

# SUPPLEMENT

TO THE

# NEW ZEALAND GAZETTE

THURSDAY, AUGUST 7, 1902.

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Notice of Acceptance of Complete Specifications.

Patent Office.

Patent Office.

Wellington, 6th August, 1902.

OMPLETE 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. 14050.—25th September, 1901.—Thomas Stanley Philpott, of Mein Street, Newtown, New Zealand, Saddler. An improved non-refill bottle.\*

-(1.) The combination in a non-refill bottle of a Claims.—(1.) The combination in a non-refill bottle of a conical valve-seat, a ball forming a valve, a stopper recessed at its end to receive and guide the ball, passages for liquid from said recess to a circumferential channel around the stopper, and passages for liquid from said channel to the open neck of the bottle through the upper end of said stopper, and means for retaining the stopper within the neck of the bottle, as specified. (2.) The combination in a non-refill bottle of a conical valve-seat, a ball forming a valve, a stopper recessed at its end to receive and guide the ball,

passages for liquid from said recess to a circumferential channel around the stopper, and passages for liquid from said channel to the open neck of the bottle through the upper end of said stopper, and bolts fitting into a hole in the stopper and projected by a spring whereby they pass into recesses in the bottle-neck and prevent the stopper from being withdrawn, substantially as specified. (3.) In a non-refill bottle, the combination of a stopper within the neck of said bottle, and above a valve therein, bolts fitting into a hole in the stopper and projected by a spring whereby they pass into recesses in the bottle-neck and prevent the stopper from being withdrawn, substantially as specified. (Specification, 2s. 6d.; drawings, 1s.) passages for liquid from said recess to a circumferential

No. 14103.—4th October, 1901.—John Rose, of Dunedin, New Zealand, Machinist. Improved gear for starting-machine for horse-racing.\*

Claims.—(1.) In race-starting machines, posts upon each side of the track, each provided with an upwardly and inwardly inclined rod, a tape stretching across the track and connected at its ends to wheels running upon the rods, a cord one end of which is attached to the running-wheel upon one side of the track while its other end is passed over a pulley on the top of the post and is then secured to one end of a helical spring fastened to the post, and means for retaining the running-wheels in their lowest positions and for simultaneously releasing the same so as to be drawn up the rods by the helical spring, as specified. (2.) In race-starting machines, posts upon each side of the track, each provided with an upwardly and inwardly inclined rod, a tape stretching across the track and connected at its ends to wheels running upon the rods, a cord one end of which is attached to the running-wheel upon one side of the track while its other end is passed over a pulley on the top of the post and is then secured to one end of a lever-arm pivoted to the post, a helical spring the top end of which is attached to the end of the lever-arm while its other end is attached to the post, and means for holding and releasing the running-wheels when in their lowest positions, as set forth. (3) The general arrangement, construction, and combination of parts in my improved gear for starting-machine for horse-racing as described and explained, as illustrated in the drawings, and for the several purposes set forth. (Specification, 4s.; drawings, 1s.)

No. 14110.—10th October, 1901.—George Andrew, of 88, arkly Street, Carlton, Victoria, Australia, Joiner. Im-Barkly Street, Carlton, Victoria, proved cash register and indicator.

Claims.—(1.) In an appliance for the purpose specified, the combination of the key-levers E¹ centred at E² within casing and acted on by spring piece K² K³, the money-indicator tablet pieces D, D² furnished with lugs D¹ and springs D⁴, the sliding galley-bar F furnished with fingers F¹ and F³, and the levers G, all assembled substantially as described and shown.
(2.) In an appliance for the purpose specified, the combination of vertical screw-rods as H¹, each supported at its upper and lower ends by holed bars within the casing A, the nuts H⁴-k² carrying pointers H², the figured register or check cards H³ over which said pointers travel, the four winged cams H secured on lower end of spindles H¹ and designed to be partially rotated simultaneously with the working of the depression-key levers, and the springs I bearing on said four winged cams, all assembled substantially as described and shown. (3.) In an appliance for the purpose specified, the combination of the key-levers E¹ centred within the casing and acted on from above by spring bar as K², the levers G shown. (3.) In an appliance for the purpose specified, the combination of the key-levers E¹ centred within the casing and acted on from above by spring bar as K², the levers G having upper spring ends g¹, the sliding galley-bar having fingers F³, the four winged cams H secured upon lower ends of vertical screw-rods H¹, the nuts H⁴-h² carrying pointers H², the figured register or check cards H⁵, and the springs I bearing upon said four winged cams, all assembled substantially as described and shown. (4.) In an appliance for the purpose specified, the combination of the key-levers E¹ supported on spindle E² within casing A, the levers G, the sliding galley-bar F furnished with fingers F¹ and F³ and acted on by spring F², latch-lever J acted on by spring J¹, slotted plate J², catch-bar K secured to back of drawer, spring K¹, and the drawer B, all assembled substantially as described and shown. (5.) The improved cash register and indicator consisting essentially of the combination of a suitably supported series of key-levers as E, levers G-g¹, galley-bar F provided with suitable fingers, money tablet pieces D-D⁴, vertical screwed rods H¹, four winged cams H, springs I, nuts H⁴ having pointers H² thereon, figured register or check cards H³, latch-lever J, drawer B provided with catch-piece K, and the casing A furnished with door A² and an upper glass-faced compartment C, and their appurtenant parts, all assembled and arranged substantially as described and shown.

(Specification, 6s. drawings 2s.)

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

No. 14111.—10th October, 1901.—Julius Paul Kernbaum, of 19, Nicholson Street, South Yarra, Victoria, Bootmaker. Improvements in locks for mail-bags and cognate purposes.\*

Claims. -(1.) In a lock of the class indicated, in combination with a rotatable cutter, a seal box slotted to permit said cutter to protrude into it whereby a seal may be placed in said seal box and be normally impaled on said cutter, and a tion with a rotatable cutter, a seal-box slotted to permit said cutter to protrude into it whereby a seal may be placed in said seal-box and be normally impaled on said cutter, and a lid for said seal-box having means for engaging said seal to hold it, substantially as set forth. (2.) In a lock of the class indicated, in combination with a rotary spring-controlled cutter, a seal-box slotted to permit said cutter to protrude into it whereby a seal may be placed in said seal-box and be normally impaled on said cutter, and a lid for said seal-box having means for engaging said seal to hold it, substantially as set forth. (3.) In a lock of the class indicated, in combination with a movable plate having a cutter, a seal-box slotted to permit said cutter to protrude into it whereby a seal may be placed in said seal-box and be impaled on said cutter, a lid for said seal-box having means for engaging said seal to hold it, locking-means for holding said lid closed, and means carried by said movable plate for disengaging said locking-means, substantially as set forth. (4.) In a lock of the class indicated, in combination with a base plate, a rotary spring-controlled disc mounted thereon having a cutter, a seal-box slotted to permit said cutter to protrude into it whereby a seal may be placed in said seal-box and be impaled on said cutter, a lid for said seal-box having a tongue to puncture said seal and hold it, a locking-device engaging said tongue, and means carried by said disc for engaging the locking-device and unlocking said lid when said disc is rotated, substantially as set forth. (5.) In a lock of the class indicated, in combination with a seal-box having a movable cutter working therein, a label having a head adapted to be inserted in said seal-box and provided with a slot to receive and permit unobstructed movement of said cutter, substantially as set forth. (6.) In a lock of the class indicated, in combination with a seal-box having a movable cutter working therein and provided with a lid having a tongue to p

No. 14120.—14th October, 1901.—ALEXANDER COLIN MURRAY, of Cromwell, New Zealand, Sharebroker. Combined frying-pan-lid and strainer.\*

Extract from Specification.—The objects of this invention are to provide a lid for a frying-pan which allows the escape of steam whilst cooking is proceeding, and at the same time prevents fat splashing from the frying-pan over the range or fire; and it can also be used for straining purposes at other times. Fig. 1 is a plan, Fig. 2 is a section, of my invention. I effect these objects by making a dish 1 in shape to fit the edge of the frying-pan, with a narrow rim 2 fitting inside that edge, and a flange 3 projecting over it. The dish is preferably shaped like an ordinary bowl with the bottom uppermost, and this bottom is perforated with holes 5 to allow of the escape of the steam from the frying-pan. Fastened to this perforated bottom is another preferably bowl-shaped vessel 4, bottom downwards, with the bottom removed. This second bowl 4 is preferably smaller than the first one, and when the device is used as a lid serves as a handle to remove it from the frying-pan when it is desired to handle to remove it from the frying-pan when it is desired to examine or turn the contents thereof. The device with the small end uppermost can be used for straining gravy and the like, and with the large end uppermost can be used as a calendar.

(Naim.—The general construction, arrangement, and combination of parts composing my "combined frying-pan-lid and strainer," all substantially as and for the purposes described with reference to the drawings.

