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CONTENTS:

Note. Throughout this *Gazette* the names in Italics within parentheses are those of Communicators of Inventions.

Complete Specifications.

Patent Office, Perth,
17th July, 1903.

NOTICE is hereby given that the undermentioned Applications for the Grant of Letters Patent, and the complete Specifications annexed thereto, have been *accepted*, and are now open to public inspection at this Office.

Any person or persons intending to oppose such applications must leave particulars, in writing, in duplicate (on Form D), of his or their objections thereto, within two calendar months from the date of this *Gazette*. A fee of Ten shillings (10s.) is payable with such notice.

Application No. 4442.—SAMUEL BUTLER, of Henbury Hill, Westbury-on-Trym, Bristol, England, Merchant, "*Improvements connected with Anti-skidding Devices for Motor Vehicles.*"—Dated 28th May, 1903.

Claims:—

1. A tyre having a flat thick tread of india-rubber for the purpose of forming a bed for a flexible chain-like band or belt, or other non-skidding device to lie upon and impress itself into the rubber tyre, substantially as herein described and set forth.
2. The attachment of a bridle or guard to a belt-chain or any non-skidding device, placed around the tread of a tyre for the purpose of insuring its coming off on the outside of the wheel only, substantially as herein described and set forth.
3. The method of preventing chains, belts, bands or the like employed on the tread of the tyre of a motor vehicle from coming off on the inner side of the wheel, or from flying off tangentially, by means of a bridle of rope, wire, chain or cord of any suitable material, substantially as herein described and set forth.

Specifications, 4s. Drawings on application.

Application No. 4446.—WILLIAM BOWIE STEPHENSON, residing on the property of the Nourse Deep Gold Mining Company, Limited, Witwatersrand Goldfields, Transvaal, Engineer, "*Improvements in Safety Gear for Mine Skips, Cages, and the like.*"—Dated 2nd June, 1903.

Claims:—

1. In a safety gear for mine skips, cages and the like, the combination with the supporting frame of the angular containing and guiding straps and the dog-wedges, the latter being arranged in the straps in such manner that when raised the vertical serrated or toothed surfaces move inwards and parallel with the sides of the guides or runners, and means which operate to raise said wedges in their containing and guiding straps should the cage or skip become unsuspended, substantially as described.
2. In a safety gear for mine skips, cages and the like, in combination the supporting frame, the containing and guiding straps fitted thereto and forming angular recesses at the sides of the guides or runners, the dog-wedges or catches arranged in the angular recesses of the containing and guiding straps and constructed with serrated or toothed vertical gripping surfaces which move inward and parallel to the guides or runners when raised in the straps, the rods arranged in the supporting frame, the wipers fixed thereon and the rods pivotally attached at one end to the wipers and at the other end to the wedges or catches for the purpose of raising the wedges or catches in their containing and guiding straps, substantially as and for the purposes described.
3. A safety gear or mechanism for mine skips, cages and the like having its several parts constructed, arranged and operating for the purposes specified, substantially as described and illustrated in the accompanying drawings.

Specification, 7s. 6d. Drawings on application.

Application No. 4451.—THE OLIVER MILL CO., LIMITED, of 220 Gresham House, Old Broad Street, London, E.C., England (assignee of James Thame, and Arthur William Smith), "*Improvements in Disintegrating Machines.*"—Dated 4th June, 1903.

Claims:—

1. A disintegrating or pulverising machine having beaters revolving in a casing, a stationary impact block within said casing having its impact surface arranged at such an angle relative to the position of the feeding orifice or orifices in the casing and the axis of the rotary beaters that the material is thrown by the beaters against the said block in a direction substantially normal to its surface in order to limit the zone of pulverisation and wear on the casing to the vicinity of the block and to keep the material in this zone until disintegrated small enough to be carried under the block by the air current set up by the rotary beaters, substantially as described.
2. A disintegrating or pulverising machine having beaters revolving in a casing in which the material is thrown by the beaters upon a screen so that the graded material is separated from the larger particles which return to the beaters for further disintegration, the dust being carried off from the front and back of the screen by the air current set up by the beaters in the casing so as to leave the graded material free from dust, substantially as described.
3. In a rotary disintegrating or pulverising machine having beaters or lifters, the mounting of the beater or lifter heads upon stems of a flexible character capable of axial compression but of sufficient rigidity in an axial direction to support the beater heads in their normal radial position, substantially as described.
4. In a disintegrating or pulverising machine having beaters or lifters, the mounting of the beater or lifter heads upon stems consisting of wire rope and clamping means for the attachment of the strands thereof to the respective parts, substantially as described.
5. In a disintegrating or pulverising machine having beaters or lifters, wire rope stems for carrying the beater or lifter heads and a protecting sleeve to each stem arranged so as not to interfere with the flexibility or compressibility of the stem, substantially as described.
6. The arrangement and construction of a disintegrating or pulverising machine, substantially as described and illustrated by the accompanying drawings.

Specifications, 16s. Drawings on application.

Application No. 4452.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patent Agent (*John Andrews and Sydney Andrews*), "*Improvements in conditioning or improving the quality of recently ground Flour, Semolina, or the like.*"—Dated 4th June, 1903.

Claims:—

1. In the process of conditioning flour and the like, passing the same with full exposure through an atmosphere containing a gaseous oxide of nitrogen or chlorine or bromine oxidising agent in the gaseous or vapourised state.
2. The apparatus for the purposes described consisting of a device for impregnating air with a gaseous oxidising agent, a rotating conveyor receiving the oxidising atmosphere and through which the material to be treated is passed in a regulated stream.

Specification, 5s. Drawings on application.

Application No. 4453.—GEORGE RIDGWAY, of Great Boulder Gold Mine, Engineer, "*An improved Filter Press Tap, to be known as Ridgway's Filter Press Tap.*"—Dated 5th June, 1903.

Claims:—

1. In a filter press tap a valve constructed to receive an ordinary gauge glass india rubber ring, forming a seating, and also having one wing extended, and bored to receive the pin passing through the handle, so that it may be raised or lowered by means of a handle and pin, without the use of packing glands and the like, as described and illustrated in the accompanying drawings.

2. In a filter press tap a nozzle or discharge portion, fitted with slots in each side, and projections of such a shape and size as to enable the cheeks of a forked handle to work in them and raise or lower the valve as required, as described and illustrated in the accompanying drawings.

3. In a filter press tap a forked handle, having cheeks in each fork, fitting around the nozzle or discharge portion of the tap and between the projections in such a manner that when the handle is lowered, the valve is raised and *vice versa*. The handle being attached to the valve, by means of a pin, passing through the fork of the handle, the slots in the discharge portion of the tap, and the valve, as described and illustrated in the accompanying drawings.

4. In a filter press tap a wedge cleat joining cover nut, having wedge shaped cleats on its inside rim, and inversely corresponding wedge-shaped cleats, cast on the top portion of the body of the tap, of such dimensions and so arranged that the nut will slip over the top of the body of the tap, the cleats in the nut passing through the spaces between the cleats of the body, and being screwed, the cleats to wedge into each other, squeezing the packing down to the face of the top part of the tap, forming a water-tight joint, as described and illustrated in the accompanying drawings.

