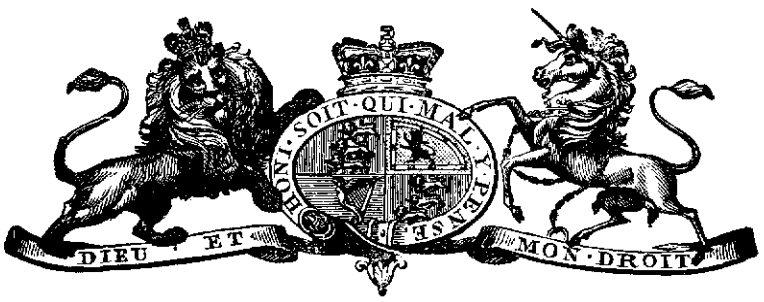


SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, JUNE 25, 1903.

Published by Authority.

WELLINGTON, THURSDAY, JUNE 25, 1903.

CONTENTS

Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 24th June, 1903.

COMPLETE specifications relating to the undermentioned applications for Letters Patent have been accepted, and are open to public inspection at this office. Any person may, at any time within two months from the date of this *Gazette*, give me notice in writing of opposition to the grant of any such patent. Such notice must set forth the particular grounds of objection, and be in duplicate. A fee of 10s. is payable thereon.

No. 15242.—11th August, 1902.—WILLIAM HENRY BOYENS, of Kaikoura, South Marlborough, New Zealand, Mechanical Engineer. An improved force-pump.*

Claims.—(1.) In an improved force-pump of this class, the utilisation of three tubes, fully described, and illustrated in drawings as *a*, *b*, and *c*. The outer or casing *a* is supplied with valve *e* and stuffing-box *d*, through which the tubes *b* and *c* work, as described and illustrated. (2.) In force-pumps of this class described, the two inner tubes *b* and *c* joined together at top form the plunger which works through stuffing-box *d*, as described and illustrated. (3.) In force-pumps of this class described the plunger *b* is supplied with valve *f*, which acts in conjunction with valve *e* for the purpose described and illustrated. (4.) In force-pumps of this class described, the interior tube *c*, being the lesser tube, as described, is suspended in the centre of tube *b*, thus leaving a space between the two tubes and forming an air-chamber for the purpose specified. (5.) The general arrangement, construction, and combination of parts comprising my improved pump for forcing liquids or aqueous preparations, substantially as described, illustrated, and set forth.

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

No. 15260.—16th August, 1902.—WILLIAM BENJAMIN WALTERS, of Dunedin, New Zealand, Engineer. Improved means for the production of hydrocarbon gas.*

Claims.—In means for the production of hydrocarbon gas, a carburetter chamber adapted to contain a hydrocarbon, and provided with a number of perforated plates placed horizontally across it with spaces between them, an air-inlet pipe leading into the chamber to beneath the lowest plate, and provided with a branch extending across the bottom of the chamber, such branch being formed with openings at intervals on its under-side, and an outlet-pipe leading from the top of the chamber, in combination with means whereby air may be led at will under pressure into the inlet-pipe, substantially as specified.

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

No. 15261.—15th August, 1902.—WILLIAM HENRY KEON, of 37, Cargill Street, Dunedin, New Zealand, Marine Engineer, and WALTER OLIPHANT MILLER, of Ross Street, Roslyn, Otago, New Zealand, Company Secretary. Improvements in and relating to fire-escapes.*

Claims.—(1.) An improved fire-escape consisting of the parts arranged, combined, and operating substantially as and for the purposes specified, and illustrated in the drawings. (2.) A fire-escape comprising in combination a platform pivoted to the side of a building or to a balcony thereon, and a ladder pivoted to said platform, substantially as specified and illustrated. (3.) A fire-escape comprising in combina-

tion a platform pivoted to the side of a building or to a balcony thereon, a ladder pivoted to said platform, wheels at the foot of the ladder, and handrails upon the ladder and the platform, substantially as specified and illustrated.
(Specification, 3s.; drawing, 1s.)

No. 15301.—22nd August, 1902.—JOSEPH ROBERT SIGLEY, of Gisborne, New Zealand, Tinsmith. Improvements in the form and construction of concrete tanks.*

Claim.—An improved method of forming and constructing tanks for holding water or other liquid, composed of concrete filled into moulds, as described.
(Specification, 1s. 3d.; drawing, 1s.)

No. 15304.—23rd August, 1902.—JOHN MILLAR ARMOUR, of Dunedin, New Zealand, Carpenter. Making chairs, go-carts, cribs, and the like collapsible.*

Claims.—(1.) Making chairs, cribs, and cradles collapsible by means of trellis-work sides, substantially as described. (2.) Making a cradle collapsible by providing trellis-work sides thereto, the corners of which are secured to uprights by pins running in slots therein, said pins being adapted to be clamped to said uprights, substantially as described.
(Specification, 1s. 9d.; drawing, 1s.)

No. 15339.—1st September, 1902.—HENRY JAMES TOPLISS, of Addington, New Zealand, Engineer, and NICHOLAS ANDREW, of Wanganui, New Zealand, Manufacturers' Agent. Mode of and apparatus for utilising the exhaust from oil and gas engines.*

Claims.—(1.) The employment in the exhaust-pipe of an oil or gas engine of a spiral water-pipe, one end of which communicates with the interior of the cylinder-jacket so that the whole or part of the water circulating therein may if desired be conducted into the spiral, and the other end with the factory hot water supply-tank, as set forth and explained. (2.) A spiral water-pipe within the exhaust-pipe of an oil or gas engine deriving its supply from a suitable source and absorbing heat from the exhausted gases in the pipe, as specified.
(Specification, 1s. 9d.; drawing, 1s.)

No. 15365.—5th September, 1902.—COWPER LASHLIE, of Christchurch, New Zealand, Salesman. A combined hat and clothes brush.*

Claims.—In a combined hat and clothes brush, in combination, a pair of brushes pivotally connected and adapted to be closed together to form one brush, and an overlapping backing to the major portion thereof under which the minor or hat-brush will come when the parts are closed together, substantially as specified.
(Specification, 1s.; drawing, 1s.)

No. 15366.—6th September, 1902.—DAVID RANKIN SHERRIFF GALBRAITH, of Ladies' Mile, Remuera, near Auckland, New Zealand, Analytical and Consulting Chemist. A combined milk and other food product.*

[NOTE.—The title in this case has been altered. See list of Provisional Specifications, Gazette No. 75, of 18th September, 1902.]

Claims.—(1.) In the food-product as specified, the combination of milk with the flesh or pulp of fruit, duly freed from skin, seeds, stalks, and other objectionable substances, in the proportions and in the manner and for the purposes set forth, substantially as described. (2.) In the food-product as specified, the combination of milk, fruit, sugar, gelatine, and malt-extract in the proportions and in the manner and for the purposes set forth, substantially as described. (3.) In the food-product as specified, the combination of the ingredients in the proportions of skim-milk about one gallon, or a proportionate quantity of fresh or normal milk, or a proportionate mixture of the two milks, of the flesh or pulp of bananas or other suitable fruit, such as grapes, plums, apples, pears, and the like, about three pounds avoirdupois weight, of sugar about four ounces, and of gelatine about one ounce, in the manner and for the purpose set forth, substantially as described. (4.) In the food-product as specified, the combination of the ingredients in the proportions of skim-milk about one gallon, or a proportionate quantity of fresh or normal milk, or a proportionate mixture of the two milks, of the flesh or pulp of bananas or other suitable fruit, such as grapes, plums, apples, pears, and the like, about three pounds avoirdupois weight, and of sugar about five ounces, in the manner and for the purpose set forth, substantially as described. (5.) In the food-product as specified, the combination of the ingredients in the proportions of skim-milk about one gallon, or a proportionate quantity of fresh or normal milk, or a proportionate mixture of the two milks, of the flesh or pulp of bananas or other suitable fruit, such as grapes, plums, apples, pears, and the like, about three pounds avoirdupois weight, of sugar about two ounces, of extract of malt about two ounces, and of gelatine one ounce, in the manner and for the purpose set forth, substantially as described.
(Specification, 3s. 3d.)

No. 15373.—6th September, 1902.—HENRY UPTON ALCOCK, of 208–212, Russell Street, Melbourne, Victoria, Billiard-table Manufacturer. Improved convertible settee and billiard-table.*

Claims.—(1.) In a convertible settee and billiard-table, the combination of the radius rods, guides, and brackets, marked B to B^4, with the frame of settee and the table A, substantially as described and shown. (2.) In a convertible settee and billiard-table, the combination of the table A, the radius rods, guides, and brackets marked B to B^4, and the settee-frame, the posts C^1 of which have screwed heads C^2, substantially as described and shown. (3.) In a convertible settee and billiard-table, the combination of the table A, the radius rods, guides, and brackets marked B to B^4, the settee-frame provided with adjustable post-heads C^2, and the movable adjustable posts D to D^2, substantially as described and shown.
(Specification, 2s. 6d.; drawing, 1s.)

No. 15600.—5th November, 1902.—ISAAC TROLLEY, of Grantley Cottage, Grantham, England, Binder Expert and Traveller. Improvements in or applicable to sheaf-binding harvesters and straw-trussers.*

Claims.—(1.) In a sheaf-binding harvester or straw-trusser, a spring or spring flap arranged upon the binding-table and adapted, as the sheaf or truss is being formed, to be gradually pressed down on to or level with the table, and as the sheaf or truss is ejected to rise to retain the following straw, substantially as described. (2.) A spring or spring flap adapted to be applied to the table of a sheaf-binding harvester or straw-trusser, substantially in the manner described, for the purpose specified.
(Specification, 2s. 3d.; drawing, 1s.)

No. 15989.—14th February, 1903.—JOHN COVENTRY, of Dunedin, New Zealand, Jeweller. Improved umbrella-tip retainer.*

[NOTE. The title in this case has been altered. See list Provisional Specifications, *Gazette* No. 18, of the 5th March, 1903.]

Claims.—(1.) The general construction, arrangement, and combination of parts composing my improved umbrella-tip retainer all substantially as and for the purposes described with reference to the drawing. (2.) An umbrella-tip retainer comprising a piece in the shape of a frustum of a cone held in position on an umbrella-handle by a helical spring resting on a flange secured to the handle and adapted to slide down the handle under pressure from the tips on the external face of said piece sufficiently to allow the tips to pass over the upper edge of said face and then to slide back up the handle under the pressure of said spring to grip said tips, substantially as described. (3.) In combination, a flange on the umbrella-handle, a helical spring supported by said flange, and a piece in the shape of a frustum of a cone open at its upper and narrower end resting on said spring, and a stop on the umbrella-handle, substantially as and for the purposes set forth.
(Specification, 2s. 6d.; drawing, 1s.)