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

No. 14133.—18th October, 1901.—ROBERT CRESSWELL, of Spring Creek, Mariborough, New Zealand, Blacksmith. Improvements in the fingers of reaping, mowing, and binding machines.

Claim.—A finger for reaping, mowing, and binding machines consisting of a single piece of steel or other metal, shaped with its top and bottom edges converging to a point at the forward end, and with a cut-away portion and projecting pieces at its back end, a knife-groove extending inwardly from the cut-away portion and provided with a removable ledger plate, and means whereby the finger may be attached to the bar of the machine, as specified. (Specification, 2s. 3d.; drawings, 1s.)

No. 14138.—21st October, 1901.—Frank Cook, Settler, and James Symons, Settler, both of Foxton, New Zealand. Improved filtering-apparatus.\*

Claims.—(1.) The filtering-apparatus consisting of the parts combined, arranged, and operating substantially as specified, and illustrated in the drawing. (2.) The combination in filtering-apparatus of a tank receiving water to be treated, filtering-medium within said tank beneath a reticular diaphragm therein, an overflow-pipe from the tank above the diaphragm, a second tank containing filtering-medium and receiving and treating water from the first tank, a storage-tank receiving water from said second tank, and a draw off pipe from the storage-tank, substantially as and for the purposes described and illustrated. (Specification, 2s.; drawings, 1s.)

No. 14145.—22nd October, 1901.—Gordon Hughan, of Carterton, New Zealand, Blacksmith. An improved handle for milk-cans and the like.\*

Claim.—A handle for milk-cans and the like consisting of a bar of metal bent into the ordinary handle-shape and secured to the side of the can and provided with a loop in the centre of its gripping-portion, such loop being inclined outwards and upwards at an angle to the handle, as set forth. (Specification, 1s. 6d.; drawings, 1s.)

No. 14166.—26th October, 1901.—Edward Sprey, of New Brighton, New Zealand, Hawker. An improved fastening or brace for boots, shoes, and allied articles.\*

Claims.—(1.) In fastening-devices of the class described, as shield that rests upon the instep of the foot, and which has means whereby straps are held loosely thereon at right angles to each other, said straps being connected to a shoe or other allied article as specified. (2.) In fastening-devices of the class described, the combination with suitable footwear of a leather shield, a disc superimposed thereon and fastened thereto at its corners, straps passing beneath the disc at right angles to each other and which attach to the shoe or other footwear, as and for the purposes described. (3.) In fastening-devices of the class described, the combination with suitable footwear of a leather shield, a disc superimposed

thereon and fastened thereto at its corners, straps passing beneath the disc at right angles to each other and which are attached to the shoe or other footwear at suitable points, pins upon the shield, and slits in the straps, the whole as explained and for the purposes set forth.

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

No. 14213.—12th November, 1901.—EBENEZER HENRY SLATER, of Auckland, New Zealand, Farmer. Improvements in and relating to the cutting-tools of planing-machines.

Extract from Specification.—This invention provides an improved cutter-tool for use upon planing-machines for tonguing, grooving, and the like. Plane-irons are usually formed in one piece, but according to my invention they are made in two parts—viz., a holder which is bolted to the cutter-block, and a cutter or knife shaped to suit the work to be done and secured in the holder. The holder has an oblong slot to receive the stud bolt by which it is secured to the cutter-block of the machine, and also a slot through one end into which the cutter is dovetailed, the cutter being held securely in position when the holder is bolted against the side of the cutter-block.

Claim.—The combination of a cutter-holder having means by which it may be secured to the cutter-block of a planing-

Claim.—The combination of a cutter-holder naving means by which it may be secured to the cutter-block of a planing-machine, and a cutter dovetailed into said holder, substanti-ally as and for the purpose specified. (Specification, 1s. 9d.; drawings, 1s.)

No. 14351.—18th December, 1901.—WILLIAM AUGUST EDWIN HENRICI, of 37, Fruchtstrasse, Berlin, Germany, Engineer. An improved rotary engine.

Claims.—(1.) The improved rotary engine comprising a cylinder of the form shown and described, a suitable piston travelling therein, a steam-admission valve consisting of a slotted circular disc or plate located within a recess upon the side or face of the cylinder, such disc being secured to and rotating with the shaft of the engine, a gate for closing the bore of the cylinder operated from the main shaft by means of a cam and system of levers and suitable steam admission of a cam and system of levers and suitable steam admission and exhaust ports, all arranged, constructed, and operating substantially in the manner described and illustrated. (2.) In a rotary engine of the kind herein specified, a steam-admission valve consisting of a circular plate or disc, preferably bevelled upon its periphery, and provided with an opening therein, such disc being mounted upon and secured to the shaft of the engine, and located within a suitable recess formed upon the side or face of the cylinder, and enclosed therein by means of a suitable cover in which is formed a passage for the admission of steam, such passage formed a passage for the admission of steam, such passage being so disposed as to coincide at a predetermined point of the piston's travel, and so permit of the passage of steam therethrough and through the steam-port to the cylinder, substantially as described and illustrated by the drawings.

(3.) In a rotary engine of the kind specified, the means for setuating the gate for eleging the bore of the cylinder compared to the contract of the cylinder compared to the cylinder actuating the gate for closing the bore of the cylinder comprising an arm attached to the spindle of the gate, a rod attached at its upper and lower ends respectively to one end of a lever and to the said arm, such lever being pivotally supported at a suitable point of its length, and being attached supported at a suitable point of its length, and being attached at its outer end to an extensible rod or like means, by which the lever's movement may be communicated to a second lever provided with a roller bearing upon a disc cam and also pivotally supported at a suitable point on its length, all arranged and operating substantially as described, and illustrated by the drawings.

(Specification, 7s. 6d.; drawings, 2s.)

No. 14465. — 24th January, 1902. — James Murray, of Fairlie, Canterbury, New Zealand, Labourer. Improved clothes-line and clothes-pegs.\*

Claims. — (1.) An improved clothes-line and clothes-pegs comprising in combination two clothes-lines fastened at their comprising in combination two clothes-lines fastened at their ends a distance apart to posts, and clothes-pegs hanging from the upper line, each having jaws for gripping the lower line, and a movable band operating to close such jaws on to the lower line, substantially as and for the purposes set forth.

(2.) An improved clothes-line and clothes-pegs comprising in combination two clothes-lines fastened at their ends a distance apart to bars, such bars being fastened to posts, and clothes-pegs hanging from the upper line, each having jaws for gripping the lower line, and a movable band operating to close such jaws on to the lower line, substantially as and for the purposes set forth. (3.) An improved clothes-line and clothes-pegs comprising in combination two clothes-lines fastened at their ends a distance apart to bars, such bars being fastened to posts by rotating screws, a centre bar fixed to such clothes-lines, and clothes-pegs hanging from the upper line, each having jaws for gripping the lower line, and upper line, each having jaws for gripping the lower line, and a movable band operating to close such jaws on to the lower line, substantially as described and illustrated, and for the purposes set forth. (4.) The combination and arrangement of parts comprising the improved clothes-line and clothespegs, substantially as described, and illustrated in the drawings, and for the purposes set forth. (Specification, 4s.; drawings, 1s.)

No. 14904.—23rd May, 1902.—George Lucas Pearson, of Lincoln, Canterbury, New Zealand, Farmer. Improvements in apparatus used in boring and artesian-well driving.\*

Claims .- (1.) As an improvement in connection with ap-Claims.—(1.) As an improvement in connection with apparatus used in boring, the employment of a guide upon the top of the driving-pipe for the purpose of guiding the boring-rods, substantially as specified. (2.) In apparatus for the purpose indicated, the employment of a driving-monkey working upon the driving-pipe, substantially as specified. (3.) In apparatus for the purpose indicated, a driving-collar internally screwed from each end, and having an inner circular projection forming shoulders against which are butted the driving-pipe and driving-nipple, substantially as specified. (4.) The pipe and driving-nipple, substantially as specified. (4.) The combination in apparatus for the purpose indicated of a carriage working in vertical guides and carrying winch-drums around which are coiled the driving-ropes, means for revolving the drums to adjust the length of said driving-ropes, a chain passing over guide-pulleys and connecting the carriage with a swivel collar moving vertically in connection with the driveswivel collar moving vertically in connection with the drive-pipe, and means whereby the carriage is normally drawn ver-tically upwards by the driving-ropes, substantially as specified. (5.) The combination in apparatus for the purpose indicated of a carriage working in vertical guides and carrying winch-drums around which are coiled the driving-ropes, means for revolving the drums to adjust the length of said driving-ropes, a chain passing over guide-pulleys and connecting the carriage with a swivel collar moving vertically in connection with the drive-pipe, pivoted levers having sheaves at their outer ends around which are passed the driving-ropes, discs carrying crank-pins operating the inner ends of said levers, and means for revolving the crank-discs, substantially as specified. for revolving the crank-discs, substantially as specified. (6.) In apparatus for the purpose indicated, the combination of a lever having a sheave at its outer end around which a driving-rope is passed, the inner ends of said rope being secured, whereby vibration of the lever lifts the driving apparatus, a crank-disc operating said lever, and means for revolving the crank-disc, substantially as specified.