5. In a filter press tap the combined arrangement of a valve with an ordinary gauge glass indiarubber ring seating, and a wing extended and drill to receive a pin, a discharge nozzle slotted, and having peculiar projections to receive the cheeks of a forked handle, and a forked handle made with cheeks to fit between the projections in such a way that when the handle is pinned to the valve through the slot holes, the valve may be raised and lowered at will. A wedge cleat jointing cover nut having wedge-shaped cleats on its inside surface and having inversely corresponding wedge cleats on the top part of the body of the tap, enabling the nut to be secured and pressed tightly down to the face of the tap, forming a water-tight joint, as described and illustrated in the accompanying drawings.

Specifications, 4s. Drawings on application.

Application No. 4455.—DAVID THOMSON, of Georgie Mains, Slateford Road, Edinburgh, Scotland, Engineer, "*Dividing Machine for dividing liquid, granular, and plastic substances from bulk.*"—Dated 5th June, 1903.

Claims, to the number of 23, can be inspected at the Patent Office.

Specifications, 20s. Drawings on application.

Application No. 4456.—LEWIS ERNEST SAUNDERS, of William Street, Perth, Western Australia, Engineer, and HENRY JOHN SAUNDERS, of St. George's Terrace, Perth, aforesaid, Civil Engineer, "*Self Grip and Draw Off Attachment for vessels.*"—Dated 9th June, 1903.

Claims:—

1. A self-grip and draw-off attachment for vessels having two or more pivoted or hinged claws or grippers, as *c*, which are arranged so as to radially operate on their axis by means of a threaded tube, substantially as and for the purposes herein set forth and as illustrated in Figures 1 to 5 of the attached drawings.

2. A self-grip and draw-off attachment for vessels formed with an internally threaded annular boss, as *a*, having lugs which carry pivoted gripper claws, as above claimed, and substantially as and for the purposes herein set forth and as illustrated in Figures 1 to 5 of the attached drawings.

3. A self-grip and draw-off attachment for vessels comprised by the parts marked *a* to *g* having or provided with an externally threaded and operative tube which interscrews with an internally threaded annular boss, as *a*, said operative tube engaging by its periphery with the inner ends of pivoted claws, as *c*, so forcing such claws outwardly in a radial manner, substantially as and for the purposes herein set forth and as illustrated in Figures 1 to 5 of the attached drawings.

4. A self-grip and draw-off attachment for vessels comprised by its parts denoted by the letters *a* to *g*, in operative combination with a threaded tube, as *h*, made secure by a jam collar or nut, as *j*, substantially as and for the purposes herein set forth and as illustrated in Figures 1 to 5 of the attached drawings.

5. A self-grip attachment comprised by its parts, as denoted by the letters *a* to *g*, in operative combination with a threaded bolt or rod, as *p*, substantially as and for the purposes herein set forth and as illustrated in Figure 6 of the attached drawings.

Specification, 6s. 6d. Drawings on application.

Application No. 4457.—GEORGE RIDGWAY, of Great Boulder Gold Mine, Western Australia, Engineer, "*A new or improved Feeder for Dry Pulp and Ores, to be called 'Ridgway's Dry Pulp and Ore-feeder.'*"—Dated 9th June, 1903.

Claims:—

1. In a dry pulp feeder a cylindrical pan having a hub in its centre through which a spindle may pass, a discharge hole in the bottom, lugs or brackets by means of which it may be secured to a foundation, also flanges or lugs to which a cover may be secured as described and illustrated in the accompanying drawings.

2. In a dry pulp feeder a cylindrical pan having a hub to receive a spindle, a discharge opening and a cover fitted and bolted thereto, in which there is a similar hub to accommodate the same spindle, and an inlet opening on the opposite side of the spindle from the discharge opening already described, and holes by means of which it may be bolted to the cylindrical pan as described and illustrated in the accompanying drawings.

3. In a dry pulp feeder a cylindrical pan and cover having hubs for a spindle, and discharge and inlet openings respectively, and fitted through these hubs a spindle to which are attached a number of arms or vanes of such design and dimensions as to radiate from the spindle and nearly fill the vertical section of the pan, so that if the spindle be made to revolve it shall revolve the vanes, which would carry any pulp from the inlet opening to the discharge opening, as described and illustrated in the accompanying drawings.

4. In a dry pulp feeder the combined arrangement of a cylindrical pan with a discharge opening and hub for a spindle, a cover with an inlet opening and hub for a spindle, and a spindle having attached arms or vanes so constructed, arranged and capable of operating, so that dry pulp being placed into the inlet opening, will be driven round at a required rate of speed to the discharge opening, and which may be operated by means of a ratchet and pawl, gearing, belting, or by any other approved means, as described and illustrated in the accompanying drawings.

Specifications, 4s. 6d. Drawings on application.

Application No. 4459.—EDWIN PHILLIPS, of 533 Collins Street, Melbourne, in the State of Victoria, Commonwealth of Australia, Certified Patent Agent and Engineer, (*John Clarence Cole*) "*Improvements in Tire Constructions.*"—Dated 10th June, 1903.

Claims:—

1. In combination with the felly of a wheel, a tire, a flat base thereon adapted to fit the periphery of the felly, a downwardly bevelled flange on each side of the base, a loose ring located on each flange, and devices for moving said rings one toward the other against said bevelled surfaces, and means of engagement between said devices and the felly, substantially as described.

2. In combination with the felly of a wheel, a tire, a flat base thereon adapted to fit the periphery of the felly, a flange on each side of the base, the upper surface of which is downwardly inclined toward the edge of the base, a loose ring located on each flange and having a bevelled under surface, and devices for moving said rings one toward the other, and means of engagement between said devices and the felly, substantially as described.

3. The combination with the felly of a wheel, of a flat metal rim secured to the felly, a tire, a base on the latter whereby it is clamped to said rim, and means for clamping said base to the rim consisting of a separate clamping ring for each side of the base, suitable devices for drawing one of said rings toward the other and constituting interlocking means between said tire and the wheel, substantially as described.

4. The combination with the felly of a wheel, of a flat metal rim secured thereon, a tire, a base on the latter, and means for securing said base to said tire against lateral and circumferential movements consisting of a ring located over each edge of said base, and bolts adapted to engage said rings whereby they may be drawn one toward the other, and means for interlocking said bolts and said rim, substantially as described.

5. The combination with a wheel, of a flat metal rim thereon, a tire having an outwardly flaring flanged base fitting over said rim, rings having a greater diameter than said rim on either side of said base fitting over the outwardly flaring portions thereof, and means for drawing said rings together whereby said base portions may be radially compressed against the rim.

6. In combination with the felly of a wheel, a tire, a flat base thereon adapted to fit the periphery of the felly, a flange on each side of the base, the upper surface of which is downwardly inclined towards the edge of the base, a loose ring located on each flange, and devices for moving said rings one toward the other, and means of engagement between said devices and the felly, substantially as described.

7. The combination with a wheel of a flat metal rim, a tire having an outwardly flaring flanged base fitting over said rim, rings on either side of said base having a greater diameter than said rim and adapted to fit over said base portion of the tire, and means for drawing said rings together whereby said base portions of the tire may be compressed laterally and radially against the rim.

8. The combination with a wheel, of a metal rim thereon, a tire, a base on the latter whereby it is clamped to the rim, and means for clamping the base to the rim consisting of a suitable abutment for the base on one side, and a loose ring having a greater diameter than said rim on the other side of said base, and means for forcing said ring over the edge of said base, whereby the latter may be clamped between said ring and said rim.