No. 16076. — 11th March, 1903. — WILLIAM ERNEST HUGHES, of Queen's Chambers, Wellington, New Zealand, Patent Agent (nominee of the Electrical Ore-finding Company, of Dashwood House, 9, New Broad Street, London, England—the assignees of Leo Daft, of The Laboratory, Meadow House, The Mall, Ealing, Middlesex, England, Electrical Engineer, and Alfred Williams, of 10, Princes Road, Wimbledon, Surrey, England, Engineer). Improved apparatus for detecting and localising mineral deposits.

Claims.—(1.) An electric-circuit breaker consisting of a combination of an electrode which is in connection with a

source of electricity and which is adapted to be reciprocated, a second electrode which is adapted to make contact with the first and accompany it through a portion of its excursion, and which is adapted also to receive a motion relatively to the first electrode, such second electrode being also in electric connection with the same source of electricity as the first, and an arrester which is adapted to stop the movement of the second electrode and break its contact with the first. (2.) An electric-circuit breaker characterized as described in claim 1, and in which the reciprocation is derived from an electro-motor adapted to be regulated in speed and provided with a mechanism which is adapted to vary the amplitude of the reciprocation. one electrode consisting of a wheel which is adapted to be rotated, and the other electrode consisting of a disc which by means of a ratchet-and-rawl device is adapted to be turned through a small angle in each reciprocation, the arrester being a screw adapted to be adjusted in position, and the surfaces which make and break contact being immersed in a bath of insulating-fluid. (3.) An electric-circuit breaker consisting of a combination of two fixed electrodes which are in connection with a source of electricity, two spring-pressed pivoted electrodes connected with the same source of electricity, an electro-magnet and two spring-pressed pivoted armatures, the electro-magnet being adapted to be energised from an independent source of electricity, and the armatures being each adapted to alternatively make and break a contact of the above-mentioned electrodes and also to alternately complete and break the energising circuit of the electro-magnet, the period of contact of the electrodes being adapted to be regulated by adjusting screws, and the period of vibration of each of the armatures being adapted to be regulated by an adjustable weight and wire connections adapted to place the contact of two of the electrodes either parallel to or in series with the contact of the two other electrodes. (4.) A resonator adapted to produce audible sensations from minute electric impulses, consisting of a combination of two soft-iron pole-pieces, a number of permanent magnets having their ends in contact with the pole-pieces, a tympanum the rim of which is secured to one of the pole-pieces, a central actuating permanent magnet, and a bobbin of fine wire mounted either on the pole of the central actuating magnet or on the tympanum. (5.) A resonator characterized as described in claim 4, in which the bobbin is provided with two coils of wire, and in which there is a switch which is adapted to place the two coils of wire in series or in parallel as desired, or to cut one out of the circuit. (6.) An apparatus for locating mineral deposits, consisting of a combination of a source of electricity, an inductor which is adapted to emit fluctuating electric impulses, two portable electrodes which are electrically connected, having the battery and inductor in intermediate series, two other portable electrodes which are electrically connected, and a resonator which is in intermediate series therewith, such resonator being adapted to produce audible sensations from electric impulses. (7.) An apparatus for locating mineral deposits, characterized as described in claim 6, in which the inductor consists of the following parts: An electro-magnet doubly wound, the primary circuit being traversed by electricity from the before-mentioned source, a repeating break for the primary circuit, a primary-circuit condenser, and the secondary circuit having a condenser and a sparking-gap. (8.) An apparatus for locating mineral deposits characterized as described in claims 6 and 7, in which both the primary and the secondary circuits may be switched along the wires on the two arms of the magnet, either in series or in parallel, and in which the condenser of the secondary is adjustable in capacity, and in which the secondary current is adapted to traverse a sparking-gap and the earth by the electrodes in parallel. (9.) An apparatus for locating mineral deposits characterized as described in claims 6, 7, and 8, and in which the electro-magnet has an adjustable armature to vary the air gap, and in which the break for the primary is constructed as described in claims 1, 2, or 3, and in which the secondary circuit has a motor-driven high-frequency break, and in which the resonator is constructed as described in claims 4 or 5.

(Specification, £1 2s. 6d.; drawings, 4s.)

No. 16134.—25th March, 1903.—THOMAS EASTON DEVONSHIRE, of Pirbright, Chislehurst, County of Kent, England, Civil Engineer. Improvements in troughs or conduits more especially intended for underground electric cables.

Claims. — (1.) Lengths of trough or conduit made of U-shaped or equivalent metal, engaging or spigot-and-socket ends, and with perforated, reticulated, or "expanded" metal extending from end to end, this metal structure being imbedded in concrete moulded therearound so as to form a U or equivalently shaped length, substantially as described. (2.) Lengths of trough or conduit made of U-shaped or equivalent metal, engaging or spigot-and-socket ends connected together by rods, and having perforated, reticulated, or "expanded" metal extending from end to end, this metal structure being imbedded in concrete moulded therearound so as to form U or equivalently shaped lengths, substantially as described. (3.) Lengths of trough or conduit made of U or equivalently shaped end pieces connected by rods at their upper ends, and perforated, reticulated, or "expanded" metal connected to the rods and extending at each end around the end pieces, and with concrete moulded around the metal parts and engaging therewith so as to form U or equivalently shaped lengths, substantially as described. (4.) Lengths of trough or conduit made of U or equivalently shaped metal, engaging or spigot-and-socket ends formed with flanges or recesses, and connected at their upper ends by rods to which perforated, reticulated or, "expanded" metal is secured, the said perforated, reticulated, or "expanded" metal being shaped to correspond with the end pieces and extending from end to end, concrete being moulded on the said parts so as to form a length of U or equivalently shaped trough or conduit in which the metal parts are keyed and imbedded, substantially as described and illustrated in Figs. 1 to 6 of the drawings. (5.) Lengths of trough or conduit made of U or equivalently shaped sheet-metal end pieces bent inwards at their upper ends, and perforated, reticulated, or "expanded" metal of a shape corresponding to the end pieces and extending from end to end, concrete being moulded on the said parts so as to form a length of U or equivalently shaped trough or conduit in which the metal parts are keyed and imbedded, substantially as described with reference to Figs. 10, 11, and 12 of the drawings. (6.) Lengths of trough or conduit made of U or equivalently shaped sheet metal, end pieces bent inwards at their upper ends so as to receive metal rods to which perforated, reticulated, or "expanded" metal is connected, the said perforated, reticulated, or "expanded" metal being of a shape corresponding to the end pieces and extending from end to end, concrete being moulded on the said parts so as to form a length of U or equivalently shaped trough or conduit, in which the metal parts are keyed and imbedded, substantially as described, and illustrated in Figs. 10, 11, and 12 of the drawings. (7.) In combination with lengths of trough or conduit according to the preceding claiming clauses, a lid or cover consisting of concrete in which is imbedded perforated, reticulated, or "expanded" metal, substantially as described. (8.) In combination with lengths of trough or conduit according to the preceding claiming clauses, a lid or cover consisting of a combination of perforated or reticulated or "expanded" metal, strengthened by rods, and having concrete moulded thereover, substantially as described. (9.) The modifications of the described constructions so as to constitute an "earth sheath" in the troughs or conduits, substantially as explained, and illustrated by Figs. 15 to 21 of the drawings.

(Specification, 10s. 6d.; drawings, 9s.)

No. 16136.—24th March, 1903.—ALLAN LANGLEY HEIGHTON, of 231, St. Asaph Street West, Christchurch, New Zealand, Salesman. An improved attachment to the heels of boots and the like.*

[NOTE.—The title in this case has been altered. See list of Provisional Specifications, *Gazette* No. 29, of the 16th April, 1903.]

Claims.—(1.) As an attachment to a boot or shoe heel, a rubber layer immediately beneath the wearing top piece, said rubber layer being of a size to fill up and occupy the rear portion of the heel, to which it is secured by its inner edge only, as specified and shown. (2.) The combination in a partially formed heel of a boot or shoe of a layer of rubber secured to the main portion of the heel by its inner edge only, a piece of leather cut diagonally which with the rubber together are equivalent to one complete lift, and a leather wearing top piece superincumbent upon the whole, as described, and for the purpose set forth.

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

No. 16332.—12th May, 1903.—ALFRED MOUL, of 105, Shaftesbury Avenue, London, England, Gentleman. Improvements in target apparatuses and the like where no projectiles are employed.

Claims.—(1.) A target apparatus comprising a gun or simulated firearm having a hammer and trigger, means for cocking the hammer, a target with indicators, and selecting electrical devices between the gun or simulated firearm and the target whereby the point aimed at on the target shall be automatically selected in aiming, and indicated when the trigger is pressed by the marksman. (2.) A target apparatus comprising a gun or simulated firearm having a hammer and trigger, said firearm having universal mountings, a target

