

SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, MARCH 22, 1906.

Published by Authority.

WELLINGTON, THURSDAY, MARCH 22, 1906.

CONTENTS.

	Page
Notice	869
Patent Agent registered	869
Official Notices	869
Applications for Letters Patent filed	870
Complete Specifications accepted	871
Provisional Specifications accepted	876
Letters Patent sealed	876
Letters Patent on which Fees have been paid	876
Subsequent Proprietors of Letters Patent registered	877
Applications for Letters Patent abandoned	877
Applications for Letters Patent void	877
Applications for Letters Patent lapsed	877
Application for Letters Patent withdrawn	877
Letters Patent void	877
Applications for Registration of Trade Marks	877
Trade Marks registered	881
Trade Mark Renewal Fees paid	881
Subsequent Proprietor of Trade Mark registered	881
Trade Marks removed from the Register	881
Notice <i>re</i> Advertisements	881
Illustrations of Inventions.	

Notice.

CLASSIFIED abridgments of inventions patented in the United Kingdom from 1900 to 1904 are now available for inspection in the library attached to this office.

Patent Agent registered.

Patent Office,
Wellington, 21st March, 1906.

IT is hereby notified that

WILLIAM PINCHES,

of Wanganui, in the Colony of New Zealand, architect, has been registered as a Patent Agent.

▲

Official Notices.

THE following publications relating to Patents for inventions, &c., are open to inspection in the colony:—

WELLINGTON.—PATENT OFFICE LIBRARY.

United Kingdom.

The full text of the specifications and complete drawings of inventions patented from the year 1617 up to the 30th December, 1905.

Classified abridgments of inventions from 1855 to 1904. Illustrated Official Journal, containing lists of recent applications, abridgments of inventions for which patents have been lately granted, patents void, &c., to January, 1906.

Index of Applicants.

Subject-matter Index.

Commissioner of Patent Journal, &c.(^a).

Trade Marks Journal to January, 1906.

Canada.

Patent Office Record (containing illustrated abridgments of inventions, &c.) to September, 1905.

Australia.

The Official Journal of Patents of the Australian Commonwealth (containing lists of applications for letters patent, abridgments of complete specifications accepted, &c.).

The Gazettes of the various States (containing lists of applications for registration of trade marks, &c.).

Specifications, drawings, abridgments, and indexes of Victoria, New South Wales, Queensland, and South Australia(^b).

United States.

The Official Gazette of the United States Patent Office (containing illustrated abridgments of specifications, &c.) to February, 1906.

Mexico.

The Official Gazette of the Patent and Trade Mark Office.

General.

La Propriété Industrielle (the official organ of the International Bureau of the Union for the Protection of Industrial Property).

Patent laws of the world.

Patent and Trade Mark Review.

Text-books and handbooks on patents and trade marks.

AUCKLAND.—PUBLIC LIBRARY.

United Kingdom.

Classified abridgments of inventions from 1855 to 1900.

Illustrated Official Journal from 1897 to date.

Canada.

Patent Office Record (containing illustrated abridgments of inventions, &c.) from 1897 to date.

Australia.

The Official Journal of Patents from 1905 to date.

United States.

The Official Gazette of the United States Patent Office (containing illustrated abridgments of specifications, &c.) from 1885 to 1887 and 1890 to 1895.

CHRISTCHURCH.—PUBLIC LIBRARY.

United Kingdom.

Classified abridgments of inventions from 1855 to 1900.

Illustrated Official Journal from October, 1905, to date.

Canada.

Patent Office Record (containing illustrated abridgments of inventions, &c.), from 1897 to date.

Australia.

The Official Journal of Patents from 1905 to date.

BOOKS AND DOCUMENTS OPEN TO INSPECTION.

The following documents and books are open to public inspection at the Patent Office:—

Patents.

(Fee for each search or inspection, not exceeding one hour, 1s.)

1. The files relating to all applications for letters patent in respect of which complete specifications have been accepted.
2. Classified copies of specifications and drawings, with index and key^(a).
3. Register of Application for Letters Patent.
4. Register of Patents.
5. Register of Subsequent Proprietors of Letters Patent^(d).
6. Index of Patentees^(e).
7. Index of Proprietors of Letters Patent granted prior to 1890^(f).
8. Index of Specifications^(g).

