

SUPPLEMENT

TO THE

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Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 28th February, 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. 11642.—23rd May, 1899.—WALTER NORRELL and JAMES DUFF MURRAY, both of 54, Lambton Quay, Wellington, New Zealand, Fellmongers. An improved apparatus for treating wool locks and dags.*

Claims.—(1.) The improved apparatus for treating wool locks and dags consisting of parts constructed, arranged, and operating substantially as set forth. (2.) In an apparatus such as described, a corrugated drum and a corrugated concave, substantially as set forth. (3.) In an apparatus such as described, a corrugated drum, a corrugated and pivoted concave, and means for supporting the concave yieldingly near the drum, substantially as set forth. (4.) In an apparatus such as described, the combination of a corrugated drum, a corrugated concave, and means for washing the dags and wool-locks, substantially as set forth. (5.) In an apparatus such as described, the combination of a corrugated drum, a corrugated concave, and means for spreading and crushing the dags and locks before entering the concave, substantially as set forth.
(Specification, 3s. 3d.; drawings, 8s.)

No. 11710.—12th June, 1899.—THOMAS LORD TAYLOR, of Windsor Villa, Darebin Street, Northcote, near Melbourne, Victoria, Gentleman. An improved advertising contrivance actuated by the lids of match-boxes or similar receptacles.*

[NOTE.—The title in this case has been altered. See list Provisional Specifications, *Gazette* No. 52, of the 22nd June, 1899.]

Claims.—(1.) An improved advertisement-display, principally for hotels, shops, and clubs, consisting essentially of a match-box or other receptacle having a hinged lid connected with and releasing a train of gearing or clockwork driving a roller around which passes an endless apron or band carrying the advertisements, substantially as described and ex-

plained. (2.) An improved advertising-contrivance actuated by the lids of match-boxes or similar receptacles, comprising an endless travelling-belt such as C, carrying the advertisement to be displayed, passing round rollers such as D, D¹, D², D³, and passing under a tension-roller as D⁴, in combination with the lid such as e¹ of a receptacle containing matches or the like, said lid having a rearwardly-projecting arm such as e, connected to a cord such as B, coiled around one of said rollers, whilst a weighted cord such as F is coiled around said roller in the opposite direction, substantially as and for the purposes described and explained. (3.) In a contrivance to be operated by the actuation of the lids of match-boxes or similar receptacles, an endless travelling-belt as C, having stop-pieces as G in its surface, together with a retaining wire such as G¹, substantially as and for the purposes described and explained. (4.) In an advertisement-displayer automatically operated by the lid of a match-box or other receptacle, a match-box or other receptacle having a hinged lid connected by a cord or otherwise with an arm upon a spindle carrying a retaining pawl as I, in combination with a rotating fan or flier, with which said arm engages when in its raised position, substantially as described and explained.
(Specification, 4s.; drawings, 8s.)

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

Claims.—(1.) An induction motor in which the resistance included in circuit with the secondary member consists of a ring or rings of comparatively large cross-section connected by resistance bars or arms to the corresponding ends of the conductor bars of the secondary member, for the purpose specified. (2.) An induction motor having a secondary member with a resistance included in circuit, constructed, arranged, and operating as described, and shown in the drawing.
(Specification, 2s.; drawings, 10s. 6d.)

No. 12255.—21st December, 1899.—VALDEMAR POULSEN, of 17, Alhambravej, Copenhagen, Denmark, Engineer. A method of receiving, and storing, and reproducing messages or the like by magnetic action, and apparatus for that purpose.

Claims.—(1.) Process for receiving and at intervals storing messages, signals, or the like, characterized by the fact that a magnetizable solid body is influenced permanently and magnetically from a suitable transmitter in accordance with the messages or signals issuing from said transmitter, said magnetic influence being of such nature that the said body is inversely able at the desired time to repeat the messages or signals substantially as described. (2.) For carrying out the process specified in claim 1, an apparatus characterized by the fact that a microphonic, telephonic, or electric signalling-line is connected electrically with an electro-magnet which magnetizes a magnetizable body situated in its immediate vicinity, during the relative movement between the said magnet and the said body, at different places corresponding to the messages or signals sent at the time, and which body can then, with the help of a telephone or the like, give forth again what it has received, and will also be ready, after having been demagnetized, to receive a fresh message, constructed and arranged substantially as described. (3.) For carrying out the process specified in claim 1, an apparatus characterized by a pulley or a cylinder with steel wire coiled spirally round it, which is placed in contact, during the reception of a message or signal, with an electro-magnet which is moved around the same, and whose magnetism is dependent on a microphonic or telephonic current circuit included in the same line, constructed and arranged substantially as described. (4.) A form of construction of the apparatus specified in claim 3 characterized by the fact that the electro-magnet core is lifted by a spring *l* off the wire spiral *g* until, in setting the apparatus into operation and rotating the electro-magnet around the cylinder *d*, the lever *k* is shifted by centrifugal force and by this means presses the electro-magnet core *i* against wire spiral *g*, constructed and arranged substantially as described. (5.) A further modification of the apparatus specified in claim 3, characterized by the fact that, instead of the wire spiral, there is employed a steel strip which is moved past the electro-magnet core, constructed and arranged substantially as described. (6.) A modification of the apparatus specified in claim 5, characterized by the fact that the line current causes a clockwork to be thrown out of operation, which has the function of closing a local-current circuit for a period corresponding to the duration of the conversation, for the purpose of moving the steel strip past the electro-magnet during the duration of the conversation, constructed and arranged substantially as described.

(Specification, 18s. 6d.; drawings, £2 12s. 6d.)

No. 12278.—4th January, 1900.—EDWIN THOMSON, of "Haytor," Toorak Road, Breakfast Creek, Brisbane, Queensland, Commercial Traveller. An improved collar for horses and other animals.

Claims.—(1.) An improved collar for horses or other animals jointed at the bottom, fastened at the top, covered and padded as described, and illustrated in the drawings. (2.) An improved collar for horses or other animals jointed at the top, fastened at the bottom, covered and padded as described, and illustrated in the drawings.

(Specification, 2s. 6d.; drawings, 13s. 6d.)

No. 12306.—13th January, 1900.—WILHELM SCHMIDT, of Wilhelmshöhe, near Cassel, Germany, Engineer. Improvements in compound engines.

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

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

No. 12328.—4th April, 1899.—ROBERT SKELTON, of 40 and 41, Aungier Street, Dublin, Ireland, Tailor and Out-fitter. Improvements in or relating to ladies' cycling-skirts.

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

Claims.—(1.) Providing a lady's cycling- and promenade-skirt with double- and single-holed rings at the front and rear inner parts respectively, as specified, the rings having a runner-cord in such position that the rear lower part of the skirt can be drawn close towards the legs, and the upper front down for the lap portion to lie upon the knees and the lower front to fall freely, as described, and substantially as shown. (2.) A cycling- and walking-dress skirt having the cord guide ring *D* secured at the rear, directly below the bustle portion; the cord guide-ring *A* secured to the centre of the front; the cord-hole *F* at one side, near the waistband,

and the continuous single cord *C* secured at one end to the front ring, passing back loosely through the rear ring, thence passing forward through the front ring, and thence ascending to and through said cord-hole, all as shown, whereby the central rear part of the skirt is drawn forward, and a central front part below the abdomen is drawn rearward, by pulling said cord.

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

No. 12380.—15th February, 1900.—EDWIN TOMS, of Wellington, New Zealand, Inventor. An improved cowl for chimneys and ventilators.

Claims.—(1.) A cowl for the purposes set forth, comprising in combination a pipe, loops attached to the pipe, and crossed over one another so as to have openings for the emission of smoke or air, substantially as set forth. (2.) A cowl for the purposes set forth, comprising in combination a pipe, loops attached to the pipe and crossed over one another so as to leave openings for the emission of smoke or air, and wire netting across the said openings, substantially as set forth. (3.) The improved cowl for chimneys and ventilators consisting of parts constructed and arranged substantially as set forth.