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

No. 14918.-21st May, 1902.-Otto Prollius, of Copenhagen, Denmark, Engineer. Improvements in or pertaining to bearings for centrifugal machines and the like.

Claims.—(1.) A yielding bearing for shafts of centrifugal machines or the like, comprising a coiled spring 3 which is arranged concentrically with the shaft and between the bush 1 and the internal surface of the aperture for the bearing in the frame 2, characterized thereby that the coiled spring bears against the bush and against the internal wall of the aperture so that the shaft can oscillate on its bearing. (2.) In a yielding bearing as stated in claim 1, arrangements by means of which the compression of the coiled spring can be varied. (3.) In a yielding bearing in accordance with the preceding claims, the arrangements that the means for adjusting the compression of the coiled spring comprise nuts screwed upon the bush, or rings provided with a screwthread and screwed into the aperture in the frame. (4.) In a yielding bearing according to the first two claims, the arrangements that the means for compressing the coiled spring comprise a screw-thread of the same pitch as the said spring, formed either externally on one end of the bush or internally at one end of the aperture in the frame into which the bush is inserted, and provided either at the bottom which the bush is inserted, and provided either at the bottom of the groove or at the top of the thread with notches into which the end of the spring can be inserted.

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

No. 15077.—3rd July, 1902.—ROLAND HENRY EASDOWN, of Mount McDonald, New South Wales, Postmaster. Improvements in fastenings for mail-bags and the like.

-In fastenings for mail-bags and the like, the com-Claim.—In fastenings for mail-bags and the like, the combination with a binding-strap of a buckle consisting of a locking-plate and a sealing-device connected by a looped hinge, the said locking-plate being provided with an aperture to receive and an underlying pivoted locking-plate to retain the tongue, and having one end of the binding-strap riveted thereto; the sealing-device being provided with a circular aperture and a hinged plate adapted to fit therein and clamp a sealing-slip placed over the aperture, said hinged plate carrying on one face a revolving disc and on the other the tongue of the buckle, substantially as described, and as illustrated in the drawings.

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

No. 15089.—5th July, 1902.—Norman Whitmore Griswold, of Honolulu, Hawaii, Gentleman. Improvements in watering-troughs for animals.

Claims.—(1.) In a watering-trough for animals, a hinged bowl or basin adapted to be moved on its hinged bearings to a vertical position so as to empty its contents, a closed tank supported at an elevation higher than the bowl or basin and connected by a pipe with a source of water-supply, an air-valve in the top of the tank, a pipe leading downward from the bottom of the tank so as to discharge into the bowl or basin, a valve in the feed-pipe and a valve in the discharge-pipe, and means operated by the raising and lowering of the bowl or basin whereby said valves are opened and closed alternately so as to successively admit water into the tank and then discharge it into the bowl, substantially as described. (2.) In a watering-trough for animals, a bowl or basin provided with a discharge-spout on one side and supported on hinged bearings on each side of said spout, a latch adapted to engage with the opposite rim of said bowl or basin when it is elevated and closed, a waste-spout adapted to receive the contents of the bowl when it is tipped to a vertical position, and a rigid arm attached to said bowl and adapted to operate a spray within the bowl or basin as it is opened and closed, substantially as described. (3.) In a watering-trough for animals, a bowl or basin supported on hinged bearings and adapted to be raised to a vertical position, means for alternately filling and emptying said bowl or basin, and a spray-pipe connected with the water-supply and operated by the movements of the bowl or basin in opening and closing, whereby a spray of fresh water is ejected into and against the bottom of the bowl each time it is raised and lowered, substantially as described. (4.) In a watering-trough for animals, a bowl or basin adapted to be raised to a vertical position on hinged bearings, means for filling the bowl or basin when it is lowered to a horizontal position and for emptying its contents when it is raised to a vertical position, and a thin wall or screen extending on each side and above the trough or basin,

No. 15099.—10th July, 1902.—International Ore-Separating Company, of 11, Pemberton Square, Boston, Massachusetts, United States of America (assignees of Henry French Campbell, of 2, Batavia Street, Boston aforesaid, Gentleman). Method and apparatus for separating ore-pulp.

Claims.-(1.) In an apparatus of the character specified, a tray, and means to feed the material upon said tray substantially its entire width in a predetermined film. (2.) In an apparatus of the character specified, a tray, means for feeding cause the material upon said tray, and a distributer arranged to cause the material to approach a given point in a predetermined film. (3.) In an apparatus of the character specified, a magnetic device, means arranged to carry material into the field of the said device, a distributer for feeding the material upon said means in a predetermined film, and means for vibrating said means in a direction at an angle to the feed of the material. (4.) In an apparatus of the character specified, two or more sets of magnetic separating-devices of progressive potentiality, means arranged to conduct the material to said devices in succession, whereby the work of magnetic separa-tion is divided and one set of devices supplements the action of the other. (5.) In an apparatus of the character specified, a magnetic separating-device arranged to remove magnetic particles from a mass of ore-pulp, a tray arranged to conduct the pulp to the field of said device, an agitator arranged to shatter ore-pulp into particles and deliver the same upon said tray substantially its entire width in a predetermined amount. (6). In an apparatus of the character specified, a magnetic separating-device arranged to remove magnetic par-ticles from the mass of ore-pulp, a tray arranged to conduct the pulp to the field of said device, and means to vibrate the tray to shatter masses of the pulp and feed the pulp to the magnetic field in a predetermined film. (7.) In an apparatus of the character specified, a magnetic separating device arranged to remove magnetic particles from a mass of crepulp, a tray arranged to conduct the pulp to the field of said device, said magnetic device being arranged to shake the particles or masses lifted by it to shatter from the magnetic particles non-magnetic particles, whereby the material removed by said device contains substantially no free nonmagnetic particles. (8.) In an apparatus of the character specified, a tray, a stationary hopper, an agitator into which said hopper discharges, said agitator being arranged to automatically regulate the discharge of material from the hopper and to shatter and distribute said material upon the tray in a film of predetermined depth and width. (9.) In tray in a film of predetermined depth and width. (9) In an apparatus of the character specified, an agitator, a tray on to which said agitator discharges the material, means for vibrating such agitator to shatter and feed the material

therefrom, said agitator being constructed with an interrupted discharge-orifice to regulate and facilitate the discharge of the material from the agitator. (10.) In an apparatus of the character specified, a magnetic separating-device, a tray arranged to conduct the ore-pulp to the field of said device, an agitator arranged to receive the material from a source of supply and deliver the same upon said tray, and means for vibrating the tray and agitator at an angle to the line of feed of the material. (11.) In an apparatus of the character specified, a magnetic separating-device, a tray for conducting the material to the field of said device, an agitator formed with an apron arranged to distribute and discharge the material upon the tray in a predetermined film, a distributer upon said tray between the field of the separating-device and the point where the material discharges upon the tray, arranged to cause the material to therefrom, said agitator being constructed with an intercharges upon the tray, arranged to cause the material to enter the field of the device in a predetermined film, means for vibrating said tray, and means for preventing the material from being shaken from the tray. (12.) In an apparatus of the character specified, a magnetic separating-device, a tray arranged to conduct the material to the field of said device, an agitator to receive the material from the source of supply and discharge it upon the tray, means for vibrating the agitator to shatter and distribute the material upon the tray, means for vibrating the tray to shatter and feed the material means for vibrating the tray to shatter and feed the material to the field of said device, and means for shaking the material lifted by said device to shatter and separate therefrom non-magnetic particles whereby the resulting product is substantially free from magnetic particles. (13.) In an apparatus of the character specified, a magnetic separating-device arranged to remove magnetic particles from a mass of ore-pulp, means for conducting the ore-pulp to the field of said device, said device comprising a magnet and carrier, the carrier arranged to remove particles or masses when lifted by the magnet, and means for shaking said masses or particles while en route upon said carrier, to shatter apart a bunch or mass of particles to permit the non-magnetic particles to separate from the magnetic. (14.) In an apparatus of the character specified, a tray, means non-magnetic particles to separate from the magnetic. (14.) In an apparatus of the character specified, a tray, means for feeding the material upon said tray, a distributer comfor feeding the material upon said tray, a distributer comprising independent shutters or members, and means for adjusting said shutters individually in order to control the amount of material passing the distributer at a given point. (15.) In an apparatus of the character specified, a tray having an ore-contact surface composed of aluminum. (16.) In an apparatus of the character specified, means arranged to conduct the material, and means for subjecting the said material at two or more successive points to magnetic action of different intensity. (17.) In an apparatus of the character specified, a magnet and carrier, a tray arranged to conduct material to the field of said magnet, and means whereby said magnet may be adjusted to or from the material. (18.) In an apparatus of the character specified, a horse-shoe magnet and carrier, a tray arranged to conduct material to said magnet may tray arranged to conduct material to said magnet, and provisions whereby either arm of said magnet may have its visions whereby either arm of said magnet may have its pole-piece independently adjusted to or from the material to increase or diminish the action of the magnet upon the material. (19.) In an apparatus of the character specified, a magnet and carrier, a tray arranged to conduct the material into the field of said magnet, said parts being so constructed and arranged that as the magnetic material is lifted and transported by the carrier it is subjected to a series of lateral movements independent of the movement of oscillation by the carrier, whereby the adhering zinc-particles are shaken back upon the tray, and the magnetic material delivered by the carrier is substantially free from zinc-particles. (20.) The method of ore-separation which consists in conducting orepulp upon a suitable support and subjecting said ore-pulp during its passage on said support to the action of a plurality of magnets of different potentiality, the first magnet serving to remove the material most susceptible to magnetic action, and the subsequent magnet or magnets in turn removing the and the subsequent magnet or magnets in turn removing the atoms less susceptible to magnetic action, whereby the action of each magnet is unimpeded by reason of the presence of ultra-magnetic particles in the field of that magnet. (21.) The method of separating ore-pulp which consists in causing a stream of ore-pulp in the form of a thin, even film to be passed along a suitable support, subjecting said moving stream simultaneously to the successive action of two or more sets of magnets of different intensity, whereby the work of magnetic separation is distributed and the operation of one magnet supplements the work of the other. (22.) In an apparatus of the character specified, means for conducting ore-pulp in a predetermined film upon a suitable support, means for subjecting said ore during its passage on said sup-port to the action of a plurality of magnets of different potentiality, the first magnet serving to remove the material most susceptible to magnetic action, and the subsequent magnet or magnets in turn removing the atoms less susceptible to magnetic action, whereby the action of each magnet is unimpeded by reason of the presence of ultra-magnetic particles in the field of that magnet. (23.) In an apparatus of the abovector specified most for excepting paratus of the character specified, means for causing