Designs.

(Search fee, 1s. each quarter of an hour.)

1. Register of Designs, with Index of Names of Proprietors.
2. Classified Representations of Designs in respect of which Copyright has expired.
3. Index of Designs.

Trade Marks.

(Search fee, 1s. each quarter of an hour.)

1. The files relating to all applications for registration of trade marks.
2. Register of Applications for Registration of Trade Marks.
3. Register of Trade Marks.
4. Index of Applicants for Registration of Trade Marks^(h).
5. Index of Trade Marks.
6. Classified Representations of Trade Marks, with indexes.

Miscellaneous.

Register of Patent Agents.

FORMS.

The following forms, &c., may be had on application:—

- Application for letters patent.
- Provisional specification.
- Complete specification and copy thereof.
- Application for registration of design.
- Application for registration of trade mark.
- Applications for extension of time.
- Requests by subsequent proprietor to enter name on Register of Patents and Trade Marks.
- Printed sheets of information as to fees and procedure to obtain letters patent and to register a trade mark⁽ⁱ⁾.
- Pamphlet containing Act and Regulations (price 1s.).

OFFICIAL PUBLICATIONS.

The following publications may be obtained from the Government Printer, Wellington:—

Printed specifications to the end of the year 1879.

Annual lists of letters patent and letters of registration applied for, and particulars of applications lapsed, and patents lapsed, from 1880 to 1888 inclusive.

Annual reports of the Registrar, containing alphabetical lists of applicants for letters patent and of inventions patented from 1889 to 1904 inclusive.

The Patents Supplement to *Gazette* (containing notifications, applications for letters patent, abridged descriptions and drawings of inventions, &c.), published fortnightly.

LOCAL PATENT OFFICES.

Local patent offices for the reception of applications for letters patent without extra payment have been appointed at the following places: Ashburton, Auckland, Blenheim, Christchurch, Dunedin, Gisborne, Greymouth, Hokitika, Invercargill, Napier, Nelson, New Plymouth, Oamaru, Queenstown, Thames, Timaru, Wanganui, Westport. These are situated in the Supreme Court Buildings and S.M. Court Houses.

PATENT AGENTS.

A list of registered patent agents may be obtained on application.

- (a) Discontinued.
 (b) In arrear. Not now being printed.
 (c) Key is in card index.
 (d) This Register contains only names of subsequent proprietors of letters patent granted prior to 1st January, 1890; since that date they appear in Register of Patents.
 (e) Includes all names of applicants, &c., and consists of four volumes to 4th November, 1903, and card index since that date. A separate card index is kept for current quarter.
 (f) The names of proprietors of subsequent letters patent appear in the Index of Patentees.
 (g) Contains classified abridgments of specifications from 1861, with extracts from drawings from July, 1904.
 (h) Names of applicants for registration and proprietors of trade marks are indexed at the beginning of the Registers up to 31st December, 1889; in separate volume up to 5th September, 1904; and since the latter date are in card index.
 (i) May also be obtained at any local Patent Office or money-order office.

Applications for Letters Patent filed.

LIST of applications for Letters Patent filed. (Where a complete specification accompanies an application an asterisk is suffixed; in all other cases a provisional specification has been lodged. In cases where the applicant is not the inventor the name of the latter appears in italics after the title.)