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

No. 12381.—15th February, 1900.—HURRY AND SEAMAN'S PATENTS, LIMITED, of 2, Queen Anne's Gate, Westminster, London, England (assignees of Edward Henry Hurry, of Bethlehem, Pennsylvania, United States of America, Engineer, and Harry John Seaman, of Catasaqua, Pennsylvania aforesaid, Chemist). New or improved process for the manufacture of Portland and other similar cement.

Claims.—(1.) The described process for cooling hot cement clinker which consists in reducing the hot clinker to a broken condition, wetting the hot clinker, and subjecting the wet and broken material to a cooling atmosphere. (2.) The described process for cooling hot cement clinker which consists in breaking and wetting the hot clinker, and then rapidly evaporating the moisture from the broken material. (3.) The described process for cooling hot cement clinker which consists in breaking and wetting the hot clinker, tossing the broken material, and rapidly evaporating the moisture therefrom. (4.) The described process for cooling hot cement clinker which consists in simultaneously wetting and breaking the hot clinker, supplying additional water to the broken material, and subjecting it to the action of the atmosphere. (5.) The described continuous process in the manufacture of cement which consists in roasting the cement-material, partially cooling the hot clinker, then breaking and wetting it, and then evaporating the moisture from the broken material. (6.) The combination with a conduit for the hot clinker, a reducing or breaking apparatus therefor, a pipe for supplying water to the hot material, and a leading-off conduit for the broken and wetted material, as set forth. (7.) The combination with the breaking-rolls, and the water-supply for directing water on to said rolls, of a conduit taking the material from the rolls, and an exhausting apparatus for drawing air through the conduit, as set forth. (8.) The combination with the breaking-rolls, the water-supply feeding water to the rolls, and a chute leading from the rolls, of a conduit extending from the chute, a water-supply leading into said conduit, and an exhausting-apparatus for drawing air through the conduit, as set forth.

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

No. 12382.—15th February, 1900.—HURRY AND SEAMAN'S PATENTS, LIMITED, of 2, Queen Anne's Gate, Westminster, London, England (assignees of Edward Henry Hurry, of Bethlehem, Pennsylvania, United States of America, Engineer, and Harry John Seaman, of Catasaqua, Pennsylvania aforesaid, Chemist). Improvements in process and apparatus for the manufacture of Portland cement, parts of which are applicable to other purposes.

Claims.—(1.) The described process of burning pulverised carbonaceous fuel in the presence of the material being roasted which consists in injecting the pulverised fuel with a limited volume of high-pressure air, inducing a limited current of air at atmospheric pressure with the injected fuel, and supplying the air necessary to support combustion of said fuel by a natural draught independent of the injected mixture. (2.) The described process of burning pulverised carbonaceous fuel in the presence of the material being roasted which consists in injecting the pulverised fuel with a limited volume of high-pressure air, inducing a limited current of air at atmospheric pressure with the injected fuel, and supplying the volume of air, to support combustion by a heated natural draught independent of the injected mixture. (3.) The described method of feeding pulverised fuel to an injector which consists in subjecting

uniform quantities of pulverised fuel to violent agitation to form a fuel-cloud, and then presenting said fuel-cloud to the injector. (4.) The described method of feeding pulverised fuel to an injector which consists in subjecting the fuel to violent agitation, and simultaneously conveying it forward in a cloud to the injector. (5.) The combination of a rotary roasting-furnace, a stationary chamber extending from the end of the furnace, a pulverised-fuel injector leading to said chamber, a chute from the discharge end of the furnace, a rotary conduit extending from the chute forming a natural draught from the conduit through the furnace, a shield closing the connection between conduit and the chute, and a pipe leading from the hot-air space enclosed by the shield to the combustion-chamber, as set forth. (6.) The combination of the rotary roasting-furnace, the fixed chamber at each end thereof, a removable chamber extending from one of said fixed chambers, and a fuel-burner connected to said chamber, as set forth. (7.) The combination of the rotary roasting-furnace, the fixed chamber at each end thereof, a suspended chamber extending from one of said fixed chambers, an elevated track supporting said chamber, and a fuel-burner connected to set chamber, as set forth. (8.) The combination of the rotary roasting-furnace, the fixed chamber at each end thereof, a removable chamber extending from one of said fixed chambers, a fuel-burner connected to said removable chamber, a passage for a natural draught of air through the furnace, and a branch passage leading from said passage to the removable chamber, as set forth. (9.) In a pulverised-fuel burner, the combination of the fuel-receiving chamber, an air-pressure conduit terminating in a nozzle extending into said chamber, atmospheric-air orifices opening into said chamber in rear of the nozzle for an induced current of air, and an air- and fuel-directing pipe leading from the chamber, as set forth. (10.) In a pulverised-fuel burner, the combination of the fuel-receiving chamber, an air-pressure conduit of limited area extending into said chamber, and atmospheric-air orifices surrounding said air-pressure conduit in rear thereof for an induced current of air into the chamber, as set forth. (11.) In a pulverised-fuel burner, the combination of the fuel-receiving chamber, an air-pressure conduit extending into said chamber, a plurality of orifices in the chamber open to the atmosphere for an induced current of air, an air- and fuel-directing pipe leading from one chamber, and other orifices at the end of said pipe for a further induced current of atmospheric air, as set forth. (12.) In a pulverised-fuel burner, the combination of the fuel-receiving chamber, a compound air-conduit extending into said chamber and having a needle-valve for varying the volume of air admitted, a plurality of orifices to the chamber open to the atmosphere for an induced current of air, an air- and fuel-directing pipe leading from the chamber, as set forth. (13.) In a pulverised-fuel burner, the combination with the high-pressure-air conduit, a fuel-chamber, and a directing-pipe, of a plurality of orifices leading from the chamber to the atmosphere, and means for adjusting the area of the orifices, as set forth. (14.) In a pulverised-fuel burner, the combination with the high-pressure-air conduit, a fuel-chamber, and a directing-pipe, of a plurality of orifices leading from the chamber to the atmosphere, and an adjustable ring having orifices to coincide with the orifices of the chamber, to vary their area, as set forth. (15.) In a pulverised-fuel burner, the combination of the fuel-chamber, the air-pressure conduit leading thereto, a chambered casing surrounding and supporting said conduit having communication with the air-pressure supply and with said conduit, and an air- and fuel-directing pipe leading from the fuel-chamber, as set forth. (16.) The combination with a pulverised-fuel burner of a pulverised-fuel feed therefor, consisting of a small primary conveyer for continuously feeding limited compact quantities of fuel, a secondary conveyer receiving the fuel from the primary conveyer and positively conveying it to the burner, and means for rotating the secondary conveyer at a speed to violently agitate the fuel and deliver it in a cloud to the burner, as set forth. (17.) The combination with a pulverised-fuel burner of a fuel-feed therefor consisting of a hopper having a vertical opening, a worm conveyer mounted vertically in said opening to convey a limited compact quantity of fuel from the hopper, a secondary conveyer to receive such fuel, to positively carry it forward to the burner, and means for rotating the secondary conveyer at a speed to violently agitate the fuel as it is carried forward, as set forth. (18.) The combination with a pulverised-fuel burner of a fuel-feed therefor consisting of a hopper having a plurality of vertical openings, a worm conveyer mounted vertically in each opening to convey limited compact quantities of fuel from the hopper, a driver for said worm conveyers having means for connecting and disconnecting one or more of the worm conveyers therefrom, and a secondary conveyer receiving the fuel from said worm conveyers to carry it forward to the burner, as set forth. (19.) The described downwardly-inclined and rotary furnace provided adjacent its lower and exit end with a surrounding water-

jacket having one end closed and the other open, and a water-feed pipe for delivering water into the open end of the jacket. (20.) The combination with a rotary cylindrical furnace, a water-jacket surrounding its end, and having one of its ends closed and the other open, and a water-feed pipe independent of and leading to the open end of the jacket, of a chamber into which the furnace-end and jacket projects, and a surrounding air-excluding annulus fixed to the walls of the chamber, as set forth. (21.) The process for automatically handling cement-material and continuously making and finishing Portland cement, substantially as specified and represented in Figs. 1 and 1A of the drawings. (22.) The process for continuously and automatically manufacturing Portland cement which consists in preparing the cement-material, roasting such material, wetting, cooling, and pulverising the resultant clinker, and packing or storing the finished cement.

