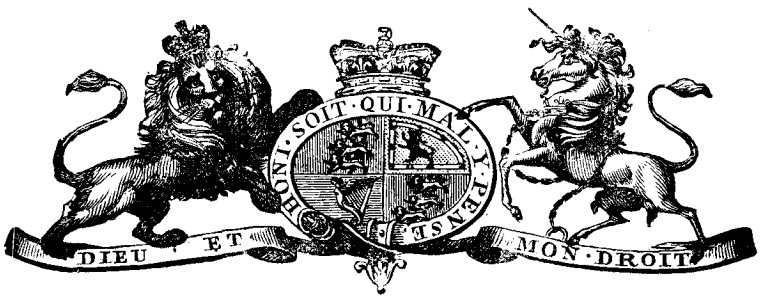


SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, JULY 9, 1903.

Published by Authority.

WELLINGTON, THURSDAY, JULY 9, 1903.

CONTENTS

Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 8th July, 1903.

COMPLETE specifications relating to the undermentioned 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. 15057.—28th June, 1902.—THOMAS GREGORY RUSSELL, of Christchurch, New Zealand, Solicitor, and ALBERT HENRY PARSMORE NOBLE, of Christchurch aforesaid, Engineer. An improved method of exterminating rabbits, and apparatus in connection therewith.*

Claims.—(1.) In the destruction of rabbits and the like, the employment of members of the hydrocarbon series or their derivatives which are capable of volatilisation without artificial heat, volatilising the same by a current of air, and afterwards forcing the mixture under pressure in the burrows, as specified. (2.) In the destruction of rabbits and the like, the volatilisation by a current of air of petrol or gasoline, either separate or together, without the application of artificial heat, and afterwards forcing the mixture under pressure into the burrows, as specified. (3.) In the destruction of rabbits and the like, the volatilisation of carbon-bisulphide by a current of air without the application of artificial heat, and afterwards forcing the mixture under pressure into the burrows, as described. (4.) In the destruction of rabbits and the like, the volatilisation of carbon-bisulphide by a current of air without the application of artificial heat, forcing the mixture under pressure into the burrows and exploding it, as specified. (5.) In apparatus used in the destruction of rabbits, the general arrangement, construction, and combination of parts substantially as described, and illustrated with reference to the drawings. (6.) In apparatus for destroying rabbits, a vaporiser through which the liquid to be volatilised is passed, said vaporiser being in connection with an air-pump and having internally situated inclined overlapping baffle-plates and a delivery-orifice, as described and set forth. (7.) In apparatus for destroying rabbits, the combination, in the flexible delivery-pipe, of a metal tube having a firing-cap and a cut-off cock between the firing-cap and the apparatus, the handle of said cut-off normally covering the cap while the apparatus is in operation, as described, and for the purposes set forth.

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

No. 15144.—17th July, 1902.—FREDERICK SEYMOUR POTTER, of Lorne and Rutland Streets, Auckland, New Zealand, Coach-builder. An improvement in the springs attached to vehicles.*

Claim.—An improvement in the springs attached to vehicles, consisting of a buffer composed of one or more curved steel plates to receive weight of load when the spring is pressed down upon it by the weight being carried. These plates or plate are curved up at both ends and tempered so that they have the same elasticity as the springs, and are attached to the inside of springs by bolt in centre and two clips, as illustrated in drawing.

(Specification, 1s.; drawing, 1s.)

No. 15380.—11th September, 1902.—THOMAS WILLIAM NORTH, of Christchurch, New Zealand, Orchardist. An improved horse-collar.*

Claim.—The improvement in horse-collars which consists in the employment upon a horse-c llar of a metal rack attachment having a link to which the draft hook or shackle of the harness is connected, said link being adapted to be placed in any compartment of the rack according as it is desired to alter the bearing of the load upon the animal's shoulder, as specified.

(Specification, 1s. 9d.; drawing, 1s.)

No. 15413.—18th September, 1902.—UNITED SHOE MACHINERY COMPANY, of Paterson, State of New Jersey, United States of America, a corporatiion duly organized under the laws of the said State of New Jersey, and having their principal place of business at 205, Lincoln Street, Boston, Massachusetts, United States of America (assignees of Benjamin Franklin Mayo, of Salem, Essex, Massachusetts aforesaid, Inventor). Improvements in or relating to me chanism for assorting nails.*

Extract from Specification.—This invention relates to mechanism for assorting nails. Many different forms of mechanism have heretofore been devised for automatically assorting nails head first or point first as they are delivered from raceways, on which said nails are placed indiscriminately as to the direction of their heads and points. We have devised a novel mechanism for this purpose, which is based on a novel principle not heretofore observed, so far as we are aware, in connection with this class of work. The nails used are commonly of the same length and weight, and their head ends preponderate in weight. We have therefore provided a raceway the grooved parts of which are arranged in different levels, and at the discharge-end of the uppermost level a transverse shoulder is provided, beyond which is a space in which all the nails which are arranged head first in the grooves of the raceway drop by gravity, the said nails thereafter continuing to slide down the lower part of the raceway with their heads leading; but all the nails which are deposited in the grooves of the raceway above said shoulder point first, on arriving at said shoulder, cross the space and enter grooves of a nail-point receiver, and said point-first nails continue to travel until their heads pass the shoulder referred to, when the heavier head ends of the nails predominating immediately turn the said nails end-for-end, letting them drop into the grooves of the lower part of the raceway head first, after which they continue to travel in the lower part of the raceway head first. In this way it will be noticed that the raceway itself has provision whereby it acts automatically to assort, as to heads and points, the nails which come down its grooves. We believe we are the first to provide a raceway which will itself automatically assort the nails passing over it. The nails with their heads all arranged in one direction on the lower part of the raceway pass therefrom with their heads so arranged on to a transferring device, which in the first construction of mechanism according to this invention may be moved at the proper times, and in either direction, to discharge said assorted nails head first or point first into pockets, which lead to the position from which the nails are to be driven. In devices of this class as heretofore constructed it has been customary to reciprocate the raceway constantly in order to work the nails gradually down to the delivery point, and in order to insure the separation of a series of nails at each operation of the device which transfers the nails from the raceway it has been customary, as described in the second and third constructions of mechanisms according to this invention, hereinafter explained, to divide the raceway near its lower end, placing its terminal portion higher than the part adjacent to it, and to employ a lifter to elevate a series of nails from one portion of the raceway to the other, thus separating at each operation a series of nails to be acted upon by the transferring device. In the first construction of nail assorting mechanism according to this invention, shown in Figs. 1 to 7 inclusive and fully described, we have dispensed with this division of the raceway and with the lifter, and have provided mechanism for stopping the reciprocations of the raceway at each operation of the transferring device, so that while the transferrer is operating there is no reciprocation of the raceway, and consequently there is no movement of the nails toward the transferrer, and no confusion of each series of nails, as they are being handled, with the preceding nails on the raceway. We believe that we are the first to arrange, in a nail-assorting mechanism, means for intermittently stopping the reciprocations of the raceway and so stopping the movement of the nails thereon when desired. The device employed in the first construction of mechanism according to this invention to receive and deliver the nails is herein referred to as a table which may be oscillated, preferably in one or the other direction, at will to deliver the nails either point first or head first as may be required. We have also discovered that if an arresting-device be located at a distance from the end of an inclined raceway section by which the nails are sustained, and on the surface of which said nails are free to slide, the distance of said arresting-device from said raceway section being however suitably less than the length of the nails, the ends of the nails will meet said arresting-device, and that all the nails leaving said raceway section head first will, because of the preponderance of their heads in weight, drop head first, but the nails which leave it point first will rest with their points against said arresting-device and will not drop by gravity. Observing these facts we have devised a second construction, shown in Figs. 8 to 12 inclusive, and more fully described, comprising an arresting-device which also constitutes a nail-reverser, and which is composed of two parts, one part movable on or with relation to the other, whereby, by the movement of that part of the device which arrests the point-first nails, said nails having given to them, after having been arrested, an additional longitudinal movement, which enables their heads to leave the raceway section which had sustained them. The movable plates comprising the arresting and reversing device are superimposed one on or in relation to the other, and said plates at times present their edges next to the said raceway section in substantially the same vertical plane, and at other times in different vertical planes, said plates being moved one on or with relation to the other for each series of nails to be discharged from a plurality of grooves in the raceway section, the upper plate having first imparted to it a movement away from the raceway terminal section to enable the point-first nails to slide from the terminal, the points of the point-first nails passing over the edge of the lower plate, which thereafter acts as a reversing device, so that all the point-first nails may, by the movement of the upper plate, slide far enough to enable their heads to leave the raceway. Heretofore the raceways used in this class of machines have been reciprocated, and in practice it has been found that the strain required to move said raceways and the strain exerted in reversing their movements have so jarred the machine as to cause an objectionable amount of vibration. We have discovered that by dividing the raceway or forming the nail-conducting device in parts, and imparting to the different parts of the raceway independent movements, preferably in opposite directions and substantially simultaneously, we are enabled to do away with the jarring strains and the other objections hitherto existing in machines provided with reciprocating raceways. We believe that we are the first to divide a raceway into a plurality of parts, and move said parts independently to impart thereby to the raceway movements which will cause the nails to travel on said parts of the raceway. In the third construction of nail-assorting mechanisms according to this invention, as shown in Figs. 13, 14, 15, and 16, we therefore have divided the raceway transversely into a plurality of parts and provided mechanism for reciprocating the parts of the raceway simultaneously in opposite directions, said reciprocations causing the nails to travel in the direction of the grooves in the raceway. In this third construction of mechanism we have also provided a nail returning table, located beneath the upper raceway, to receive the nails which are rejected by the said upper raceway and return them to the nail-supplying mechanism, and the table is inclined in a direction opposite to that in which the upper raceway is inclined. The nail-returning table is so connected to the actuating mechanism that it is reciprocated simultaneously with the upper raceway to cause the nails to travel on it, said reciprocation being, however, in an opposite direction to the reciprocating movement of one part of the upper raceway. In this construction of nail-assorting mechanism a novel feeding-mechanism has been provided to supply the raceway-plate and its grooves with nails.

[NOTE.—The above extract from the specification is inserted in place of the claims.]

Specification, £1 15s.; drawings, 5s.

No. 15429.—22nd September, 1902.—JOHN WHITEHOUSE, of Waihi, Auckland, New Zealand. Improved spark-arrester.*

Claims.—(1.) In apparatus for the purpose indicated, in combination, an exhaust steam-pipe fixed within a chimney vertically above the ordinary exhaust-plates of an engine, and fitted with a telescopic end, baffle-plates between said exhaust-pipe and the chimney, a casing or jacket surrounding the chimney, and ports in the chimney below said baffle-plates communicating with the annular space between the chimney and the casing, substantially as specified, and illustrated in the drawings. (2.) For the purpose indicated, in combination, an exhaust steam-pipe fixed within a chimney and having a telescopic end receiving the upper end of the main exhaust-pipe, baffle-plates between the exhaust steam-pipe

and the chimney, ports through the chimney below the baffle-plates, a casing surrounding the chimney forming an annular space which receives sparks and *débris* passing through said ports, and doors at the lower part of the casing for the removal of *débris*, substantially as specified, and as illustrated in the drawing. (3.) For the purpose indicated, in combination, an exhaust steam-pipe fixed within a chimney and having a telescopic end receiving the upper end of the main exhaust-pipe, baffle-plates between the exhaust-pipe and the chimney, ports through the chimney below the baffle-plates, a casing surrounding the chimney, doors at the lower part of the casing for the removal of *débris* passing through the ports, and a spray-pipe within the casing for preventing firing of the ashes therein, substantially as specified and as illustrated. (4.) Improved spark-arrester consisting of the parts arranged, combined, and operating substantially as and for the purposes indicated, and as illustrated in the drawings.

(Specification, 4s.; drawing, 3s.)