- No. 20817.—8th March.—C. Butters, Berkeley, U.S.A.
Filtering-apparatus.*
- No. 20818.—8th March.—S. E. Evans, Balaclava, Vic.
Incandescent burner.
- No. 20819.—8th March.—G. Ridgway, Kalgoorlie, W.A.
Filter.
- No. 20820.—8th March.—M. L. Severy, Arlington, U.S.A.,
and G. B. Sinclair, Winthrop, U.S.A.
Musical instrument.
- No. 20821.—8th March.—G. F. Hutchinson, Kapuni, N.Z.
Acetylene-generator.
- No. 20822.—8th March.—J. McGuire, Melbourne, Vic.
Cooking-oven.*
- No. 20823.—8th March.—International Steam Pump Company,
New York, U.S.A.
Turbine pump.* (*C. H. Jaeger.*)
- No. 20824.—6th March.—A. G. Davies, Stoneburn, N.Z.
Unloading coal.
- No. 20825.—7th March.—E. E. Collins, Wendonside, N.Z.
Hot well.
- No. 20826.—7th March.—R. B. Forsyth, Christchurch, N.Z.
Removing ink.*
- No. 20827.—9th March.—M. Squire, Fairview, N.Z.
Fireproof house. (*G. Lilienthal.*)
- No. 20828.—9th March.—E. W. and G. H. Buckeridge,
Auckland, N.Z.
Electrical conductor.
- No. 20829.—8th March.—F. A. G. Cotterell, Auckland,
N.Z.
Sterilising meat.
- No. 20830.—8th March.—A. Marr, Invercargill.
Curtain-pole support.
- No. 20831.—8th March.—R. Cockburn, Roxburgh, N.Z.
Detection of undue water.*
- No. 20832.—9th March.—J. Craig, Christchurch, N.Z.
Advertising.
- No. 20833.—10th March.—R. Gilmour, Auckland, N.Z.
Hose-coupling.