Specifications, 8s. 6d. Drawings on application.

Application No. 4461.—HENRY SMITH HAYLING, of 12 Ackland Street, St. Kilda, Victoria, Gentleman (Assignee of Alexander Mansfield), "*Improvements in Tip-waggon mechanism.*"—Dated 10th June, 1903.

Claims:—

1. In combination with a tip waggon, a trunnion at each end, so supported by a slidable carrier that either end of the waggon 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 combination with the end of a tip waggon, 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 and set forth.

3. In tip waggon 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 waggon, during its raising, as set forth.

4. In tip waggon 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 waggon 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 waggon, 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 described.

Specifications, 6s. 6d. Drawings on application.

Application No. 4470.—GEORGE RIDGWAY, of Great Boulder Gold Mine, Western Australia, Engineer, "*A new or improved Roasting Furnace for refractory and sulphide ores, to be called 'Ridgway's Turret Roasting Furnace.'*"—Dated 16th June, 1903.

Claims:—

1. In a turret ore roasting furnace, having a number of superimposed hearths and being built in the form of a circular tower or turret; a divided water column constructed in the form of a pipe or tube and having a partition through its centre; the opening in the top of one half of the column being covered and the partition not reaching quite to the bottom of the water column; and having a discharge pipe leading from the top of the closed half of the water column, so that if water were poured into the top of the column it must pass down the passage on one side of the partition and up on the other side and out through the pipe near the top, causing a complete circulation of the water. Also having seats or flanges to receive hollow rabble arms alternately on opposite sides, and having water pipes fitted into and through the partition of the divided column and passing through holes, larger in diameter than the pipes, made in the seatings or flanges in the rabble arms and continuing inside and nearly to the point of the rabble arms, thus compelling the circulating water to pass in its course though the water column, alternately through the pipe into the rabble arm and back outside of the pipe through the rabble arm into the discharge half of the water column, and through the rabble arm to its point outside the pipe, entering the pipe at the extreme end and returning through it to the discharge half of the water column, as particularly described and illustrated in the accompanying drawings.

2. In a turret ore roasting furnace having a number of super-imposed hearths and being built in the form of a circular tower or turret and having a divided water column in the form of a tube with a partition in the centre and rabble arms having water pipes fitted in such a manner that the water shall be compelled to circulate through them in its onward course through the water column. The arrangement of flues being such that the heat shall be admitted from the fire box to the second hearth from the bottom, and shall pass upwards, through and across all the hearths in a zig-zag manner, through the flues which are to be located at various places in the circumference of each hearth, so that the heat may be spread uniformly over nearly the whole surface of the hearth, as particularly described and illustrated in the accompanying drawings.

3. In a turret ore roasting furnace having a number of super-imposed hearths and being built in the form of a circular tower or turret and having a divided water column in the form of a tube with a partition in the centre and rabble arms having water pipes fitted in such a manner that the water shall be compelled to circulate through them in its onward course through the water column; and having flues to convey the heat in a zig-zag course over the surface of its hearths. Circular hearths arranged with ore discharge openings alternately near the centre and periphery, so that the ore being rabbled shall pass from the centre outwards in a spiral course to a discharge opening at the periphery, falling on to the next floor hearth and be rabbled inward in a spiral course to a discharge opening near the centre and so on over all the hearths, as particularly described and illustrated in the accompanying drawings.

4. In a turret ore roasting furnace having a number of super-imposed hearths and being built in the form of a circular tower or turret and having a divided water column in the form of a tube with a partition in the centre and rabble arms having water pipes fitted in such a manner that the water shall be compelled to circulate through them in its onward course through the water column; and having flues to convey the heat in a zig-zag course over the surfaces of the hearths; and having circular hearths with discharge openings alternately near the centre and periphery so that the ore may be rabbled alternately outwards and inwards over the surface of the various hearths; an ore cooling and hot air supplying hearth being rabbled in the same manner as the other hearths in this furnace, but admitting cold air by a special passage or passages and conducting over the surface of the hot ore thence passing under the fire grate and into the fire box, thus cooling the roasted ore and supplying hot air to the roasting furnace, as particularly described and illustrated in the accompanying drawings.

5. In a turret ore roasting furnace the general construction and arrangement of a circular wall in the form of a tower or turret; a number of circular, super-imposed hearths with discharge openings; a divided water column; a hollow rabble and pipe arranged in the manner described; an arrangement of flues making the heat pass over the hearth in a zig-zag course and an ore cooling, hot air supplying hearth, and the arrangement of flues carrying the cold air to the cooling hearth and the hot air to the fire box, the whole forming a complete roasting furnace for the purpose of calcining or roasting ore, as particularly described and illustrated in the accompanying drawings.

Specifications, 10s. Drawings on application.

Application No. 4471.—JOHN WATERS SUTHERLAND, of Boulder, Western Australia, Mine Manager, "*A rotary Water Sprayer and Sprinkler for use in condensers, water-cooling towers, flue dust settlers, road and lawn sprinklers, and the like.*"—Dated 16th June, 1903.

Claims:—

Attached to a spindle and revolved at a rapid rate and having one or any number of jets of water directed on its surface in such a way that the water will be forced, by centrifugal force, towards the periphery of the plate and thrown in a fine spray in tangential lines; and the application of this sprayer to the purposes of condensers for the condensation of steam, vapour, and the like; and to water-cooling towers for the purpose of cooling hot water; and to flues and the like for the purpose of retaining dust, gases, and the like; and to lawn and road sprinklers and the like, and to any purpose in which it is required to have water formed into a fine spray, as described and illustrated in the accompanying drawings.

Specification, 5s. Drawings on application.

Application No. 4473.—GEORGE MCLENNAN and MARCUS MCCAUSLAND, trading as James Burge & Co., of No. 444, Little Collins Street, Melbourne, Victoria (assignee of James Burge), "*An improved Rug for Cows, Horses, and like animals.*"—Dated 16th June, 1903.

Claims:—

1. In a rug, for the purpose specified, fastening straps as B and B^1 each secured to rug cloth near its fore part either direct or with a spring catch and held together under the body of animal with a loose ring as B^2 and with the back part of each strap passed through a buckle as a^5 on rug substantially as described and shown.

2. In a rug, for the purpose specified, two fastening straps as B, B^1 secured to the rug and which straps serve as body and breeching straps by first passing under the body of animal and being held together by a loose ring B^2 and by the end parts of each strap passing out through a slot in rug and the ends being connected with a buckle fastening substantially as described and shown.

3. An improved rug, for the purpose specified, consisting of the combination of the rug cloth A, straps B, B^1, the former furnished with a hook and ring fastening a^1-a^2, ring B^2, slots a^4, buckles a^5 and b and the breast straps A^1, A^2 all arranged and secured substantially as described and shown.

Specifications, 3s. Drawings on application.

Application No. 4475.—HENRY BAUMGARTEN, of No. 222 Shaftesbury Avenue, London, England, Gas Engineer, "*Improved automatic generator and lamp for acetylene gas.*"—Dated 16th June, 1903.

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 gas-tight 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, characterised as described in Claim 1, in which the water-vessel makes a gas-tight connection with the generator case by means of a union joint.