No. 15439.—20th September, 1902.—LAWRENCE WILLIAM GRAYSON, of Ludstone Chambers, 352, Collins Street, Melbourne, Victoria, Mining Engineer, and CHARLES STUART CUNNINGHAM, of the same address, professional shorthand-writer. An improved rowing-machine for physical exercise, training, and coaching.*

Claims.—(1.) An improved rowing-machine for physical exercise, training, and coaching, comprising a pair of rotatable handles or oar-looms each mounted upon the horizontal arm of a crank-spindle, whose vertical arm is fitted with a clutch mechanism adapted to engage and release a friction-wheel, the whole being mounted in pivoted casings on each side, substantially as set forth and illustrated. (2.) In a rowing-machine for physical exercise, training, and coaching, an eccentric or roller clutch mechanism attached to a crank-spindle, in combination with a friction-wheel having an adjustable brake-band around its grooved periphery, substantially as and for the purposes specified and as illustrated. (3.) In a rowing-machine for physical exercise, training, and coaching, a pair of pivoted casings having trunnions journalled in bearings in convenient side support, and carrying the mechanism, substantially as and for the purposes specified and as illustrated.

(Specification, 2s. 3d.; drawing, 1s.)

No. 15449.—26th September, 1902.—JOHN ARMSTRONG, of Mount Roskill. Auckland, New Zealand, Carpenter. Improved means for securing cords to window-sashes and for other analogous purposes.*

Claims.—(1.) In means for securing cords to window-sashes and the like, a pair of metal plates or discs, each provided with a groove across its face and adapted to be secured to the side of the sash with their grooved faces adjacent and with the sash-cord between them, substantially as described. (2.) A pair of metal plates or discs each provided with a groove across its face, one of such discs being formed with a slot through it extending along the groove, while the other disc is formed with knobs projecting from the bottom of its groove, substantially as and for the purposes set forth.

(Specification, 2s. 6d.; drawing, 1s.)

No. 15461.—1st October, 1902.—WALTER AUGUST THOMSEN, of Rotorua, New Zealand, Painter. Improved means for securing hats to the wearers' heads.*

Claims.—(1.) In means for securing hats upon the wearers' heads, pins hinged at one end to one side of the inside of the hat and extending across the width thereof, in combination with means upon the other side of the hat whereby the points of such pins may be locked thereto, substantially as specified. (2.) In means for securing hats upon the wearers' heads, a plate secured to one side of the inside of the hat, pins hinged to such plate and extending across the width of the hat, a plate secured to the other side of the hat, a flap hinged to such plate and capable of extending inwards, and means whereby such flap may be raised and lowered, substantially as specified. (3.) In means for securing hats upon the wearers' heads, a plate secured to one side of the inside of the hat, pins hinged to such plate and extending across the width of the hat, in combination with a flap hinged to a plate secured upon the other side of the hat, and with a sliding pin passing through such plate and the side of the hat and adapted to bear against and free the underside of the flap, substantially as and for the purposes set forth. (4.) The general arrangement, construction, and combination of parts in my improved means for securing hats to the wearers' heads, as described and explained, as illustrated in the drawings, and for the several purposes set forth.

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

No. 15514.—16th October, 1902.—ARTHUR MALDEN, of 108A, Horseferry Road, Westminster, London, England, Journalist, and WALTER JAMES MALDEN, Principal of the Colonial College, of Hollesley Bay, Suffolk, England. Improvements in the process of agglomerating finely divided ore.*

Claims.—(1.) In the process of agglomerating finely divided ore-material into a concrete mass, the addition of a solution of borax. (2.) In the process of agglomerating finely divided iron-ore material into a concrete mass, the production of a plastic mass consisting of ore, clay, lime, and borax which is subsequently moulded under pressure. (3.) A briquette or other lump of finely divided iron-ore agglomerated by the addition of about 6 per cent. of clay, 6 per cent. of lime, and a small percentage of borax, with or without small percentages of carbonates of sodium or potassium.

(Specification, 3s. 3d.)

No. 15941.—5th February, 1903.—GEORGE GARIBALDI TURRI, of Salisbury Building, Queen Street, Melbourne, Victoria, Patent Agent (nominee of Thomas Edwards, of Colorado Springs, Colorado, United States of America, Engineer and Metallurgist). Improvements in rotatable rabbles for furnaces.*

Claims.—(1.) A rabble of the class indicated comprising a foot, and a stem extending downwardly from said foot through the furnace-hearth, and rotatable from below said hearth, substantially as described with reference to Fig. 1. (2.) In combination with the parts comprised by claim 1, means for the introduction of water to the rabble-foot from below the furnace-hearth, substantially as described. (3.) In combination with the parts comprised by claim 1, means for the exit of water from the rabble-foot to below the furnace-hearth, substantially as described. (4.) In combination, the rabble-foot, stem, water inlet and outlet illustrated by firm lines in Fig. 2 (or modified as indicated), substantially as described. (5.) In combination, a downwardly extending rotatable rabble-stem and an upward waterway from an exterior supply-tube to an interior tube within said stem, arranged as described with reference to Fig. 2. (6.) In combination, a downwardly extending rotatable rabble-stem and an upward waterway from an exterior supply-tube to an interior tube within said stem, arranged as described with reference to Fig. 3. (7.) In combination, a downwardly extending rotatable rabble-stem and an upward waterway from an exterior supply-tube to an interior tube within said stem, arranged as described with reference to Fig. 4.

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

No. 15942.—5th February, 1903.—GEORGE GARIBALDI TURRI, of Salisbury Building, Queen Street, Melbourne, Victoria, Patent Agent (nominee of Thomas Edwards, of Colorado Springs, Colorado, United States of America, Engineer and Metallurgist). Improvements in furnaces for ore-roasting and other purposes.*

Claims.—(1.) In a furnace, the combination, with an elongated hearth, of openings therethrough at intervals lengthwise thereof, to feed air upward, substantially as described. (2.) In a furnace, the combination, with an elongated hearth, of openings therethrough at intervals lengthwise thereof, and means for regulating the supply of air upward through the openings, as described. (3.) In a furnace, the combination, with an elongated hearth, of air-openings at the hearth-sides and air-openings extending downward through the hearth, as described. (4.) In a furnace, the combination, with an elongated hearth, of sleeves extending downward therethrough, with a regulator or slide for each sleeve whereby the supply of air upward to the hearth may be controlled, substantially as described. (5.) In a furnace of the class indicated, the combination, with the hearth, of a series of rotatable rabbles and of air-inlets comprising sleeves extending through and above the hearth, as described. (6.) In a furnace, the combination, with the rabbles, of a line-shaft below the same, gearing connecting the line-shaft and the rabble-spindles, and openings for the purposes set forth in the arch of the furnace, substantially as described. (7.) In a furnace, the combination, with a series of rabbles, of arch-openings elongated and located as and for the purposes set forth, with or without tapered iron boxes as described.

(8.) A furnace having a series of elongated arch-openings and, in combination, a series of hearth-inlets, each arranged as and for the purposes set forth. (9.) The combination with the parts in claim 3 of means for rotation beneath the hearth, connected to rabble-feet spindles which pass through the hearth air-inlets but have not extensions to the furnace-arch, said arch being wholly closed during the rabbling. (10.) In a furnace, an elongated hearth having beneath it a tunnel for the purposes set forth, in combination with, over one end of the hearth, means for feeding the ore; at the other end the main fireplace; and one or more additional fireplaces arranged at the side or opposite sides along the length of the furnace, as and for the purposes described. (11.) In a furnace, a rabble of the construction comprised substantially by the foot, stem, spindle, and other parts heretofore described, illustrated in Fig. 5. (12.) In a furnace, the combination of parts in the next preceding claim with an annular pan set loosely round the stem *f*, under the spout *l*, and a collar or bearing as *v* below the hearth round the spindle f^1 to keep the rabble in position.

(Specification, 7s.; drawing, 1s.)

No. 16169.—2nd April, 1903.—JAMES THOMAS HUNTER, of Queen's Chambers, Wellington, New Zealand, Engineer (nominee of the Cooper-Hewitt Electric Company, of 120, Broadway, New York, United States of America, Manufacturers; the assignees of Peter Cooper-Hewitt, of 11, Lexington Avenue, New York aforesaid, Scientist). Method of and apparatus for transforming electrical energy.

Claims.—(1.) The method of producing a periodic flow of electric current through a medium which is non-conductive under the influence of currents below a given value, and which is rendered conductive by a difference of potential materially greater than said value, and remains conductive through the intermediate values, which consists in first applying to the terminals of said medium a potential of the higher value, thereby rendering the medium sufficiently conductive to cause a drop of potential below the lower value and thus interrupting the flow of current and successively repeating this operation. (2.) The method of operating a gas or vapour electric lamp by means of intermittent or vibratory currents, substantially as described. (3.) Apparatus for producing intermittent or vibratory electric currents comprising a condenser and a device in the discharge circuit of the same, which device has a definitive consumption period with relation to the electro-motive force of the discharge circuit. (4.) Apparatus for producing intermittent or vibratory electric currents arranged and operating substantially as described with reference to the drawings.

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

No. 16230.—15th April, 1903. WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of the Cooper-Hewitt Electric Company, of 120, Broadway, New York, United States of America, Manufacturer; assignees of Peter Cooper-Hewitt, of 11, Lexington Avenue, New York, aforesaid, Scientist). Improved device for producing a gas or vapour bath for electric current.

Claims.—(1.) An electrical apparatus of the kind described in which the enclosing chamber is made partly or wholly of conducting-material so that the heat developed therein may be readily dissipated. (2.) The modification of the invention in which the chamber is made in two parts, united by a separable joint either with or without a seal of plastic material, substantially as described. (3.) An electrical apparatus of the kind described in which the enclosing chamber is provided with an oil or water jacket for conducting away heat therefrom, substantially as described. (4.) An electrical apparatus of the kind described provided with means for condensing or removing gases or vapours from the enclosing chamber when necessary, substantially as described.

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

No. 16361.—16th May, 1903.—THOMAS MICHAEL O'ROURKE, of Matakitaki, New Zealand, Hotelkeeper. A combined screen and elevator for use on gold-saving dredges.

Claims.—(1.) In gold-saving dredges, the combination, with a revolving screen or inclined grating, of an elevator which travels beneath the discharge-end of the screen or grating, such elevator being so constructed as to allow of the fine constituents of the material fed on to it from the screen or grating being washed through it into a conductor below, as described. (2.) In gold-saving dredges, the combination, with a revolving screen or inclined grating, of an elevator which travels beneath the discharge-end of the screen or grating, such elevator being so constructed as to allow of the finer constituents of the material fed on to it from the screen or grating being washed through it, and an inclined chute mounted below the elevator along which the elevator travels in an upward direction, and conductors leading from the bottom end of the chute to the gold-saving tables, as set forth. (3.) A combined screen and elevator for use on gold-saving dredges, the same consisting of a number of rows of links, each link of which is provided with an upward right-angled extension, and the ends of each row of which alternately overlap the ends of the rows next in order to it, the whole of the rows being hinged together in a continuous order by pins passing through the lapped portions, substantially as specified. (4.) The general arrangement, construction, and combination of parts in my combined screen and elevator for use on gold-saving dredges, as described and explained, as illustrated in the drawings, and for the several purposes set forth.

(Specification, 4s. 3d.; drawing, 1s.)

No. 16395. — 28th May, 1903.—MAX WAGNER, of Wiesbaden, Germany. Skeleton bearing.

Claims.—(1.) A bearing-liner or slipper-plate formed by the combination of a resistant metal and a soft metal, the resistant metal being in the form of a rigid skeleton for and enclosed in the soft metal, so as together to form a complete and resistant bearing, the soft metal alone forming the frictional bearing-surface, although the skeleton may show at the outer surface of the liner, as specified. (2.) The construction of a bearing-liner or slipper-plate in accordance with claim 1, the skeleton being formed or united to the body portion of the bearing-bracket, or other part to be provided with the bearing-surface, formed by the soft metal in which the skeleton is imbedded, as described.

(Specification, 4s.; drawing, 2s.)