provided with electro-magnetic indicators to designate the point or section aimed at by the marksman, a contact-point which moves as the gun is moved in aiming, and over and above a contact-plate, the said contact-plate having insulated metal segments connected electrically with the respective indicating-devices at the target, means for first closing the circuit when the trigger is pressed and then automatically breaking it. (3.) A target apparatus having a gun-stand, a gun or simulated firearm mounted in said stand to move up and down in curved guides with a counter-weight, a target with indicators, and electrical means between the firearm and target for selecting and indicating the point or section of the target aimed at by the marksman. (4.) In a target apparatus, the combination with the fixed casing of the gun-stand, of the fixed guide-frame therein, the sliding frame in said fixed frame and adapted to move upward therein in a curved path, the counterweight for said sliding frame, the gun, the stem thereof having a universal-joint bearing in said sliding frame, the target provided with electro-magnetic indicators, the contact-plate carried by said sliding frame and its segments connected electrically with the respective indicators at the target, the contact-point carried by said sliding frame and coupled to the stem of the gun for movement therewith, and means between the trigger of the gun and said contact point for putting the latter into contact with the contact-plate when the trigger of the gun is pulled, substantially as set forth. (5.) In a target apparatus, the combination with the fixed casing of the gun-stand of the fixed guide frame therein, the sliding frame in said fixed frame and adapted to move upward therein in a curved path, the counter-weight for said sliding frame, the gun, the stem thereof having a universal-joint bearing in said sliding frame, and the target, situated at a distance in front of the gun equal to the radius of the curved path in which said sliding frame moves, substantially as set forth. (6.) In a target apparatus, the combination with the gun provided with a hammer, a spring-actuated trigger, and a spring 20 to cock the hammer, the stem of the gun and a universal mounting for said stem, of the spring 23, mechanism connecting said spring and the hammer whereby said spring holds the hammer against cocking, and a manually operatable distending mechanism for distending the spring 23 whereby the spring 20 is permitted to cock the hammer. (7.) In a target apparatus, the combination with a supporting frame of the gun, the stem 5 of said gun having a universal bearing 8 in said frame, the said bearing, the slide-block 11 in said frame, the stem 9 loosely coupled at its upper end to the lower end of the stem 5 and having a universal bearing in the block 11, the said universal bearing, the lever 17 fulcrumed on the supporting frame at 18, and coupled operatively to the block 11 at its lower end, the arm 15 projecting from the stem 5 at the universal joint and engaging a slot in the upper arm of the lever 17, the contact-point 13, the spring 12 connecting it with the stem 9, the contact-plate 14, and means for moving said point out of contact with said plate when the gun is cocked, and into contact therewith when the trigger is pulled, substantially as set forth. (8.) In a target apparatus, the combination with a supporting frame, of the gun, the stem 5 of said gun having a universal bearing 8 in said frame, the said bearing, the slide-block 11 in said frame, the stem 9 loosely coupled at its upper end to the lower end of the stem 5 and having a universal bearing in the block 11, the said universal bearing, the lever 17 fulcrumed on the supporting frame at 18 and coupled operatively to the block 11 at its lower end, the arm 15 projecting from the stem 5 at the universal joint and engaging a slot in the upper arm of the lever 17, the contact-point 13 connected with the stem 9, and the contact-plate 14 under said point, substantially as set forth. (9.) In an electrical target apparatus, the combination with the contact-point 13, having a flexible stem, of the said stem, the contact-plate 14 divided into sections and having elevated deflecting ridges over the joints between said sections, substantially as and for the purpose set forth. (10.) In an electrical target apparatus, the combination with a gun mounted on universal bearings for aiming, a contact-point, means between said gun and point compelling the latter to move relatively to the movements of the gun in aiming, a contact-plate 14 composed of insulated metal parts *a* and *b*, and means whereby the pulling of the trigger puts said contact-point into contact with said plate 14, of a target having divisions corresponding to those of the plate 14 and provided with electro-magnetic indicators to indicate said divisions, conductors electrically connecting the several parts of the plate 14 and the contact-point with the respective indicators at the target, a generator in the circuit, a circuit closer and breaker in the circuit, and means for automatically operating said circuit closer and breaker, substantially as set forth. (11.) In a target apparatus, a target having superposed plates with a space between them, an electro-magnet, its armature lever, and a marker carried by the said lever and adapted to move into and out of view by the movements of said lever, substantially as set forth. (12.) In a target apparatus, a target having a face plate, a movable indicator adapted to move in and out from behind said plate, a lever carrying said indicator, and an electro-magnet adapted for actuating said lever, substantially as set forth. (13.) A target apparatus comprising a simulated gun having a hammer and trigger, a spring which cocks the hammer automatically, a spring mechanism which holds the gun against cocking, and a manually operatable spring-distending mechanism for putting the last-named spring mechanism under tension, whereby the cocking spring may cock the hammer. (14.) In a target apparatus, the combination with a target, and electro-magnetic indicating-devices at said target each adapted to move an indicator into view when the magnet connected therewith is excited, of a gun or the like mounted on universal bearings and adapted to be aimed at any point on said target, the said universal bearings, electric circuits between the gun and the target and including the respective magnets of the indicating-devices thereat, and circuit-closing devices controlled by the trigger of the gun, substantially as set forth.

(Specification, 14s. 6d.; drawing, 3s.)

No. 16381.—22nd May, 1903.—JOHN GLENNIE HOLBOURNS, Linotype-operator, and HENRY ALEXANDER LONGHURST, Engineer, both of 188, Fleet Street, London, England. Improvements in machines for the assembly of type-matrices and the casting of linotypes therefrom.

Extract from Specification.—The present invention relates to improvements in the class of linotype-machine known as the typograph, and which is described at length in the specification of British patent 15060 of 1890, and German patent 60362. In linotype-machines of this class the character-bars are suspended from a so-called matrix-carrier, consisting of a frame pivoted at the rear of the main frame of the machine, and having so-called ways or wires extending from the front of the frame to the rear of it. The spacers are mounted on separate ways. The ways for both the character-bars and the spacers stand normally inclined downwards from the rear towards the front, the character-bars and spacers being held back at the rear ends of the ways by escapements. As soon as a front character-bar or spacer is released it slides down its way to the place of assemblage. The released and assembled character-bars and spacers are distributed—*i.e.*, returned to their original positions to the rear of the respective escapements—by tilting the pivoted carrier upwards and backwards, so that the last-mentioned character-bars slide by gravity down the tilted ways past the escapements, while the released and assembled spacers are distributed by means actuated by the said tilting. The object of the present invention is to dispense with the above-described tilting; and the invention itself consists essentially in the combination with a stationary character-bar carrier, of a distributor connected to all the ways and capable of moving to and fro thereupon, and automatic mechanism connecting the driving-shaft and the character-bar distributor, as well as the spacer distributor, to move both once to the rear to effect distribution of the assembled character-bars and spacers, and once to the front to put them in the assembling position, during each cycle of the machine. This automatic mechanism may be of any suitable type, and consequently the details of it may be varied to any extent, provided that the proper discharge of its functions is provided for. The particular machine to which the invention is applied may have its character-bar ways divided into two divisions and a single space-bar way, as in the machines described in the patents above mentioned, or the character-bar ways may not be so divided. The class of machine will not be affected by the absence of such division. Neither does the fact of division or no division affect the type of either character-bar distributor or of its connecting mechanism—each remains the same. The only variation caused by such division is that for each division of character-bar ways there is a separate distributor and connecting mechanism; but not only is each a replica of the other respectively, but both must act together—*i.e.*, in unison.

[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 6s.; drawings, 5s.)

No. 16400.—28th May, 1903.—EDWIN PHILLIPS, of 533, Collins Street, Melbourne, Victoria, Certified Patent Agent and Engineer (nominee of Otho Cromwell Duryea and Morris Columbus White, both of 933, Georgia Street, Los Angeles, County of Los Angeles and State of California, United States of America, Mechanics). A free-piston engine.

Claims.—(1.) A free piston engine which is characterized by having connected free-moving pistons, which are reciprocated in their cylinders by the explosion of a suitable fuel,

and the pistons being unconnected with a fly-wheel or other rotating or inertial device, the pistons being cushioned at the end of each stroke, and tool-holding means connected with the pistons. (2.) A free-piston engine characterized as set forth in claim 1, and having a casing which carries the cylinders with their pistons, a frame on which the casing is slidably mounted, and means for moving the casing and its attachments back and forth on the frame, consisting preferably of a screw mounted on the frame, which engages a nut on the casing. (3.) An engine which is characterized by being entirely self-contained, and which has free-moving pistons which are connected and arranged in opposite cylinders, an inlet-valve for each cylinder and outlet-ports for each cylinder, the outlet-port in each cylinder being opened and closed by the piston in the cylinder as it reciprocates, and mechanism for causing an explosion of the charge in each cylinder as soon as the gas is compressed in the explosion-chamber of each cylinder, and tool-holding means connected with the pistons and slidably mounted on the casing and preferably axially in line with the cylinders. (4.) In an engine such as described, sparking-plugs in the respective cylinders, and stationary contacts in the casing each of which is electrically connected with respective sparking-plugs, and a contact-blade carried by the connection between the pistons which moves alternately into contact with the stationary contacts as the pistons reciprocate and causes a spark to be produced alternately in each cylinder by the sparking-plugs. (5.) An engine which is characterized by having free-moving pistons which are connected and are reciprocated in their cylinders by the explosions of a suitable fuel, and the pistons being unconnected with a fly-wheel or other rotating or inertial device, a tool-holding bar connected with the pistons, the bar being hollow and telescoping with a tube which communicates with the water-jacket of the cylinders whereby water is supplied from the water-jacket to cool or lubricate the tool.

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

No. 16414. — 27th May, 1903. — AGAZIO FALCONE, of Florence, Italy, Sergeant in the Italian Army. Improvements in and relating to electric-telegraph apparatus.

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 purposes 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 drawings, for the purpose specified.

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

No. 16415.—27th May, 1903.—TORE GUSTAF EMANUEL LINDMARK, of Björkhagen, Langholmen, Stockholm, Sweden. Improvements in elastic-fluid turbines.

Claims.—(1.) An elastic-fluid turbine wherein kinetic energy of the exhaust fluid from a turbine wheel, or from part of a turbine wheel, is transformed into potential energy so that the said exhaust is delivered to a further turbine wheel, or to another portion of the same turbine wheel, at a lower velocity but a higher pressure than those at which it left the previous turbine wheel or portion of the same turbine wheel, substantially as described. (2.) An elastic-fluid turbine according to the preceding claim wherein there is provided between the exhaust-outlet of a turbine wheel, or portion of a turbine wheel, and the inlet of a further turbine wheel, or portion of the same turbine wheel, a passage or channel the cross-sectional area of which increases in the direction of motion of the fluid therein in such wise that the velocity-energy of the elastic fluid passing through it can be transformed into pressure-energy, substantially as described. (3.) In a multiple elastic-fluid turbine, a wheel, a passage external to the said wheel of increasing cross-sectional area in the direction of motion of the fluid therein, and receiving the exhaust from the said wheel, and a second wheel actuated by the said exhaust, the area of the outlet of the second wheel being such as to cause an increase of the pressure of the exhaust fluid in the said passage, substantially as described. (4.) In a multiple elastic turbine, a series of hollow wheels each having a central inlet and a circumferential outlet, and each, after the first of the series, actuated by the exhaust from the wheel next preceding, and an annular exhaust-passage surrounding each wheel-outlet, and having a cross sectional area increasing in the direction of motion of the fluid, the pressure of which is increased in the said passage, substantially as described. (5.) Improved elastic-fluid turbines constructed, arranged, and operating substantially as described with reference to and illustrated in Figs. 3 and 4, in Fig. 5, in Figs. 6, 7, 8, and 9, in Fig. 10, and in Figs. 11 and 11A respectively of the drawings.

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

No. 16416.—27th May, 1903.—CARL GUSTAF PATRIK DE LAVAL, of Stockholm, Kungsträdgardsgatan 20, Sweden, Doctor of Philosophy and Engineer. Improvements in or pertaining to the distillation of zinc and other volatile metals from material containing the same.

Claims.—(1.) Distilling zinc or other volatile metal from ore by means of an electric furnace, into which the ore is so introduced as to present towards the electric source of heat a slope or incline, the surface of which is heated by radiation from the said source of heat, and wherein the volatile constituents of the ore, escaping from the said surface, pass off through a special outlet, whilst the residues are collected at and removed from the base of the slope, substantially as set forth. (2.) Distilling zinc or other volatile metal as set forth by means of the electric furnace described.