3. A form of construction, characterised 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, characterised 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, characterised as described in Claim 1, fitted with a gas-tight 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, characterised 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.

Specifications, 5s. 6d. Drawings on application.

Application No. 4479.—FRANK HOWARTH BROWN, Printer, JOHN EDWARD HANRAHAN, Type Founder, residing respectively at No. 1921 Garret Avenue, and No. 204 North Broadway, in the City of Baltimore and State of Maryland, United States of America, and GEORGE ALBERT BOYDEN, Mechanical Engineer, of Mount Washington, in the county of Baltimore and State of Maryland aforesaid, "*Improvements in and relating to machines for casting type.*"—Dated 17th June, 1903.

Claims numbering 35 may be inspected at the Patent Office.

Specifications, £2 16s. Drawings on application.

Application No. 4480.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patents Agent (*William Clark Mitchell* and *Mark Cummins*), "*Improvements relating to brakes for vehicles.*"—Dated 17th June, 1903.

Claims:—

1. Braking apparatus for cars, trucks and other vehicles, having brake blocks adapted to be applied with substantially equal pressure to the wheels on each side of the vehicle when the operating means is moved in either direction from its normal position.

2. For the purpose of applying the brake blocks with substantially equal pressure to the wheels on each side of the vehicle, a transverse shaft connecting the brake rods and connections at one side with those at the other, and mounted in floating bearings so that it can take up varying positions.

3. For the purpose of applying the wheel blocks of braking apparatus with substantially equal pressure to all the wheels of the vehicle when the operating means is moved in either direction from its normal position, a pair of rods disposed one above the other on each side of the vehicle connecting the equaliser brake beams together in a manner corresponding to a pin and slot connection, and having a lever pivotally secured to both rods to which power is transmitted, whereby a pull is transmitted through one rod in one direction and through the other rod in the opposite direction to apply the brakes.

4. The several forms of braking apparatus having their parts constructed, arranged and adapted for use substantially as hereinbefore described and shown in the accompanying drawings.

Specification, 13s. 6d. Drawings on application.

Application No. 4481.—RICHARD SPARROW, of Perth, Western Australia, Licensed Patents Agent (*George Westinghouse* and *L. M. Aspinwall*) "*Improvements in controlling systems for electric motors.*"—Dated 17th June, 1903.

Claims:—

1. In a controlling system of the kind described, having a series of independently actuated contacts for changing the grouping of the motors and the resistance of their circuits and arranged to be operated by pneumatic or other power, the provision of means for effecting progressive operation of a plurality of said contacts without movement of the governing switch so as to effect an automatic acceleration of the motors controlled thereby.

2. In a controlling system of the kind described, motor controlling switches, the closure of which operates interlocking switches included in the governing circuit and thereby automatically ensures the closure of another motor controlling switch or switches, substantially as described.

3. In a controlling system of the kind described, an arrangement for rendering the governing circuit of the motor control switches dependent on the operation of the first of these switches except when the governing switch is in its first position, substantially as described.

4. In a controlling system of the kind described, an arrangement for preventing closure of the main circuit breaker except when the governing switch is in its first position, substantially as described.

5. A controller for electric motors having a plurality of annularly disposed independently actuated contacts, and provided with a single blow-out magnet centrally located with reference to said contacts having pole pieces that project alternately from the poles of the magnet between adjacent contacts, substantially as described.

6. In a controller, the arrangement of a resilient lost motion connection between the drum and the operating handle therefor provided with a dashpot comprising two liquid-containing chambers connected by ports and passages, and a piston in one of said chambers connected to the controller drum and having means operated by an excessive current in the motor circuit to stop or materially impede the movement of the drum during the time that such excessive current continues to flow, substantially as described.

7. A controlling system for electric motors, provided with a plurality of separately operated motor circuit switches arranged and operating substantially in the manner described with reference to Figure 2 or to Figure 12 of the accompanying drawings.

8. For electric motors, a controller constructed and operating substantially as described with reference to Figures 3 to 5, or to Figures 13 to 17 of the accompanying drawings.

9. A controller constructed and operating substantially as described with reference to Figures 6 to 11 of the accompanying drawings.

Specification, £1 5s. Drawings on application.

Application No. 4483.—CATHERINE CLARA GARDNER, of "Range View," Mount Victoria Road, Kew, Victoria, married woman, "*A transparent door for Domestic Ovens.*"—Dated 19th June, 1903.

Claims:—

1. A transparent door for domestic ovens having a comparatively large portion cut out and formed with a frame adapted to carry a transparent sheet substantially as and for the purpose set forth and as illustrated.

2. In a door for domestic ovens, a rectangular frame adapted to carry a transparent sheet, the upper section of said frame being pivoted at one side and curved on its lower edge substantially as and for the purpose specified and as illustrated.
3. A door for domestic ovens dished outwardly and having a frame adapted to carry a transparent sheet substantially as and for the purpose set forth and as illustrated.

Specification, 2s. Drawings on application.

Application No. 4484.—HILARY QUERTIER, of Dunedin, New Zealand, Engineer, "*A Machine for excavating, raising, screening, and filling gravel, ballast, and the like.*"—Dated 19th June, 1903.

Claims :—

1. The combination in a machine as described of a channel iron mounting the wheel boxes of the truck, a block or wedge adapted to make contact between the web of channel truck frame and axle box 4 as described and for the purposes specified.
2. In a machine for excavating, raising, screening and filling gravel, ballast and the like continuously in the same machine, a travelling truck or carriage, a tumbler frame thereon, a bucket ladder pivotally connected to the frame, means for operating the same, and a reticulating screen for receiving the contents of the buckets said screen having swivelling shutes for disposing of the material into trucks or other suitable conveyers or out of its way, as specified.
3. In a machine for excavating and raising gravel, ballast and the like continuously in the same machine, a travelling truck or carriage a tumbler frame thereon, and a bucket ladder pivotally connected to the frame with means for turning the same in order that the ladder may work at any angle with the rail track or channel for the purpose specified and as described with reference to Figures 1, 2 and 7 of the drawings.
4. In a machine for excavating and raising gravel, ballast and the like continuously in the same machine, a travelling truck or pontoon, a tumbler frame thereon a king bolt about which the said frame turns, said tumbler frame pivotally connecting with a bucket ladder that is suspended in a gantry for the purposes specified.
5. In a machine for excavating and raising gravel, ballast and the like continuously in the same machine in combination, a travelling truck or pontoon, a tumbler frame thereon a bed plate as 2 supporting said frame rollers 8 carrying the bed plate, a bucket ladder pivotally connected to the tumbler frame and a gantry for supporting the ladder as specified and shown.
6. In a machine for excavating, raising and filling gravel ballast and the like continuously in the same machine, a travelling truck, a tumbler frame thereon, a bucket ladder pivotally connected to the frame, a hopper shute and a lead away shute 35 operated as set forth.
7. In combination, a bucket ladder pivotally connected to a tumbler framing, a pair of tumblers, a bucket chain suspended therebetween adapted to discharge material over the topmost tumbler, and picks upon the lower tumbler shaft that revolve therewith as and for the purposes specified.
8. A wheel bracket adapted to move between guides, said bracket forming a nut, a screw spindle, a collar upon the spindle, and a hand wheel thereon, a thread upon the lower portion of the spindle taking into the nut and an encircling spring upon the upper portion impinging against the under part of eye of the iron bracket support for the purposes specified, and as described with reference to Figures 5 and 6 of the drawings.
9. In a machine for excavating, raising and filling gravel ballast and the like continuously in the same machine mounted upon a travelling carriage or pontoon, the employment of swivelling shutes for the purposes herein set forth.
10. In a machine as described, a bucket ladder pivotally connected to a tumbler frame, a medial slot in the ladder and a pin as 37 passing through the same and impinging against the bearing 20, the whole operating so that the ladder may be lengthened or shortened at will as described.
11. In a machine for excavating, raising and filling gravel ballast and the like continuously in the same machine mounted upon a travelling carriage the employment of a self-propelling device that can be thrown in or out of gear at will by means of a friction and reversed without stopping the engine or motor or reversing the same, as described and shown on Figure 3 of the drawings.