stream of ore-pulp in the form of a thin, even film to be passed along a suitable support, and means for subjecting said moving stream simultaneously to the successive action of two or more sets of magnets of different intensity, whereby the work of magnetic separation is distributed and the operation of one magnet supplements the work of the other. (Specification, £1 10s.; drawings, 5s.)

No. 15120.—14th July, 1902.—James Orr, Jun., of Waitohi, Temuka, New Zealand, Farmer. Improvements in apparatus for holding bags for filling.

Claims.—(1.) In apparatus as described, in combination, a Claims.—(1.) In apparatus as described, in combination, a hopper having an annular groove in which a wire cable can lie, means for actuating the cable, and springs that keep it normally free from the hopper, as and for the purposes specified. (2.) In apparatus for holding bags for filling, a hopper that is provided with an annular groove and which mounts springs that keep a wire cable normally free from said hopper, a bracket on the hopper to which one end of the cable is attached and which carries a bell-crank lever, and a link connecting the lever with the other end of the cable, the whole arranged and combined substantially as illustrated and as set forth and specified.

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

No. 15121.—17th July, 1902.—CHARLES EDWARD ADOL-PHUS Esse, of 40, St. Helens Road, Ormskirk, Lancaster, England, Brewer. Improvements in the pneumatic inner tubes of tires.

Claims.—(1.) An inner tube for pneumatic tires, characterized by a long length with closed ends overlapping each other, the valve being placed near one end, and the other end formed with an elastic sleeve solutioned all round the tube at one part so as to leave the extreme end free all round inside one part so as to leave the extreme end free all round make the sleeve to form a pocket for the reception of the opposite end of tube and yet permit the outer sleeve to be drawn back so as to expose the end of the tube which was previously inside the sleeve, to enable any repairs to be effected. (2.) An inner air-tube for pneumatic tires of the kind mentioned in claim 1, having the combination of a rubber sleeve at one end of tube for receiving the opposite end, the said sleeve being claim 1, having the combination of a rubber sleeve at one end of tube for receiving the opposite end, the said sleeve being provided with backings of canvas with intervals between each piece so that while providing sufficient strength at the point where the sleeve is drawn over the opposite end of tube there will be enough elasticity to enable the valve to be pushed through the hole in the sleeve and also freely allow for inflation. (3.) An inner tube for pneumatic tires comprising a long length of tube with closed ends overlapping each other, a valve at one end of said tube, an elastic sleeve at the other end to form a pocket for the reception of the at the other end to form a pocket for the reception of the valve-fitted end, and a hole in the sleeve to receive the valve, valve-fitted end, and a hole in the sleeve to receive the valve, said hole being so made as to enable the ends of the tube to be pulled apart somewhat when the valve has been passed through it so as to bring the lock-hole out of register with the valve. (4.) An inner tube for pneumatic tires of the kind mentioned in claim 1, the arrangement by which the outer sleeve can be pulled back clear of the end of the tube, which consists in solutioning to the end of the tube inside the sleeve a tongue-piece projecting a little beyond the end of the tube, whereby if the tongue is held firmly and the sleeve then laid hold of the sleeve can be forcibly drawn back as far as it will go, thus turning it inside out. (5.) An inner tube for pneumatic tires comprising a long length of tube with closed ends overlapping each other, a valve placed near one end, and the other end formed with an elastic sleeve to which one-half of that end of the tube is solutioned, leaving the end, and the other end formed with an elastic sleeve to which one-half of that end of the tube is solutioned, leaving the other half as a pocket for the reception of the opposite end of tube, the other end of sleeve being made with tabs with embayments between, which facilitates the valve being slipped through a lock-hole in the sleeve and one end of the tube being placed in the pocket of the other.

(Specification, 5s.; drawings, 1s.)

No. 15122. – 17th July, 1902. — HARRY BURGON, of 136, Oakbrook Road, Sheffield, York, England, Sheep-shear Manu-Improvements in sheep shears. facturer.

Claims.—(1.) Sheep-shears whereof the blades are made detachable from the bow, the blades and bow having shanks forged integrally therewith respectively and adapted a shank of the one to fit in a shank of the other and to make a longitudinally-sliding-non-torsional interlocking engagement therewith, substantially as specified. (2.) Sheep-shears whereof the blades are detachably connected to the box by shanks on the blades slidably fitting in and making longitudinally sliding non-torsional interlocking engagement with shanks on the bow, and provided with spring latches adapted to lock

the shank of the one in engagement with the shank of the other, substantially as specified. (3.) Sheep-shears whereof the blades are detachably connected to the bow by shanks on the blades slidably fitting in and making longitudinally sliding non-torsional interlocking engagement with shanks on the bow, the male shanks being longitudinally slitted and divergently formed so as to fit tightly within the female shanks or sockets by spring pressure, as described. (Specification, 4s. 6d.; drawings, 1s.)

No. 15125.—17th July, 1902.—FERDINAND MORA CANDA, of 33, West Twenty-first Street, Manhattan, New York, United States of America, Manufacturer. Improvements in locking-devices for securing cams, pulleys, gear wheels, and other like devices.

Claims.—(1.) A wedge arranged within an eccentric recess in the cam or the like and having a groove to receive a projection upon the shaft, substantially as and for the purposes described. (2.) The combination with the aforesaid wedge of a spring or springs, substantially as and for the purposes described. (3.) A locking-device having its parts constructed, arranged, and combined to operate substantially as described with reference to the drawings for the purposes specified. (Specification 9s.: drawings. 1s.)

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

No. 15131.—18th July, 1902.—Thomas James Steele, of Auckland, New Zealand, Gentleman. An improved method of treating clay to render it suitable for road-making and other purposes.

Claim.—The method of treating clay to render it suitable for road-making and other purposes, consisting in burning the clay by placing it in successive layers over a fire and alternately with layers of fine combustible material as each layer becomes hardened, as herein specified.

(Specification, 1s. 6d.)

No. 15134.—16th July, 1902.—The Automatic Aerator Patents, Limited, of 14, Sherborne Lane, London, England (assignees of Frank George Hampson, of 34, Danvers Street, Chelsea, England, Engineer). Improvements in or relating to the aeration and bottling of liquids.