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

No. 16417.—27th May, 1903.—GEORGE EVERETT HOYT, of San Francisco, California, United States of America, Mechanic. Gas or explosive engines.

Claims.—(1.) In a gas-engine, a main cylinder, a trunk-piston movable within said main cylinder forming a combustion-chamber at the outer end of the latter, a fixed trunk-piston extending within said movable piston forming a compression-chamber between it and the latter, a gas inlet and outlet in said fixed trunk-piston, and valves in said fixed trunk-piston leading to and from said compression-chamber, substantially as specified. (2.) In a gas-engine, a main cylinder, a trunk-piston movable therein forming a combustion-chamber between the two, a fixed trunk-piston extending within said movable piston forming a compression-chamber between the two latter, a horizontal partition in said fixed trunk-piston dividing it internally into two chambers or passages, an inlet-pipe for gas to one chamber, an outlet-pipe for gas from the other chamber to the combustion-chamber, and valves between the said chambers or passages respectively and the compression-chamber, substantially as specified. (3.) In a gas-engine, a main cylinder, a trunk-piston movable therein forming a combustion-chamber between the two, an extension to said combustion-chamber in which ignition takes place, a fixed trunk-piston extending within the movable piston forming a compression-chamber between the two latter, said fixed piston being divided into two chambers or passages, a gas-inlet to one passage 19, a gas-outlet from the other passage 25 to the combustion-chamber, a valve opening from passage 19 to the compression-chamber, and a valve opening into passage 25 from the compression-chamber, substantially as specified. (4.) In a gas-engine, a main cylinder, a trunk-piston movable therein, a fixed trunk-piston extending within and guiding the movable trunk-piston, a horizontal partition in said fixed trunk-piston dividing it internally into two passages, a slotted way in said partition for the cross-pin to traverse in, a cross-pin in said slot fixed in the walls of the movable trunk-piston, a forked connection between said cross-pin and the main crank-shaft, and a main crank-shaft from which the movable trunk-piston derives its motion, substantially as specified. (5.) In a gas-engine, a main cylinder, a trunk-piston movable therein, a fixed trunk-piston extending within said movable piston, supporting and guiding the latter at top and bottom, said fixed piston being flattened at the sides to form clearance spaces for the strengthening-bosses of the movable piston, bosses formed on the interior of said movable piston, and a cross-pin fixed in said bosses to form a means of attachment for the mechanism which moves the movable piston, substantially as specified. (6.) In a gas or vapour engine, an automatic igniter, the same comprising a retort or chamber suitably connected to the engine's cylinder, a lining of refractory material within the retort or chamber, communication

between the retort or chamber and the combustion-chamber of the engine, and a heating-coil or igniting-surface interposed between the combustion-chamber and the interior of the retort or chamber for firing the charge within the combustion-chamber of the engine.

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

No. 16424.—2nd June, 1903.—THE OLIVER MILL COMPANY, LIMITED, of 220, Gresham House, Old Broad Street, London, E.C., England, Manufacturers (assignees of James Thame, of 220, Gresham House, aforesaid, Engineer, and Arthur William Smith, of the Engineering Works, London Road, Barking, in the County of Essex, England, Engineer). Improvements in disintegrating-machines.

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 drawings.

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

No. 16425.—2nd June, 1903.—ROBERT PEARCE GIBBONS, of Kopu, Auckland, New Zealand, Sawmill-proprietor. An improved water-gauge for steam-boilers.

Claims.—(1.) A water-gauge for steam-boilers, the same consisting of a metal tube, the two ends of which are connected with the internal space of the boiler, such metal tube being provided with transparent discs inserted therein throughout its length, as specified. (2.) A metal tube the two ends of which are connected to the internal space of a steam-boiler, holes extending throughout the length of such tube and arranged in pairs diametrically opposite to each other, each pair being on an axis at right angles to those above and below it, and discs of transparent material fitted within the holes, as and for the purposes set forth. (3.) The general arrangement, construction, and combination of parts in my approved water-gauge for steam-boilers, as described and explained, as illustrated in the drawings, and for the several purposes set forth.

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

No. 16428.—2nd June, 1903.—THE WESTINGHOUSE BRAKE COMPANY, LIMITED, a company duly formed and registered under the English Companies Acts, and having its registered office at 82, York Road, King's Cross, County of London, England, Manufacturers (assignees of John Wills Cloud, of 82, York Road, aforesaid, Engineer). Improvements in or relating to automatic couplings for railway and like vehicles.

Claims.—(1.) An automatic coupler for railway vehicles in which the coupling is effected by a knuckle engaging with a projection on a counterpart-head, the said knuckle being free to oscillate round its pivot between two limiting positions, one in either direction beyond the locked or coupled position, in one of which limiting positions the knuckle is in the open or coupling position, and in the other the coupling end of the knuckle lies in a recess in the coupler-head, substantially as described, for the purpose specified. (2.) For railway and like vehicles, automatic couplings, constructed and operating substantially as described with reference to the drawings.

(Specification, 8s.; drawing, 2s.)

No. 16433.—4th June, 1903.—COLIN RANDOLPH MCKENZIE, of Oroville, California, United States of America, Dredge Miner. An improved surface riffle for use in gold-saving.

Claims.—In gold-saving tables, sluice-boxes, or the like, a plate extending across the inside width of such sluice-box or table, and the upper end of which is hinged to the sides thereof, while the plate extends freely downwards along the box or table, the under-surface of such plate being formed or provided with projecting bars or riffles placed across it, substantially as and for the purposes set forth.

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

No. 16455.—4th June, 1903.—WILLIAM HUTTON CHAMPION, of Harcourt Street, Grey Lynn, Auckland, New Zealand, Master Mariner. A medicine for the cure of gonorrhœa, syphilis, and other venereal diseases.

Claims.—(1.) The described medicine, consisting of the expressed essence of the leaves of the plant neouile mixed with water in the proportions and for the purposes set forth, substantially as specified. (2.) The described medicine for curing gonorrhœa, syphilis, and other venereal diseases, consisting of from 3 oz. to 5 oz. of the expressed essence of the leaves of the plant neouile mixed with one pint and a half of water, substantially as specified.

(Specification, 1s. 3d.)

No. 16456.—6th June, 1903.—LESLIE HARLING MCHARDY, of Blackhead, Hawke's Bay, New Zealand, Sheep-farmer. An improvement in wire-fencing standards and droppers.

Claim.—The improvement in T angle-iron fencing standards and droppers described and illustrated in the drawing—that is to say, drilling through the face and back rib of the standard or dropper two divergent holes for the reception and secure retention of each staple, essentially as described and illustrated.

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

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

NOTE.—The cost of copying the specification and drawings has been inserted after the notice of each application. An order for a copy or copies should be accompanied by a post-office order or postal note for the cost of copying.

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

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

F. WALDEGRAVE,
Registrar.

Provisional Specifications.

Patent Office,
Wellington, 24th June, 1903.

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

No. 16392.—27th May, 1903.—JAMES THOMAS KIBBLEWHITE, of Beach Street, Petone, Wellington, New Zealand, Carpenter, and RICHARD WALTON SHORT, of Bay Street, Petone aforesaid, Agent. An improved lifting-jack.

No. 16404.—28th May, 1903.—PETER HERBERT, of "Chester," Karrabar Road, North Sydney, New South Wales, Retired Civil Servant. Improved construction of tram and railway cars and wagons in order to facilitate locomotion.

No. 16420.—27th May, 1903.—ALBERT GODFREY MACKAY, of Totaranui, Nelson, New Zealand, Farmer. Improvements in chamber utensils.

No. 16428.—1st June, 1903.—LIZZIE DAVIE, of Homefield, Rongomai, Eketahuna, New Zealand. An improved apparatus for washing crockery, cutlery, and the like.

No. 16443.—4th June, 1903.—ROBERT ENNIS, of Barrakee, Victoria, General Agent. An improved seed and fertiliser drill attachment for regulating the depth of hoeing.

No. 16444.—8th June, 1903.—EDWARD FERDINAND WILHELM, of Cunningham's, Feilding, New Zealand, Farmer. An improvement on brakes for timber light and heavy wagons, lorries, expresses, and coaches.

No. 16445.—5th June, 1903.—GEORGE THOMAS BOOTH, Manufacturer, and WILLIAM BREW, Engineer, both of Christchurch, New Zealand. Improved lubricator mechanism for plough-skeiths.

No. 16446.—5th June, 1903.—HENRY HARLAND DENNEY, of care of Cooper and Duncan, George Street, Timaru, New Zealand. An improved feed for grain, turnips, rape, and other seeds.

No. 16453.—8th June, 1903.—CHARLES J. COOZE, of Carterton, New Zealand, Carriage-trimmer. An improved spile for beer and other casks.

No. 16454.—4th June, 1903.—DAVID MCKENZIE, of Tennyson Street, Grey Lynn, Auckland, New Zealand, Cabinet-maker. Improved coiler and spindle for wire-weaving machines.

No. 16458.—9th June, 1903.—GEORGE SEATON STEVENSON, of Wendon, New Zealand, Traction-engine Owner. An attachment to the draw-bars of vehicles.

No. 16459.—9th June, 1903.—NEIL LESLIE NICHOLSON, of Winton, Southland, New Zealand, Bushman. An improved handle for saws or other tools.

No. 16460.—9th June, 1903.—JOHN DILLICAR, of Taneatua, New Zealand, Settler. An invention for the purpose of branding carcases of meat for export or otherwise.

No. 16464.—10th June, 1903.—FREDERICK WILLIAM BURSILL, of Sedgemere, Awatere, Provincial District of Marlborough, New Zealand, Sheep-farmer. Improvements in fencing-standards.

No. 16465.—10th June, 1903.—ROBERT THORN HAINES, of Swanston Street, Melbourne, Victoria, Broker. An improved cinematographic process, and mechanism for effecting same.

No. 16466.—10th June, 1903.—GEORGE ARTHUR GOYDER, of Pirie Street, Adelaide, South Australia, Analytical Chemist, and EDWARD LAUGHTON, of Currie Street, Adelaide aforesaid, Gentleman. Improved mode of and apparatus for effecting the separation of minerals, and extracting some of them as concentrates.

No. 16469.—9th June, 1903.—JOHN COOP, of Kaituna, Canterbury, New Zealand, Sheep-farmer. A traversing feeder to sheep-dip.

No. 16471.—4th June, 1903.—JOHN WILLIAM MULHARE, of Invercargill, New Zealand, Labourer. Improvements in water-purifiers for attachment to tanks.