Specification, 12s. 6d. Drawings on application.

Application No. 4485.—HERMAN CHARLES WOLTERECK, of Edinburgh Mansions, Howick Place, Victoria Street, London, England, "*Process for the production of ammonia by synthesis.*"—Dated 19th June, 1903.

Claims :—

1. The process for the synthetical production of ammonia consisting in passing air and steam heated to a temperature between 300° C. and 400° C. and preferably to about 350° C. over iron or other suitable metal offering a large surface and intimate contact and preferably heated to the same temperature.
2. The process for the synthetical production of ammonia consisting in passing air and steam and a reducing gas, such as hydrogen or carbon monoxide or both, heated to a temperature between 300° C. and 400° C. and preferably to about 350° C. over iron or other suitable metal offering a large surface and intimate contact, and preferably also heated to the same temperature.
3. The process for the synthetical production of ammonia consisting in passing air and steam heated to a temperature between 300° C. and 400° C. and preferably to about 350° C. over iron or other suitable metal offering a large surface and intimate contact and preferably also heated to the same temperature, and intermittently reducing the oxidised iron or other suitable metal by a reducing gas such as hydrogen or carbon monoxide or both.

Specification, 3s.

Application No. 4488.—BABCOCK & WILCOX, LIMITED, of Oriel House, Farringdon Street, London, England, and RICHARD ANDREW MCLAREN, of Renfrew, in the County of Renfrew, Scotland, Engineer, "*Improvements in chain grate stokers for boilers or other furnaces.*"—Dated 24th June, 1903.

Claims :—

1. A mechanical chain grate stoker of the class set forth embodying the several improvements hereinbefore described with reference to Figures 1 to 19 of the accompanying drawings.
2. In a mechanical chain grate stoker a fuel hopper furnished with a shutter or intercepter to close off the supply of fuel and to form when open a lower extension of the hopper side as described.
3. In a mechanical stoker the improved devices hereinbefore described for raising and lowering the furnace door.
4. In a mechanical chain grate stoker a furnace door constructed as described and having detachable top and bottom plates as and for the purpose set forth.
5. In a mechanical chain grate stoker the combination with the carriage frame of side flange plates detachably secured to the sides of the frame as and for the purpose set forth.
6. In a mechanical chain grate stoker an ash plate for the rear of the furnace constructed as described with detachable and renewable nose pieces.
7. In a mechanical chain grate stoker a balanced swivelling ash door constructed as described and fitted at the rear of the ash pit.
8. In a mechanical chain grate stoker, the arrangement in combination with the chain grate driving gear of a spring actuated ball clutch connecting the ratchet wheel to the feed shaft as and for the purpose set forth.
9. A carriage wheel for the movable frame of a mechanical chain grate stoker having a perforated side flange constructed as described to serve as a capstan for traversing the carriage.

Specification, 12s. 6d. Drawings on application.

Application No. 4490.—AGAZIO FALCONE, of Florence, in the Kingdom of Italy, Sergeant in the Italian Army, "*Improvements in and relating to electric telegraph apparatus.*"—Dated 25th July, 1903.

Claims :—

1. Electric telegraph apparatus in which signals or messages are transmitted by means of instantaneous or short induction currents of opposite sign, and are received by an electro-magnetic device having a polarised oscillatory member or tongue which pauses for a longer or shorter period between its strokes in accordance with the period of rest between the aforesaid instantaneous induction currents generated by the transmitter, thereby enabling the received signals to be prolonged or diminished independently of the duration of the transmitted currents for the purpose specified.
2. Electric telegraph apparatus in which the transmitter is provided with an armature of the Siemens type situated in a magnetic field, to which armature partial rotary or small angular movements are imparted in opposite directions through suitable gearing by a transmitter key controlled by a spring, the movements of said key causing an instantaneous or short induced current in one direction when the key is depressed and in the opposite direction when said key is liberated substantially as and for the purpose specified.
3. Electric telegraph apparatus having its parts constructed arranged and combined to operate substantially as described with reference to the accompanying drawings for the purpose specified.

Specification, 9s. 6d. Drawings on application.

Application No. 4491.—ARTHUR BROCK, of the firm of C. T. Brock & Co., of Sutton, Surrey, England, Pyrotechnists, "*Improvements in explosives.*"—Dated 25th June, 1903.

Claims :—

1. The manufacture of an explosive by mixing aluminium with any of the oxides of lead, or nitrate of lead, baryta or potash, or chlorate of baryta or potash, the ingredients being in a fine state of division, substantially as described.
2. An explosive manufactured substantially as hereinbefore described.

Specification, 3s. 6d.

Application No. 4493.—"SECRETARY," No. 611 Broadway, New York, in the County and State of New York, U.S.A. (assignee of DANIEL JOHNSON CLARK), "*Improvements in gas stoves.*"—Dated 26th June, 1903.

Claims, to the number of 17, can be inspected at the Patent Office.

Specifications, 9s. Drawings on application.

Application No. 4495.—JAMES LESLIE CAMPBELL, of Roebuck Street, West Adelaide, South Australia, Machinist, "*Improvements in Stripper Harvesting Machines.*"—Dated 30th June, 1903.

Claims :

1. In a stripper harvesting machine a tipping receiver supported upon pivot bearings substantially as described and for the purpose set forth.
2. In a stripper harvesting machine a receiver supported upon a pivot bar resting in bearings on the body frame and provided with means whereby it is retained in position for filling or released for discharging by tipping substantially as described.
3. In a stripper-harvester a tipping receiver having an opening in its front end coinciding with the opening in the delivery end of the grain passage from the beaters and having its rear end removable forming a door for the discharge of the contents substantially as described.
4. In a stripper-harvesting machine a diagonal stay extending from the platform to the off side portion of the axle and forming a connection between the same substantially as described and for the purpose set forth.
5. In a stripper harvesting machine a capstan block having an elongated bolt hole or curved slot whereby its set in the platform, and consequently the inclination of the leading wheel stem can be adjusted substantially as described.
6. In a stripper harvester the improved construction of spider stamped from plate metal, and having its central hole drilled and flanged out substantially as described, and for the purpose set forth.
7. In a stripper harvester the combination with a comb plate having a series of projections along its front edge of a number of teeth of the shape shown, each tooth having a flat rear portion with two upwardly projecting flanges which engage the sides of the projections from the comb plate and having its central portion of approximately semi-circular cross section substantially as described and for the purposes set forth.
8. In a stripper harvester a comb tooth having a flat rear portion with two upwardly projecting flanges which engage the sides of projections from the comb plate substantially as described and for the purpose set forth.