No. 16451.—8th June, 1903.—GEORGE HOLFORD, of Auckland, New Zealand, Master Mariner. An improved trap for rats or other animals.

Claims.—(1.) In means for trapping animals, an endless box or receptacle provided with vertically sliding doors at both ends, such doors being connected together so as to rise and fall simultaneously, in combination with means whereby the doors may be held in the raised position and released so as to drop and close the box upon an animal passing partially through it, substantially as specified. (2.) In means for trapping animals, an endless box or receptacle provided with vertically sliding doors at both ends, a rigid bar connecting the top ends of the two doors together, and a light frame pivoted loosely across the width of the box and provided with an upwardly extending arm above the top surface thereof, such arm being adapted to support the bar connecting the two doors upon its end, substantially as and for the purposes specified.

(Specification, 2s. 3d.; drawing, 1s.)

No. 16452.—8th June, 1903.—ROBERT WALKER ASHCROFT, Tinsmith, and WILLIAM JOHN MADDREN, Mechanic, both of Palmerston North, New Zealand. An improved lid for milk-cans and the like.

Claim.—In milk-cans and the like, a lid provided with a rim tapering downwards and outwards, the bottom edge of which is adapted to fit closely within the neck or mouth of the can, and a flange extending outwards around the top edge of the rim and adapted to fit upon a corresponding flange extending inwards from the top edge of the can neck or mouth, substantially as and for the purposes set forth.

(Specification, 1s. 9d.; drawing, 1s.)

No. 16461.—10th June, 1903.—HENRY SMITH HAYLING, of 12, Acland Street, St. Kilda, Victoria, Gentleman (assignee of Alexander Mansfield, of 60, Brunswick Street, North Fitzroy, Victoria, Blacksmith). Improvements in tip-wagon mechanism.

Claims.—(1.) In combination with a tip-wagon, a trunnion at each end so supported by a slidable carrier that either end of the wagon may be raised higher than the other, an inclined slot in which said carrier is fitted, and an inclined screw adapted to be rotated to raise and lower each carrier, substantially as and for the purposes set forth. (2.) In com-

bination with the end of a tip-wagon, a bracket having a trunnion, a sector (with a lever engaging it) arranged as set forth, a slidable carrier supporting the trunnion and lever, an inclined screw engaging the carrier, and means for rotating said screw as set forth. (3.) In tip-wagon mechanism, the combination, with a slidable carrier, of an inclined slot having a screw therein to slide said carrier, gearing as set forth to rotate said screw, and rests for the support at one side of the more or less tipped wagon during its raising, as set forth. (4.) In tip-wagon mechanism, the combination, with a trunnion-bracket, of a toothed sector in engagement with a toothed lever, stops to limit the motion of the sector but allowing the wagon to be tilted slightly backwards, a slide carrier in which the trunnion and the said lever are pivoted, an inclined screw to raise said carrier, gearing to rotate said screw, and rests to support during the raising of the wagon the side of the latter, said rests having curved or like tops to allow the angle of tip to increase during the raising, substantially as set forth.

(Specification, 4s. 9d.; drawing, 1s.)

No. 16462.—10th June, 1903.—WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of Alfred Pfaff, of 375, Collins Street, Melbourne, Victoria). Method of or process for, and chemicals to be used in, the treatment of eggs for preserving same.

Claims.—(1.) A process for preserving eggs in which the eggs are placed in a chamber in a condition of vacuum or partial vacuum, then exposed to the action of a mixture of sulphurous-acid, chlorine, and carbonic-acid gases, then immersed in dilute sulphuric acid for the purpose of forming a sealing-composition in the pores or interstices of their shells, and afterwards carefully drained and dried, substantially as and for the purposes set forth. (2.) A process for preserving eggs in which the eggs are exposed in a chamber to the action of a gas or gases, and afterwards immersed in dilute sulphuric acid for the purpose of forming a sealing-composition in the pores or interstices of their shells, and afterwards carefully drained and dried, substantially as and for the purposes set forth. (3.) A process for preserving eggs in which the eggs are placed in a chamber in a condition of vacuum or partial vacuum, then exposed to the action of a mixture of sulphurous-acid, chlorine, and carbonic-acid gases, then immersed in dilute sulphuric acid heated to a temperature of not more than 176° Fahr., then drained and dried, substantially as and for the purposes set forth. (4.) A process for preserving eggs in which the eggs are exposed in a chamber to the action of a gas or gases, and afterwards immersed in dilute sulphuric acid heated to a temperature of not more than 176° Fahr., then drained and dried, substantially as and for the purposes set forth. (5.) A process for preserving eggs in which the eggs are placed in a chamber in a condition of vacuum or partial vacuum, then exposed to the action of a mixture of sulphurous-acid, chlorine, and carbonic-acid gases, then immersed in dilute sulphuric acid in either hot or cold condition, such eggs being then removed and drained of any surplus acid and lightly rinsed in water before being dried and stored, substantially as and for the purposes set forth. (6.) A process for preserving eggs in which the eggs are exposed in a chamber to the action of a gas or gases, and afterwards immersed in dilute sulphuric-acid in either a hot or cold condition, such eggs being then removed and drained of any surplus acid, and lightly rinsed in water before being dried and stored, substantially as and for the purposes set forth. (7.) A process for preserving eggs in which the eggs are placed in a chamber in a condition of vacuum or partial vacuum, then exposed to the action of a mixture of sulphurous-acid, chlorine, and carbonic-acid gases, then immersed in dilute sulphuric acid in either a hot or cold condition, such eggs being then removed and drained of any surplus acid, and lightly rinsed in a weak solution of sodium or analogous suitable alkali, then again drained and dried for storage purposes. (8.) A process for preserving eggs in which the eggs are exposed in a chamber to the action of a gas or gases, and afterwards immersed in dilute sulphuric acid, in either a hot or cold condition, such eggs being then moved and drained of any surplus acid, and lightly rinsed in a weak solution of sodium or analogous suitable alkali, then again drained and dried for storage purposes.

(Specification, 6s. 6d.)

No. 16463.—10th June, 1903.—JOSEPH FREDERICK CLARKE, of Woolwich, New South Wales, Factory-manager. Improvements in automatic weighing-machines.

Claims.—(1.) In automatic weighing-machines of the class described, a pair of swinging cut-off receptacles which close and open at intervals the discharge-openings of the inlet-hopper according to the movement of the underswinging scale-pan, substantially as described, and as illustrated in the drawings. (2.) In automatic weighing-machines of the class described, an inlet or feed hopper having two discharge-channels, each of which is controlled by a swinging cut-off receptacle operated by the movement of the underswinging scale-pan, substantially as described, and as illustrated in the drawings

(Specification, 4s.; drawing, 1s.)

No. 16467.—6th June, 1903.—SUBMARINE SIGNAL COMPANY, of Waterville, Maine, a corporation duly organized under the laws of the State of Maine, and having a usual place of business at 246, Atlantic Avenue, Boston, Suffolk, Massachusetts, United States of America, Manufacturers (assignees of Arthur Joseph Mundy, of Boston aforesaid, Horace Bigelow Gale, of Natick, Middlesex, Massachusetts aforesaid, and Fred Mellen Dewing, of Boston aforesaid, all of this Company). A new and useful improvement in automatic means for producing sound-vibrations in water.

Claims.—(1.) A submerged sound-producing signalling device for imparting sound-vibrations to water by which they are conducted, and independent means for automatically actuating it by the movement of the water. (2.) A submerged automatic sound-producing signalling device for imparting sound-vibrations to water by which they are conducted, means operated by the water for actuating the device, comprising a buoyant support by which the device is suspended in the water, and an interposed mechanism between it and the sound-producing device whereby a change in the relation of the two produced by movement of the water will cause the sound-producing device to be actuated. (3.) A buoy or other buoyant support, a submerged bell suspended from it, a sea-anchor upon the suspended means, movable with relation to each other, and a bell-hammer operated by such relative movements. (4.) In a submerged sound-producing signalling device, a power-accumulator, progressively or continuously actuated by the movements of the water to store energy, and adapted to be automatically released to deliver that energy to the sound-producing mechanism.

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

No. 16468.—6th June, 1903.—RICHARD HENRY FANCOURT, of Huntingdon, Victoria Avenue, Woollahra, near Sydney, New South Wales, Tobacco-manufacturer. Improvement in and relating to the packing of cake tobacco.

Claims.—(1.) Improvement in the packing of cake tobacco consisting in compressing piled cakes of tobacco between heads or ends and fastening by ties or bands or the like while the whole is still under pressure, substantially as described. (2.) Improvement relating to the packing of cake tobacco consisting in a vendor's package of tobacco made up of piled cakes of tobacco between heads or ends, to one of which ties or straps or bands around the whole are fastened while under pressure, substantially as described. (3.) Improvement relating to the packing of cake tobacco consisting of a pair of heads or ends of similar size to the cakes, and in the outer faces of each of which are grooves for ties or bands or the like, substantially as described. (4.) Improvement in and relating to the packing of cake tobacco consisting of packages of cake tobacco made up of the parts substantially as described and explained, and illustrated in the drawing.

(Specification, 2s. 6d.; drawing, 1s.)

No. 16474.—8th June, 1903.—JOHN ANDERSON, of Moray Place, Dunedin, New Zealand, Engineer and Brass-founder. Improvement in taps, especially for dairy-work and suchlike.

Claims.—(1.) In taps, the combination of an internal sliding-valve arranged to work as a quadrant by an outside handle for the purpose of cutting off all the liquid in a vat and not retaining any in the body of the tap, substantially as set forth, and as illustrated in the drawing. (2.) In taps, especially of the variety that require frequent cleaning, the combination of a cylinder B, a valve D, and a handle E, with a loose bib C easily removable, said tap being flush with the inner surface and bottom of the vat, so that no liquid remains in the body of the tap, and finally none need remain in the vat, all substantially as set forth, and as shown on the drawing.

(Specification, 2s.; drawing, 1s.)

No. 16488.—12th June, 1903.—FRANCIS RYDING, of 331, Franklin Street, West Melbourne, Victoria, Legging-manufacturer. An improved legging.

Claim.—An improved legging, consisting of the combination of a body, with or without a toe-cap, an integral or attached side portion at one side, and at the other side an extension, a binding-strap the lower end of which is secured to the said extension and the upper end of which strap has adjusting-holes therein, a buckle for said strap, a pocket inside the body, said pocket being formed by a pocket-piece secured to the body on the top, the bottom, and one side of the said pocket-piece, all as and for the purposes described, and as illustrated in the drawings.

(Specification, 3s.; drawing, 1s.)

No. 16502.—17th June, 1903.—EDWARD JOHN SHAW, of Astral Works, Hatherton Street, Walsall, Staffordshire, England, Lamp and Glass Manufacturer. Improvements in and relating to adjustable pendants for hanging lamps and the like.

Claims.—(1.) An adjustable pendant for hanging articles, consisting of two grooved drums or pulleys secured fast to a common axle mounted in a support and maintained at a predetermined height, a flexible connection depending from each of said pulleys, said connections being wound thereon in opposite directions, substantially as described. (2.) An adjustable pendant for hanging articles in which two grooved drums or pulleys are made fast to a common axle side by side, the axle being secured in a fixed fork support, and flexible connections depending from said pulleys, being wound thereon in opposite directions, substantially as described. (3.) In an adjustable pendant for hanging lamps which comprises pulleys fast to an axle, supported at a predetermined height, and a flexible connection depending from each of said pulleys, an electric or pipe connection which suspends the lamp from its pulley, communicating electrically or by means of passages with the service-pipe above the pulleys so as to afford continuous feed to the lamp, adjustably supported from the axle at a predetermined height, substantially as described. (4.) An adjustable double-pulley pendant for hanging lamps, in which the lamp-supporting pulley is in communication with the service-pipe by means of a hollow axle to the pulleys and a passage in the axle-support, and in communication with the flexible supply-pipe by means of a suitable joint, so that the lamp may be fed at whatever height it may be, substantially as described, and illustrated on the drawings. (5.) In an adjustable double-pulley pendant for hanging articles, friction-plates secured upon the axle, which is common to the pulleys, and maintained at a predetermined height, so that the pulleys may be held in any desired position by friction with their fixed forked support, substantially as described. (6.) In an adjustable pendant for hanging articles, a stop device, screw-threaded internally and movable upon a flexible metallic pipe, for limiting the upward movement of the said flexible connection, substantially as described, and illustrated in Fig. 8. (7.) In a double-pulley adjustable pendant, the combination, with a flexible connection secured to and dependent from one of the pulleys, of a spring secured at its ends to the other pulley, and to a non-moving part of the pendant support respectively, the said spring being coiled on the second pulley in the opposite direction to the flexible connection wound upon the first.