No. 16472.—8th June, 1903.—ISAAC NEWTON WATT and CHARLES LLEWELLYN WATT, both of Dunedin, New Zealand, Engineers. Improvements in spark-arresters.

No. 16473.—8th June, 1903.—ANNIE CONNOR, of Dunedin, New Zealand, Clerk. Improved fire escape, extinguisher, and alarm.

No. 16475.—10th June, 1903.—THOMAS CHANNON MILLSOM, of 67, Octavia Street, St. Kilda, Victoria, Ear Specialist. A composition and method of treatment for the cure of deafness.

No. 16477.—11th June, 1903.—DONALD WILLIAM MCLEAN, of Mount Hutt, Methven, Canterbury, New Zealand, Sheep-farmer. Gear for belt-driving motor cycles and cars.

No. 16481.—12th June, 1903.—HENRY CHARLES BROWN, of Lepperton, near New Plymouth, New Zealand, Farmer. Improvements in the construction of bedsteads.

No. 16482.—12th June, 1903.—ALBERT EDWARD ROUSE, of Wellington Street, Perth, Western Australia, Pearler. Pressure protector frame for use with diving-dresses.

No. 16483.—12th June, 1903.—JOHN TREGERTHEN SHORT, THOMAS FORTH ROTHERAM, and JOHN WHITWORTH SHAW, all of Perth, Western Australia, being respectively Chief Traffic Manager, Chief Mechanical Engineer, and Signal Inspector of the Western Australian Government Railways. Automatic flag-signal staff for use on railways and tramways.

No. 16484.—9th June, 1903.—HENRY ALBERT ELLIS KELLY, of 128, Albany Street, Dunedin, New Zealand, Canvasser. An improved device for creating a draught when lighting a fire in a register grate.

No. 16485.—13th June, 1903.—JOHN R. WATT, of Islington, Christchurch, New Zealand, Carpenter. Improvements in and relating to the covering of walls of houses, &c.

No. 16486.—13th June, 1903.—HENRY ALBERT ELLIS KELLY, of 128, Albany Street, Dunedin, Otago, New Zealand, Canvasser. Improved means for adjusting the shutters of register grates and the like.

No. 16487.—12th June, 1903.—JOHN RUTHERFORD PARK, of Dunedin, New Zealand, Clerk (nominee of Alfred Walter Alexander Barnard, Government Service, and William George Reid, Botanical Gardener, both of Dunedin aforesaid). Improved secateur.

No. 16489.—12th June, 1903.—JOHN RUTHERFORD PARK, of Dunedin, New Zealand, Clerk (nominee of Robert Noble Adams, of Dunedin aforesaid, Publisher). Sash mover and lock.

No. 16490.—12th June, 1903.—WILLIAM STENHOUSE, Dentist, and JAMES STENHOUSE, Coach-proprietor, both of Dunedin, New Zealand. Improvements in spark-arresters.

No. 16491.—11th June, 1903.—JOHN RUTHERFORD PARK, of Dunedin, New Zealand, Clerk (nominee of Robert Noble Adams, of Dunedin aforesaid, Publisher). Improved fish-plate.

No. 16492.—11th June, 1903.—SYDNEY HAROLD DAY, of Waverley Farm, Lady Barkly, Southland, New Zealand, Farmer. Improvements in apparatus for sheep-dipping.

No. 16493.—12th June, 1903.—WILLIAM HALY HARPUR HOLLINWORTH, of Brunswick Street, Brisbane, Queensland, Gentleman. A coin-freed machine for stamping letters and suchlike articles.

No. 16495.—12th June, 1903.—JOHN THOMAS MURPHY, of Dillon Street, Blenheim, New Zealand, Farmer. A bird-trap for catching birds such as sparrows, linnets, blackbirds, &c.

No. 16496.—16th June, 1903.—CHARLES ANKETELL, of Greytown North, Wellington, New Zealand, Farmer. Improvements in wagon-brakes.

No. 16497.—16th June, 1903.—CHARLES ANKETELL, of Greytown North, Wellington, New Zealand, Farmer. Improvements in carriage-lamps.

No. 16498.—16th June, 1903.—CHARLES EDWARD FISHER, of Wellington, New Zealand, Engine Fireman, ROWLAND FIRTH, of Petone, New Zealand, Coppersmith, JOHN GRIFFITHS, of Petone aforesaid, Spring-maker, and JOSEPH FIRTH, of Wellington aforesaid, Clerk. Improvements in or relating to locomotive engine head-lights.

No. 16499.—16th June, 1903.—JAMES DUNCAN, of Whangamomona, Taranaki, New Zealand, Farmer. Improvements in leggings.

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

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

F. WALDEGRAVE,
Registrar.

Letters Patent sealed.

LIST of Letters Patent sealed from the 10th to the 19th June, 1903, inclusive:—

No. 14571.—J. A. Secor, explosion motor.
No. 14601.—J. O'Donoghue, chaff-cutter and corn-crusher.
No. 14639.—J. and W. G. Jamieson, stone-dressing machine.
No. 14671.—J. Chambers and Son, Limited, mechanical chain grate-stoker (G. W. Thode).
No. 14672.—J. Chambers and Son, Limited, mechanical chain grate-stoker (G. W. Thode).
No. 14780.—F. H. Aussel, vehicle under-frame.
No. 14926.—F. Pegler, ruler.
No. 14952.—J. D. Kelly, D. P. Fisher, and N. V. G. Wix, ventilating halls, &c.
No. 15318.—F. Cotton, utilisation of carbonaceous liquids as fuel.
No. 15651.—D. Brummer, portable building.
No. 15767.—W. Cormack and J. G. F. Lowson, manufacture of gelatine.
No. 15996.—F. J. Fletcher, aerating liquids.
No. 15997.—F. J. Fletcher, bottle filling and stoppering apparatus.
No. 16000.—H. A. Danne, R. V. Danne, and J. Donaldson, weighing-machine.
No. 16010.—F. J. and J. H. McShane, ore-concentrator (R. E. and E. Waugh).
No. 16011.—J. Fletcher, drawing off liquids.
No. 16048.—G. H. Irvine, abstracting colouring-matter from bark.
No. 16049.—E. Phillips, massage-machine (F. King).
No. 16056.—J. McGrath, sheep-shears attachment.
No. 16066.—E. Waters, jun., grinding and polishing glass (The St. Louis Plate Glass Company—D. J. Murnane).

F. WALDEGRAVE,
Registrar.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

NO. 11728.—A. E. Hight, cleaning watercourses. 12th June, 1903.

No. 11777.—F. W. Payne, dredge elevator-tray. 12th June, 1903.
No. 11905.—P. Pfleiderer, refrigerating-apparatus (W. W. Harris). 10th June, 1903.
No. 12282.—J. Swinburne and E. A. Ashcroft, treating sulphide ores. 17th June, 1903.

THIRD-TERM FEES.

No. 8714.—C. A. MacDonald, cooling and purifying air. 10th June, 1903.

F. WALDEGRAVE,
Registrar.

Subsequent Proprietors, &c., of Letters Patent registered.

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

NO. 15425.—Sidney Arthur Ward, of Stratford, New Zealand, Ironmonger, Ebenezer Burgess, of Stratford aforesaid, Architect, Ralph Collins, of Midhirst, near Stratford aforesaid, Settler, Frederic William Wake, of Stratford aforesaid, Solicitor. *Registered as proprietors of a quarter-share.* Cow-leg holder. [W. A. Collins.] 11th June, 1903.
No. 15769.—Forwood, Down, and Company, Limited, of Adelaide, South Australia, and Kalgoorlie, Western Australia, Engineers. *Registered as licensees.* High-pressure tap. [R. F. Bradshaw and W. E. Harding.] 11th June, 1903.

F. WALDEGRAVE,
Registrar.

Request to amend Specification allowed.

THE request to amend Specification No. 14761—W. H. Gordon, hub or boss—advertised in Supplement to *New Zealand Gazette*, No. 9, of the 5th February, 1903, has been allowed.

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent abandoned.

LIST of applications for Letters Patent (with which provisional specifications only have been filed) abandoned from the 11th June to the 24th June, 1903, inclusive:—

No. 15244.—J. D. Tripe, securing doors, &c.
No. 15245.—J. P. Williams, billiard-table.
No. 15247.—F. Giles, roofing nail and screw.
No. 15250.—J. T. Love, milk-can lid.
No. 15252.—E. Smyth, snatch-block.
No. 15253.—E. Gifford and R. R. Holmes, wire-strainer.
No. 15255.—W. Collins, animal-trap.
No. 15256.—P. J. Gossling, cigar-cutter, match-holder, and advertising device.
No. 15257.—G. Beaumont, securing bradawls to handles.
No. 15258.—J. H. Bell and F. J. J. Butler, buckle.
No. 15262.—W. H. Keon and W. O. Millar, water-closet cistern.
No. 15264.—J. Sadlier, wire-strainer.
No. 15272.—C. W. Langstone, plug brick.
No. 15273.—F. de J. Clere, insulating walls, &c.
No. 15274.—P. Ellis, rotary engine.
No. 15275.—C. W. Penny, attachment to diving-boat.
No. 15276.—S. Nicolson, knife cleaner and sharpener.
No. 15278.—W. Desmond, lamp-bracket.
No. 15280.—J. J. Macky, nut-lock.
No. 15284.—F. W. Painter, bicycle-holder.
No. 15285.—A. I. Senior, reversing motion of steam-engine.
No. 15288.—W. Nicol, hair-curler.
No. 15289.—J. Hanley, car-coupling.
No. 15290.—H. A. Nicholson, oil and gas motor.
No. 15291.—J. P. Williams, billiard-table.
No. 15292.—J. Kerr, milk-strainer.
No. 15293.—J. Kerr, milk-cooler.
No. 15294.—H. August, water-closet.
No. 15300.—K. Davy, umbrella.
No. 15303.—W. H. Gore and H. J. K. Massey-Lawless, apparatus for boiling eggs.
No. 15308.—W. Nicol and J. H. Stewart, candlestick.

[ERRATUM.—No. 15144, F. S. Potter, vehicle-spring, was inadvertently gazetted as abandoned in *Gazette* No. 43, of the 28th May, 1903.]

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent lapsed.

LIST of applications for Letters Patent (with which complete specifications have been lodged) lapsed from the 11th to the 24th June, 1903, inclusive:—

No. 14263.—P. R. Williamson, rotary pump.
No. 14327.—D. Herlihy, tank for measuring milk.
No. 14342.—J. da Silva, kerosene-pump.
No. 14343.—H. M. Levinge, fire-escape.
No. 14362.—G. H. Tiller, tablet-holder.
No. 14372.—A. J. Marchant, folding-ladder.