Specifications, 7s. Drawings on application.

Application No. 4496.—GEORGE GARIBALDI TURRI, of Salisbury Building, Queen Street, Melbourne, in the State of Victoria, Patent Agent (*George Archibald Lowry*), "*Improvements in apparatus for charging Fluids and the like with Carbonic Acid or other gas.*"—Dated 30th June, 1903.

Claims:—

1. In an apparatus for charging fluids, liquids and the like with carbonic acid or other gas, the combination with a bottle or other vessel, of a puncturing device adapted to be received and supported in the neck of the bottle or vessel, a capsule containing the carbonic acid or other gas, and also adapted to be received within the neck of the bottle or other vessel, and means for crowding the capsule upon the puncturing device.

2. The combination with a bottle or other vessel, an elastic stopper therefor containing a puncturing device and having a seat for a capsule adapted to contain carbonic acid or other gas, and means for crowding the capsule upon the puncturing dev.ce.

3. The combination with a bottle or other vessel, a stopper contained in the neck thereof, a puncturing device forming part of said stopper, a capsule adapted to contain carbonic acid or other gas, and means for crowding the capsule upon the puncturing device.

4. The combination with a bottle or other vessel, an expansible stopper contained in the neck thereof, a puncturing device forming part of said stopper, and means for crowding a capsule containing carbonic acid or other gas into the stopper and upon the puncturing device.

5. An apparatus for charging bottles or the like with carbonic acid or other gas, including a capsule adapted to contain the gas, in combination with means for piercing said capsule, said piercing means being carried in the mouth of the bottle, and operating to open communication between the interiors of the bottle and capsule.

6. An apparatus for charging bottles or the like with carbonic acid or other gas, including a capsule adapted to contain the gas under pressure, in combination with a disc or plate supported within the mouth of the bottle or other vessel and provided with a piercing point, and means for clamping said capsule down upon said piercing point.

7. An apparatus for charging bottles or the like with carbonic acid or other gas, including a capsule adapted to contain the gas under pressure, a plate or disc supported within the mouth of the bottle or the like, and provided with a piercing point, said piercing point having a slot or opening therethrough to open communication between the interiors of the capsule and the bottle, and means for forcing the capsule upon said piercing point.

8. An apparatus for charging bottles or the like with carbonic acid or other gas, including a capsule adapted to contain the gas under pressure, and provided with a pierceable steel cap, a packing supported within the mouth of the bottle to be charged and adapted to form a bearing seat into which projects the sealed end of the capsule, means for pressing the capsule into said bearing seat, and means for piercing said cap.

9. An apparatus for charging bottles or the like with carbonic acid or other gas, including a capsule adapted to contain the gas under pressure, a piercing point supported within the mouth of the bottle to be charged, a resilient packing washer or gasket fitting the mouth of the bottle and surrounding the piercing point, and adapted to receive the end of the capsule, and means for crowding or pushing the end of the capsule into its bearing seat in said gasket or washer and upon the piercing point, whereby the capsule is punctured.

10. The combination with a bottle or other vessel having an annular shoulder in the mouth thereof, a disc or plate supported thereon and provided with an outwardly-projecting piercing point, said piercing point having a slot or opening through and lengthwise thereof, a resilient packing washer received snugly in the mouth of the bottle and surrounding the piercing point, a capsule, containing the gas under pressure, arranged to be seated upon said resilient packing washer and over the piercing point, and an inclosing cap adapted to be applied to the neck of the bottle so as to inclose the capsule and crowd the same firmly into its seat in the packing washer and upon the piercing point.

11. A bottle or other vessel having an exteriorly-threaded neck and an annular shoulder formed within the neck, a disk or plate supported upon said shoulder and provided with a slotted piercing point arranged to project outwardly, a resilient packing washer snugly fitting the neck of the bottle and surrounding the piercing point, a capsule containing the gas under pressure and adapted to be seated upon said packing washer and over the piercing point, and an interiorly-threaded inclosing screw-cap adapted to be applied to the threaded end of the bottle neck to crowd the capsule into its seat in the packing washer and upon the piercing point.

Specification, 13s. Drawings on application.

R. G. FERGUSON,
Registrar of Patents.

Renewal Fees paid on Patents registered from 4th July to 11th July, 1903.

Fees payable before the end of the seventh year in respect of the seven following years:—

No. 1221.—G. Higgins.

Subsequent Proprietors of Patents registered from 4th July to 11th July, 1903.

[The name in brackets is that of former proprietor.]

No. 4360.—The British Westinghouse Electric Manufacturing Company, Limited (R. Sparrow.)

Applications Abandoned.

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Application No. 4031.—DAVID CURLE SMITH, of Kalgoorlie, Western Australia, Consulting Mechanical and Electrical Engineer, "*An improved means of cutting down trees by motive power.*"—Dated 9th September, 1902."

Application No. 4040.—JOHN HILTON SMITHIES BROWN, of Auckland, New Zealand, Engineer, "*Improved means for heating fluids.*"—Dated 10th September, 1902."

Application No. 4041.—ALFRED GOLDING, of Balwyn Road, Canterbury, Victoria, Rubber Goods Manufacturer, "*Improved portable sectioned structure or building.*"—Dated 10th September, 1902.

R. G. FERGUSON,
Registrar of Patents.

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[Where Provisional Specification accompanies Application an asterisk is affixed.]

No.	Date.	Name.	Address.	Title.
4505	7th July, 1903	Gillispie, J.	Fremantle, W.A. ...	An improved vertical revolving brush for the cleaning of sanitary pans.
4506	7th July, 1903	Davis, H. T., and Perrett, E....	Lewisham, England	Method and apparatus for separating oily or similar impurities from water.
4507	7th July, 1903	Edison, T. A.	Orange, New Jersey, U.S.A.	Improvements relating to the dry separation of ores.
4508	9th July, 1903	Woltereck, H. C.	London, England...	Improvements in the manufacture of hydrocyanic acid and metallic cyanides.
4509	10th July, 1903	Toledo Glass Co. (assignee of M. J. Owens)	Toledo, Ohio, U.S.A.	Improvements in or relating to receptacles or containers for molten glass.

Provisional Specifications Accepted.

Patent Office, Perth, 17th July, 1903.

APPLICATIONS for Letters Patent, accompanied by Provisional Specifications, which have been accepted from the 4th to the 11th July, 1903:—

Application No. 4431.—FRED WALSH, of 23 Elizabeth Street, Sydney, New South Wales, Engineer and Patent Agent (*Alfred George Baker*) "*Improved Shot-making Machine.*"—Dated 27th May, 1903.

Application No. 4432.—EDWARD THOMAS COX, of Yering, Victoria, Fencer, "*An Improved Wood-boring Auger.*"—Dated 27th May, 1903.

Application No. 4436.—FRANCIS PEGLER, of Greymouth, Westland, New Zealand, School Teacher, "*An improved Ruler.*" Dated 27th May, 1903.

Application No. 4443.—JAMES WELLS MOYLE, of 47 Florence Street, Perth, Western Australia, Engineer, "*Improved Sanitary Closet and Deodorant for use therewith, and for other purposes.*"—Dated 2nd June, 1903.