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

No. 16503.—17th June, 1903.—EDWARD WATERS, Jun., a member of the firm of Edward Waters and Son, Patent Agents, of 414-418, Collins Street, Melbourne, Victoria (nominee of the Edison Ore-milling Syndicate, Limited, of Fitzalan House, Arundel Street, Strand, London, England; the assignees of Thomas Alva Edison, of Llewellyn Park, New Jersey, United States of America, Inventor). Improvements in roller crushing-mills.

Claims.—(1.) A roller crushing-mill in which the crushing-rolls comprise crushing-plates attached to a roll centre or hub secured to the roll-shaft, characterized by the roll-shaft 9 having an enlargement 19, and by the roll centre or hub 21 being formed in two parts 21, 22, which fit on the shaft 9 at respectively opposite sides of the enlargement 19, the said two parts being connected together by the crushing-plates 23, which are secured to their peripheries, and thereby prevented from moving along the roll-shaft. (2.) A roller crushing-mill in which the crushing-rolls comprise crushing-plates attached by bolts, screws, or nuts to a roll centre or hub secured to the roll-shaft, characterized by the heads 41 of the said bolts or screws 39 or the nuts 46 being situated in recesses 40 and having fitted therein metal detents 44 whose outer edges engage with inwardly presented ratchet-teeth 42 formed around the recesses. (3.) A roller crushing-mill characterized by the rolls having their surfaces corrugated, the leading sides 37 of the groove 36 of such corrugation being splayed in the direction of the rotation of the roll more than are the other sides in the opposite direction, so as to improve the "biting" effect on the material to be crushed. (4.) A roller crushing-mill characterized by the crushing-rolls being each connected to its driving-gear through a coupling the two parts 47, 48, of which are provided with one or more pairs of coaxial hard steel bushes 49, through each pair of which is passed a pin 50 of softer metal, the said pin being held in position by a split clamping-sleeve 51 screwed into one of the coupling-parts and prevented from becoming accidentally unscrewed by a wire 54 passed through holes in the said sleeve and coupling-part, the pin becoming shorn by the bushes 49 when undue resistance to rotation of the rolls is presented. (5.) A roller crushing-mill in which the bearings for the crushing-rolls are lined with a metal differing from that of the bearings themselves, characterized by the fact that the said lining-metal 25 penetrates entirely through the bearings 24 at the parts 26 through which the lubricant is to be supplied, and that the lubricating-pipes 27 are connected directly to these parts, so that the lubricant is prevented from getting between the bearing 24 and the lining-metal 25. (6.) A roller crushing-mill characterized by the fact that the bearings of the crushing-rolls are each provided with a lubricant space 28 closed on one side by packing 30 and a gland 31, the said space being connected to a passage 33 for the escape of the surplus lubricant. (7.) A roller crushing-mill in which one of the rolls is laterally movable and connected to its driving-shaft by a non-circular wobbler or loose shaft characterized by the roll-shaft 9 and driving-shaft 12 having each fitted thereon a coupling-part 59 or 60 having a non-circular spigot 62 of the same shape in cross-section as is the wobbler or loose shaft 56, and the said wobbler being coupled to the spigots by sleeves 57 secured to the respective coupling-parts by clips 58 attached to the said coupling-parts.

(Specification, 9s.; drawing, 4s.)

No. 16504.—17th June, 1903.—CHARLES EDWIN BERNAYS, of 45, Adelaide Street, Brisbane, Queensland, Consulting Engineer. Improvements in means for getting more perfect combustion of fuel in the fire-chambers of boilers, and also for the prevention of smoke and sparks.

Claims.—(1.) The introduction into the combustion-chamber of a locomotive or other boiler of a supply of air (cold or hot) under pressure in the shape of a screen or film across the chamber, and in such a way that it offers a resistance to the passage of particles of unconsumed carbon from the fuel, and also a fresh supply of oxygen to aid combustion, for the purposes and in the manner described. (2.) An arrangement whereby the present or any other shape of brick arch is used in the fire-box of a boiler in conjunction with a film of air, as and for the purposes described.

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

No. 16505.—17th June, 1903.—HENRY LIVINGSTONE SULMAN and HUGH FITZALIS KIRKPATRICK-PICARD, of 44, London Wall, London, England, Metallurgical Chemists. Improvements in or relating to the recovery of precious metals.

Claims.—(1.) The process of recovering precious metals in which the sufficiently finely ground ores or pulps mixed with a solvent, or leached, filtered, or decantered solutions containing the values, are passed up through a continuous vertical or inclined column, film, or sheet of mercury, held between amalgamated surfaces and kept continuously charged with an electro-positive metal, such as sodium, for the purpose described. (2.) The process of recovering precious metals in which a solution carrying the valves partly in suspension or not is passed up through mercury kept continuously charged with an electro-positive metal, such as sodium, and passing slowly downward in a narrow interspace between two or more inverted cones or the like. (3.) An apparatus for use in the recovery of precious metals, consisting of concentric, inverted, conical, or similar vessels, the surfaces of which are amalgamated, having the narrow intervening space filled with a descending body of mercury charged with an electro-positive metal through which the solution carrying the values is passed upwards, substantially as and for the purpose described. (4.) The complete process of recovering precious metals, substantially as described. (5.) The complete apparatus for use in recovering precious metals, substantially as described, and illustrated in the drawings.

(Specification, 6s.; drawing, 1s.)

No. 16506.—17th June, 1903.—HENRY BAUMGARTEN, of 222, Shaftesbury Avenue, London, England, Gas Engineer. Improved automatic generator and lamp for acetylene gas.

Claims.—(1.) An acetylene-gas generator consisting of a combination of a carbide-holder, a water-vessel adapted to be removable from the rest of the apparatus and to make a gastight connection therewith, a chamber between the two partially bounded by flexible material, such chamber being adapted to expand by the rising of the carbide-holder, exterior guides, exterior springs to press the carbide-holder downwards and contract the chamber, a valve the seating of which forms a portion of the bottom of the carbide-holder, a spring enclosed within a tube above the valve, and a rod secured to the valve, of such length as to reach the bottom of the removable water-vessel, substantially as described. (2.) A form of construction, characterized as described in claim 1, in which the water-vessel makes a gastight connection with the generator-case by means of a union joint. (3.) A form of construction, characterized as described in claim 1, in which the moving top of the gas-container is connected to the burner by a flexible pipe. (4.) A form of construction, characterized as described in claim 1, in which a second valve is adapted to cut off the supply of carbide on the bursting of the gas-bag, and a safety valve is fitted to relieve excess pressure. (5.) A form of construction, characterized as described in claim 1, fitted with a gastight cap for replenishing the carbide, and a nut, bolt, and cross-bar adapted to relieve the pressure of the gas when desired. (6.) A form of construction, characterized as described in claim 1, in which the gas-bag is composed of two thicknesses, the inner one being extensible and impervious, such as rubber, and the outer one of limited extensibility, such as leather or canvas.

(Specification, 4s. 6d.; drawing, 1s.)

ERRATUM.—In the "Notice of Acceptance of Complete Specification" No. 15301, Armour, page 1464 of *Gazette* No. 50, of 25th June, 1903, for the title "Making chairs, go-carts, cribs, and the like collapsible," read "Making chairs, cribs, and cradles collapsible."

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

NOTE.—The cost of copying the specification and drawings has 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.

Extracts from the drawings accompanying the foregoing complete specifications appear at the end of this *Gazette*.

F. WALDEGRAVE,
Registrar.

Provisional Specifications.

Patent Office,
Wellington, 8th July, 1903.

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

No. 16116.—21st March, 1903.—HERBERT ERNEST LEIGHTON, of 4, Featherston Street, Wellington, New Zealand, Importer, Manufacturer's and Commission Agent (nominee of Henry Sanders, of Water Works, Papplewick, Nottingham, England, Engineer). Improvements in or relating to boiler and other furnaces.

No. 16117. 21st March, 1903.—HERBERT ERNEST LEIGHTON, of 4, Featherston Street, Wellington, New Zealand, Importer, Manufacturer's and Commission Agent (nominee of Henry Sanders, of Water Works, Papplewick, Nottingham, England, Engineer). Improved means for consuming the smoke and economizing the heat given off by boiler and other furnaces.

No. 16447.—8th June, 1903.—ALBERT PEPPLER, of Christchurch, New Zealand, Manufacturer (nominee of Wilhelm Biel, of Itzehoe, Empire of Germany, Manufacturer). Improvements in or relating to windows.

No. 16457.—9th June, 1903.—HENRY CARLSON, of Dannevirke, Hawke's Bay, New Zealand, Sawmiller. An improved hobble for horses or cattle.

No. 16478.—8th June, 1903.—WALTER SEAVILL, of Waingaro, Auckland, New Zealand, Gentleman. A new gate-catch.

No. 16479.—8th June, 1903.—ROBERT HENRY BROOKS, of 12, Ponsonby Road, Auckland, New Zealand, Miner. An automatic newspaper-vending machine.

No. 16480.—10th June, 1903.—ALEXANDER ROBINSON MCINTYRE, of Gisborne, New Zealand, Coach Proprietor. An improved method of yoking-in horses.

No. 16507.—13th June, 1903.—RALPH DUNNE, of Dunedin, Otago, New Zealand, Artists' Merchant. Means for making bottles non-refillable.

No. 16508.—15th June, 1903.—HARRY GUNTHORP, of Dunedin, New Zealand, Dentist. Improvements in apparatus for inhaling anæsthetics.

No. 16509.—18th June, 1893.—UNITED-XPEDITE FINISHING COMPANY, of Berwick, State of Maine, United States of America, a corporation duly organized under the laws of said State of Maine, and having a place of business at 205, Lincoln Street, Boston, Massachusetts, United States of America (assignees of Charles Pease, of Salem, Essex, Massachusetts aforesaid, Inventor). Improvements in heel-finishing machines.

No. 16510.—18th June, 1903.—UNITED-XPEDITE FINISHING COMPANY, of Berwick, State of Maine, United States of America, a corporation duly organized under the laws of said State of Maine, and having a place of business at 205, Lincoln Street, Boston, Massachusetts, United States of America (assignees of Robert Watson Thomson, of Lynn, Essex, Massachusetts aforesaid, Manufacturer). Improvements in heel-finishing machines.

No. 16513.—18th June, 1903.—THOMAS CUBBINS, of 13, Randolph Street, Hawthorn, and WILLIAM PRESTON, of 300, Burnley Street, Richmond, both in the County of Bourke, Victoria, Tramway Employees. An improved amalgamating apparatus for extracting gold from quartz tailings, sand, slimes, and the like.

No. 16514.—18th June, 1903.—PETRUS VAN LANSCHOTT ALKEMADE, of 448A, Flinders Street, Melbourne, Bourke, Victoria, Lime and Cement Merchant. An improved trap for rats or other rodentia, to be used in combination with a drain or other pipe, or a ventilator-opening.

No. 16517.—16th June, 1903.—RALPH LECHMERE MONTAGU, of Oroville, Butte, California, United States of America, Engineer. Apparatus for recovery of metals or minerals from gravel and the like.

No. 16518.—17th June, 1903.—LEWIS GAITT, of Middlemarch, New Zealand, Trapper. Improvements in animal-traps.