Extract from Specification.—This invention relates to the aeration, delivering quantities, and bottling of liquids, and has for its chief object to provide an apparatus in which the water to be aerated can be supplied either under pressure direct from the water-service main, or from a filter, storage-tank, or other appropriate source, gas being provided by compression from bottles or in any other convenient manner. According to this invention the apparatus comprises essentially a nlling-bottle or receiver into which the liquid and gas are admitted, a reservoir or aerating-chamber into which the liquid is forced from the receiver by the gas, a delivery-vessel into which the aerated product is forced by the pressure in the aerating-chamber and from which it is delivered, preferably after reduction of the pressure, or a bottling attachment, and suitable valves and valve-operating mechanism. A preliminary enriching-chamber is also preferably provided, into which the liquid is admitted before entering the receiver and wherein it is enriched by the waste or excess gas discharged from the apparatus, this gas-pressure or excess gas discharged from the apparatus, this gas-pressure being also employed to force the water from the enriching-chamber into the receiver. An important feature of the apparatus is that the withdrawal of a quantity of aerated liquid therefrom does not materially reduce the quantity of liquid therefrom does not materially reduce the quantity of aerated liquid in the reservoir, as the controlling-mechanism is so arranged that when a quantity of aerated liquid is withdrawn from the apparatus fresh supplies of gas and liquid are admitted thereto from separate sources to form aerated liquid replacing the portion withdrawn; provided, therefore, that the various valves are properly regulated and operated, a constant supply of aerated liquid from the apparatus can be obtained. be obtained.

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

(Specification, £1; drawings, 8s.)

No. 15139.—17th July, 1902.—SIR W. G. ARMSTRONG, WHITWORTH, AND COMPANY, LIMITED, of Elswick Works, Newcastle-on-Tyne, England, Manufacturing Engineers (assignees of Roger Wright, of Elswick Works, Newcastle-on-Tyne aforesaid, Engineer). Improvements in appliances for shipping or transferring coal and the like.

Extract from Specification.—According to this invention coal or the like carried by railway in a large-sized truck is transferred into four or other convenient number of trucks of ordinary size, or of boxes mounted on bogies, by tipping the large truck sideways, the smaller trucks or boxes being then carried on by rail to cranes or hoists.

Claims.—(1.) The tipping-apparatus for transferring coal and the like from large trucks into smaller trucks and boxes, substantially as described, and illustrated in the drawings. (2.) The arrangements, substantially as described, and illustrated in the drawings, of railway-lines whereby both large-sized and ordinary trucks can be dealt with. (3.) The combined appliances for shipping or transferring coal and the like, substantially as described, and illustrated in the drawings.

(Specifications, 4s. 6d.; drawings, 9s.)

No. 15146.—19th July, 1902.—Samuel Barningham, Edward Thomas O'Connell, and Thomas McCormack, trading as "Barningham and Co.," Dunedin, New Zealand, Ironfounders. Improvements in fire-escape ladders.

Claims.—The combination of the parts E, D, and F forming a catch sustaining the extension-piece B. The projecting step D forming a trip to release the catch E acted on by a person descending the ladder. The mechanism of the trip as operated by the rod F.

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

No. 15148.-23rd July, 1902.-John Cowan, of 2, St. Andrew's Square, Edinburgh, Scotland, Managing Director of the Stirling Boiler Company, Limited. Improvements in water-tube boilers.

Claims.—(1.) In water-tube boilers with two or more steam-and-water drums, increasing the effective distance between the water-level in these drums and the steam-outlet by means of directive baffle-plates so that the outlet draws steam only by way of a drum other than that on which it is secured.

(2.) In water-tube boilers provided with three or more steam-and-water drums, increasing the effective distance between the water level in these drums and the effective distance between the only by way of a drum other than that on which it is secured.

(2.) In water-tube boilers provided with three or more steamand-water drums, increasing the effective distance between the water-level in these drums and the steam-outlet by means of an internal pocket or box secured opposite the steam-outlet, groups of steam-tubes connecting the steam-spaces of the drums together, and a group of steam-tubes connecting the steam-box with the steam-space of the back drum, and internal baffle-plates opposite the steam-tubes whereby the steam can only pass to the outlet by way of the baffle-plates, connecting-tubes, and steam-pocket, substantially as described.

(3.) In water-tube boilers as claimed in claim 1, connecting the steam-spaces of the steam-and-water drums by two or more sets of tubes separated into groups for steam-circulation by means of baffle-plates forming pockets in the upper part of the middle and front drums, the upper group of tubes being connected with the outlet by a pocket in one of the drums, preferably the front one.

(4.) In water-tube boilers having upper steam-and-water drums connected by banks of tubes with a single lower water-drum, partitions dividing the water-space of the upper drum most remote from the furnace and the lower water-drum into two longitudinal spaces so that the feed-water admitted to one of these spaces in the upper drum is kept practically separate from the main water circulation of the boiler until it has passed down the coolest bank of tubes into the back lower water-space, and means for equalising the water-circulation, substantially as described.

(5.) The combination of a water-tube boiler as claimed in claim 4, with tubes connecting the front water-space of the back steam-and-water drum with the water-space of the adjacent steam-and-water drum so as to prevent piling of the water in the front steam-and-water drum of the boiler, substantially as described.

(6.) The combination of a water-tube boilers provided with improved water-circulation devices described with r

No. 15154.-23rd July, 1902.-Samuel John Heffer, of Wellington, New Zealand, Brewer. An improved candle-

Claims,—(1.) In candle-holders, a pair of gripping-arms of semicircular shape hinged together upon a base plate and provided with extension-pieces upon the other side of

the hinge, and with a spring for normally keeping the gripping-arms together, as specified. (2.) In candie-holders, a base plate of circular form, provided with peripheral extension-clips whereby the plate may be clipped to the top of a candlestick, in combination with a pair of springy gripping-arms of semicircular shape hinged together upon the base plate and provided with finger-piece extensions beyond the hinge, as set forth. (3.) The general arrangement, construction, and combination of parts in my improved candle-holder as described and explained, as illustrated in the drawings, and for the several purposes set forth. (Specification, 2s. 3d.; drawings, 1s.)

No. 15158.—24th July, 1902.—WALTER LEITCH, of Wattle-tree Road, Malvern, Victoria, Merchant. Improvements in the manufacture of sweetmeats and the like.

Claims.—(1.) The improved manufacture of sweetmeats and the like wherein a solution consisting of a mixture in substantially the specified relative proportions of plain sugar and sugar which has been inverted by means of an acid, such as tartaric acid, is boiled to the required temperature, substantially as described. (2.) The improved manufacture of sweetmeats and the like wherein a mixture in substantially the specified relative proportions of an alkaline solution of sugar and a solution of sugar which has been inverted by means of an acid, such as tartaric acid, is boiled to the required temperature, substantially as described. (3.) The described manufacture of sweetmeats and the like with a mixture of alkaline sugar and inverted sugar in solution, the sugar-solutions and mixture being prepared and treated in the manner specified. the manner specified. Specification, 3s. 6d.

No. 15159.—24th July, 1902.—PHILIP RAYSON, of Orrong Road South, Elsternwick, Victoria, Engineer. Improvement in spanner-attachments.

Claims.—(1.) In a spanner-attachment, a block to engage a spanner-jaw in combination with a bow or the like having limbs of adjustable length with lugs to grip in any desired position, substantially as and for the purposes set forth.

(2.) In a spanner-attachment, a slidable block to engage a spanner-jaw in combination with a bow or the like having limbs with lugs to grip, as set forth.

(3.) In a spanner-attachment, a spanner-jaw engaging block having wings, substantially as and for the purposes set forth.

(4.) In a spanner-attachment, the combination with a perforated block (with or without wings) of a bow b or the like and the limbs d having perforation-entering lugs c, substantially as set forth. set forth.

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

No. 15162.—24th July, 1902.—ARTHUR ALLWOOD SPENCER SMITH, of Aberdeen, New South Wales, Postmaster. An improved seal lock, specially adapted for mail-bags.

Claims.—(1.) A seal lock comprising a box portion containing a pair of snap springs and a lever, a cam device for opening out the same, a slot through the top plate of the box for said lever, a flap plate folding down over said box top plate to hold down a seal over the lever-slot, and a stud-like hasp-piece attached to said flap D adapted to engage with a strap binding flap or equivalent contrivance and to be held locked by the snap springs, substantially as described. (2.) The described construction of seal lock wherein the opening-lever is closed down below a seal which must be broken to obtain access to it after the lock is closed, of a hasp swinging from said seal construction of seal lock wherein the opening-lever is closed down below a seal which must be broken to obtain access to it after the lock is closed, of a hasp swinging from said seal plate adapted to be engaged by snap springs within the lock which cannot be opened except by lifting the lever up through the seal so as that the seal will be mutilated before the lock can be opened, substantially as described. (3.) In a seal lock, the combination of the box portion A carrying snap springs P and a cam and lever for operating same, and an upper and a lower flap, the one for holding a strap or other fastening and the other for securing down over the lever a seal to prevent the lifting of the lever to open the springs without first mutilating the seal, substantially as described. (4.) In a seal lock, the combination with the other operative parts set forth of a flap plate D adapted to hold down a seal over the lever F to prevent the lifting of the same, and carrying an end flap portion C, upon which or through which a stud-like hasp is passed to engage with springs P, said flaps D and C being so constructed at the edges relatively to the box A as to prevent the insertion of a picking-tool, substantially as described. (5.) In a seal lock, the combination with flap portions co-operating with locking-mechanism, substantially in the manner described, of a pair of snap springs P and a cam and lever within the body of the lock, said lever being capable of being raised through the casing of the lock to open out the springs as soon as the seal has been broken through, substantially as described. (6.) In a seal lock, the combination with a body portion containing locking-mechanism of a strap flap and a seal flap co-operating therewith, substantially as described, of a hasped yoke whose head passes through the flaps and box and is engaged by springs within the latter so as to be incapable of being opened until the seal has been broken through, substantially as described. (7.) In a seal lock of the kind described, the specific construction of locking-mechanism and flaps co-operating with a locking-hasp as described, and and flaps co-operating with a locking-hasp as described, and shown in the drawings.