Application No. 4448.—SOREN JOHN WICKMAN, of 13 Cambridge Street, Hawthorn, near Melbourne, Australia, Laundryman, "*An improved Laundry Stove.*"—Dated 3rd June, 1903.

R. G. FERGUSON,
Registrar of Patents.

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Edison, T. A.	Improvements relating to the dry separation of ores ...	4507	9th July, 1903
Gillespie, J.	An improved vertical revolving brush for the cleaning of sanitary pans	4505	7th July, 1903
Owens, M. J.	*Vide* Toledo Glass Co.	4509	10th July, 1903
Perrett, E., and Davis, H. T.	*Vide* Davis, H. T., and Perrett, E.	4506	7th July, 1903
Toledo Glass Co. (assignee of M. J. Owens)	Improvements in or relating to receptacles or containers for molten glass	4509	10th July, 1903
Woltereck, H. C.	Improvements in the manufacture of hydrocyanic acid and metallic cyanides	4508	9th July, 1903

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Glass (molten), receptacles for ...	Toledo Glass Co.	4509	10th July, 1903
Hydrocyanic Acid (manufacture of)	Woltereck, H. C.	4508	9th July, 1903
Metallic Cyanides	*Vide* Hydrocyanic Acid (manufacture of)	4508	9th July, 1903
Ores (dry separation of)	Edison, T. A.	4507	7th July, 1903
Water (separation of impurities from)	Davis, H. T., and Perrett, E.	4506	7th July, 1903

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Mayne, W.	An improved engine valve gear by which the points of admission, cut off, and release of high pressure steam or other motive fluid may be controlled	4365	6th April, 1903	24th April, 1903	17	946
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Engines	*Vide* Rotary Fluid Engines	4330	17th Mar., 1903	10th April, 1903	15	870
Engines	*Vide* Valve Gear	4365	6th April, 1903	24th April, 1903	17	946
Fabrics (improved manufacture in Indigo)	Ribbert, J.	4368	8th April, 1903	24th April, 1903	17	946
Fire Escape	Boyd, K.	4325	17th Mar., 1903	17th April, 1903	16	908
Floors	*Vide* Dusting floors	3944	11th July, 1902	10th April, 1903	15	869
Friction Gear (differential) ...	Kerr, J. C., and Coxon, J. ...	4356	2nd April, 1903	24th April, 1903	17	945
Garbage Destructor	Rooke, T.; Thrush, J.; and Early, T. F. W.	4327	17th Mar., 1903	17th April, 1903	16	908
Game	Ottenson, M., and Dwyer, P. F.	3911	27th June, 1902	17th April, 1903	16	907
Gas	*Vide* Alternating Currents ...	4361	3rd April, 1903	24th April, 1903	17	946
Hooks	*Vide* Lacing Hooks	4329	17th Mar., 1903	10th April, 1903	15	870
Lacing Hooks (machine for making)	United Shoe Machinery Co.	4329	17th Mar., 1903	10th April, 1903	15	870
Lasting Machine (hand method)	United Shoe Machinery Co.	4342	26th Mar., 1903	24th April, 1903	17	945
Loading device (ore upon waggons)	Park, T. McL.	4338	25th Mar., 1903	17th April, 1903	16	908
Locks (strap buckle)	Channon, J.	4350	31st Mar., 1903	17th April, 1903	16	909
Medicinal product (from suprarenal glands)	Takamine, J.	4351	31st Mar., 1903	1st May, 1903	18	1005
Motor Cars (prevention of skidding)	Butler, S.	4340	25th Mar., 1903	17th April, 1903	16	908
Motor Vehicles	Barber, T. W.	4333	19th Mar., 1903	10th April, 1903	15	870
Mowing Machine	Latimer, J. W.	4354	31st Mar., 1903	17th April, 1903	16	909
Ore Conveyor	Manners, W. G.	4344	27th Mar., 1903	17th April, 1903	16	909
Points	*Vide* Blade Joints	3957	18th July, 1902	17th April, 1903	16	907
Railway Crossings	*Vide* Blade Joints	3957	18th July, 1902	17th April, 1903	16	907
Rotary Fluid Engines	Cooley Development Co. ...	4330	17th Mar., 1903	10th April, 1903	15	870
Scoring Wheels	*Vide* Boot Finishing Machine	4366	7th April, 1903	17th April, 1903	16	910
Seal Locks	*Vide* Locks (strap buckle) ...	4350	31st Mar., 1903	17th April, 1903	16	909
Shoes	*Vide* Lacing Hooks	4329	17th Mar., 1903	10th April, 1903	15	870
Stone Bricks (artificial) ...	Ford, L. P.	4375	8th April, 1903	24th April, 1903	17	946
Stoves (for heating irons, etc.)	Maniachi, A. V.	4373	8th April, 1903	24th April, 1903	17	946
Table (self tilting)	Harvey, R., and Bruce, C. J.	4352	31st Mar., 1903	17th April, 1903	16	909
Tobacco Boxes	*Vide* Boxes	3973	30th July, 1902	10th April, 1903	15	869
Traction system (electric) ...	*Vide* Electric Traction System	4367	7th April, 1903	24th April, 1903	17	946
Tubes (piercing and forging machine)	McTear, B. F.	4355	31st Mar., 1903	24th April, 1903	17	945
Tyres (pneumatic)	Magnus, P.	4349	31st Mar., 1903	17th April, 1903	16	909
Valve gear	Mayne, W.	4365	6th April, 1903	24th April, 1903	17	946
Vehicles	*Vide* Motor Vehicles	4333	19th Mar., 1903	10th April, 1903	15	870
Ventilating halls	Kelly, J. D.; Fisher, D. P.; and Wix, N. V. G.	3918	1st July, 1902	17th April, 1903	16	907
Vessels (hermetically sealed) ...	*Vide* Air	4369	8th April, 1903	1st May, 1903	18	1005
Wad (ammunition loading) ...	Whitney, A. C.	4345	30th Mar., 1903	17th April, 1903	16	908

Trade Marks.

Patent Office, Trade Marks Branch,
Perth, 17th July, 1903.

IT is hereby notified that I have received the undermentioned Applications for the Registration of Trade Marks.

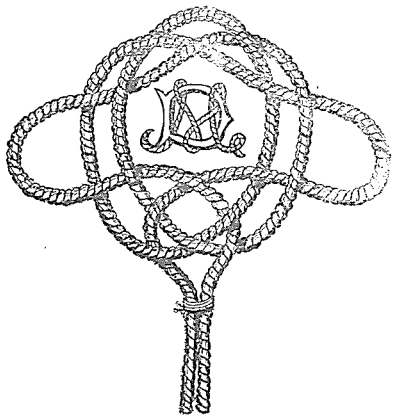
Any person or persons intending to oppose such applications must leave particulars in writing, in duplicate (on Form F), of his or their objections thereto, within two calendar months from the date of this *Gazette*.

A fee of £1 is payable with such notice.

In the case of an Application in which have been inserted a statement and disclaimer (or a disclaimer only), a copy of the same is printed in *italics* in connection with the advertisement.