- No. 20834.—9th March.—R. Dunne, Dunedin, N.Z.
Shaving-appliance.
- No. 20835.—10th March.—J. Bonner, Port Chalmers, N.Z.
Can for boiling water.
- No. 20836.—13th March.—H. T. Twiss, Khandallah, N.Z.
Milk-can.
- No. 20837.—10th March.—Aktiebolaget Separator, Stockholm, Sweden.
Milking-machine.* (*F. Ljungstrom.*)
- No. 20838.—10th March.—C. Bergner, Hamburg, Germany.
Cream-separator supply-tube.*
- No. 20839.—10th March.—F. Gossler, Melbourne, Vic.
Linotype machine.
- No. 20840.—13th March.—A. M. Anderson, Invercargill, N.Z.
Brake-hose.
- No. 20841.—12th March.—D. Bower, Dunedin, N.Z.
Milk-strainer.
- No. 20842.—13th March.—F. G. Semb, Christchurch, N.Z.
Billiard-recorder.
- No. 20843.—14th March.—A. E. Woodhouse, Kew, Vic.
Electric-conductor conduit.
- No. 20844.—14th March.—R. K. Catt, Abbotsford, Vic.
Mask.*
- No. 20845.—14th March.—J. E. L. Gardner, Palmerston North, N.Z.
Heating plates, &c.*
- No. 20846.—14th March.—G. Ullrich, Broken Hill, N.S.W.
Classifying ores.
- No. 20847.—14th March.—G. Ullrich, Broken Hill, N.S.W.
Magnetic separator.
- No. 20848.—14th March.—A. A. Gibbs, Ringarooma, Tasmania.
Curtain-suspender.
- No. 20849.—14th March.—H. C. Becker, Christchurch, N.Z.
Extracting fat and wool.
- No. 20850.—14th March.—H. M. Crimp, Strzlecki, Vic.
Egg-beater.
- No. 20851.—14th March.—K. de L. Cudmore, Saltern, Q.
Motor for shearing.*
- No. 20852.—14th March.—J. Delehanty, Kensington Park, S.A.
Rotary engine.
- No. 20853.—14th March.—A. E. Thomas, Coolgardie, W.A.
Rock-drill. (*J. Arthur.*)
- No. 20854.—14th March.—A. Gillies, Geelong, Vic.
Teat-cup.
- No. 20855.—14th March.—W. H. Thomas, Sydney, N.S.W.
Linotype machine.* (*W. H. Scharf.*)
- No. 20856.—14th March.—J. Nicholson, Paddington, N.S.W.
Separating gold.
- No. 20857.—14th March.—H. Ledgard, Hawera, N.Z.
Horse-shoe.*
- No. 20858.—12th March.—A. Williams, Auckland, N.Z.
Trolley-pole adjuster.
- No. 20859.—12th March.—A. Williams, Auckland, N.Z.
Tin-opener.
- No. 20860.—15th March.—J. O. Galbally, Wellington, N.Z.
Window-sash adjuster.
- No. 20861.—15th March.—R. E. Brett, Waimauku, N.Z.
Astronomical instrument.
- No. 20862.—15th March.—O. K. Carlson, Clydevale, N.Z.
Water-tap.
- No. 20863.—15th March.—A. Curwood, Waipori, N.Z.
Clothes-peg.
- No. 20864.—14th March.—E. W. Ackland, Dunedin, N.Z.
Feet for chair or table legs.
- No. 20865.—15th March.—G. A. Watson, Maitauro, N.Z.
Milk-strainer fastening.
- No. 20866.—16th March.—H. E. McDonald, Wellington, N.Z.
Spanner.
- No. 20867.—16th March.—J. H. Wagenhorst, Pittsburg, U.S.A.
Turbine-vanes.* (Date applied for under section 106, 18th March, 1905.)
- No. 20868.—16th March.—E. E. Arnold, Wilkinsburg, U.S.A.
Turbine-vanes.* (Date applied for under section 106, 18th March, 1905.)
- No. 20869.—16th March.—E. E. Arnold, Wilkinsburg, U.S.A.
Turbine-vanes.* (Date applied for under section 106, 22nd March, 1905.)
- No. 20870.—16th March.—J. L. Heckler, Mangamahoe, N.Z.
Kicking-strap.*
- No. 20871.—14th March.—B. F. Cranwell, Henderson, and C. F. F. Allan and J. H. Trudgeon, Auckland, N.Z.
Broad caster.
- No. 20872.—16th March.—J. Wilson, Christchurch, N.Z.
Toothache-cure. (*G. T. Shilton.*)
- No. 20873.—19th March.—E. H. Waddington, Masterton, N.Z.
Cinder-sifter.
- No. 20874.—19th March.—D. Hartwell, Wellington, N.Z.
Flax-dressing.
- No. 20875.—20th March.—C. J. Tuck, Dannevirke, N.Z.
Shackle or link.
- No. 20876.—20th March.—C. J. Tuck, Dannevirke, N.Z.
Cart-saddle pocket.
- No. 20877.—20th March.—J. G. Dawson, Woodbury, N.Z.
Egg-carrier.
- No. 20878.—21st March.—W. R. Comings, Wharnclyff, England.
Cardboard boxes.*
- No. 20879.—21st March.—Rheinisch-Nassauische Bergwerks and Hiitten-Actien-Gesellschaft, Stolberg, Germany.
Ore-dressing.* (*A. Demuth.*)
- No. 20880.—21st March.—Marconi's Wireless Telegraph Company Limited, London.
Wireless telegraphy.* (*G. Marconi.*)
- No. 20881.—21st March.—C. E. Sweet, Pittsburg, U.S.A.
Turbine-vanes.* (Date applied for under section 106, 20th April, 1905.)
- No. 20882.—21st March.—J. Fola, Valentia, Spain.
Propeller.*
- No. 20883.—21st March.—Brunswick Refrigerating Company, New Brunswick, U.S.A.
Pump.* (*R. Whitaker.*)
- No. 20884.—21st March.—Brunswick Refrigerating Company, New Brunswick, U.S.A.
Valve.* (*R. Whitaker.*)
- No. 20885.—21st March.—Brunswick Refrigerating Company, New Brunswick, U.S.A.
Refrigerating-apparatus.* (*R. Whitaker.*)
- No. 20886.—21st March.—C. Kendrick, Silverhope, N.Z.
Saucepan-lid.*
- No. 20887.—21st March.—M. Woods, Carlton, Vic., and T. J. Gilbert, Brunswick, Vic.
Dressing rails.
- No. 20888.—21st March.—D. Morgan, Ararat, Vic.
Gold-saving.
- No. 20889.—21st March.—A. A. Holdsworth, Hawksburn, Vic.
Tent.
- No. 20890.—21st March.—M. Teasdale, Thames, N.Z.
Lantern.*
- No. 20891.—21st March.—W. D. Martin, Ashfield, N.S.W., and N. M. Thomson, Sydney, N.S.W.
Water-heater.*

Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 21st March, 1906.