No. 16519.—17th June, 1903.—JAMES MAINS, of Port Chalmers, New Zealand, Labourer. Improvements in cross-beams for hatches.

No. 16521.—17th June, 1903.—ROBERT NOBLE ADAMS, of Dunedin, New Zealand, Publisher. Improvements in and relating to casters.

No. 16522.—20th June, 1903.—CHARLES TRILLO, of Leet Street, Invercargill, New Zealand, Metal-turner, and WILLIAM ALEXANDER GAFFNEY, of Yarrow Street, Invercargill aforesaid, Grocer. An improved marking-tool for boilermakers and engineers.

No. 16523.—18th June, 1903.—ROBERT FRANCIS BROWN, of Dunedin, New Zealand, Carter. Improved terret.

No. 16524.—19th June, 1903.—BENJAMIN TREWHELLA and WILLIAM TREWHELLA, trading as "Trewhella Bros.," of Trentham, Victoria, Engineers and Ironworkers. Improved mechanism for automatically operating the pawls of lever jacks.

No. 16528.—19th June, 1903.—JAMES GRAY, of Dunedin, New Zealand. Improvements in seed-sowers.

No. 16530.—18th June, 1903.—HENRY DROUTLEGE, of Vermont Street, Auckland, New Zealand, Engineer. An automatic gas and other lamp light controller.

No. 16531.—18th June, 1903.—ALPHONSUS JOSEPH FRANCIS TEMPEST, of Parnell, Auckland, New Zealand, Gentleman. A constant-level-sight oil-regulator for kerosene, benzine, naphtha, and other oil engines.

No. 16532.—23rd June, 1903.—ERNEST JONES, of Karangahape Road, Auckland, New Zealand, Jeweller. An improved sleeve-link.

No. 16533.—19th June, 1903.—FREDERIC WILLIAM HARRADENCE, of Brixton Road, Mount Roskill, Auckland, New Zealand, Printer. Improvements in and relating to tires for the wheels of vehicles.

No. 16539.—22nd June, 1903.—CARL OTTO, of Dunedin, New Zealand, Factory-manager. Collapsible box.

No. 16540.—20th June, 1903.—JAMES WILLIAM MULHARE, of Invercargill, New Zealand, Labourer. Improvements in pocket-knives.

No. 16543.—25th June, 1903.—HALVAR MATHEW MEINUNG, of Forth Street, Dunedin, Otago, New Zealand. Improved means for utilising tidal water for generating power.

No. 16544.—22nd June, 1903.—ALEXANDER HARRISON BROWNLEY, of Queen Street, Onehunga, Auckland, New Zealand, Optician. Improved spring-winding apparatus for the suspending-cords of eye-glasses and the like.

No. 16546.—20th June, 1903.—GIDEON BISH, of Bombay, Auckland, New Zealand, Blacksmith, and JOHN JOHNSTON, of Bombay aforesaid, Wheelwright. An improved machine for mortising, boring, and tenon-shaping.

No. 16547.—22nd June, 1903.—ANDREW MCLEOD, of Arch Hill, Auckland, New Zealand, Engineer. An improved burner and heater.

No. 16548.—22nd June, 1903.—ANDREW MCLEOD, of Arch Hill, Auckland, New Zealand, Engineer. An improved continuously fire-heated adjustable brand for expeditiously brand-

ing cattle, horses, and other animals, and inanimate things or articles.

No. 16549.—22nd June, 1903.—ROBERT BAIN WIGHT, of Norfolk Street, Ponsonby, Auckland, New Zealand, Storeman. A new machine for removing paint and corrosive matter, rust, and the like from boilers, steamers, and iron vessels.

No. 16551.—26th June, 1903.—FREDERICK STANLEY RAMSON, of Mauna, Auckland, New Zealand, School-teacher. A new mechanical appliance used in producing outline maps.

No. 16552.—26th June, 1903.—EDWARD WALKER, of 34, Owen Street, Wellington South, New Zealand, Presbyterian Minister. Ventilator window-blind and safety fire-screen.

No. 16564.—26th June, 1903.—HARRY FITZHERBERT LATTEY, of Dunedin, New Zealand, Tea Expert, and WILLIAM GEORGE SOMERVILLE, of Dunedin aforesaid, Director J. Wilkie and Co., Limited. Improvements in wall and table brackets.

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.

F. WALDEGRAVE,
Registrar.

Letters Patent sealed.

LIST of Letters Patent sealed from the 20th June to the 8th July, 1903, inclusive :—

No. 14604.—T. Ballinger, skylight.
No. 14605.—F. Oakden, Portland cement.
No. 14606.—M. Peryer, painted-surface-cleansing composition.
No. 14607.—W. Thomas, production of printing-surface.
No. 14636.—F. W. Payne, centrifugal tailings-stacker.
No. 14670.—J. Chambers and Son, Limited, oil-separator (Babcock and Wilcox—A. Arndt).
No. 14686.—D. Robertson, mail-marking machine.
No. 14703.—A. F. Wall, stay-busk shield.
No. 14801.—W. Andrews, bag-gripper.
No. 14849.—J. H. A. McPhee, separating magnetic from non-magnetic materials.
No. 14882.—United Shoe Machinery Company, lasting-machine (E. A. Stiggins).
No. 15000.—E. Richardson, gold-extractor.
No. 15025.—F. Bonnington, damper-regulator.
No. 15049.—G. Darrell, advertising.
No. 15279.—T. Burrell and E. C. Perdriau, attachable boot, &c., heel.
No. 15357.—W. A. Garrett, wire mattress.
No. 15735.—W. Borlase, animal-trap.
No. 15995.—J. E. Tonkin, W. Ames, and W. E. H. Nicolle, railway-line joint-fastener.
No. 16040.—A. Kitson, vapour-burning apparatus.
No. 16071.—H. A. Penrose, filling and sealing bottles (E. D. Schmitt).
No. 16073.—P. W. Lindberg, centrifugal separator.
No. 16077.—F. E. Elmore, generating electric currents.
No. 16081.—J. W. Latimer, mowing-machine.
No. 16082.—J. F. McElroy, electric-lighting sys em.
No. 16083.—O. Wall and R. C. Hughes, sash-locks.
No. 16088.—W. N. Dumaresq, variable-speed gearing.
No. 16089.—Dr. M. Henius, mash-tun and wort separator.
No. 16099.—C. W. Munson, gaseous-fluid compressor.
No. 16100.—Cooley Development Company, rotary-fluid engine (J. F. Cooley).
No. 16107.—T. Rooke, J. Thrush, and T. F. W. Early, garbage-destructor.
No. 16108.—United Shoe Machinery Company, fastening lacing-hook in shoe (H. H. Eaton).
No. 16131.—L. P. Ford, artificial-stone mould.
No. 16132.—R. Harvey and C. J. Bruce, self-tilting table.
No. 16133.—Sir W. G. Armstrong, Whitworth and Company, Limited, wagon-buffer (R. Wright).
No. 16138.—L. Z. Leiter, coking-oven (R. Moss).
No. 16141.—C. Anderson, fur-dressing machinery.
No. 16168.—The Crown Cork and Seal Company, bottle-closure (R. A. Hall).
No. 16173.—J. T. Hunter, jar for preserving food (C. C. Hovey—G. Lees).
No. 16185.—W. Mayne, engine-valve gear.
No. 16187.—J. Channon, mail-bag lock (J. J. Russell).
No. 16193.—H. Bland, elastic-fluid compressor.
No. 16194.—J. B. Blair, turning ship by engines.

DUPLICATE LETTERS PATENT SEALED.

No. 14660.—R. R. Donaldson, treating sewage.

F. WALDEGRAVE,
Registrar.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

NO. 11755.—T. Gordon, fire-escape ladder (F. J. Watty and T. Gordon). 29th June, 1903.
No. 11773.—J. G. Leyner, rock-drilling engine. 1st July, 1903.
No. 11782.—E. Roberts, elevator for dredge-bucket. 6th July, 1903.
No. 11825.—R. O. Clark, jun., clay-working machine. 30th June, 1903.
No. 11900.—Gesellschaft für tropensichere verpackung mit beschränkter Haftung, preserving perishable food (Dr. W. Lanwer). 30th June, 1903.

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. 14576.—National Voting-machine Company, of California, having their principal place of business in the City of Passadena, Los Angeles, California, United States of America, voting-machine. [H. B. Cary.] 1st July, 1903.
No. 15785.—The British Westinghouse Electric and Manufacturing Company, Limited, having their registered office at Westinghouse Building, Norfolk Street, Westminster, England, Manufacturers, controller for electric motor. [J. P. Campbell—H. R. Stuart.] 1st July, 1903.
No. 15786.—The British Westinghouse Electric and Manufacturing Company, Limited, having their registered office at Westinghouse Building, Norfolk Street, Westminster, England, Manufacturers, electric arc lamp. [J. P. Campbell—H. Bremer.] 1st July, 1903.

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent abandoned.

LIST of applications for Letters Patent (with which provisional specifications only have been filed) abandoned from the 25th June to the 8th July, 1903, inclusive :—

No. 15295.—F. M. Hunt, butter-preservative.
No. 15296.—J. L. Wilson, injector.
No. 15297.—W. H. Diddams, vehicle-wheel mud-guard.
No. 15305.—F. H. Killingsworth and P. Rawson, boot-polishing brush.
No. 15306.—A. R. Wilkins and J. W. Odering, bicycle motor attachment.
No. 15307.—R. L. Suckling, indestructible lamp-wick.
No. 15315.—J. Mallet, spark-arrester.
No. 15319.—C. Sawyer, paint-brush binder.
No. 15320.—J. Hylard, detecting foul gas in mine.
No. 15321.—J. Hylard, indicating and testing foul gas in mine.
No. 15322.—A. Pfaff, preserving eggs, &c.
No. 15323.—W. B. Brain and E. Brain, use of heavy oils in oil-engine.
No. 15324.—W. G. Goss, hydraulic air-exhausting apparatus.
No. 15325.—R. H. Sinnet, gold-dredge screen.
No. 15326.—T. A. Garratt, non-refillable bottles.
No. 15328.—L. D. Robertson, spring hook.
No. 15330.—J. Watt and B. Watt, hydrocarbon-gas generator.
No. 15331.—A. Wilkie, distributing carcase-meat.
No. 15332.—A. Johnston, electric alarm thermometer.
No. 15333.—H. A. Robinson and S. Robinson, wire mattress and bedstead.
No. 15334.—J. Smaill, suction-pipe inlet.
No. 15335.—M. W. Fleming, goods-elevator.
No. 15344.—C. McIntyre, F. C. Palethorpe, and J. S. Schwartz, ping-pong net apparatus.
No. 15348.—W. G. Jesson, bicycle-driving mechanism.
No. 15349.—W. H. Keon, pipe-coupling.
No. 15352.—G. W. Blanks, hydraulic duplex oil-brake.
No. 15353.—L. E. De Mole, telephone exchange.
No. 15354.—J. McKay, target score indicator.
No. 15355.—E. H. Luxford, mattress and bolster.
No. 15358.—J. Sigley, gold-saver.
No. 15359.—P. Scoringe, cyclist's trouser-clip.
No. 15361.—A. J. Park, chair (A. C. Murray).
No. 15362.—N. Watt, spark-arrester.

No. 15363.—H. W. Ward, flushing cistern.
No. 15364.—J. Brasting, breaking up ground.
No. 15377.—W. McNaught, animal-trap.
No. 15378.—R. S. Smith, furniture-leg.
No. 15379.—J. Traves, scarifier.
No. 15387.—N. H. Whisker, A. Smart, jun., J. Wilson, and T. G. Peek, fire-escape.

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 June to the 8th July, 1903, inclusive:—

No. 14389.—J. Bishop, dredging apparatus.
No. 14390.—W. Peck, gold-saving apparatus.
No. 14401.—H. N. McLeod and G. A. Hurley, gold-dredging.
No. 14414.—J. Pomeroy, hat-fastener.