F. WALDEGRAVE,
Registrar.

Letters Patent void.

LIST of Letters Patent void through non-payment of renewal fees from the 11th to the 24th June, 1903, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 11438.—G. Siemsgluss and G. Daseking, milking-machine.
No. 11439.—G. Siemsgluss and G. Daseking, process and apparatus for milking.
No. 11444.—W. Halstead, window-sash.
No. 11447.—E. Smethurst, securing wires in fencing standard.
No. 11448.—E. Hayburst, conveyance.
No. 11451.—J. H. Silley and W. W. Bacon, shearing-machine.
No. 11452.—F. L. Bartlett, concentrator.
No. 11453.—H. S. Chipman, oil-lamp burner.
No. 11455.—A. C. Thomas and J. E. Atkinson, suspender for billiard chalk.
No. 11461.—The Simultaneous Colour-printing Syndicate, Limited, and H. de Montin, printing-machine.
No. 11474.—The Preiss Electric Storage Syndicate, Limited, secondary battery (A. Preiss).
No. 11479.—D. Parker, gold separating and amalgamating machine.
No. 11482.—W. H. Steenson, lifting-jack.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

No. 8340.—A. Hart and C. A. Bramwell, butter-box.
No. 8362.—G. H. Grapes, hoe.

F. WALDEGRAVE,
Registrar.

Designs registered.

DESIGNS have been registered in the following names on the dates mentioned:—
No. 180.—The New Zealand Times Company, Limited, of Lambton Quay, Wellington, New Zealand. Class 5. 5th June, 1903.
No. 181.—Adolphus John Frank, of Auckland, New Zealand, Broker. Class 1. 6th June, 1903.
No. 183.—Harding and Billing, of Auckland, New Zealand, Advertising Agents. Class 5. 12th June, 1903.

F. WALDEGRAVE,
Registrar.

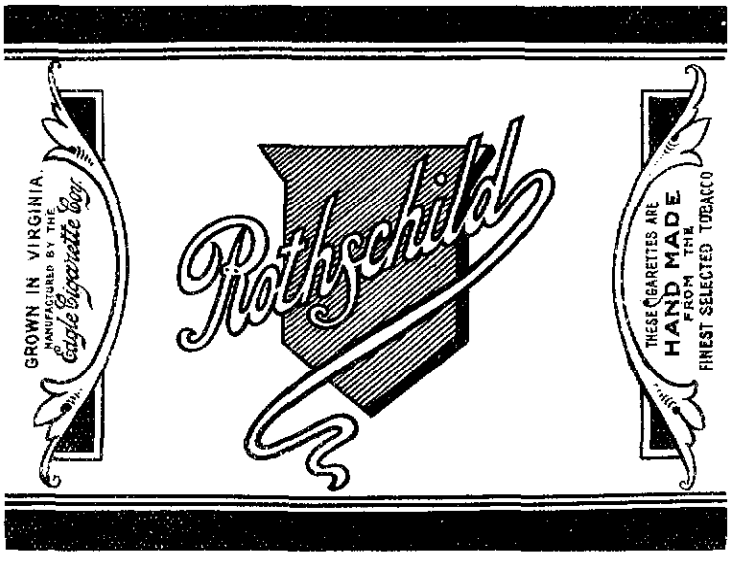
Applications for Registration of Trade Marks.

Patent Office, Wellington, 24th June, 1903.

APPLICATIONS for registration of the following trade marks have been received. Notice of opposition to the registration of any of these applications may be lodged at this office within two months of the date of this *Gazette*. Such notice must be in duplicate, and accompanied by a fee of £1.

No. of application: 4142.
Date: 19th March, 1903.

TRADE MARK.



The essential particular of this trade mark is the distinctive label; and any right to the exclusive use of the added matter, except the applicant's trading name, is disclaimed.

NAME.

JAMES JEFFS, trading as "The Eagle Cigarette Company," of Great King Street, Dunedin, New Zealand, Manufacturers.

No. of class: 45.
Description of goods: Cigarettes.

No. of application: 4217.
Date: 2nd June, 1903.

TRADE MARK.

NAME.

THE DIXSON TOBACCO COMPANY, LIMITED, of 45, Park Street, Sydney, New South Wales, and elsewhere.

No. of class: 45.
Description of goods: Tobacco, cigars, cigarettes, and snuff.

No. of application: 4218.
Date: 2nd June, 1903.

TRADE MARK.

NAME.

THE DIXSON TOBACCO COMPANY, LIMITED, of 45, Park Street, Sydney, New South Wales, *and elsewhere*.

No. of class: 45.
Description of goods: Tobacco, cigars, cigarettes, and snuff.

No. of application: 4226.
Date: 6th June, 1903.

TRADE MARK.

FEDERAL SPERM. Federal Sperm FEDERAL SPERM.

NAME.

THE NEW ZEALAND CANDLE COMPANY, LIMITED, of Kaiwarra, Wellington, New Zealand.

No. of class: 47.
Description of goods: Candles.

No. of application: 4229.
Date: 8th June, 1903.

TRADE MARK.

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

NAME.

FREDERICK STODDARD AND CO., Butchers, of 53, North Street, St. Albans, Christchurch, in the Colony of New Zealand.

No. of class: 48.
Description of goods: Shaving-powder.

No. of application: 4232.
Date: 10th June, 1903.

TRADE MARK.

The word

LULLABY.

NAME.

EMILY MOWATT FINER, of Ponsonby, Auckland, New Zealand.

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

No. of application: 4234.
Date: 10th June, 1903.

TRADE MARK.

NAME.

LOUIS ABRAHAMS, trading as "Sniders and Abrahams," at Drewery Place, Lonsdale Street, Melbourne, in the State of Victoria, Cigar, Cigarette, and Tobacco Manufacturers.

No. of class: 45.
Description of goods: Cigars, cigarettes, and manufactured tobacco.

No. of application: 4235.
Date: 10th June, 1903.

TRADE MARK.

The words

OLD TIMES.

NAME.

THE NEW YORK AND BROOKLYN TOBACCO COMPANY, LIMITED, a company registered according to the laws of the State of New South Wales, in the Commonwealth of Australia, and having its office at No. 90, Pitt Street, Sydney, in the said State, Tobacco manufacturer.

No. of class: 45.
Description of goods: Tobacco, whether manufactured or unmanufactured (including cigars and cigarettes), and cognate substances and goods.

No. of application: 4237.
Date: 11th June, 1903.

TRADE MARK.

The words

PRINCIPE DE GALES.

NAME.

BRITISH-AMERICAN TOBACCO COMPANY, LIMITED, of Cecil Chambers, 86, Strand, London, W.C., England, Tobacco-manufacturers.

No. of class: 45.
Description of goods: Tobacco, whether manufactured or unmanufactured.

No. of application: 4238.
Date: 11th June, 1903.

TRADE MARK.

The word

CREMO.

NAME.

BRITISH-AMERICAN TOBACCO COMPANY, LIMITED, of Cecil Chambers, 86, Strand, London, W.C., England, Tobacco-manufacturers.

No. of class: 45.

Description of goods: Tobacco, whether manufactured or unmanufactured.

No. of application: 4239.
Date: 11th June, 1903.

TRADE MARK.

The word

CUBANOLA.

NAME.

BRITISH-AMERICAN TOBACCO COMPANY, LIMITED, of Cecil Chambers, 86, Strand, London, W.C., England, Tobacco-manufacturers.

No. of class: 45.

Description of goods: Tobacco, whether manufactured or unmanufactured.

No. of application: 4241.
Date: 12th June, 1903.

TRADE MARK.

The words

ROB ROY.

NAME.

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

No. of class: 38.

Description of goods: Hosiery and underwear, and other ready-made clothing.

No. of application: 4242.
Date: 12th June, 1903.

TRADE MARK.

The words

GOLDEN FLEECE.

NAME.

JOSEPH NATHAN AND COMPANY, LIMITED, Merchants, of Wellington, New Zealand.

No. of class: 42.

Description of goods: Butter.

No. of application: 4243.
Date: 12th June, 1903.

TRADE MARK.

The word

Presto

NAME.

THE H-O (HORNBY'S OATMEAL) COMPANY, a corporation organized and existing under the laws of the State of New York, and having an office for the transaction of its business in the City of Buffalo, County of Erie, in said State, and also in the City of New York, in said State, United States of America.

No. of class: 42.

Description of goods: Cereals and food products generally, including flour.

No. of application: 4244.
Date: 16th June, 1903.

TRADE MARK.

The word

ECLIPSE.

NAME.

BEATTIE, LANG, AND CO., of 7, Featherston Street, Wellington, New Zealand, Produce-exporters.

No. of class: 42.

Description of goods: Salt.

No. of application: 4250.
Date: 19th June, 1903.

TRADE MARK.

The word

BONATRIM.

NAME.

KEMPTHORNE, PROSSER, AND CO.'S NEW ZEALAND DRUG COMPANY, LIMITED, of Dunedin, Christchurch, Wellington, and Auckland.

No. of class: 3.

Description of goods: Patent and proprietary medicines, manufactured by our company, for human use, and in particular connection with two medicated articles called "Townend's Celebrated Cinnamon Cure," and "Spencer Vincent's Great Benjamin Gum."

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 11th to the 24th June, 1903, inclusive:—

No. 3245; 4140.—Chappell, Allen, and Co., Limited. Class 38. (*Gazette* No. 25, of the 2nd April, 1903.)

No. 3246; 4141.—Sandow's Own Combined Developer. Class 49. (*Gazette* No. 25, of the 2nd April, 1903.)

No. 3247; 4144.—F. R. Sims. Class 2. (*Gazette* No. 25, of the 2nd April, 1903.)

No. 3248; 4143.—E. C. Batkin. Class 45. (*Gazette* No. 25, of the 2nd April, 1903.)

No. 3249; 4088.—A. Gardner. Class 42. (*Gazette* No. 18, of the 5th March, 1903.)

No. 3250; 4148.—W. E. Leverett. Class 50. (*Gazette* No. 25, of the 2nd April, 1903.)

No. 3251; 4158.—C. Cammell and Co., Limited. Class 5. (*Gazette* No. 29, of the 16th April, 1903.)

F. WALDEGRAVE,
Registrar.

Subsequent Proprietors of Trade Mark registered.

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

NO. 2914/2310.—The Nugget Polish Company, Limited, of Vauxhall Street, London, England, Manufacturers. [Lane and Fitte.] 11th June, 1903.

F. WALDEGRAVE,
Registrar.

Trade Mark Renewal Fees paid.