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. 19183.—9th March, 1905.—GEORGE MAKER NELSON, of Smith Street, Warragul, Victoria, Australia, Agent, and RICHARD CLEGHORN, of Seymour Road, Elsternwick, Victoria, Australia, Traveller. Improvements in disc and other ploughs.*

Claims.—(1.) In disc and other ploughs, a bracketed beam or plough-frame as A, furnished with bearings for semi-revolvable posts as A² carrying discs, and for a central land-wheel post as C, combined with arms or levers as A³, connecting-rods A⁴, quadrant-lever A⁵, and the draught-bar as D, substantially as described and shown. (2.) In disc and other ploughs, a bracketed beam or plough-frame as A, furnished with bearings for semi-revolvable posts as A² and for a central land-wheel post as C, combined with the arms or levers as A³, connecting-rods A⁴, rods A⁶, bell-cranks A⁷, rods a⁸, furrow-wheel posts B, and the sliding-bars B², and with the quadrant-lever A⁵, and draught-bar D, substantially as described and shown. (3.) In disc and other ploughs,

mounting the discs on semi-revolvable posts supported by the plough-beam frame, and connecting said posts by a system of levers with a centrally pivoted draw-bar so that the action of giving the draw-bar an end-to-end semicircular travel about the plough-frame reverses the cutting position of discs, substantially as described. (4.) In disc and other ploughs, mounting the furrow-wheels at each end of frame on a transverse sliding-bar, and operating said bars by a system of levers actuated from draw-bar so that as the position of draw-bar is changed from one end to another so the transverse position of the plough-beam is changed to suit the direction to be ploughed, substantially as described.

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

No. 19367.—19th April, 1905.—HENRY BRABY, of 87 View Street, Annandale, near Sydney, New South Wales, Australia, Engineer. Improvements in burners for heating and illuminating purposes.*

Claims.—(1.) In burners for heating and illuminating purposes, the combination with a nozzle of spirally formed grooves or ways therein for passage of the gas, and a fan in front of said nozzle whereby an intimate mixture of the air and gas is effected, substantially as described. (2.) The improvements in burners for heating and illuminating purposes consisting of the combination and arrangement of the parts described and illustrated in the drawings.

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

No. 19493.—18th May, 1905.—GEORGE BRODERICK, of Temuka, New Zealand, Gardener. Improved means for rendering a pneumatic tire less liable to puncture.*

Claims.—(1.) For the purpose indicated, the general arrangement, construction, and combination of parts, substantially as described. (2.) For the purpose indicated, the use of a strip of cardboard or a layer or layers of stout brown paper in a wrapper of canvas between the cover of a pneumatic tire and the air-tube thereof, as specified. (3.) For the purpose indicated, the use of a strip or strips of cardboard or layers of stout brown paper in a wrapper of canvas in combination with a strip of celluloid arranged within the layers, the whole being enveloped in a rubber cover and applied to a pneumatic tire, substantially as described, and in the manner explained.

(Specification, 1s. 9d.)

No. 19534.—25th May, 1905.—ALEXANDER STORRIE, of Invercargill, Southland, New Zealand, Agricultural-Implement Maker. A rotary turnip-thinner.*

Claims.—(1.) A turnip-thinner consisting of a frame, spring-operated arms, hoes secured to the outer ends of the arms, a hub upon which the arms are mounted, a shaft for revolving the hub, a cam mounted freely on the shaft and having a track against which the inner ends of the arms are pressed, a gap in the disc, means for keeping the cam from revolving, and means for travelling the hoes over the ground, substantially as set forth. (2.) In a turnip-thinner constructed as specified in claim 1, the employment of a lever having a spring bolt for operating the cam, whereby the hoes will be prevented from cutting through the furrow, substantially as set forth. (3.) In a turnip-thinner, a plurality of hoes which are forced by a spring laterally through a furrow when in their lowest position, and are returned to the other side of the furrow by a cam having a sloping track, substantially as set forth. (4.) The combination and arrangement of parts comprising the improved turnip-thinner, substantially as and for the purposes set forth and illustrated.