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

No. 15163.—24th July, 1902.—ROBERT SCOTT, of Waipukurau, New Zealand, Plumber. Improved attachments to bedsteads to enable them to be readily moved about.

Claims.-(1.) In means for enabling bedsteads to be moved Claims.—(1.) In means for enabling bedsteads to be moved about, a pair of wheels loosely mounted upon a spindle carried in bearings attached to the legs at one end of the bed in combination with means whereby such legs may be forced from off the floor and the weight at that end transferred to the wheels, as specified. (2.) A pair of wheels loosely mounted upon a spindle carried by bearings attached to the legs at one end of a bed, a pair of two-armed levers mounted upon a spindle above the wheels and rigidly connected to the wheelspindle, and a pair of two-armed levers mounted in bearings upon the other end of the bed and respectively connected to the first-named levers. as and for the purposes set forth. the first-named levers, as and for the purposes set forth.

(3.) The general arrangement, construction, and combination of parts in my improved attachments to bedsteads to enable them to be readily moved about, as described and explained, and for the several purposes set forth.

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

No. 15166.—24th July, 1902.—Matthew Bernard Silk, of 82, King Street, Sydney, New South Wales, Tailor. An apparatus for shrinking cloth and other fabrics.

Claims.—(1.) In an apparatus for shrinking cloth and other fabrics, the combination of a metal plate covered with calico or other material, the said plate being heated by any suitable means, and a metal frame, substantially as and for the purposes set forth. (2.) In an apparatus for shrinking cloth and other fabrics, the combination of a metal plate covered with calico or other material, the said metal plate being heated by gas or other means, a metal frame, and a roller, as described. (3.) In an apparatus for shrinking cloth and other fabrics, the combination of the parts shown, substantially as and for the purposes set forth. (Specification, 4s. 3d.; drawings, 1s.)

No. 15169.—22nd July, 1902.—Alfred George Wass, of 131, Peckham Road, London, England, Oil Chemist. An improvement in the manufacture of printers' varnish

Claims.—(1.) Printers' varnish compounded of mineral oil of from 0.880 to 0.920 specific gravity and rosin dissolved therein. (2.) Printers' ink compounded of mineral oil of from 0.880 to 0.920 specific gravity, rosin dissolved therein, and black or colouring matter. (3.) Printers' varnish compounded of about 18 parts of mineral oil of about 0.880 specific gravity and about 20 parts of rosin dissolved therein. (4.) Printers' ink compounded of about 18 parts of mineral oil of about 0.880 specific gravity, about 20 parts of rosin dissolved therein, and black or colouring matter. (5.) Printers' ink compounded of about 18 parts of mineral oil of about 0.880 specific gravity, about 20 parts of rosin dissolved therein, and about 5 to 6 parts of lamp-black. (Specification, 2s. 3d.)

No. 15170.—25th July, 1902. — John Anderson, of Patutahi, Gisborne, New Zealand, Ploughman. An improvement relating to ploughs.

Claims.—(1.) In combination for the purpose indicated, the disc skeith of a plough, a fork carrying said skeith the stem of which is journalled upon the plough-beam, and a handle for operating said stem, substantially as and for the purposes specified and illustrated. (2.) The improvement relating to ploughs, substantially as specified.

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

No. 15177.—26th July, 1902.—ALFRED ROBERT WILKINS, and JOHN WILLIAM ODERING, both of Christchurch, New Zealand, Cycle-manufacturers. Improved apparatus for connecting a bicycle with a trailed carriage and for other analogous purposes.

Claims.—(1.) In mechanism as described, a draw-bar that is capable of a rotary motion and that is provided with rightis capable of a rotary motion and that is provided with rightangularly projecting members having cone-shaped ends that
form with a jaw on a pair of extension-forks connected to
the rear-wheel hub of a bicycle and recessed set-screws
therein, a vertical bearing, as specified and for the purposes
set forth. (2.) In mechanism as described, the combination
with a bicycle of a pair of extension-forks connected thereto
at the rear-wheel axle, a link or links upon the forward end
of each arm of the forks and a jaw upon the other end,
recessed set-screws in the jaw that engage with cone-shaped
members upon a draw-bar attached to a trailed object, the
whole arranged and constructed so that the bicycle and such whole arranged and constructed so that the bicycle and such drawn object shall be capable either of them of a rotary mo-tion or of a motion in a horizontal or vertical plane inde-pendently of each other, as described and set forth. (3.) The pendently of each other, as described and set forth. (3.) The combination with extension-forks C of stays that project rearwardly therefrom and are connected thereto, and which pass over the front rim free thereof, of a carriage or other trailed object drawn through the forks connected to a drawtrailed object drawn through the forks connected to a draw-bar attached to the carriage, as described. (4.) The com-bination with a trailed object that is supported upon a single wheel of stays H H upon extension-forks that project rearwardly therefrom and which pass over the front rim, free thereof, of the trailed carriage or other object drawn through the forks connected to a draw-bar attached to the carriage, as described and explained. (5.) The general arrangement, construction, and combination of parts con-stituting our improved attachment device for connecting a bicycle with a trailed carriage and for other analogous purposes, substantially as described, set forth, and illus-trated. trated.

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

#### F. WALDEGRAVE.

Registrar.

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

invention for which a provisional 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.

the number.

#### Provisional Specifications.

Patent Office.

Wellington, 6th August, 1902.

A PPLICATIONS for Letters Patent, with provisional specifications, have been accepted as under:—
No. 15086.—3rd July, 1902.—John Thomas Johnson, of Waipori, New Zealand, Mine-manager. Improved means for driving dredge machinery by water review.

Waipori, New Zealand, Mine-manager. Improved means for driving dredge machinery by water-power.

No. 15114.—11th July, 1902.—James Meaby Pinnock, of Waikouaiti, New Zealand, Baker. Improved malted food and process therefor.

No. 15116.—14th July, 1902.—Frederick Montague, Merchant, and John Laffey, Hotelkeeper, of Dunedin, New Zealand. Improved fire-escape and fire-extinguisher. No. 15118.—14th July, 1902.—Francis Soper, of Dunedin, New Zealand, Farmer. Improved crank for cycles.

No. 15119.—11th July, 1902.—James Harry Steward and William Nicol, both of Invercargill, Mechanics. Improvements in candlesticks.

No. 15123.—17th July, 1902.—James Frederick Kilburn, of "Altadore," Grange Road, Toorak, Victoria, Australia, Agent. Improvements in and connected with strainers for wire fences.

No. 15124.—17th July, 1902.—The Flameless Gas-Light

No. 15124.—17th July, 1902.—The Flameless Gas-light Company, Limited, of 32, Great St. Helens, London, England (assignees of William Hooker, of 210, Portland Road, South Norwood, London, England, Gas-engineer). Improvements in methods and apparatus for incandescence gas or vapour lighting.

or vapour lighting.

No. 15126.—17th July, 1902.—ELIZABETH BRUCE ARTHUR, of 72, Tinakori Road, Wellington, New Zealand. An improvement in coal-scuttles.

provement in coal-scuttles.

No. 15127.—17th July, 1902.—ELIZABETH BRUCE ARTHUR, of 72, Tinakori Road, Wellington, New Zealand. An improvement in or relating to pie-dishes.

No. 15128.—14th July, 1902.—CHARLES NELSON HODDER, Commission Agent, and Josiah Rogers, Advertising Agent, both of Greymouth, New Zealand. An office ruler and blotting-pad combined.

No. 15130.—18th July, 1902.—George Frederick Francis Davis, Cabinetmaker, and Frederick Charles Williams, Cabinetmaker, both of 186, Tuam Street, Christchurch, New Zealand. An improved plate.

No. 15132.—18th July, 1902.—St. Clair Nathaniel Henry Macdonald, of Pukekohe, Auckland, New Zealand, Engines. An improved plate.

Engineer.

rineer. An improved rotary engine.
o. 15133.—18th July, 1902.—James Benjamin Poynter, of Wellington, New Zealand, Accountant. An improved de-

of Wellington, New Zealand, Accountant. An improved device for picking up balls.

No. 15135.—16th July, 1902.—Philip John Brown, of Little Kyeburn, New Zealand, Miner. Means for closing leaking holes in gum-boots, hose, and the like.