R. G. FERGUSON,
Registrar of Designs and Trade Marks.

Application No. 2864, dated 29th June, 1903.—DAVID MUIR, of Iron Duke Lease, Kalgoorlie, trading as a Rope Splicer, to register in Class 50, s.s.7, in respect of Miscellaneous (tarpaulins, tent rick clothing, rope, twine), a Trade Mark, of which the following is a representation :—

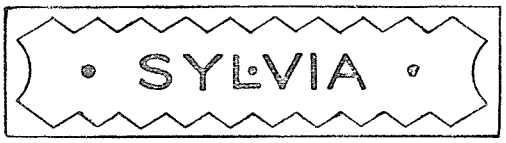


The essential particular of this Trade Mark is the distinctive device.

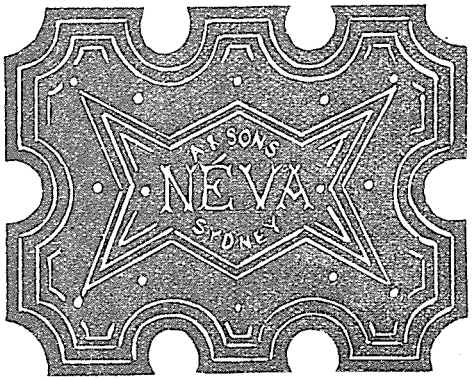
Application No. 2865, dated 30th June, 1903.—THE DISTILLERS COMPANY, LIMITED, 8-12 Torphichen Street, Edinburgh, Scotland, Distillers, to register in Class 43, in respect of Whisky, a Trade Mark, of which the following is a representation :—

The essential particular of the Trade Mark is the distinctive label.

Application No. 2873, dated 3rd July, 1903.—AULSEBROOK & SONS, Limited, of Lyons Road, Camperdown, near Sydney, in the State of New South Wales, Biscuit Manufacturers, to register in Class 42, in respect of Biscuits, a Trade Mark, of which the following is a representation :—



Application No. 2874, dated 3rd July, 1903.—AULSEBROOK & SONS, LIMITED, of Lyons Road, Camperdown, near Sydney, in the State of New South Wales, Biscuit Manufacturers, to register in Class 42, in respect of Biscuits, a Trade Mark, of which the following is a representation :—



The essential particulars of the said Mark consist of an oblong figure having a semi-circular notch cut out of each corner, and six similar notches cut out of the ends and sides of it, a double border within and conforming to the shape of the edge, twelve points arranged within the border, and in the centre a twelve-sided geometrical panel bearing the letters and words "A. & Sons, Neva, Sydney."

Application No. 2877, dated 10th July, 1903.—EDWIN MERRITT DOWNS, of 1 Duke Street, East Fremantle, in the State of Western Australia, Engineer, to register in Class 5, in respect of Zinc Shavings, a Trade Mark, of which the following is a representation :—

KANGAROO.

Alphabetical List of Registrants of Trade Marks.

JULY 4TH—11TH.

Name.	Goods.	Class	No.	Date.	Gazette. No.	Gazette. Date.	Gazette. Page.
Craigellachie Glenlivet Distillery Co., Ltd. ...	Fermented liquors and spirits ...	43	2694	15th Jan., 1903	18	1st May, 1903	1008
Craigellachie Glenlivet Distillery Co., Ltd.	Fermented liquors and spirits ...	43	2695	15th Jan., 1903	18	1st May, 1903	1008
Craigellachie Glenlivet Distillery Co., Ltd.	Fermented liquors and spirits ...	43	2697	15th Jan., 1903	18	1st May, 1903	1008
Craigellachie Glenlivet Distillery Co., Ltd.	Fermented liquors and spirits ...	43	2698	15th Jan., 1903	18	1st May, 1903	1008
Jones, D., & Co.	Underclothing, corsets, boots and shoes, and hats, and other articles of feminine apparel	38	2709	3rd Feb., 1903	18	1st May, 1903	1008
Knox, C. B. (trading as Spim Co.)	Chemical substances prepared for use in medicine and pharmacy	3	2792	23rd April, 1903	18	1st May, 1903	1010
Krankau, A., & Co., Ltd.	Tobacco pipes	50	2791	23rd April, 1903	18	1st May, 1903	1010
Singer Manufacturing Company	Sewing machines and sewing machine attachments and parts thereof	6	2793	23rd April, 1903	18	1st May, 1903	1010
Singer Manufacturing Company	Sewing machines and sewing machine attachments and parts thereof	6	2794	23rd April, 1903	18	1st May, 1903	1010
Spim Company	*Vide* C. B. Knox (trading as Spim Co.)	3	2792	23rd April, 1903	18	1st May, 1903	1010

Index of Goods for which Trade Marks have been registered.

JULY 4TH—11TH.

Goods.	Name.	No.	Date.	Class.	Gazette. No.	Gazette. Date.	Gazette. Page.
Attachments	*Vide* Sewing Machines	2793	23rd April, 1903	6	18	1st May, 1903	1010
Attachments	*Vide* Sewing Machines	2794	23rd April, 1903	6	18	1st May, 1903	1010
Boots	*Vide* Underclothing	2709	3rd Feb., 1903	38	18	1st May, 1903	1008
Chemical Substances	C. B. Knox, trading as Spim Co. ...	2792	23rd April, 1903	3	18	1st May, 1903	1010
Corsets	*Vide* Underclothing	2709	3rd Feb., 1903	38	18	1st May, 1903	1008
Liquors (fermented) ...	Craigellachie Glenlivet Distillery Co., Ltd.	2694	15th Jan., 1903	43	18	1st May, 1903	1008
Liquors (fermented) ...	Craigellachie Glenlivet Distillery Co., Ltd.	2695	15th Jan., 1903	43	18	1st May, 1903	1008
Liquors (fermented) ...	Craigellachie Glenlivet Distillery Co., Ltd.	2697	15th Jan., 1903	43	18	1st May, 1903	1008
Liquors (fermented) ...	Craigellachie Glenlivet Distillery Co., Ltd.	2698	15th Jan., 1903	43	18	1st May, 1903	1008
Medicine	*Vide* Chemical substances	2792	23rd April, 1903	3	18	1st May, 1903	1010
Pharmacy	*Vide* Chemical Substances	2792	23rd April, 1903	3	18	1st May, 1903	1010
Pipes (tobacco) ...	A. Krankau & Co., Ltd.	2791	23rd April, 1903	50	18	1st May, 1903	1010
Sewing Machines ...	Singer Manufacturing Co.	2793	23rd April, 1903	6	18	1st May, 1903	1010
Sewing Machines ...	Singer Manufacturing Co.	2794	23rd April, 1903	6	18	1st May, 1903	1010
Shoes	*Vide* Underclothing	2709	3rd Feb., 1903	38	18	1st May, 1903	1008
Spirits	*Vide* Liquors	2694	15th Jan., 1903	43	18	1st May, 1903	1008
Spirits	*Vide* Liquors	2695	15th Jan., 1903	43	18	1st May, 1903	1008
Spirits	*Vide* Liquors	2694	15th Jan., 1903	43	18	1st May, 1903	1008
Spirits	*Vide* Liquors	2698	15th Jan., 1903	43	18	1st May, 1903	1008
Underclothing ...	D. Jones & Co.	2709	3rd Feb., 1903	38	18	1st May, 1903	1008

By Authority: WM. ALFRED WATSON, Government Printer, Perth.