(Specification, £1; drawings, £1 6s.)

No. 12383.—15th February, 1900.—HURRY AND SEAMAN'S PATENTS, LIMITED, of 2, Queen Anne's Gate, Westminster, London, England (assignees of Edward Henry Hurry, of Bethlehem, Pennsylvania, United States of America, Engineer, and Harry John Seaman, of Catasauqua, Pennsylvania aforesaid, Chemist). Improvements in the refractory lining of rotary cement-furnaces, and in the method of applying the same.

Claims.—(1.) The described method of coating the firebrick lining of a rotary cement-furnace with a refractory and adherent layer of cement-material which consists in first heating the firebrick lining to a high temperature (with or without the use of salt or other suitable fusible material), and heating or pressing down on it a layer of cement-material, substantially as described. (2.) A rotary cement-furnace having a firebrick lining protected by an adherent coating of cement material, substantially as described.

(Specification, 2s. 9d.)

No. 12384.—15th February, 1900.—ALEXANDER McDONALD, of Queen Street, Chippendale, near Sydney, New South Wales, Boot-manufacturer, and EDGAR ERNEST TURNER, of 367, Pitt Street, Sydney aforesaid, and 372, Lonsdale Street, Melbourne, Victoria, Machinery-importer (assignees of Hugh Jones, of Bishop Street, Petersham, near Sydney aforesaid, Engineer). Improvements in tobacco-cutting machines.

Claims.—(1.) In tobacco-cutting machines of the class set forth, the combination and arrangement of the tobacco-channel such as E and a cutting-knife such as D, of a knife-arm such as C, and an L-shaped frame such as A, and crank-wheel such as B1, crank-disc such as B2, pitman-rod such as B3, and knuckle-piece such as B4, substantially as described and explained, and as illustrated in the drawings. (2.) In tobacco-cutting machines of the class set forth, the combination and arrangement of the tobacco-channel such as E, and cutting-arm such as C, carrying knife such as D, of a feed-screw such as F, supported by centre screw such as F1, and bearing such as F2, nut such as G, pusher-piece such as G1, ratchet such as G3, pawl such as G5, lever such as G4, radius bar or lever such as H1, rocking-shaft such as H, arm and arms such as H2, substantially as described and explained, and as illustrated in the drawings. (3.) In tobacco-cutting machines of the class set forth, the combination and arrangement with the feed-channel such as E and feed-screw such as G of a cut-away or turned-off reduced-part such as G2 and of horns such as G7, adapted to take over feed-wheel such as G8, substantially as described and explained, and as illustrated in the drawings. (4.) In tobacco-cutting machines of the class set forth, the combination with a pusher-piece such as G1 and a reciprocating-knife such as D of a presser-plate such as J, bar or spindle such as J2, and lever cam such as J3, with handle such as J4, substantially as described and explained, and as illustrated in the drawings. (5.) The combination and arrangement of mechanical parts all together forming an improved tobacco-cutting machine, substantially as described and explained, and as illustrated in the drawings.

(Specification, 3s. 8d.; drawings, £1 6s.)

No. 12385.—12th February, 1900.—GEORGE RENWICK ROBERTSON, of Sydney, New South Wales, Engineer. An improved fastening for hoop irons with which bales containing wool and other soft produce are secured.

Claim.—The fastenings of hoop irons for securing bales consisting of punching and bending out one or more tongues at one end of the hoop iron and punching out corresponding apertures at the opposite end of the hoop iron, into which apertures the tongues may be inserted, as specified.

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

No. 12886.—13th February, 1900.—HENRY JOHN ALLEY, of Huirangi, Taranaki, New Zealand, Settler. An improvement in seed-sowing machines—an appliance for converting a Massey-Harris broadcast seed-sower and cultivator into a drilling-machine.

Extract from Specification.—This invention consists essentially of a coultter or hopper A, shown in Figs. 1, 2, 3, and 4, made of iron, either galvanised or black, strengthened in the angles by square or angle iron B as shown in plan, Fig. 4, shaped as shown in Figs. 1, 2, and 3. The bottom or mouth of the said hopper is left open as shown at C, Figs. 1 and 4, and is fitted at the back with an angular iron tooth D, Figs. 1, 2, and 3, to open the ground for the reception of the seed and fertiliser. This coultter or hopper is attached to the spring frame of the Massey-Harris broadcast seed-sower by means of the bars E and the lugs F. These lugs F are recessed as shown to engage the bars of the spring frame of the seed-sower, and are bored and provided with bolts G, so that the coultter or hopper may be securely fastened to the said spring frame.

Claim.—In a broadcast seed-sowing machine, a coultter or hopper shaped as shown and described, fitted with a tooth at the bottom for opening the ground, to be attached to a Massey-Harris broadcast seed-sowing machine, converting the same into a drilling-machine, substantially as described. (Specification, 1s. 6d.; drawings, 3s.)

No. 12887.—16th February, 1900.—MANETHO CORTES JACKSON, of 74, Sherman Avenue, Manufacturer, JOHN McDONOUGH, Hotel Metropole, Mining, and ARTHUR JOHN CLARK, of 1429, Pennsylvania Avenue, Mining, all of Denver, Colorado, United States of America. Improvements in rock-drilling machines.

Claims.—(1.) The combination with a casing and a reciprocating-device, of a yoke located in the casing and connected with the reciprocating-device, and a crank-shaft whose crank engages a slot formed in the yoke for operating the reciprocating-device. (2.) The combination with a casing and a reciprocating-device of a yoke located in the casing, a yielding connection between the yoke and the reciprocating-device, and a crank-shaft whose crank engages a slot formed in the yoke for operating the latter in conjunction with the reciprocating-device. (3.) The combination with a casing, and a reciprocating-device enclosed thereby, of a yoke also enclosed by the casing, a yielding connection between the yoke and the said device permitting either of them a limited independent movement in either direction, but causing them to reciprocate together, and suitable operating means connected with the yoke. (4.) The combination with a casing, and a reciprocating-device enclosed thereby, of a yoke, also enclosed by the casing and connected with the reciprocating-device, and a buffer-spring located between the yoke and a stop on the reciprocating-device, and suitable means connected with the yoke for operating said device. (5.) The combination with a casing, and a reciprocating-device enclosed thereby, of a yoke, also enclosed by the casing, and connected to move with the said device, and two buffer-springs surrounding the reciprocating-device and engaging stops thereon, their opposite extremities engaging on opposite sides a part of the yoke through which the said device passes, and suitable means connected with the yoke for operating the reciprocating-device. (6.) In a rock-drilling machine or other kindred instrument, the combination with a casing, a guide-shell on which the casing is mounted, and a reciprocating-shaft enclosed by the casing, of a yoke, also enclosed by the casing and yieldingly connected with the shaft, means connected with the yoke for operating the shaft, feed-mechanism mounted on the guide-shell and connected with the casing, and means for automatically rotating the shaft. (7.) The combination with a casing, a guide-shell upon which the casing is mounted, a feed-screw for moving the casing on the shell, a reciprocating-shaft enclosed by the casing, and means for rotating the shaft, of a slotted yoke also enclosed by the casing, and yieldingly connected with the drill-shaft, a crank-shaft whose crank engages the slot in the yoke, a flexible shaft connected with the crank-shaft, and a motor, engine, or other power for operating the flexible shaft. (8.) In a rock-drilling machine, the combination with the casing, a drill-shaft enclosed thereby, and means for reciprocating the same, of means for rotating the drill-shaft, comprising two ratchet-wheels surrounding the shaft, and respectively provided with lugs respectively engaging a straight and a spiral groove formed in the drill-shaft, two detachable keepers located in the casing and respectively enclosing the ratchet-wheels, means for locking the keepers against rotation and longitudinal movement in the casing, and spring-held dogs pivotally mounted on the keepers and engaging the ratchet-teeth of the wheels. (9.) In a rock-drilling machine, the combination with a casing, and a reciprocating-shaft enclosed thereby, of a yoke also enclosed by the casing, and