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

No. 19559.—5th June, 1905.—VICTOR BERG, of Southbridge, New Zealand, Painter. An improved ventilator.*

Claims.—(1.) A ventilator of the kind indicated, consisting of a telescopic body, the outer ends of which are flanged and are provided with a wire-gauze covering, and for the purposes specified. (2.) A ventilator of the kind indicated, consisting of, in combination, a telescopic body with or without flanged ends, bolts in one part that mesh with nuts in the other part, and a vane or baffle-plate arranged within the ventilator, all substantially as described and as set forth. (3.) The general arrangement, construction, and combination of parts in my improved ventilator, all substantially as described and as illustrated.

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

No. 19580.—7th June, 1905.—THOMAS SUMMERS SKEATES, of Devonport, Auckland, New Zealand, Saddler. Improved motor-carriage leather tire-cover.*

[NOTE.—The title in this case has been altered.]

Claims.—(1.) An outer cover for pneumatic tires comprising a leather casing cemented to the ordinary rubber tire-cover, and a tread-band studded with rivets secured upon a leather strip fastened to the leather casing, substantially as specified and illustrated. (2.) An outer cover for pneumatic tires comprising a leather casing cemented to the ordinary rubber tire-cover, a strip of leather fixed permanently to the leather casing, and a second tread-band studded with rivets secured to a leather strip, the said strip being riveted or sewn together, substantially as specified and illustrated. (3.) An outer cover for pneumatic tires constructed, arranged, and operating substantially as specified and illustrated.

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

No. 19861.—10th August, 1905.—THE MONITOR SHIPPING CORPORATION, LIMITED, of St. Nicholas' Buildings, Newcastle-upon-Tyne, Northumberland, England (assignees of William Petersen, of Kenton Lodge, Gosforth, Newcastle-upon-Tyne aforesaid, Shipowner). Improvements in navigable vessels.

Claims.—(1.) A vessel characterized by the hull having a longitudinal recess, mainly below the waterline, but above the bilge, parallel throughout the greater portion of its extent with the centre line of the ship. (2.) In combination in a vessel substantially as described in claim 1, a rounded gunwale, an ordinary deck continuation of that gunwale, an upper deck above the ordinary deck connected with the ordinary deck by means of curved sides forming a superstructure considerably narrower than the hull, the walls of said superstructure forming a curve or series of angles of about 180 degrees so as to run tangentially or at an acute angle into the ordinary deck and into the upper deck, substantially as specified. (3.) In a sea-going vessel, forming the ship-plates with longitudinal corrugations, as described. (4.) In a vessel having straight sides, the combination of a broad bilge and a rounded gunwale formed of plates projecting outward beyond the ship's side.

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

No. 19979.—5th September, 1905.—FREDERICK GEORGE MCKIM, of 115 Finsbury Pavement, London, England, Mechanical Engineer. Improvements in or relating to pneumatic tires.

Claims.—(1.) A pneumatic tire comprising a number of independent air-chambers, each of which is formed or provided with a tread-piece and has an orifice at either end, the said air-chambers being placed within a recessed wheel-rim from the periphery of which the tread-pieces project, and the adjacent air-chambers being connected together so as to form a complete air-tube by means of double-coned nipples which engage the orifices in the air-chambers, substantially as described. (2.) The combination with a wheel rim, of a pneumatic tire comprising a series of independent air-chambers detachably connected together to form a continuous air-tube, and tread-pieces resting upon or integral with the said air-chambers and projecting peripherally from the wheel-rim, and of distance-pieces within the rim and between the contiguous air-chambers, substantially as described. (3.) Pneumatic tires for vehicle-wheels, constructed substantially as described, and illustrated in the various figures of the drawing.