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

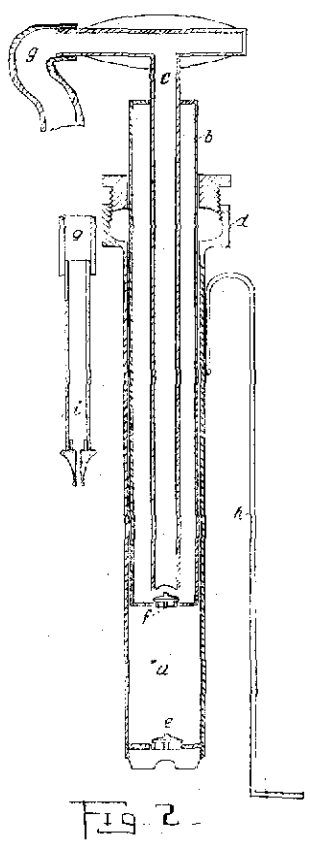
No. 88/2657.—Union Bag and Paper Company, of Chicago, United States of America. (Three trade marks.) 10th June, 1903.

F. WALDEGRAVE,
Registrar.

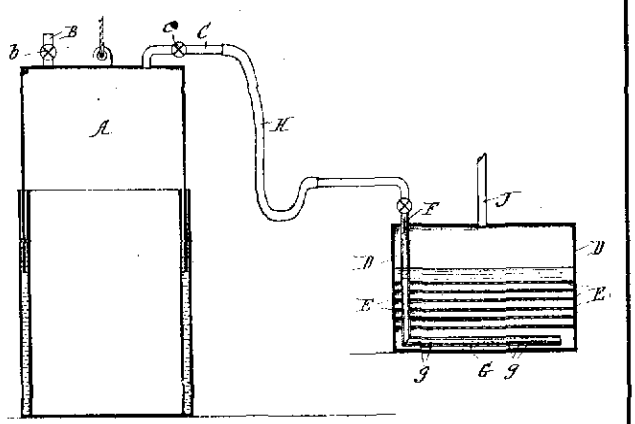
By Authority: JOHN MACKAY, Government Printer, Wellington.

ILLUSTRATIONS OF INVENTIONS.

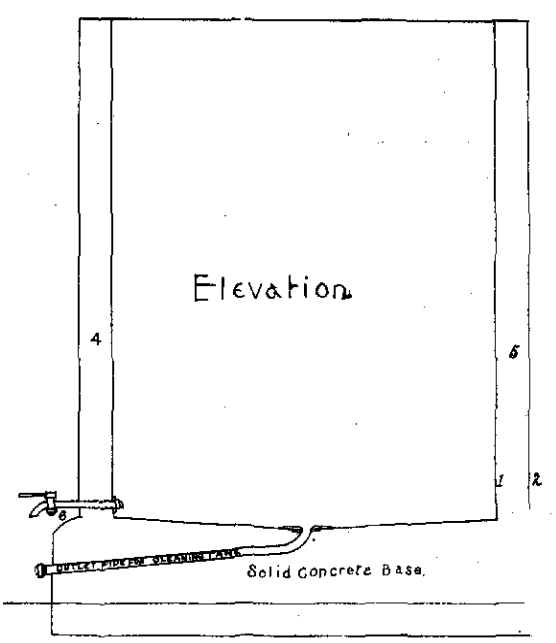
[These illustrations refer to the complete specifications accepted, and advertised in this *Gazette*.]



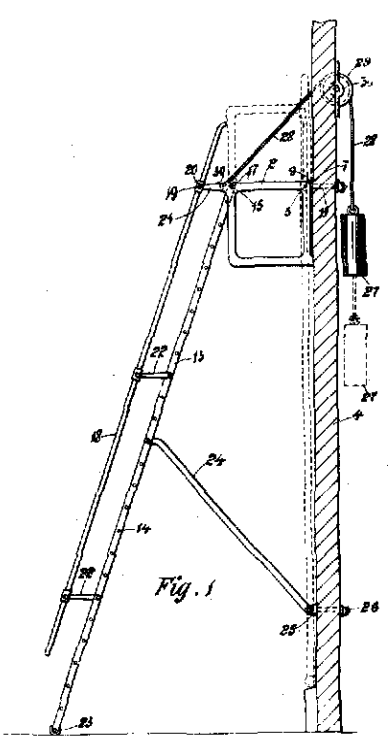
15242
Boyens. Force-pump.



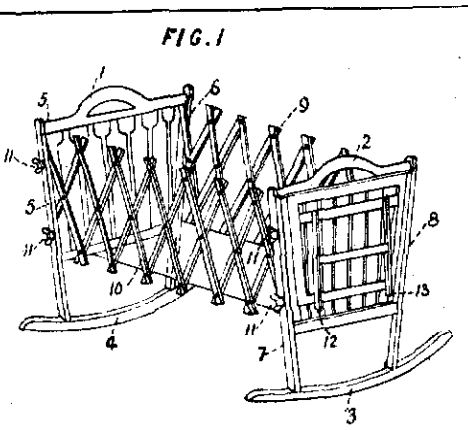
15260
Walters. Production of Hydrocarbon Gas.



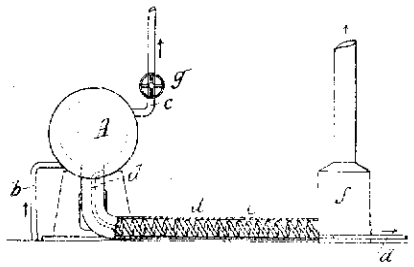
15301
Sigley. Concrete Tank.



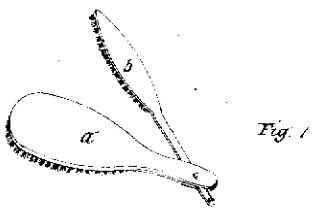
15261
Keon and Miller. Fire-escape.



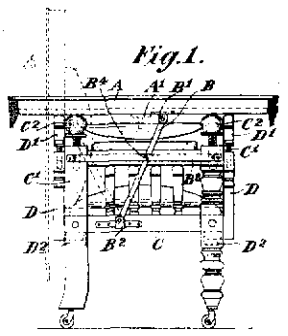
15304
Armour. Collapsible Cradle, &c.



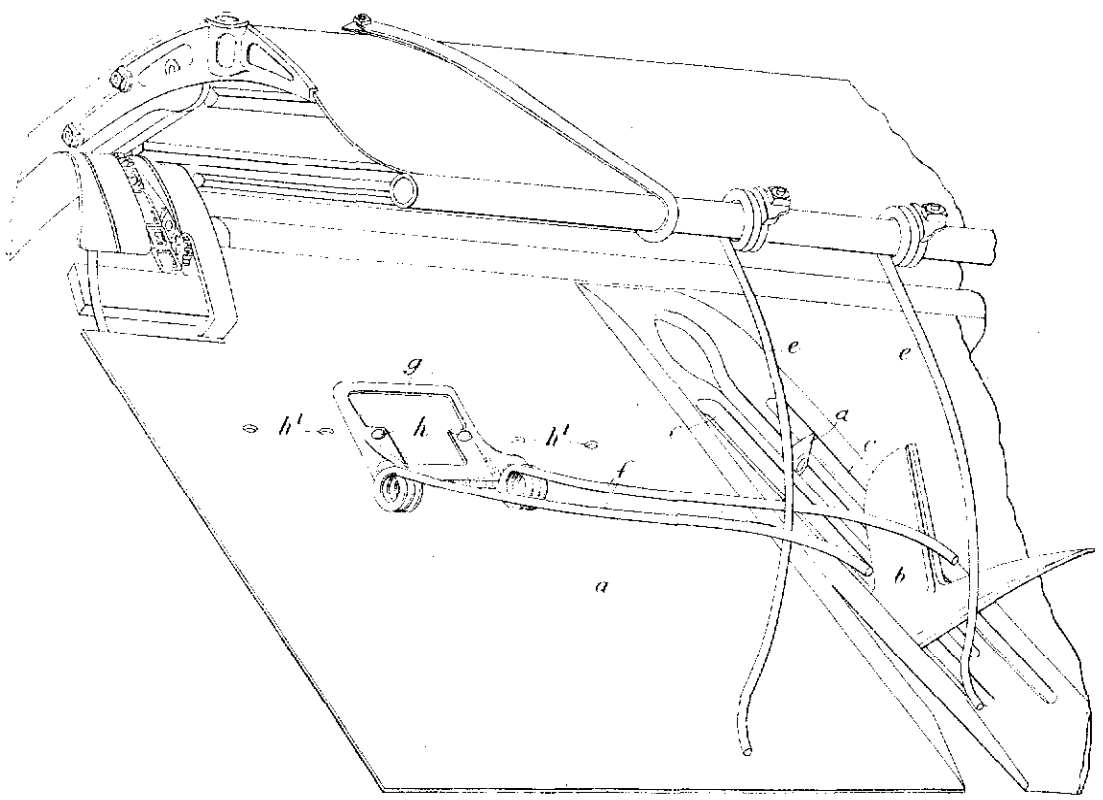
15339
Topliss and Andrew. Exhaust-utilising Apparatus.



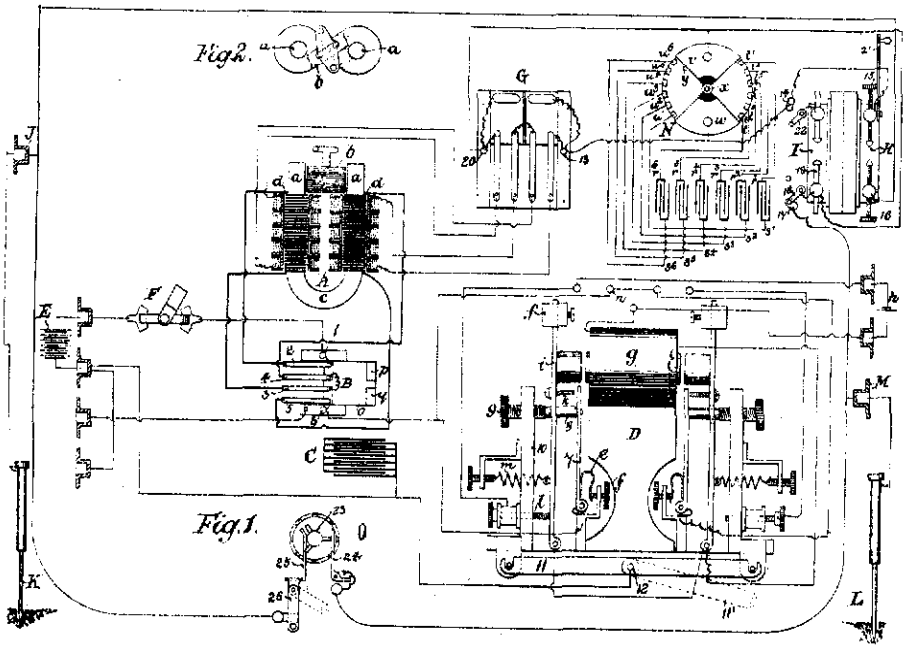
15365
Lashlie. Hat and Clothes Brush.