yieldingly connected with the shaft in such a manner as to allow the shaft to rotate, the yoke being locked against rotation, the crank-shaft engaging a slot formed in the yoke, a flexible shaft connected with the crank-shaft, and means for rotating the flexible shaft. (10.) In a rock-drilling machine the combination of a casing, a reciprocating shaft, an operating crank-shaft, a flexible shaft connected with the crank-shaft, a motor, and a connection between the flexible shaft and the motor comprising two pulleys and a belt. (11.) The combination with a drill-bit or tool, of a reciprocating shaft having a bit-socket in its forward extremity and a transverse opening intersecting said socket, and a fastening-bolt inserted in the said transverse opening and apertured to receive the shank of the bit, the parts being so arranged that the shaft is revolvably balanced. (12.) In a rock-drilling machine, the combination with a guide-shell, and suitable drilling-mechanism mounted thereon, of a supporting bar, a clamp embracing the bar, a slotted plate bolted to the clamp, and a bolt passing through an opening in the guide-shell and slot of the plate whereby the shell and drill-mechanism may be shifted laterally without loosening the clamp-members. (13.) In a rock-drilling machine, the combination of the casing, the reciprocating drill-shaft, a crank shaft for operating the drill-shaft, and a fly-wheel geared to the crank-shaft in such a manner that the speed of the wheel is greater than that of the crank-shaft.

(Specification, 11s. 3d.; drawings, £1 1s.)

No. 12888.—16th February, 1900.—JOSEPH ROSS, Engineer, and WILLIAM DOUGLAS CATRNEY, Chartered Accountant, both of 45, Renfield Street, Glasgow, Scotland. Improvements in explosives.

Claims.—(1.) Explosives, either in the form of moulds or cartridges, or in a granulated form, and consisting of a mixture of about 87 per cent. of chlorate of potash, 8 per cent. of charcoal, 7 per cent. of paraffin or other suitable wax, and 3 per cent. of vaseline, and all treated in the manner substantially as described. (2.) Explosives, either in the form of moulds or cartridges, or in a granulated form, and consisting of about 75 per cent. of chlorate of potash, 6 per cent. black oxide of manganese, 6 per cent. of charcoal, 9 per cent. of paraffin or other suitable wax, and 4 per cent. of vaseline, and all treated in the manner substantially as described.

(Specification, 2s.)

No. 12889.—16th February, 1900.—DARLING'S PATENT AUTOMATIC COUPLING, LIMITED, having its registered office at 79, West Regent Street, Glasgow, Scotland (assignee of John Darling, of 2, Wharton Street, Kingscross Road, London, England, Engineer, and John Darling, jun., of Gallowflats, Rutherglen, Lanark, Scotland, Commercial Traveller. Improvements in automatically coupling and uncoupling railway-carriages, wagons, and other vehicles.

Claims.—(1.) The general arrangement, combination, and operation of the parts for automatically coupling railway-carriages, wagons, and other vehicles, substantially as described, and illustrated on the sheets of drawings. (2.) The arrangement by which the shackles adjust themselves for coupling after the operation of uncoupling has taken place, substantially as described, and illustrated more especially in hard lines in Fig. 3A of the drawings. (3.) The arrangement by which the shackles are raised to the required level and put out of reach for coupling when desired, substantially as described, and illustrated more especially in dotted lines in Fig. 3A of the drawings. (4.) The use of a spiral spring on the link D to give sufficient resistance to shackle F in operating the catch I on the spring I', substantially as described, and illustrated more especially in Fig. 5 of the drawings. (5.) The crossbar G, carrying the pin J, which, when the catch I is pushed in by the link F of the other carriage, is automatically drawn along so that the pin J engages with the link F of the other carriage, substantially as described, and illustrated on the sheets of drawings. (6.) The general arrangement, combination, and operation of the parts for uncoupling railway-carriages, wagons, and other vehicles, substantially as described, and illustrated on the sheets of drawings.

(Specification, 6s. 6d.; drawings, 18s. 6d.)

No. 12890.—16th February, 1900.—DAN LICHTENBERG-MADSEN, of 31, Nedergade, Odense, Denmark, Printer. Improvements relating to the reproduction of clichés, stamps, and the like in cellulose.

Claims.—The process for the reproduction in cellulose of clichés, stamps, and the like, characterized by the fact that a matrix is stamped with the original in a special kind of cellulose, containing 70 per cent. of nitro-cellulose, 25 per cent. of camphor, and 5 per cent. of resinous oil or the like,

whereupon the desired number of stampings are effected in the usual manner in cellulose containing from 35 per cent. to 50 per cent. of camphor.
(Specification, 3s. 3d.)

No. 12391.—16th February, 1900.—CHARLES LEWIS BENE-DICT, of Brockville, Ontario, Canada, Inventor. Improvements in books or tablets.

Claims.—(1.) A book or tablet having a series of copy-receiving leaves, and a series of removable leaves alternating therewith, each of said removable leaves having an address-receiving portion, sealing-flaps extending laterally thereof, and a portion to receive the body of the letter, substantially as described. (2.) A book or tablet having a series of permanent copy-receiving leaves, and a series of removable leaves alternating therewith, each of said removable leaves having a central address-receiving portion, sealing-flaps extending laterally thereof, and portions above and below said address-receiving portion adapted to be folded between the said address-receiving portion and said flaps, substantially as described. (3.) A book or tablet having a series of permanent copy-receiving leaves, and a series of removable leaves alternating therewith, each of said removable leaves being provided with lateral sealing-flaps, and having upon its upper face an address-receiving portion located between said flaps and a letter-receiving portion, whereby by inserting a sheet of transfer-paper between one of the removable leaves and the sheet beneath it, said lower sheet will receive an exact copy of the letter and the envelope-address, substantially as described. (4.) A book or tablet having a series of copy-receiving leaves, and a series of removable letter-sheet-envelope leaves alternating therewith, substantially as described. (5.) A book or tablet having a series of copy-receiving leaves, and a series of removable letter-sheet-envelope leaves alternating therewith, said removable leaves having lateral sealing-flaps adapted to overlap each other, one of said flaps having portions adapted to lie beneath the other flap cut away to enable the overlapping flap to be sealed to a part beneath the underlying flap, substantially as described. (6.) A book or tablet having a series of copy-receiving leaves, and a series of removable letter-sheet-envelope leaves alternating therewith, said removable leaves having lateral sealing-flaps adapted to overlap each other, one of said flaps having portions adapted to lie beneath the other flap cut away at each side, forming a central tongue, whereby the overlapping flap may be sealed to parts beneath the underlying flap on each side of said tongue, substantially as described. (7.) A book or tablet having a series of copy-receiving leaves, and a series of removable letter-sheet-envelope leaves alternating therewith, each of said removable leaves having a substantially central address-receiving portion, sealed flaps extending laterally thereof, a part below the address-receiving portion adapted to fold in rear thereof, a part above the address-receiving portion of less width longitudinally of the sheet than the flaps, adapted to fold upon the other folded part of the sheet, one of said flaps having cut-away portions on each side at its end, forming a central tongue, whereby the other flap may be sealed upon the said tongue and upon the upper and lower folded portions on opposite sides of the tongue, substantially as described. (8.) A letter-sheet provided with a substantially central address-receiving portion, sealed flaps extending laterally thereof, a part below the address-receiving portion adapted to fold in rear thereof, a part above the address-receiving portion of less width longitudinally of the sheet than the flaps, adapted to fold upon the other folded part of the sheet, one of said flaps having cut-away portions on each side at its end, forming a central tongue, whereby the other flap may be sealed upon the said tongue and upon the upper and lower folded portions on opposite sides of the tongue, substantially as described.