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

No. 20115.—25th September, 1905.—ANDREW TAIT WALKER ALLAN, Miner, and WILLIAM McCULLOUGH, Journalist, both of Thames, New Zealand. Improved portable tables, plates, and slides for saving gold from crushed ores or sands.*

Claims.—(1.) The improved portable gold-saving machine substantially as described, and as illustrated on the drawings. (2.) In a gold-saving machine, the combination of the series of silvered copper plates or tables such as 6 with distributing-box with perforated bottom such as 8, substantially as described, and as illustrated on the drawings. (3.) In a gold-saving machine, the series of silvered copper plates in combination with the hinged or swinging silvered dash-plates such as 7, as and for the purposes as described, and as illustrated on the drawings.

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

No. 20627.—24th January, 1906.—RICHARD TROLLEY HUNTER, of Ivy Grove, Eaglescliffe, Durham, England, Gentleman. Improvements in methods of construction as applied to roofing and other structural purposes.

Claims.—(1.) In the construction of roofs, walls, and the like structural work, the combination with principals or main rafters consisting of sheet iron or rolled girders, of sheathing with scroll-shaped dependent extensions adapted to be threaded thereon, and panels or tiles interlocked therewith by returned edges, the whole forming when put together a reliable weather- and water-tight structural arrangement, substantially as and for the purpose described, and illustrated in Figs. 1 to 4A inclusive of the drawings. (2.) The use, in combination with sheathed principals or main rafters and panels or tiles interlocked therewith, of valley-plates furnished with returned flanges such as d^1 for the panels to hook on to, with or without a second flange or upset edging such as d^2 for preventing the penetration of water through the roof, substantially as described, and illustrated in Fig. 5 of the drawings. (3.) In combination with sheathed principals or rafters and overlapping panels interlocked therewith, the means for preventing stormwater penetrating between the laps, substantially as described, and illustrated in Figs. 6 and 7 of the drawings. (4.) The use, in combination with the general construction as indicated in the previous claims, of segmental corner-plates such as g clinched in position by cover-plates f , thereby affording additional protection to the structure at the intersection of the principals or rafters, substantially as described, and illustrated in Figs. 1, 8, and 9 of the drawings.

(Specification, 7s. ; drawings, 3s.)

No. 20629.—24th January, 1906.—WILLIAM HADLEY WOOD, of Lloyd Street, Petersburg, South Australia, Engineer. Improvements in railway brakes.

Claims.—(1.) The combination with one or more brake-shoes carried and operated by hangers, rods, rockshaft, and side-brake lever, of a cross-lever pivoted in a bracket at the end of the vehicle and attached at one end to said side-brake lever, substantially as described, and for the purpose set forth. (2.) The combination with one or more brake-shoes carried and operated by hangers, rods, rockshaft, and side-brake lever, of a jointed cross-lever pivoted in two brackets at the end of the vehicle and attached at one end to said side-brake lever, substantially as described, and for the purpose set forth. (3.) In brake gear for railway vehicles, a side hand-brake lever having a socket-piece or block adapted to engage the end of a sliding bar carried in brackets attached to the vehicle-body, substantially as described, and for the purpose set forth. (4.) In brake gear for railway vehicles, a sliding bar carried in fixed brackets and provided with means for operating the same in either direction, the means for moving in one direction comprising a pivoted weighted bell-crank and a collar on the bar, and the means for operating in the other direction comprising an arrangement of levers and connecting-rods, substantially as described. (5.) In brake gear for railway vehicles, the combination with a side-brake lever of a sliding bar carried in fixed brackets and adapted to engage a socket upon such lever, said sliding bar having the underface of its forward end bevelled, and being moved in one direction by a pivoted weighted bell-crank engaging a collar on the bar, and in the other by hand-levers and connections, substantially as described, and for the purpose set forth. (6.) In brake gear for railway vehicles, the combination with a sliding bar of four levers, one on each corner of the vehicle, such levers being pivoted to the vehicle-frame and connected by rods either directly or through a bell-crank lever to the sliding bar, substantially as described, and for the purpose set forth. (7.) In brake gear for railway vehicles, the combination with a sliding bar of a lever pivoted to the vehicle-frame and connected by a rockable plate also pivoted to the vehicle-frame, and by a rod to the sliding bar, substantially as described, and for the purpose set forth. (8.) In brake gear for railway vehicles, the combination with a brake lever of a vertical bar attached thereto and having a handle upon its upper end whereby the brake-block pressure can be increased or decreased, substantially as described. (9.) In brake gear for railway vehicles, the combination with a hand-lever of a vertical bar pivoted thereto having its upper portion grooved or corrugated, and passing through a bracket or guide with correspondingly grooved or corrugated adjacent face, against which it may be pressed by a wedge operated by a lever at either side of the vehicle, substantially as described, and for the purpose set forth. (10.) The means for locking a brake lever in any desired position, or for releasing the same from either side of a vehicle, comprising a vertical bar pivoted to the lever and having its upper portion grooved or corrugated, a bracket or guide