F. WALDEGRAVE,
Registrar.

Letters Patent void.

LIST of Letters Patent void through non-payment of renewal fees from the 25th June to the 8th July, 1903, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 11486.—F. W. Martino and F. Stubbs, treatment of ores.
No. 11487.—Merrell-Soule Company, vegetable powder (W. B. Gere).
No. 11488.—N. Bendixen, sterilising milk.
No. 11492.—D. Buchanan, potato-digger.
No. 11498.—H. A. Saltmarshe, river-bed mining apparatus.
No. 11499.—A. R. Lysaght, wire-netting machine.
No. 11500.—L. C. Auldjo, furnace.
No. 11509.—R. W. Henn, valve for tire.
No. 11511.—G. G. Turri, trunk (M. Glover).
No. 11512.—H. Dunlop, top-dressing for wood paving.
No. 11513.—J. Ashdown, recovering fats, &c., from waste water.
No. 11515.—W. E. Hughes, fireplace or stove (The Incandescent Fire Mantle and Stove Company, Limited—W. H. Harvey).
No. 11517.—T. C. Donnelly, sifting-screen.
No. 11522.—C. H. Hansen, horse-cover fastener.
No. 12328.—R. Skelton, ladies' cycling-skirt.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

Nil.

F. WALDEGRAVE,
Registrar.

Designs registered.

DESIGNS have been registered in the following names on the dates mentioned:—

No. 184, 5, 6.—Louis Schatz and Co., of Colonial Mutual Buildings, Customhouse Quay, Wellington, New Zealand, Wholesale Jewellers. Class 2. No. 184, 20th June, 1903; Nos. 185–6, 2nd July, 1903.

F. WALDEGRAVE,
Registrar.

Applications for Registration of Trade Marks.

Patent Office,
Wellington, 8th July, 1903.

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: 3987.
Date: 30th October, 1902.

TRADE MARK.

The essential particulars of the trade mark are the device and the words "Flor de Coromandel."
The applicants claim that the said trade mark has been used by their predecessors in business for seven months before the 2nd September, 1889.

NAME.

OAKES AND COMPANY, LIMITED, of 200, Mount Road, Madras, India, and of 46, New Broad Street, London, England, Manufacturers.

No. of class: 45.

Description of goods: Manufactured tobacco, including cigars.

No. of application: 4125.
Date: 16th March, 1903.

TRADE MARK.

NAME.

JENKINS BROTHERS, of No. 71, John Street, in the City, County, and State of New York, United States of America, Manufacturers.

No. of class: 6.

Description of goods: Valves (brass and iron), steam fittings, mechanical rubber goods, such as discs, pump-valves, gasket-tubing (all being parts of machinery, except agricultural and horticultural machinery) included in this class.

No. of application: 4144.
Date: 24th March, 1903.

TRADE MARK.

The word

KILORL.

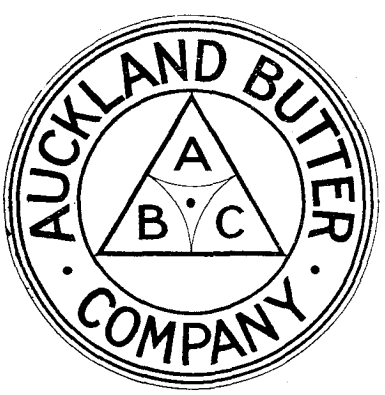
NAME.

FREDERICK ROBERT SIMMS, of 146, Cashel Street, Christchurch, in the Colony of New Zealand, Commission Merchant.

No. of class: 2.
Description of goods: Powder for destroying insect life.

No. of application: 4221.
Date: 5th June, 1903.

TRADE MARK.



NAME.

GRANT CAMPBELL, of 61, Shortland Street, Auckland, New Zealand, Butter Merchant.

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

No. of application: 4246.
Date: 18th June, 1903.

TRADE MARK.

The word

BREWSTER'S.

The applicant claims that the said trade mark has been in use by him and his predecessors in business in respect of the article mentioned before 1890.

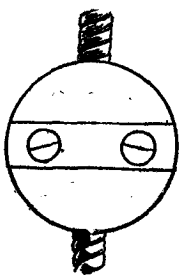
NAME.

GEORGE WARD, of 132, St. Asaph Street, Christchurch, New Zealand.

No. of class: 3.
Description of goods: Sarsaparilla.

No. of application: 4253.
Date: 23rd June, 1903.

TRADE MARK.



NAME.

J. ARMSTRONG AND Co., of Leamington Road, Mount Roskill, Auckland, New Zealand.

No. of class: 13.
Description of goods: Armstrong sash-cord grip.

No. of application: 4255.
Date: 24th June, 1903.

TRADE MARK.

The essential particular of this trade mark is the device; and any right to the exclusive use of the added matter, except the name and address, is disclaimed.

NAME.

The EXECUTORS of the late GEORGE BONNINGTON, of High Street, Christchurch, New Zealand, Chemists.

No. of class: 42.
Description of goods: Poultry-food, under the name of "Singer's Egg-producer."

No. of application: 4256.
Date: 24th June, 1903.

TRADE MARK.

The word

OCEANA.

NAME.

BARLOW AND JONES, LIMITED, of Manchester, England, Manufacturers.

No. of class: 24.

Description of goods: Quilts, towels, toilet-covers, sheetings, calicoes, linings, sateens, flannelettes, shirtings, linen damasks, tablecloths, serviettes, and cotton piece goods of all descriptions.

No. of application: 4257.
Date: 24th June, 1903.

TRADE MARK.

The word

OCEANA.

NAME.

BARLOW AND JONES, LIMITED, of Manchester, England, Manufacturers.

No. of class: 27.

Description of goods: Quilts, towels, toilet-covers, sheetings, calicoes, linings, sateens, flannelettes, shirtings, linen damasks, tablecloths, serviettes, and linen and hemp piece goods.

No. of application: 4258.
Date: 24th June, 1903.

TRADE MARK.

The word

SHAMROCK.

NAME.

BARLOW AND JONES, LIMITED, of Manchester, England, Manufacturers.

No. of class: 24.

Description of goods: Quilts, towels, toilet-covers, sheetings, calicoes, linings, sateens, flannelettes, shirtings, linen damasks, tablecloths, serviettes, and cotton piece goods of all kinds.

No. of application: 4259.
Date: 24th June, 1903.

TRADE MARK.

The word

SHAMROCK.

NAME.

BARLOW AND JONES, LIMITED, of Manchester, England, Manufacturers.

No. of class: 27.

Description of goods: Quilts, towels, toilet-covers, sheetings, calicoes, linings, sateens, flannelettes, shirtings, linen damasks, tablecloths, serviettes, and linen and hemp piece goods.

No. of application: 4260.
Date: 24th June, 1903.

TRADE MARK.

The word

EMPIRE.

NAME.

BARLOW AND JONES, LIMITED, of Manchester, England, Manufacturers.

No. of class: 24.

Description of goods: Quilts, towels, toilet-covers, sheetings, calicoes, linings, sateens, flannelettes, shirtings, linen damasks, tablecloths, serviettes, and cotton piece goods of all kinds.

No. of application: 4261.
Date: 24th June, 1903.

TRADE MARK.

The word

EMPIRE.

NAME.

BARLOW AND JONES, LIMITED, of Manchester, England, Manufacturers.

No. of class: 27.

Description of goods: Quilts, towels, toilet-covers, sheetings, calicoes, linings, sateens, flannelettes, shirtings, linen damasks, tablecloths, serviettes, linen and hemp piece goods.

No. of application: 4263.
Date: 25th June, 1903.

TRADE MARK.

The word

RANGATIRA.

NAME.

THE WANGANUI SUPPLY AND AGENCY COMPANY, LIMITED, of Taupo Quay, Wanganui, New Zealand, Merchants.

No. of class: 47.

Description of goods: Soap.

No. of application: 4265.
Date: 25th June, 1903.

TRADE MARK.

The word

TWENCENT.

NAME.

THE WELSBACH LIGHT COMPANY OF AUSTRALASIA, LIMITED, of 2, Bury Street, St. Mary Axe, London, in England.

No. of class: 18.

Description of goods: Burners and incandescent mantles for oil-lamps.

No. of application: 4268.
Date: 29th June, 1903.

TRADE MARK.

Martin's

The applicant claims that the said trade mark has been in use by him and his predecessors in business in respect of the articles mentioned for fifteen years.

NAME.

ARTHUR HEDLEY GAUDIN, of 53, Bourke Street, Melbourne, Victoria, trading as "Martin's."

No. of class: 22.

Description of goods: Bicycles.

No. of application: 4271.
Date: 30th June, 1903.

TRADE MARK.

The word

EXCELSIOR.

NAME.

THE WINTERBOTTOM BOOK-CLOTH COMPANY, LIMITED, of 12, Newton Street, Piccadilly, Manchester, in the County of Lancaster, England, Manufacturers.

No. of class: 39.

Description of goods: Tracing-cloth.

No. of application: 4273.
Date: 30th June, 1903.

TRADE MARK

The word

CORONET.

NAME.

HOLMES SAMUEL CHIPMAN, of No. 54, Margaret Street, Sydney, in the State of New South Wales, Australia, Merchant.

No. of class: 6.

Description of goods: Sewing-machines.

No. of application: 4274.
Date: 1st July, 1903.

TRADE MARK.

THE
RED ROSE
BRAND
FACTORY BUTTER.

The essential particulars of this trade mark are the words "The Red Rose"; and any right to the exclusive use of the words "Brand" and "Factory Butter" is disclaimed.

NAME.

EDWIN GROVE, of Palmerston North, New Zealand, Grocer.

No. of class: 42.

Description of goods: Butter.

No. of application: 4277.

Date: 29th June, 1903.

TRADE MARK.

(The mark as in preceding notice, No. 4268.)

The applicant claims that the said trade mark has been in use by him and his predecessors in business in respect of the articles mentioned for fifteen years.

NAME.

ARTHUR HEDLEY GAUDIN, of 53, Bourke Street, Melbourne, Victoria, trading as "Martin's."

No. of Class: 40.

Description of goods: Tires.

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 25th June to the 8th July, 1903, inclusive:—

No. 3252; 3800.—I. P. Clarke and Co. Class 23. (*Gazette* No. 25, of the 2nd April, 1903.)

No. 3253; 4010.—Tooth and Co., Limited. Class 43. (*Gazette* No. 29, of the 16th April, 1903.)

No. 3254; 4011.—Tooth and Co., Limited. Class 44. (*Gazette* No. 29, of the 16th April, 1903.)

No. 3255; 4052.—J. Watson and Co., Limited. Class 43. (*Gazette* No. 29, of the 16th April, 1903.)

No. 3256; 4118.—N. Gianaclis. Class 45. (*Gazette* No. 29, of the 16th April, 1903.)

No. 3257; 4150.—W. Oddy and Co. Class 34. (*Gazette* No. 29, of the 16th April, 1903.)

No. 3258; 3900.—H. Osborne. Class 42. (*Gazette* No. 78, of the 2nd October, 1902.)

No. 3259; 4119.—H. W. Scott. Class 2. (*Gazette* No. 29, of the 16th April, 1903.)

No. 3260; 4075.—Lysoform Gesellschaft mit Beschränkter Haftung. Class 2. (*Gazette* No. 33, of the 30th April, 1903.)

No. 3261; 4145.—S. Barry. Class 8. (*Gazette* No. 33, of the 30th April, 1903.)

No. 3262; 4162.—Barraud and Abraham. Class 42. (*Gazette* No. 33, of the 30th April, 1903.)

No. 3263; 4163.—Barraud and Abraham. Class 42. (*Gazette* No. 33, of the 30th April, 1903.)

No. 3264; 4167.—J. Love. Class 22. (*Gazette* No. 33, of the 30th April, 1903.)

No. 3265; 4169.—H. B. Gibbons. Class 49. (*Gazette* No. 33, of the 30th April, 1903.)