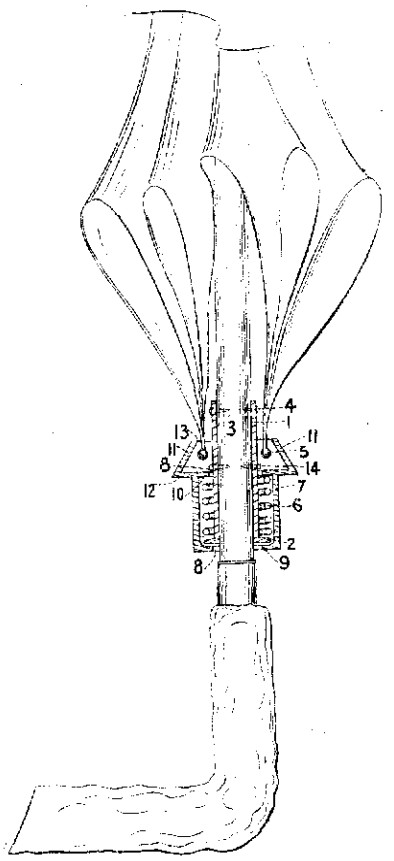
15373
Alcock. Settee and Billiard-table.



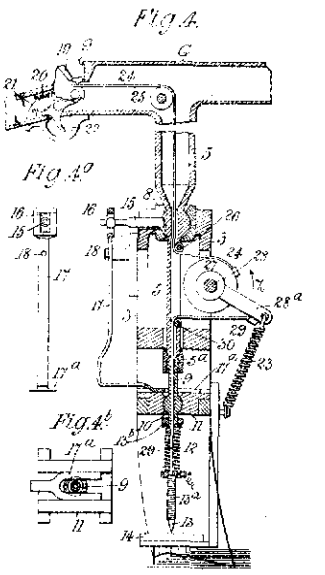
15600
Trolley. Harvester.



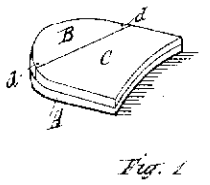
16076
Hughes. Mineral-detecting Apparatus.
Electrical Ore-finding Company. (Daft and Williams.)



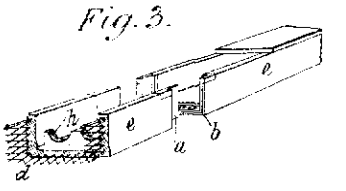
15989
Coventry. Umbrella-tip Retainer.



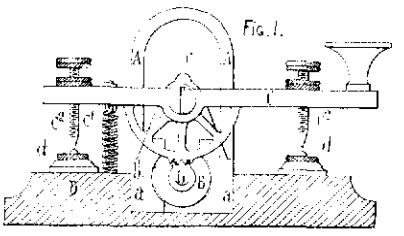
16332
Moul. Target Apparatus.



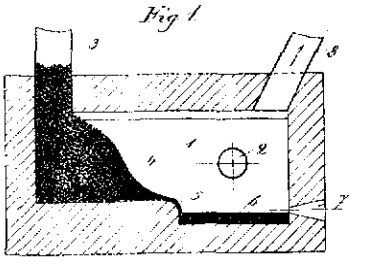
16136
Heighton. Boot-heel Attachment.



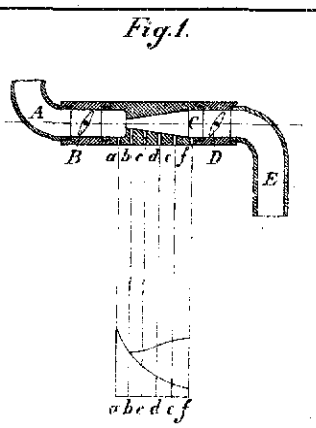
16134
Devonshire. Electric Conduit.



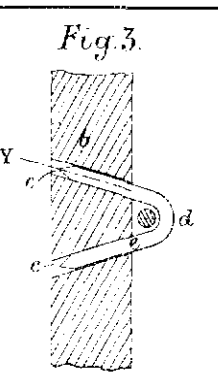
16414
Falcone. Electric-telegraph Apparatus.



16416
De Laval. Distillation of Zinc.

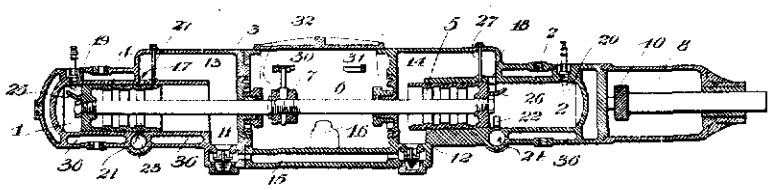


16415
Lindmark. Turbine.



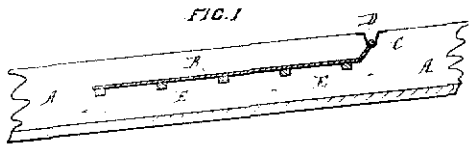
16456
McHardy. Fencing Standard and Dropper.

Fig 1



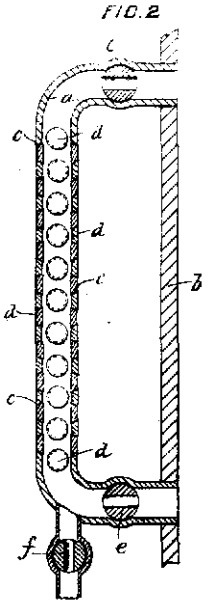
16400
Phillips. Piston-engine. (Duryea and White.)

FIG. 1



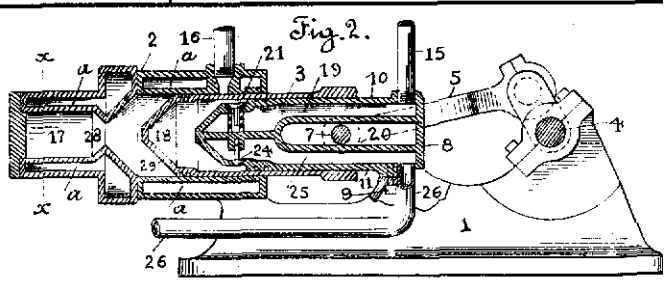
16433
McKenzie. Gold-saving Riffle.

FIG. 2



16425
Gibbons. Water-gauge for Boiler.

Fig. 2.



16417
Hoyt. Gas-engine.

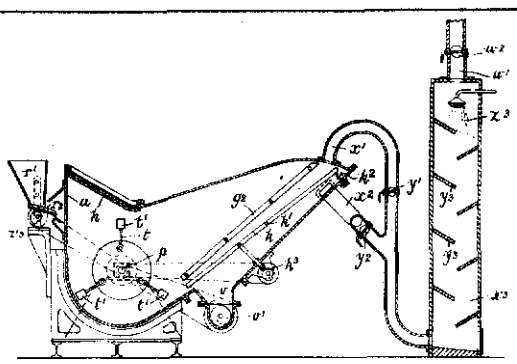
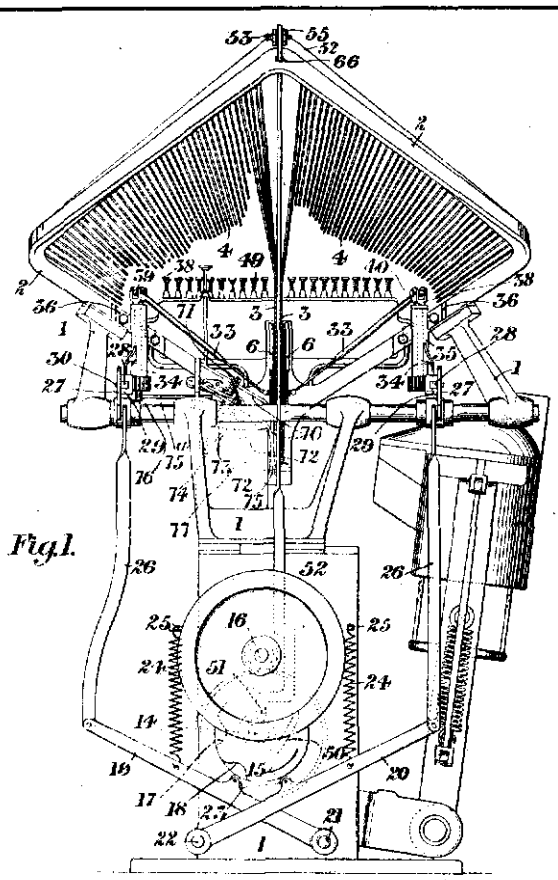


FIG. 7.

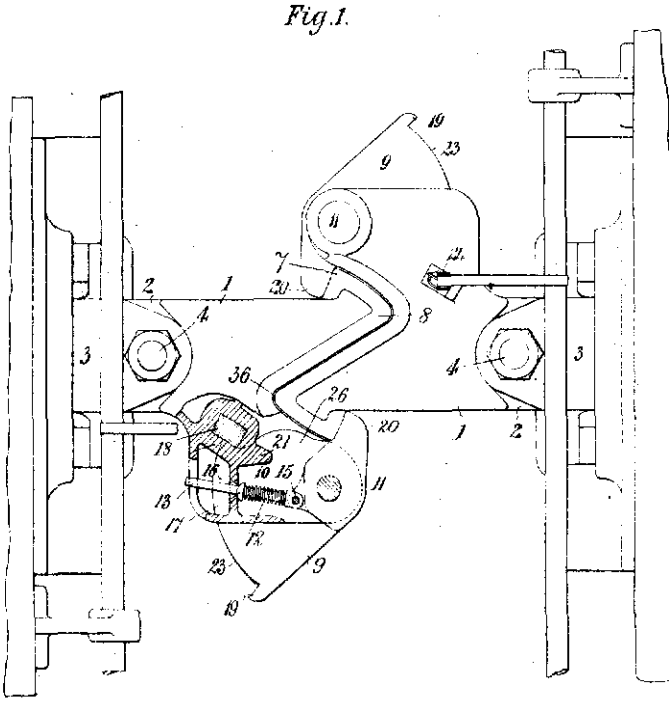
16424
Oliver Mill Company, Limited. Disintegrating-machine.
(Thame and Smith.)

Fig 1.



16381
Holbourns and Longhurst. Linotype Machine.

Fig. 1.



16428
The Westinghouse Brake Company, Limited.
Railway Coupling. (Cloud.)