No. 15136.—15th July, 1902.—Samuel Williams, Bootmaker, and Joseph Perks, Metal-worker, both of Christ-church, New Zealand. A new or improved attachment for cooking repress.

No. 15138.—17th July, 1902.—Ralph Dunne, of Dunedin, New Zealand, Artists' Merchant. Improved hinge.
No. 15140.—17th July, 1902.—George Muir Nichol, of Campbelltown, New Zealand, Accountant. Improvements in the produce of hierarchy.

Campbelltown, New Zealand, Accountant. Improvements in the pedals of bicycles.

No. 15141.—22nd July, 1902.—John Hilton Smithies Brown, of Auckland, New Zealand, Engineer. Improved means for heating fluids.

No. 15143.—17th July, 1902.—WILLIAM WATERS, of Upper Queen Street, Auckland, New Zealand, Farmer. A combined street sweeping and sweepings-carrying machine.

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

No. 15145.—19th July, 1902.—Adolph Frederick William Lorie, of Princes Street, Dunedin, New Zealand, Draper and Universal Provider. Improvements in sash-

No. 15153.—23rd July, 1902.—Robert Duprat Tosswill, of Upper Matakitaki, New Zealand, Miner, and Thomas Michael O'Rourke, of Matakitaki, New Zealand, Hotel-keeper. A combined screen and elevator for dredging-

No. 15155.—21st July, 1902.—Frederick Montague, Merchant, and John Laffey, Hotelkeeper, both of Dunedin,

New Zealand. Fire escape, extinguisher, and alarm.
No. 15156.—22nd July, 1902.—ALFRED NIGHTINGALE, of
44, Pitt Street, Auckland, New Zealand, Furniture-designer. Improvements in couches and similar articles of

furniture.

No. 15157.—24th July, 1902.—ARTHUR DUNBAR, of Normanby Road, South Melbourne, Victoria, Consulting Engineer (assignee of James Macartney, of 10, Bridge Street, Sydney, New South Wales, Consulting Engineer). Improvements in feed-water heaters and distributers.

No. 15160.—24th July, 1902.—Georg Buhlmann, of 56, Koepenicker Strasse, Berlin, Kingdom of Prussia, Germany, Manufacturer. A new and useful process of manufacturing incandescent mantles.

No. 15161.—24th July, 1902.—Cornellus John Surrway.

incandescent mantles.

No. 15161.—24th July, 1902.—Cornelius John Shipway and Henry May, both of Meningie, South Australia, Inventors. Improvements in sheep-shears.

No. 15164.—24th July, 1902.—William Thomas Locke Travers, of 15, Featherston Street, Wellington, New Zealand, Solicitor (nominee of Frederick Elias Wattne, of Stavanger, Norway, Merchant). Improvements in or relating to metallic-box-making machinery.

No. 15167.—24th July, 1902.—Robert Hollis, of Newman Street, Newtown, near Sydney, New South Wales, Member of the Parliament of said State, James Alexander Cockburn, of Nelson Street, Lewisham, near Sydney aforesaid, Plumber, and Charles Edmund Grindrod, St. Mary Street, Kingston, near Sydney aforesaid, Plasterer. Improvements Kingston, near Sydney aforesaid, Plasterer. Improvements in locomotive-spark arresters.

No. 15168.—24th February, 1902.—Edwin James Restorck, of 18, Muir Street, Richmond, Victoria, Agent. Appliances for attaching woven wire to bedsteads and tightening said wire, thereby forming a wire mattress.

[Note.—This is an application under sections 106-7 of the Act, the date given being the official date of the application in Victoria.]

No. 15172.—22nd July, 1902.—WILLIAM BORLASE, of Mander's Road, North-east Valley, Dunedin, New Zealand, Cycle Mechanic. Improved shear-regulator.

No. 15173—24th July, 1902.—Thomas Deane, of 122, Cashel Street, Christchurch, Produce-merchant. Invention for facilitating the packing of tea and similar loose substructs.

No. 15174.—23rd July, 1902.—FREDERICK WALTER PATERSON, of Dunedin, New Zealand, Boatbuilder. Apparatus for

recording votes.

No. 15175.—23rd July, 1902 —Thomas Francis Quilter, of Waipori, New Zealand, Dredge hand, and George William Gare, of Waipori aforesaid, Dredge-hand. Means for removing clay and the like from dredge-buckets.

No. 15176.—23rd July, 1902.—RALPH DUNNE, of George Street, Dunedin, New Zealand, Picture-framer. Improved mitre-cutting machine.

F. WALDEGRAVE,

Registrar.

-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.

IST of Letters Patents sealed from the 24th July to 5th

August, 1902, inclusive:

No. 13798.—P. R. Russell, leggings.
No. 13855.—J. Volkner, egg-beater.
No. 13958.—F. W. Page, fencing-dropper.

No. 14484.—J. F. Rose, protection of river-banks. F. WALDEGRAVE,

Registrar.

Letters Patent on which Fees have been paid.

[Note.—The dates are those of the payments.] SECOND-TERM FEES.

No. 10659.—J. Colquhoun-Thompson, dry crusher and classifier. 29th July, 1902.

No. 10842.—M. A. Heath, metallic bale-covering. 23rd July, 1902.

No. 10854.—C. G. Hepburn, treating and cooling liquid fats with air. 2nd August, 1902.

No. 10873.—C. May, fire-alarm annunciators. 23rd July,

1902

No. 10932.—G. Lorenz, rendering swine proof against swine-fever. 25th July, 1902.
No. 10977.—F. Lobnitz, rock-breaker. 2nd August, 1902.
No. 10984.—E. Norton, sheet-metal-seaming machines.
23rd July, 1902.
No. 11074. — Volenite, Limited, vulcanising fibrous material (F. Lamplough). 23rd July, 1902.

THIRD-TERM FEES.

No. 7800.—H. L. Mainland, rabbit-trap. 25th July, 1902.

No. 7892.—E. Maertens, treating wool with solvents. 2nd August, 1902.

No. 7901.—B. Baron, manufacture of cigarettes. 23rd July, 1902.

F. WALDEGRAVE Registrar.

Subsequent Proprietor of Letters Patent registered.

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

N O. 8532.—The Oliver Mill Company, Limited, of 220, Gresham House, Old Broad Street, London, E.C., England, pulveriser. [T. Parker.] 28th July, 1902.

F. WALDEGRAVE,

Registrar.

## Applications for Letters Patent abandoned.

IST of Applications for Letters Patent (with which provisional specifications only have been received) abandoned from the 24th July to the 6th August, 1902, in-

No. 14048. - C. Anketell, grip for chaff-cutter bag-ring. No. 14051.—C. Anketell, sprocket wheel. No. 14053.—A. S. Merriett, cream-separator (H. Galer and E. J. Smith).

No. 14065.—C. J. Cooze, spouting-bracket. No. 14066.—G. H. Bigelow, locking nuts on bolts (L. L.

Bigelow).

No. 14067.—J. Harrison, window-sash.

No. 14071.—W. L. F. Chambers and G. Davies, firescape.
No. 14072.—C. Tandy, fire-escape.
No. 14075.—H. Greig, seed-sowing appliance.
No. 14078.—D. McKay, automatic siphon.
No. 14080.—J. R. Thurlow, discharge for spitzkasten, &c.
No. 14091.—W. R. Linley, supporting pictures.
No. 14093.—T. T. Shaw, lifting posts out of ground.
No. 14095.—C. A. Wilson and C. H. Gilby, acetylene-lamp.
No. 14096.—A. McLeod, merry-go-round.
No. 14101.—F. Gough, medicine.
No. 14102.—J. Gray, adjustable turnip-thinner.

No. 14102.—J. Gray, adjustable turnip-thinner. F. WALDEGRAVE,

Registrar.

#### Letters Patent lapsed.

IST of applications for Letters Patent (with which complete specifications have been lodged) lapsed from the 24th July to the 6th August, 1902, inclusive:

No. 18945.—J. E. L. Cull, separating magnetic from non-

No. 13345.—J. E. L. Com, magnetic materials.
No. 13353.—J. Troup, spouting-bracket.
No. 13357.—H. Corrick, chrome-dressed leather.
F. WALDEGRAVE,
Regis

Registrar.

## Letters Patent void.

IST of Letters Patent void through non-payment of renewal fees from the 24th July to 6th August, 1902, inclusive:

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 10529.-J. W. Butcher and J. A. Pietzcker, incandes-

No. 10529.—J. W. Butcher and J. A. Freezener, Incurrence cent oil-burners.
No. 10530.—G. E. Spicer, tire (J. A. Bigelow).
No. 10534.—U. de Günzburg, preserving skins.
No. 10535.—J. O. Gunn, explosive compounds (W. W. McCormick).

No. 10537.—W. Rowbotham, primary electricity-batteries. No. 10545.—C. Dahl, horse-cover. No. 10547.—A. R. Jones, tallow-lamp. No. 10552.—W. Pickup, pruning-trees. No. 10556.—A. C. Whitney, gas-check for loading cartridges. No. 10559.—R. E. Waugh and E. Waugh, dry-ore concentation. trator.

