applications for Letters Patent have been established at the following places: Auckland, Thames, New Plymouth, Wanganui, Gisborne, Napier, Blenheim, Westport, Greymouth, Hokitika, Christchurch, Ashburton, Timaru, Oamaru, Dunedin, Queenstown, Lawrence, and Invercargill. In every case the office is at the Courthouse.

Specifications of all Patents and Letters of Registration applied for in the colony can be inspected at the Patent Office, and particulars of Patents, &c., granted in England, the United States, Canada, and the Australian Colonies can be seen at the Patent Office Library, Wellington.

The following publications of this office can be had from the Government Printer:—

1. Printed Specifications to the end of the year 1879.
2. Annual Lists of Letters Patent and Letters of Registration applied for, and Particulars of Applications and Patents lapsed, from 1880 to 1888, inclusive.
3. Annual Reports of the Registrar, containing list of Letters Patent, nature of Letters Patent, &c., applied for during the years 1889 to 1898, inclusive.

F. WALDEGRAVE,  
Registrar.

By Authority: JOHN MACKAY, Government Printer, Wellington.