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

No. 12392.—16th February, 1900.—HENRY BOWEN HAIGH, of 265, McDonough Street, Brooklyn, New York, United States of America, President. Improvements in elastic heels for shoes.

Claims.—(1.) A heel for shoes made of leather, provided with a recess in the lower surface of the heel, and a rubber piece fitting in said recess but not completely filling the same, with the upper surface extending only slightly above the outer surface of the heel, with means for holding said rubber piece in place, substantially as described. (2.) A heel for shoes provided with a recess in the lower surface of the heel, and a rubber piece fitting in said recess but not completely filling the same, with the upper surface of the rubber extending only slightly above the outer surface of the heel, and a tongue on the rubber piece extending between the top lift and heel for holding the said rubber piece in place, substantially as described. (3.) In a heel for shoes a top lift therefor, made of leather, provided with a

slot wider within than at the surface, and a rubber strip fitting in said slot but not completely filling the same, and means for retaining said strip within the slot, substantially as described. (4.) In a heel for shoes made of leather, the combination, with the heel, of the top lift therefor provided with a slot having walls flaring inwardly, and a rubber strip fitting in said slot but not completely filling the same, with the upper surface of the rubber extending only slightly above the outer surface of the top lift, and a tongue on the strip extending between the top lift and the heel for retaining the strip in place, substantially as described.

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

No. 12393.—16th February, 1900.—WILLIAM KINGSLAND, of 8, Bream's Buildings, Chancery Lane, London, England, Electrical Engineer. Improvements in and connected with electrical traction on a sectional-conductor system.

Claims.—(1.) In the surface-contact system of electrical traction wherein the electric current is transmitted from a main conductor to the moving vehicle through sectional conductors successively connected and disconnected to and from the main by the passing vehicle, the latter making electrical contact with the successive sections as it passes along the track, the combination with a horizontally arranged shaft mounted in stationary bearings, a four or more armed tappet-lever fixed on the shaft, and a front and rear tappet-piece on each motor-vehicle, which tappet-pieces act consecutively upon the arms of the tappet-lever to give step-by-step rotative movements to the shaft, of a cylinder fixed upon the tappet-lever shaft and rotated therewith about its central longitudinal axis with a step-by-step motion, insulating- and conducting-surfaces upon the periphery of the cylinder, two conducting-brushes carried upon a stationary frame and in frictional contact with the periphery of the cylinder upon opposite sides thereof, an electrical connection from one brush to the main conductor, and a similar connection from the other brush to the corresponding sectional conductor, the conducting- and insulating-surfaces on the cylinder being arranged so that the sectional conductors are connected to the main at one partial rotation of the cylinder, and are disconnected at the next partial rotation, and so on, substantially as described. (2.) In the surface-contact system of electrical traction wherein the electric current is transmitted from a main conductor to the moving vehicle through sectional conductors successively connected and disconnected to and from the main by the passing vehicle, the latter making electrical contact with the successive sections as it passes along the track, the combination with a horizontally arranged countershaft, a four or more armed tappet-lever fixed thereon, and a front and rear tappet-piece on each motor-vehicle, which tappet-pieces act consecutively upon the arms of the tappet-lever to give step-by-step rotative movements to the said countershaft, of a cylinder fixed upon the second shaft and toothed gearing to connect the countershaft and the second shaft, and thereby to rotate the cylinder about its central longitudinal axis with a step-by-step motion, insulating- and conducting-surfaces upon the periphery of the cylinder, two conducting-brushes carried on a stationary frame and in frictional contact with the periphery of the cylinder upon opposite sides thereof, an electrical connection from one brush to the main conductor, and a similar connection from the other brush to the corresponding sectional conductor, the conducting- and insulating-surfaces of one cylinder being arranged so that the sectional conductors are connected to the main at one partial rotation of the cylinder, and are disconnected at the next partial rotation, and so on, substantially as described. (3.) In the surface-contact system of electric traction wherein the electric current is transmitted from a main conductor to the moving vehicle through sectional conductors successively connected and disconnected to and from the main by the passing vehicle which is in electrical contact with the sections as it passes along the track, the combination with a box formed with two compartments, the first compartment being made watertight, to contain an axially revoluble switch-cylinder C, with conducting- and insulating-surfaces on its circular periphery, and a frame carrying brushes A, B, in contact with the cylinder, one brush being in connection with the electrical main and the other with the sectional conductor, a revoluble shaft carrying the cylinder and passing through the partition to the second compartment, and a four or more armed tappet-lever fixed on the cylinder-shaft in the second compartment, the upper part of the walls of the latter being cut away above the tappet-lever, of track-rails having an open channel between same passing over the cut-away part of the second compartment, the arms of the tappet-lever extending into such channel between the rails, and a front and rear tappet-piece on each motor-vehicle, which tappet-pieces act consecutively upon the arms of the tappet-lever to give step-by-step rotative motions to the shaft and thereby to the

cylindrical switch, substantially as set forth. (4.) In electrical traction, the combination with a main electrical conductor, and sectional working conductors from which the motor-vehicle directly collects the current, a switch-mechanism located between the main and each of the sectional conductors, such switch-mechanism consisting of a shaft mounted in bearings, a four or more armed tappet-lever carried on the shaft, a cylinder having conducting- and insulating-surfaces also mounted on the same shaft, two brushes in contact with the cylinder, one in electrical connection with the main conductor and the other in connection with one of the sectional conductors, of a locking-device consisting of two lever catches hinged to a fixed part, counterbalancing arms to cause the lever catches to normally engage with the arms of the tappet-lever, a curved striking-plate on the upper end of each lever catch, tappet-pieces on each motor-vehicle to force back the catch-levers, to free the tappet-lever and partially rotate same, the latter lever being again locked automatically by the falling-forward of the catch-levers, substantially as set forth. (5.) In electrical traction, the combination with a main electrical conductor and sectional working conductors, from which the motor-vehicle directly collects the current, of a switch-mechanism located between the main and each sectional conductor, such switch-mechanism consisting of a rotary shaft carried in bearings, a cylinder having conducting- and insulating-surfaces mounted on the shaft, two brushes in contact with the cylinder, one in electrical connection with the main conductor and the other in connection with one of the sectional conductors, an enclosing box having a watertight compartment therein to receive the rotary shaft and parts connected therewith, an extension of the rotary shaft into a second compartment of the box, a four or more armed tappet-lever carried on the shaft in the second compartment, rails above the box arranged to form a slotted conduit into which the armed tappet-lever projects, two lever catches hinged to the box and counterbalanced arms on the catches to cause same to normally and automatically engage and lock the armed tappet-lever, and tappet-pieces on each motor-vehicle to force back the catch-levers and release and partially rotate the armed tappet-lever, the latter lever being again locked automatically by the falling-forward of the catch-levers after the passing of the vehicle-tappets as set forth. (6.) The general arrangement and combination of parts composing my improvements in or connected with electrical traction, substantially as described with reference to the drawings.

(Specification, 10s. 3d.; drawings, 16s.)

No. 12394.—16th February, 1900.—WILLIAM KINGSLAND, of 8, Bream's Buildings, Chancery Lane, London, England, Electrical Engineer. Improvements in or connected with surface-contact studs for electric traction.

Claims.—(1.) A contact stud for electric traction composed wholly of metal or partly of metal and partly of insulating material, and made in two main parts, one of which fits tightly within the other in the manner of a wedge, and so that it may be withdrawn when required, substantially as described. (2.) The construction and arrangement of contact studs for electric traction substantially as described, and illustrated with reference to the drawings.