No. 3266; 3859.—The Fresh Food and Frozen Storage Company, Limited. Class 42. (*Gazette* No. 63, of the 7th August, 1902.)

No. 3267; 3848.—H. Driver Class 42. (*Gazette* No. 60, of the 24th July, 1902.)

F. WALDEGRAVE,
Registrar.

C

Trade Mark Renewal Fees paid.

FEES paid for renewal of undermentioned trade marks for fourteen years from the 1st January, 1890:—

No. 80/4930.—W. McEwan and Co., Limited, of Edinburgh, Scotland. (Two trade marks.) 2nd July, 1903.

No. 83/182.—J. C. Eno, Limited, of London, England. (Two trade marks.) 2nd July, 1903.

No. 83/183.—H. C. Stephens, of London, England. (Two trade marks.) 2nd July, 1903.

No. 83/184.—M. B. Foster and Sons, Limited, of London, England. 2nd July, 1903.

No. 83/187.—Curtis's and Harvey, Limited, of London, England. (Three trade marks.) 2nd July, 1903.

No. 83/331.—F. C. Calvert and Co., of Manchester, England. 2nd July, 1903.

No. 84/481.—Curtis's and Harvey, Limited, of London, England. 2nd July, 1903.

No. 84/2431.—W. Symington and Co., of Market Harborough, Leicester, England. 2nd July, 1903.

No. 84/2641.—C. Macintosh and Co., Limited, of Manchester, England. 2nd July, 1903.

No. 84/2641.—J. Richardson and Co., of Leicester, England. 2nd July, 1903.

No. 84/3496.—Bass, Ratcliff, and Gretton, Limited, of Burton-on-Trent, England. (Four trade marks.) 2nd July, 1903.

No. 86/687.—Suter, Hartmann, and Rahtjen's Composition Company, Limited, of London, England. 2nd July, 1903.

No. 86/1554.—Potosi Company, of Birmingham, England. (Two trade marks.) 2nd July, 1903.

No. 86/2609.—Southall Bros. and Barclay, of Birmingham, England. 2nd July, 1903.

No. 86/2610.—I. C. Johnson and Co., Limited, of London, England. 2nd July, 1903.

No. 87/890.—Curtis's and Harvey, Limited, of London, England. 2nd July, 1903.

No. 87/1829.—A. Riddle and Co., of London, England. 2nd July, 1903.

No. 87/2750.—J. Kronheimer and Co., of Melbourne, Victoria. (Two trade marks.) 2nd July, 1903.

No. 87/4327.—Stapley and Smith, of London, England. (Three trade marks.) 2nd July, 1903.

No. 87/4329.—T. J. Williams, of London, England. 2nd July, 1903.

No. 87/4520.—E. Izod and Son, of London, England. 2nd July, 1903.

No. 87/4995.—St. Jacob's Oil, Limited, of London, England. (Two trade marks.) 2nd July, 1903.

No. 88/41.—Distillers' Company, Limited, of Edinburgh, Scotland. 2nd July, 1903.

No. 88/456.—Henry Clay and Bock and Co., Limited, of Havana, Cuba. 2nd July, 1903.

No. 88/2170.—W. Teacher and Sons, of Glasgow, Scotland. 2nd July, 1903.

No. 88/2354.—Curtis's and Harvey, Limited, of London, England. (Two trade marks.) 2nd July, 1903.

No. 88/2588.—D. Dunlop, of Petersburg, Virginia, United States of America. (Three trade marks.) 2nd July, 1903.

No. 88/2902.—W. McEwan and Co., Limited, of Edinburgh, Scotland. 2nd July, 1903.

No. 88/3148.—The Association Portland Cement Manufacturers (1900), Limited, of London, England. 2nd July, 1903.

No. 88/3382.—S. Allsop and Sons, Limited, of Burton-on-Trent, England. 2nd July, 1903.

No. 88/3454.—Betts and Co., Limited, of London, England. 2nd July, 1903.

No. 88/3529.—Keen, Robinson, and Co., Limited, of London, England. (Three trade marks.) 2nd July, 1903.

No. 89/1785.—J. Kronheimer and Co., of Melbourne, Victoria. 2nd July, 1903.

F. WALDEGRAVE,
Registrar.

By Authority: JOHN MACKAY, Government Printer, Wellington.

ILLUSTRATIONS OF INVENTIONS.

[These illustrations refer to the complete specifications accepted, and advertised in this *Gazette*.]

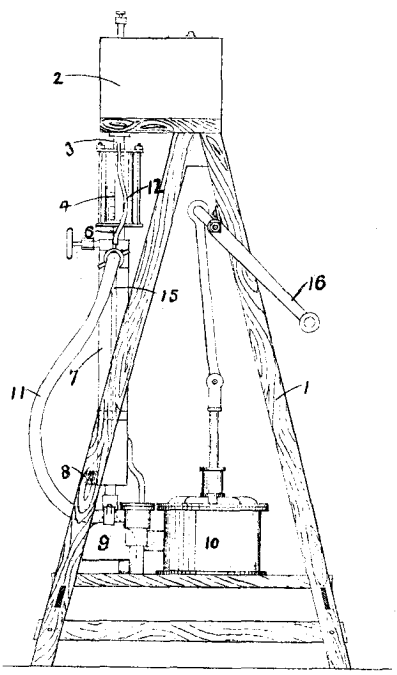


FIG. 1.

15057
Russell & Noble. Rabbit-exterminator.

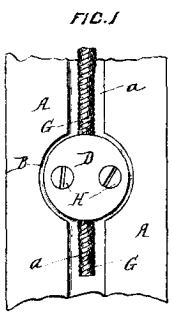


FIG. 1

15449
Armstrong. Window-cord Fastener.

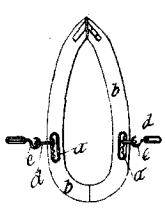


Fig. 1

15380
North. Horse-collar.

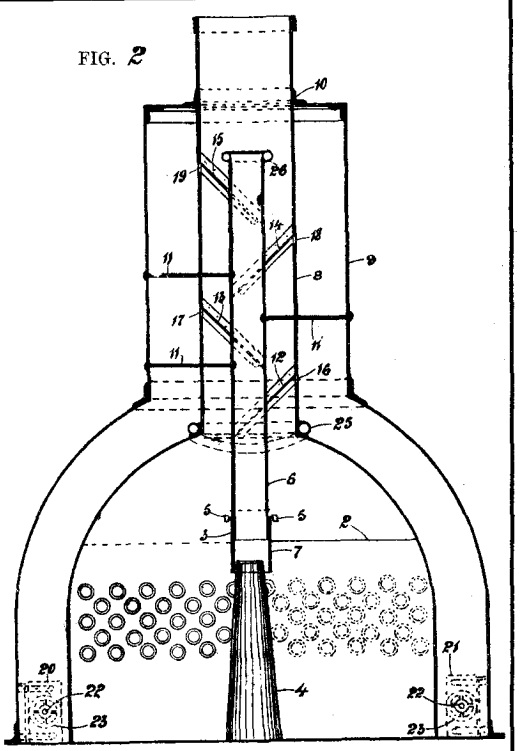
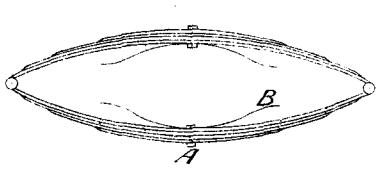


FIG. 2

15429
Whitehouse. Spark-arrester.



15144
Potter. Vehicle-spring Attachment.

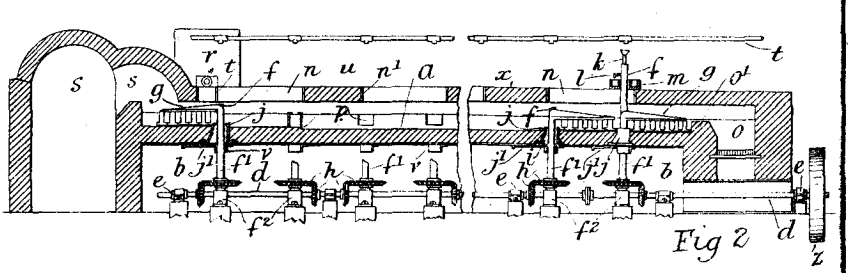


Fig 2

15942
Turri. Ore-roasting Furnace. (Edwards.)

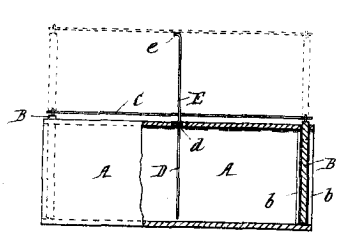
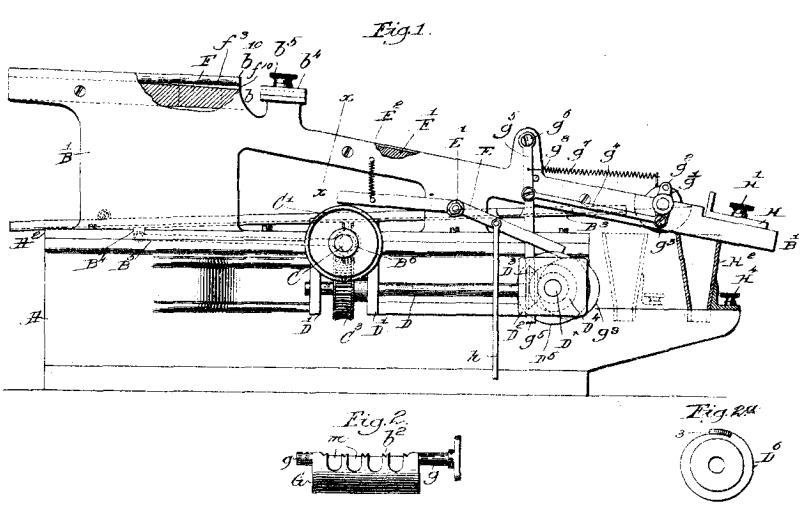
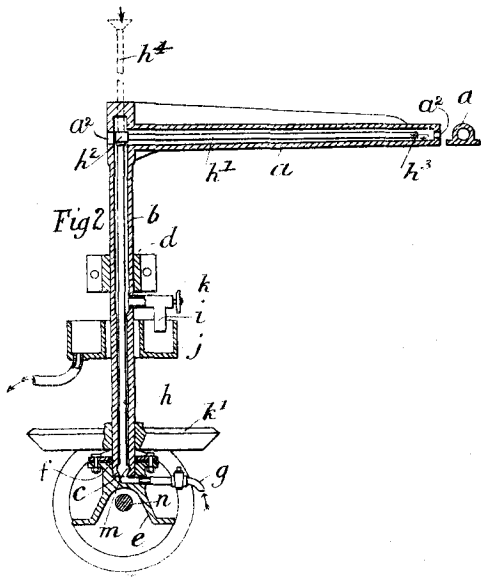


FIG. 1

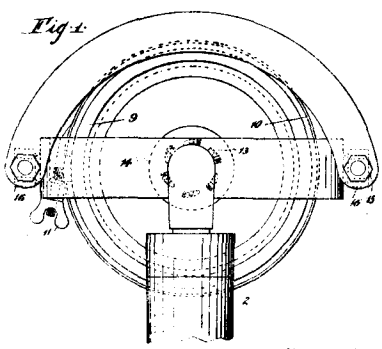
16451
Holford. Animal-trap.



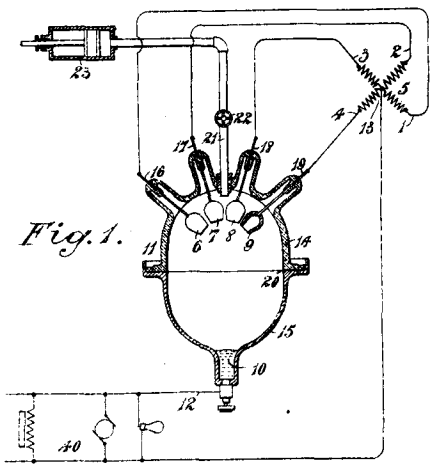
15413
United Shoe Machinery Company. Nail-assorting Apparatus. (Mayo.)