No. 10560.—E. T. Gilliland, machine for cigarettes. No. 10561.—J. W. Paige and T. S. E. Dixson, steam and air turbines.

No. 10562.—J. C. W. Stanley, treating cotton-seed. No. 10563.—The Gold Extraction Syndicate, Limited, pre-cipitation of gold from cyanide-solutions (M. B. Zerener).

No. 10564.—G. Westinghouse, rotary motor. No. 10565.—G. Lambert, brand. No. 10568.—S. Dunlop and G. H. Oatway, tire mud-guard No. 10570.—C. Gibbs, cycling-skirts. No. 11075.—C. K. Welch, tire.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

Nil.

F. WALDEGRAVE. Registrar.

Application for Letters Patent refused.

No. 13619.—A. Knox, fibrous plaster. (Advertised in Supplement to New Zealand Gazette, No. 85, of the 19th September, 1901.)

F. WALDEGRAVE,

Registrar.

#### Designs registered.

ESIGNS have been registered in the following names on the dates mentioned:

No. 159.—James Lewis, of Greytown North, New Zealand, Photographer. Class 1. 15th July, 1902.

No. 160.—James Robinson, of 75, Hereford Street, Christchurch, New Zealand. Class 3. 21st July, 1902.

No. 161.—Kirkman and Denison, a firm or partnership the members of which are William Brackenbury Kirkman and Walter Denison, Queen Street, Auckland, New Zealand, Jewellers. Class 2. 28rd July, 1902.

F. WALDEGRAVE, Registrar.

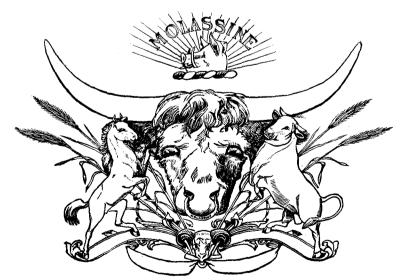
#### Applications for Registration of Trade Marks.

Patent Office, Wellington, 6th August, 1902.

A PPLICATIONS 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: 3843. Date: 2nd July, 1902.

TRADE MARK.



NAME.

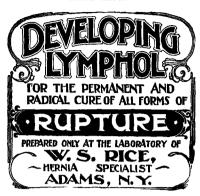
THE MOLASSINE COMPANY, LIMITED, of 36, Mark Lane, in the City of London, in England, Manufacturers.

No. of class: 42.

Description of goods: Food and condiments for animals.

No. of application: 3842. Date: 2nd July, 1902.

TRADE MARK.



The essential particular of the trade mark is the word "Lymphol"; and the applicant disclaims any right to the exclusive use of the added matter, except in so far as it consists of his own name and address.

WILLIAM SEWARD RICE, of 23, North Main Street, Adams, New York, United States, Hernia Specialist.

No. of class: 3.

Description of goods: A chemical preparation for human use for all forms of rupture.

No. of application: 3854. Date: 21st July, 1902.

TRADE MARK.

The words

## "ROYAL COLOURS."

T. C. WILLIAMS COMPANY, of Richmond, Virginia, United States of America, Tobacco-manufacturers.

No. of class: 45.

Description of goods: Tobacco.

No. of application: 3858. Date: 24th July, 1902.

TRADE MARK.

The word

# GERMINA

The applicants claim that the said trade mark has been in use by them in respect of the articles mentioned prior to

GERMINAL SOCIEDAD ANONIMA, El Admor Gerente, Manila.

No. of class: 45.

Description of goods: Cigars, cigarettes, and tobacco.

No. of application: 3859. Date: 24th July, 1902.

TRADE MARK.

NAME.

THE FRESH FOOD AND FROZEN STORAGE COMPANY, LIMITED, of Bourke Street West, Melbourne, Victoria, and elsewhere, Produce merchants.

No. of class: 42.

Description of goods: Butter, cheese, bacon, ham, beef, mutton, sausages, and preserved meats.

No. of application: 3860. Date: 24th July, 1902.

TRADE MARK.



NAME.

CHARLES STEWART BELL, Tea-salesman, and Harold Light-BAND, Salesman, both of Christchurch, in the Colony of New Zealand.

No. of class: 3.

Description of goods: Preparation for the cure of asthma.

No. of application: 3864. Date: 26th July, 1902.

TRADE MARK.



The essential particular of this trade mark is the device; and any right to the exclusive use of the words "The Hatters" is disclaimed.

J. Ballantyne and Co., of Cashel Street, Christchurch, New Zealand, Drapers, &c.

No. of class: 38.

Description of goods: Articles of clothing.

No. of application: 3867. Date: 2nd August, 1902.

TRADE MARK.

The word

## MANDARIN.

The firm trading as George Hall and Sons, at Norwood, in the State of South Australia, in the Commonwealth of Australia, Bottlers and Manufacturers.

No. of class: 43.

Description of goods: Fermented liquors and spirits.

No. of application: 3870. Date: 4th August, 1902.

TRADE MARK.

The words

#### EASTERN SATELLITES.

NAME.

E. W. Pidgeon and Company, Limited, of Lichfield Street, Christchurch, in the Colony of New Zealand, Merchants.

No. of class: 45.

Description of goods: Tobacco, cigars, cigarettes, and snuff.

No. of application: 3871. Date: 5th August, 1902.

TRADE MARK.

The words

#### "THE **GRINNELL.**"

JOSEPH DAWSON WORMALD, trading as "Wormald Bros.," of 17, Bond Street, Sydney, in the State of New South Wales, Commonwealth of Australia, Fire-appliance Manufacturers.

No. of class: 6.

Description of goods: Fire-extinguishing appliances.

F. WALDEGRAVE, Registrar. Trade Marks registered.

IST of Trade Marks registered from the 24th July to 6th August, 1902, inclusive:—

No. 2946; 3645.—H. Morris and B. Thomas; Class 13. (Gazette No. 6, of the 24th January, 1902.)

No. 2947; 3606. — Brunner, Mond, and Co., Limited; Class 42. (Gazette No. 38, of the 15th May, 1902.)

No. 2948; 3779.—E. Claridge; Class 50. (Gazette No. 38, of the 15th May, 1902.)

No. 2949; 3784.—Ogden's, Limited; Class 45. (Gazette No. 38, of the 15th May, 1902.)
No. 2950; 3298.—W. T. London; Class 42. (Gazette

No. 34, of the 1st May, 1902.)

No. 2951; 3711.—Ross and Ansenne; Class 50. (Gazette No. 27, of the 3rd April, 1902.)

No. 2952; 3754.—Union Oil, Soap, and Candle Company, Limited; Class 47. (Gazette No. 34, of the 1st May, 1902.)

No. 2953; 3782.—The Union Bag and Paper Company; Class 39. (Gazette No. 41, of the 29th May, 1902.)

No. 2954; 3792.—B. I. Clark and Co., Limited; Class 1. (Gazette No. 41, of the 29th May, 1902.)

No. 2955; 3693.—S. L. P. Rimmer; Class 42. (Gazette No. 24, of the 20th March, 1902.)

No. 2956; 3766.—D. G. Lane; Class 42. (Gazette No. 34, of the 1st May, 1902.)

No. 2957; 3796.—Adams's Star Cycle Company; Class 40. (Gazette No. 41, of the 29th May, 1902.)

F. WALDEGRAVE, Registrar.

Subsequent Proprietors of Trade Mark registered.

 ${\tt [NOTE.--The\ name\ of\ the\ former\ proprietor\ is\ given\ in\ brackets\ ;\ the\ date\ is\ that\ of\ registration.]}$ 

N O. 365/402.—H. and J. Knox, Limited, having their registered office at Kilbirnie, Ayrshire, in Scotland, Thread-manufacturers. [L. Henry.] 25th July, 1902.

No. 1930/2324.— Louis Thompson, of Sydney, in the State of New South Wales, Accountant. [J. Morgan and C. F. Doutreband.] 29th July, 1902.

No. 2334/2936.—Marshall's Chemical Company, Limited, Dunedin, New Zealand. [C. J. Badham.] 4th August, of Dunedin, New Zealand. 1902.

No. 2618/3353.—Marshall's Chemical Company, Limited, of Dunedin, New Zealand. [C. J. Badham.] 4th August, 1902.

No. 2674/8094.—Joseph Nathan and Co., Limited, a company incorporated and registered under the Imperial Companies Acts, carrying on business in England and New Zealand, and having its registered office in New Zealand at Wellington. [W. Stock.] 29th July, 1902.

No. 2895/3721.—Marshall's Chemical Company, Limited, of Dunedin, New Zealand. [C. J. Badham.] 4th August,

F. WALDEGRAVE, Registrar.

By Authority: John Mackay, Government Printer, Wellington.