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

No. 12404.—20th February, 1900.—FRANCIS JAMES OLSEN, of Spey Street, Invercargill, New Zealand, Photographer, and EDWARD HENRY WHITMOBE, of Don Street, Invercargill aforesaid, Printer. Improved apparatus for filtering water.

Claims.—(1.) In water-filtering apparatus, the combination of two cylinders one within the other, the inner cylinder having superposed compartments containing broken granite, an outer felt cup within the upper part of said inner cylinder receiving a perforated drum containing charcoal, an inner felt cup within said outer felt cup arranged above the drum containing charcoal and receiving a perforated drum containing lime, a felt disc above the lime-drum, a cover through which water to be filtered is supplied, means for securing said cover to the outer cylinder and whereby the felt cups and felt disc are clamped in position, a felt disc at the perforated bottom of said inner cylinder, a chamber beneath it receiving filtered water, and a tap upon the outer cylinder for withdrawing water from the chamber, substantially as specified and illustrated. (2.) The combination in water-filtering apparatus of two cylinders one within the other, the inner cylinder having superposed compartments containing broken granite, a felt cup within the upper part of said inner cylinder receiving a perforated drum containing charcoal, a felt disc above said drum, a cover having an opening to admit water to be filtered, means for securing said cover to the outer cylinder and clamping the felt cups

and disc in position, a felt disc beneath the perforated bottom of said inner cylinder, a reservoir beneath said inner cylinder receiving filtered water, and a tap upon the outer cylinder for withdrawing water from said reservoir, substantially as specified. (3.) The combination in filtering apparatus of a cylinder containing broken quartz, a felt cup within the upper part of said cylinder, a perforated drum within said felt cup containing charcoal, a cover over said cup through which water to be treated is admitted, a reservoir for filtered water at the perforated bottom of said cylinder, and a tap for withdrawing water from said reservoir, substantially as specified and illustrated. (4.) In water-filtering apparatus such as described, a cylinder containing filtering-medium, a felt disc above said cylinder, a cover through which water to be treated is admitted, and a "blow-through" pipe from the cover for removing silt from the upper surface of said felt disc, substantially as specified and illustrated. (5.) The combination in water-filtering apparatus of two cylinders one within the other, the inner cylinder containing broken granite, a felt cup within the upper part of said inner cylinder receiving a perforated drum containing charcoal, a felt disc above said drum, a cover having an opening to admit water to be filtered, means for securing said cover to the outer cylinder and clamping said felt cup and said disc in position, a felt disc beneath the perforated bottom of said inner cylinder receiving filtered water, and a tap upon the outer cylinder for withdrawing water from said reservoir, substantially as specified. (6.) The improved apparatus for filtering water consisting of the parts arranged, combined, and operating substantially as and for the purposes described, and illustrated in the drawing.

(Specification, 3s. 9d.; drawings, 8s.)

No. 12409.—21st February, 1900.—HENRY LANGDON SPRING, of 517, Hay Street, Perth, Western Australia, Manufacturer (assignee of Herbert Thomas Rigg, of Bunbury, Western Australia, Carpenter). Improved process of, and apparatus for, the fitro-amalgamation of auriferous ores.

Claims.—(1.) The process of fitro-amalgamation consisting of the maintenance of a superimposed body of ore or matter which by its own weight is made to percolate or filter through a body of mercury so that the auriferous particles may be won, substantially as and for the purposes set forth and described. (2.) The peculiar arrangement of an appliance consisting of an upper chamber of a taper or wedge shape, which proceeds or depends into another lower chamber, and both so arranged and disposed as to cause the ore in the upper chamber to percolate down and through the body of mercury in the power chamber, substantially as and for the purposes set forth and explained, and as illustrated in the drawings.

(Specification, 1s. 6d.; drawings, 8s.)

No. 12410.—21st February, 1900.—HENRY LANGDON SPRING, of 517, Hay Street, Perth, Western Australia, Manufacturer (assignee of Herbert Thomas Rigg, of Bunbury, Western Australia, Carpenter). An improved ball cradle for crushing metalliferous ores.

Claims.—(1.) A crushing trough or cradle having false or replaceable bottoms, and being swung or trunnioned on a transverse shaft or pivot, and having swinging or oscillatory motion imparted thereto, such cradle being in combination with a loose ball as the direct crushing agent, which travels successively from end to end by means of gravitation and its own momentum, substantially as and for the purpose set forth and specified, and as illustrated in the drawings. (2.) The specified crushing trough or cradle, being provided with meshed outlets and fluming for discharging the crushed ores successively at each down-swing of the cradle, and such outlet boxes and fluming being lined with amalgam plates substantially as set forth, and as illustrated in the drawing.

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

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.

J. C. LEWIS,
Deputy Registrar.

Provisional Specifications.

Patent Office,
Wellington, 28th February, 1900.

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

No. 12346.—31st January, 1900.—GEORGE ALBERT GAMMAN, of Dannevirke, New Zealand, Sawmiller. Improvements in cutters and cutter-heads for wood-planing machines.

No. 12362.—16th February, 1900.—ARTHUR JOHN CUMING, of Caledonian Road, St. Albans, Christchurch, New Zealand, Journalist. Improvements in and relating to branding animals and carcasses, and apparatus therefor.

No. 12363.—3rd February, 1900.—THOMAS HOOD, of Egmont Street, Patea, New Zealand, Chemist, and FREDERICK TREWEEK, of Whenuakura, New Zealand, Railway Ganger. A preparation for preventing rust on iron and steel.

No. 12365.—3rd February, 1900.—JAMES BERNARD MACKENZIE, of New Brighton, New Zealand, Commission Agent. A housemaid's knee-pad.

No. 12379.—13th February, 1900.—JAMES HOUSDEN FINLAYSON, of Conference Street, Christchurch, New Zealand, Commission Agent. Improved method of and means for producing photographic enlargements of photographs, vases, or other subjects.

No. 12395.—16th February, 1900.—WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of Ernest Rowland Hill, of 814, Maple Avenue, Wilkingsburg, Pennsylvania, United States of America, Electrical Engineer). Improvements in the electric lighting of railway-vehicles.

No. 12396.—16th February, 1900.—WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of Egbert Moore Tingley, of Amber Club, Pittsburg, Pennsylvania, United States of America, Electrical Engineer). Improvements in electric brakes.

No. 12397.—16th February, 1900.—JAMES PALMER CAMPBELL, of Wellington, New Zealand, Registered Patent Agent (nominee of Benjamin Garver Lamme, of 230, Stratford Avenue, Pittsburg, Pennsylvania, United States of America, Electrical Engineer). Improvements in current-collectors for electrical machines.

No. 12398.—16th February, 1900.—JOHN LOUDON, of Dunedin, New Zealand, Company-manager. An improved device for maintaining or preserving the fold in the crown of soft hats.

No. 12402.—19th February, 1900.—JOHN WRIGHT, Farmer, and JOHN WILLIAM MITCHELL, Machinist, both of Mosgiel, New Zealand. An improved method of and means for branding carcasses.

No. 12403.—20th February, 1900.—TOM VIVIAN, of Fort Street, Auckland, New Zealand, Merchant. Improved means for keeping salt in a powdered state.

No. 12405.—20th February, 1900.—STANLEY WAKEFIELD SHAW, of New Plymouth, New Zealand, Auctioneer. An improved fence, and apparatus for constructing the same.

No. 12406.—20th February, 1900.—PERCY STUART IRWIN and SAMUEL JAMES LUKE, of Princes Street, Dunedin, New Zealand. Improvements relating to dredging.

No. 12408.—16th February, 1900.—ANDREW SMITH, of George Street, Onehunga, Auckland, New Zealand, Blacksmith. Improvements in tips for racehorses.

No. 12411.—21st February, 1900.—JOHN ALFRED DEWHIRST, of Herberville, Hawke's Bay, New Zealand, Blacksmith. An improvement in branding-instruments.