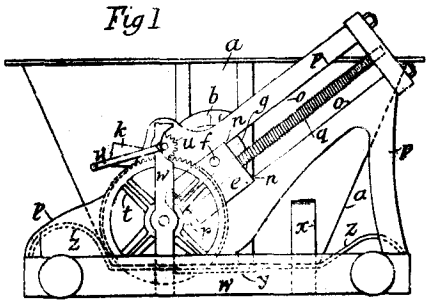
15941
Turri. Rabble for Furnace. (Edwards.)



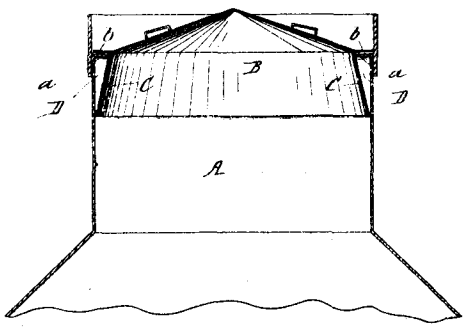
15439
Grayson & Cunningham. Rowing-machine.



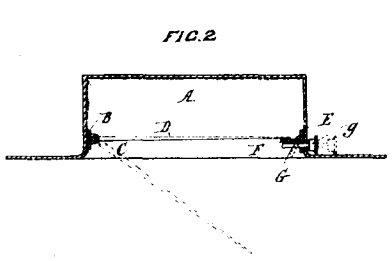
16230
Hughes. Electrical Apparatus.
(Cooper-Hewitt Electric Company—Hewitt.)



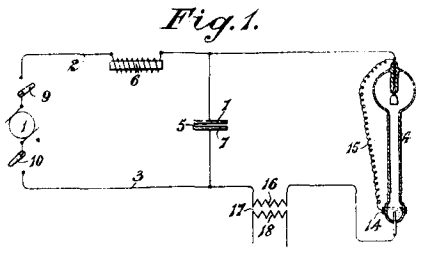
16461
Hayling. Tip-wagon Mechanism. (Mansfield.)



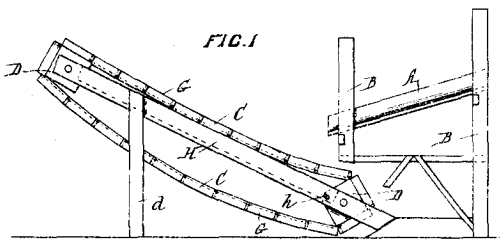
16452
Ashcroft and Maddren. Milk-can Lid.



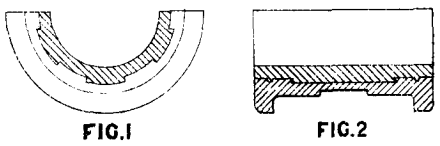
15461
Thomsen. Hat-fastener.



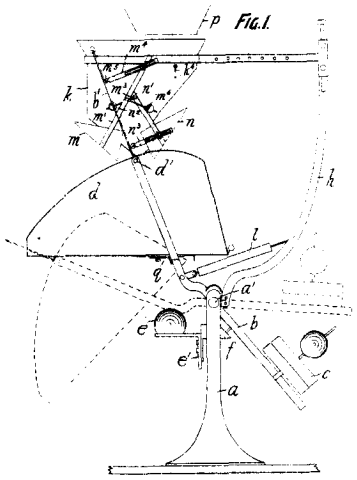
16169
Hunter. Electrical-energy Transforming Apparatus.
(Cooper-Hewitt Electric Company—Hewitt.)



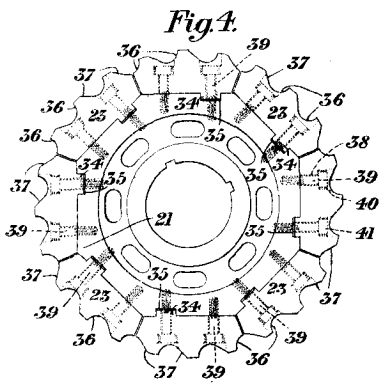
16361
O'Rourke. Gold-dredge Screen and Elevator.



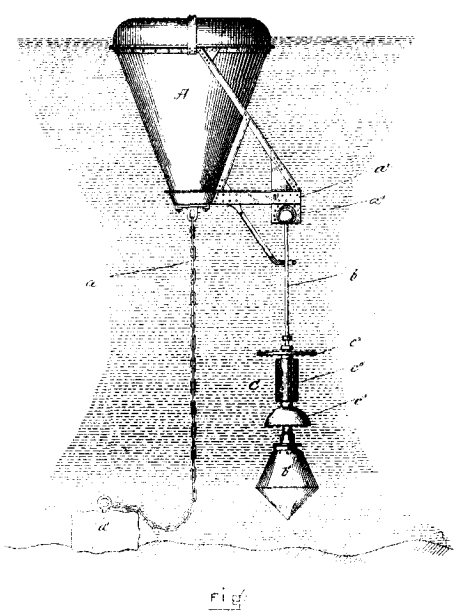
16395
Wagner. Skeleton-bearing.



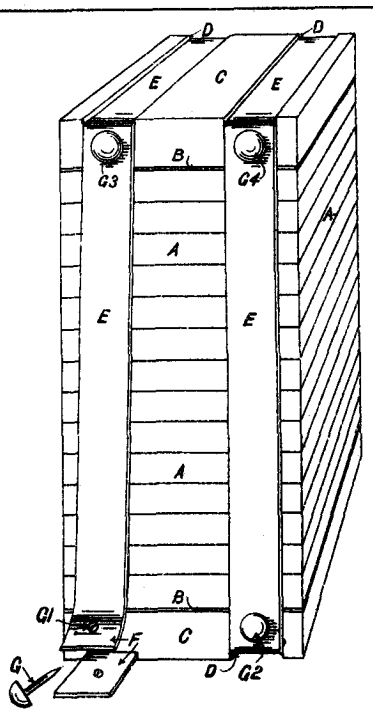
16463
Clarke. Weighing-machine.



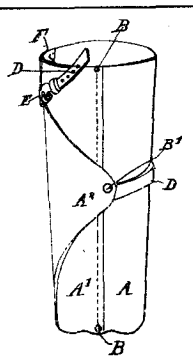
16503
Waters. Roller-crushing Mill.
(The Edison Ore-milling Syndicate, Limited—Edison.)



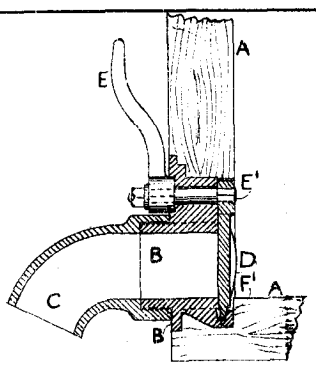
16467
Submarine Signal Company. Sound-producing Device.
(Mundy, Gale, and Dewing.)



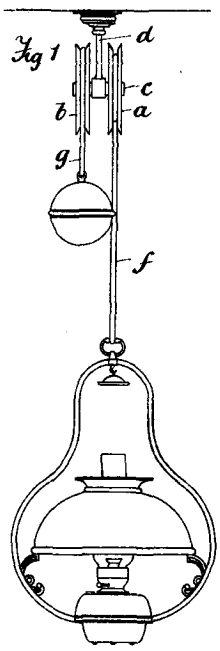
16468
Fancourt. Tobacco-cake Packing.



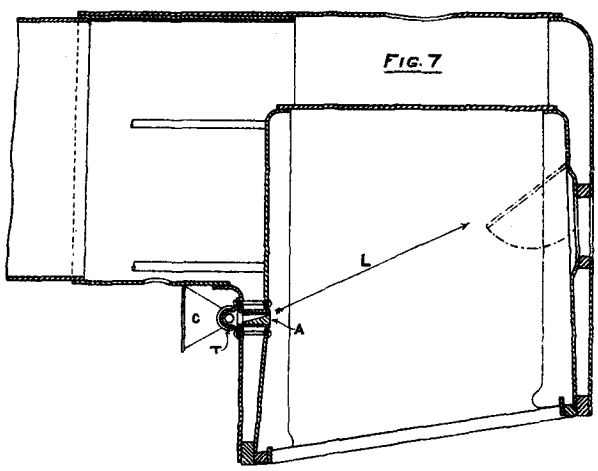
16488
Ryding. Legging.



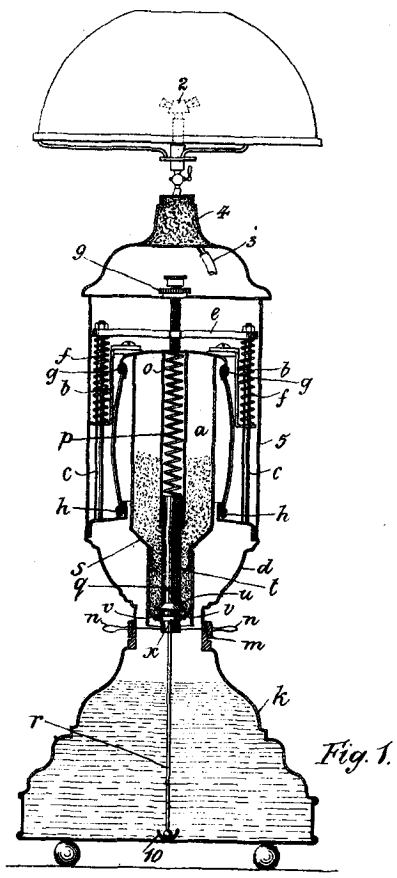
16474
Anderson. Tap.



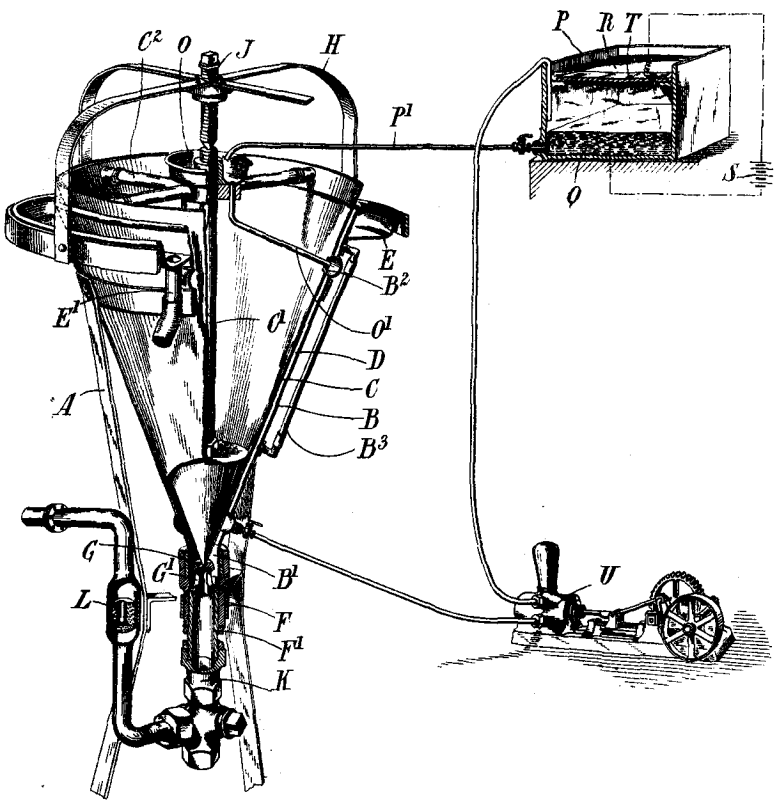
16502
Shaw. Lamp-pendant.



16504
Bernays. Combustion of Fuel.



16506
Baumgarten. Acetylene-generator and Lamp.



16505
Sulman and Kirkpatrick-Picard. Apparatus for recovering Metals.