No. 12412.—21st February, 1900.—ROBERT IRELAND, of Hunterville, New Zealand, Farmer. An improved fastening for boots and shoes.

No. 12414.—22nd February, 1900.—BINNS KERSHAW, of 62, Livesey Street, Manchester, England, Manufacturer. Improvements in and connected with the manufacture of fabrics used for covering meat.

No. 12415.—22nd February, 1900.—THOMAS BURRELL, of 193, Abbotsford Street, North Melbourne, Victoria, Stonemason. An improved tire for cycles and other road vehicles.

No. 12416.—22nd February, 1900.—HARRY WARD, of "Barcoona," Camberwell Road, Camberwell, near Melbourne, Victoria, Jeweller. Improved door-closing mechanism.

No. 12417.—22nd February, 1900.—WALLINGTON COATES, Preserver, and ANGUS MICKLE SHAND, Assistant Preserver, both of Queensport, Queensland; and GEORGE FREDERICK JAMES HEWITT, of 177, Queen Street, Brisbane, Queensland, Sharebroker. Improvements in the process of preserving meat for canning purposes.

No. 12418.—22nd February, 1900.—NORMAN HUGH MACMEIKAN, of 495, Collins Street, Melbourne, Victoria, Exporter. An improved crate for the transport of rabbits.

No. 12419.—20th February, 1900.—WILLIAM HALL, of Invercargill, New Zealand, Bootmaker. A barb-wire-cutting attachment to a rifle or carbine, for the purpose of cutting barb-wire obstacles in front of an enemy.

No. 12420.—24th February, 1900.—WILLIAM WOOD, of Dunedin, New Zealand, Confectioner. An improvement in hair-pins.

No. 12421.—21st February, 1900.—JAMES STEWART, of Campbelltown, New Zealand, Mechanical Engineer. Improvements in bottles, to prevent their fraudulent re-use.

No. 12422.—23rd February, 1900.—EWEN ALEXANDER CAMERON, of Queenstown, New Zealand, Civil Engineer and Architect. Improved spark-arrester and fuel-economizer.

No. 12423.—27th February, 1900.—HUGH CAMPBELL, of Dannevirke, Hawke's Bay, New Zealand, Dairy Factory Manager. An invention for straining wire around cheese-cases and suchlike.

J. C. LEWIS,
Deputy Registrar.

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

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

Letters Patent sealed.

LIST of Letters Patent sealed from the 1st February, 1900, to the 20th February, 1900, inclusive:—

No. 10844.—J. B. Beale, branding-instrument.

No. 11040.—W. C. Greig and J. H. Gardner, manufacture of candles.

No. 11156.—W. E. Hughes, floor (E. Jensen).

No. 11163.—W. E. Hughes, manufacturing concrete pipes (E. Jensen).

No. 11168.—J. Barugh and W. K. Elder, mould-board for plough.

No. 11184.—S. S. Bastard, treating flax.

No. 11203.—G. Clements, potato moulder and cultivator.

No. 11310.—E. Goodridge, urinal.

No. 11403.—E. Gilshnan, jun., compass and time-indicator combined.

No. 11535.—B. G. Lamme, electrical distribution.

No. 11536.—G. Westinghouse, C. A. Terry, and H. P. Davis, electric railway.

No. 11689.—B. J. Atterbury and T. Macalpine, producing acetylene compounds.

No. 11690.—N. Rowe, regulating electro-motive force.

No. 11895.—H. G. Bedell, window-sash.

No. 11960.—J. Nicholas, brake.

No. 12091.—E. Burton and R. B. Echlin, ticket printing and issuing mechanism for totalisator.

No. 12107.—W. E. Hughes, attaching corrugated-iron sheets to buildings (C. H. Windle).

No. 12113.—Massey-Harris Company, Limited, seeding-machine (C. McLeod).

No. 12114.—A. W. Maconochie, provision-tin.

No. 12119.—Fraser and Chalmers, Limited, pump (J. Stumpf).

No. 12120.—A. Stevens and W. S. Penney, brake.

No. 12122.—A. P. Schmucker, L. D. Sweet, and G. E. Ross-Lewin, rock-drill.

No. 12123.—S. R. Dresser, pipe-coupling.

No. 12124.—Lanston Monotype Machine Company, preparing record strips of type-forming machines (G. Lanston).

No. 12127.—E. Harnett, springs for cycles.

No. 12139.—F. Coffee, chair.

No. 12155.—A. Sommer, solutions of sweet carbamides in oils.

No. 12161.—R. Avery and H. C. Campbell, rock-drill.

No. 12163.—J. Smith, treating gold- and silver-ores.

No. 12164.—R. Diesel, internal-combustion engine.

No. 12176.—W. G. and E. Munt, pianoforte.

No. 12178.—J. Steiger, cement.

No. 12179.—H. J. Buchan, acetylene-generator.

No. 12188.—F. Ballou, smelting ores.

J. C. LEWIS,
Deputy Registrar.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

No. 8321.—J. A. Packer, artificial limb. 27th February, 1900.

No. 8324.—A. Muirhead, submarine telegraphy. 22nd February, 1900.

No. 8327.—F. E. Hunter, box iron. 22nd February, 1900.
 No. 8328.—H. A. Taylor, telegraph transmitter. 22nd February, 1900.
 No. 8334.—The Maypole Company, Limited, soap. (G. Stecken.) 22nd February, 1900.

THIRD-TERM FEES.

Nil.

J. C. LEWIS,
 Deputy Registrar.

Subsequent Proprietors of Letters Patent registered.

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

No. 9406.—Henry Edward Partridge, of Queen Street, Auckland, New Zealand, tobacco and general merchant, hair-wash. [W. T. Trudgeon.] 27th February, 1900.

No. 10844.—Alexander Macpherson, of Wellington, New Zealand, Gentleman, branding-instrument. [J. B. Beale.] 27th February, 1900.

J. C. LEWIS,
 Deputy Registrar.

Applications for Letters Patent lapsed.

LIST of applications for Letters Patent (with which complete specifications have been lodged) lapsed, from the 15th February, 1900, to the 28th February, 1900, inclusive:—

No. 10896.—A. Reynolds, weed-exterminator.

No. 10903.—T. Anderson, scuteher attachment.

No. 10904.—D. Whitburn, blasting-appliance.

No. 10906.—J. Crook and E. Whitehead, sack-sewing machine.

No. 10916.—J. Keir, feed for drill.

J. C. LEWIS,
 Deputy Registrar.

Letters Patent void.

LIST of Letters Patent void through non-payment of fees from the 15th February, 1900, to the 28th February, 1900, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 8060.—J. Speedy, harrow.

No. 8068.—J. Hart and W. E. Humphreys, pain specific.

No. 8071.—F. Wright, coin-freed gas-meter apparatus.

No. 8072.—The Automatic Photo-printing Syndicate, Limited, producing prints (W. Friese-Greene).

No. 8074.—J. C. Robertson and J. A. Wallace, illuminant.

No. 8084.—H. Hughes, windmill (Rollason's Wind Motor Company, Limited—S. J. Rollason).

No. 8085.—J. Mitchell, nail.

No. 8091.—C. P. Shrewsbury and J. L. Dobell, electric battery.

No. 8092.—J. Rungay, sash-fastener.

No. 8093.—J. Rungay, ventilator.

No. 8097.—A. Stubbs, milk cooler and aerator.

No. 8104.—H. E. Smith and W. Salter, match (G. W. Thomas).

THROUGH NON-PAYMENT OF THIRD-TERM FEE.

No. 5910.—W. H. Travis, harness.

J. C. LEWIS,
 Deputy Registrar.

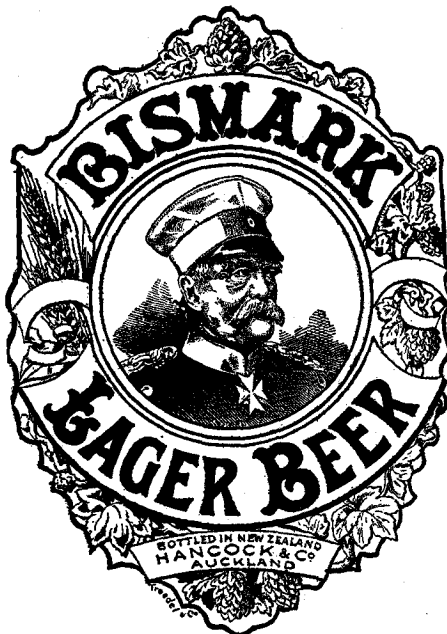
Applications for Registration of Trade Marks.

Patent Office,
 Wellington, 28th February, 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: 2350.
 Date: 3rd November, 1899.

TRADE MARK.



The essential particulars of the trade mark are as follows—the combination of devices; and the applicants disclaim any right to the exclusive use of the added matter save and except their name.

NAME.

HANCOCK AND COMPANY, of Newmarket, Auckland, New Zealand, Brewers.

No. of class: 43.

Description of goods: Lager-beer.

No. of application: 2907.

Date: 22nd December, 1899.

TRADE MARK.



The essential particular of this trade mark is the distinctive device; and the applicant disclaims any right to the exclusive use of the added matter except his name and address.

NAME.

HAROLD LUCIEN KOEFOED, of Thames, Auckland, New Zealand, Sauce-manufacturer.

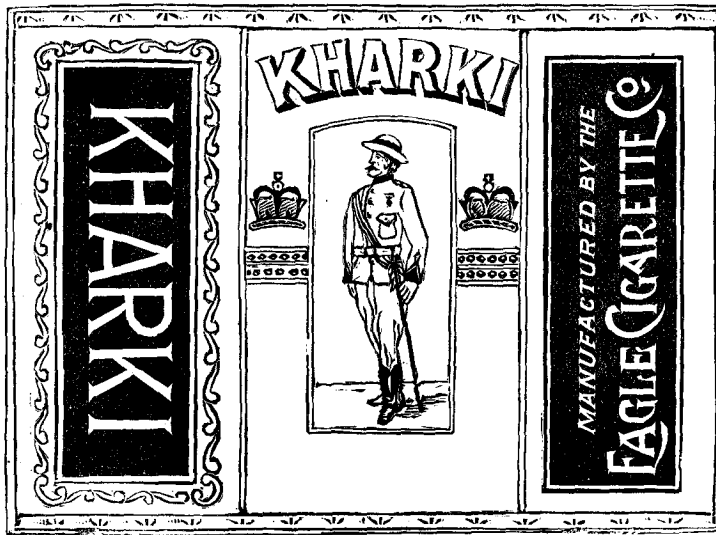
No. of class: 42.

Description of goods: Sauces, pickles, and vinegar.

No. of application: 2946.

Date: 12th February, 1900.

TRADE MARK.



The essential particulars of this trade mark are the representation of a soldier of the New Zealand Contingent, the general design, and the word "Kharki"; and the applicants disclaim any right to the exclusive use of the added matter except the name of the firm.

NAME.

WILLIAM GREGG AND Co., LIMITED (the Eagle Cigarette Company), of Rattray Street and King Street, Dunedin, New Zealand, General Merchants and Cigar and Cigarette Manufacturers.

No. of class: 45.

Description of goods: Cigars, cigarettes, and tobacco.

No. of application: 2952.

Date: 15th February, 1900.

TRADE MARK.

The word

PRIMROSE.

NAME.

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

No. of class: 42.

Description of goods: Tea.

No. of application: 2954.

Date: 15th February, 1900.

TRADE MARK.

The word

CHIEFTAIN.

NAME.

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

No. of class: 42.

Description of goods: Tea.

No. of application: 2953.

Date: 15th February, 1900.

TRADE MARK.

The word

THISTLE.

NAME.

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

No. of class: 42.

Description of goods: Tea.

No. of application: 2955.

Date: 15th February, 1900.

TRADE MARK.

The word

ROSEKANDY.

NAME.

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

No. of class: 42.

Description of goods: Tea.

No. of application : 2956.
Date : 16th February, 1900.

TRADE MARK.
The word

FRAM.

NAME.

OHLHAYER GEBRÜDER, of 30, Grosse Reichenstrasse, Hamburg, Germany.

No. of class : 7.
Description of goods : Cream-separators.

No. of application : 2958.
Date : 22nd February, 1900.

TRADE MARK.
The words

THE BUSHMAN.

NAME.

W. H. PALING AND Co. (LIMITED), a trading company registered according to the laws of the Colony of New South Wales, and having its registered office at 338, George Street, Sydney, New South Wales, Importers of Pianos, Organs, Music, and Musical Instruments.

No. of class : 9.
Description of goods : Musical instruments, including mouth-organs and suchlike.

No. of application : 2960.
Date : 24th February, 1900.

TRADE MARK.
The word
CONTINGENT.

NAME.

FRANCIS JAMES WEBBER FEAR, of Wellington, New Zealand, Engineer.

No. of class : 6.
Description of goods : Sewing-machines.

No. of application : 2961.
Date : 24th February, 1900.

TRADE MARK.
The word
CONTINGENT.

NAME.

FRANCIS JAMES WEBBER FEAR, of Wellington, New Zealand, Engineer.

No. of class : 13.
Description of goods : Metal parts of bicycles or sewing-machines, or accessories of bicycles or sewing-machines included in this class.

No. of application : 2962.
Date : 24th February, 1900.

TRADE MARK.
The word

CONTINGENT.

NAME.

FRANCIS JAMES WEBBER FEAR, of Wellington, New Zealand, Engineer.

No. of class : 22.
Description of goods : Bicycles and suchlike vehicles.

No. of application : 2963.
Date : 24th February, 1900.

TRADE MARK.
The word
CONTINGENT.

NAME.

FRANCIS JAMES WEBBER FEAR, of Wellington, New Zealand, Engineer.

No. of class : 40.
Description of goods : Tires and other rubber goods for bicycles.

No. of application : 2965.
Date : 26th February, 1900.

TRADE MARK.
The word
EUREKA.

NAME.

J. B. GILBERD AND SONS, of Wanganui, New Zealand, Soap-manufacturers.

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

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 15th February, 1900, to the 28th February, 1900, inclusive :—
No. 2244 ; 2863.—The Onewhero Co-operative Dairy Company, Limited ; Class 42. (*Gazette* No. 99, of the 23rd November, 1899.)
No. 2245 ; 2890.—J. Purdie and Co. ; Class 44. (*Gazette* No. 103, of the 7th December, 1899.)
No. 2246 ; 2882.—W. H. Martin ; Class 42. (*Gazette* No. 103, of the 7th December, 1899.)
No. 2247 ; 2879.—The British Uralite Company, Limited ; Class 17. (*Gazette* No. 103, of the 7th December, 1899.)
No. 2248 ; 2880.—The British Uralite Company, Limited ; Class 17. (*Gazette* No. 103, of the 7th December, 1899.)

No. 2249; 2881.—The British and Foreign Safety Fuse Company; Class 20. (*Gazette* No. 103, of the 7th December, 1899.)

No. 2250; 2885.—R. W. Chapman and J. Hurse; Class 42. (*Gazette* No. 103, of the 7th December, 1899.)

No. 2251; 2538.—Parker and Lawson; Class 37. (*Gazette* No. 88, of the 8th December, 1898.)

J. C. LEWIS,
Deputy Registrar.

Subsequent Proprietor of Trade Mark registered.

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

NO. 2441/2062.—Henry Edward Partridge, of Queen Street, Auckland, New Zealand, Tobacco and General Merchant. [H. E. Partridge and J. J. Odium.] 27th February, 1900.

J. C. LEWIS,
Deputy Registrar.

COPIES 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.

J. C. LEWIS,
Deputy-Registrar.

By Authority: JOHN MACKAY, Government Printer, Wellington.