for the upper portion of such bar having its adjacent face correspondingly grooved or corrugated, and a wedge behind such bar connected to levers at either side of the vehicle, substantially as described.

(Specification, 7s. ; drawings, 4s.)

No. 20638.—22nd January, 1906.—HENRY ARTHUR GODDARD, of Ada Street, Concord, near Sydney, New South Wales, Australia, Contractor. An improved mode of building in concrete, and apparatus therefor.

Extract from Specification.—This invention relates to an improved mode of building hollow walls of concrete, whereby the wall-shell shall be constructed of but $1\frac{1}{2}$ in. and upwards thickness of concrete, with an intermediate space between the two faces of the walls, such space being formed by means of collapsible frames or boxes, initially placed in position, the concrete shell being cast around the collapsible core. The external frames or moulds may be made of any suitable contour, so that joist supports or sills and mouldings of different kinds may be constructed at the same time that the wall is being built. Wood insertions, adapted to carry picture-rods or to afford a hold for wooden panelling and suchlike ornamentation, may also be introduced into the wall during the period of construction.

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

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

No. 20644.—25th January, 1906.—JOHN GILL, of Beechwood Mains, Murrayfield, Edinburgh, Scotland, Gentleman. Improved means and apparatus for compressing air or other elastic fluid for the production of motive power and other purposes.

Claims.—(1.) Means and apparatus for compressing air or other elastic fluid, which consist of two pipes connected together at the top, and to an air-receiver at the bottom, in such a manner that water or other incompressible liquid may be circulated continuously through them, carrying air down the downward pipe, delivering the said air in a compressed condition into the air-receiver, and then passing on up the upward pipe to continue the circulation, and means for effecting the circulation of the water or other liquid, and for introducing the air to be compressed into the circuit at the upper end of the pipes, substantially as described. (2.) In an apparatus for compressing air or other elastic fluid in accordance with claim 1 hereof, the combination of a downward pipe a and an upward pipe b connected together at their upper ends, an air-receiver g having connected to it the lower ends of the pipes a and b , a pump h for circulating the water or other incompressible liquid, and a blower i for delivering the air to be compressed to the upper end of the downward pipe, substantially as described. (3.) In an apparatus for compressing air or other elastic fluid in accordance with claim 1 hereof, the combination of pipes a and b , an air-receiver g , a pump h , a blower i , and a reservoir d at the upper part of the upward pipe b , substantially as described. (4.) In an apparatus for compressing air or other elastic fluid in accordance with claim 1 hereof, the combination of pipes a and b , an air-receiver g , one or more air blowers or injectors, and an air-jet (or a series thereof) for supplying the air to be compressed to the upper end of the downward pipe a , and for keeping the incompressible liquid in circulation in the pipes a and b , substantially as described. (5.) In an apparatus for compressing air or other elastic fluid in accordance with claim 1 hereof, the employment of a siphon-pipe t , the upper end of which is connected to the upper end of the upward pipe b , and the lower end of which is immersed in liquid contained in a reservoir d , for the purpose of reducing the power required to keep the liquid in circulation in the pipes a and b , substantially as described.

(Specification, 10s. ; drawings, 2s.)

No. 20661.—31st January, 1906.—BENJAMIN TREWHELLA and WILLIAM TREWHELLA, trading as "Trehwella Bros.," at Trentham, Victoria, Australia, Engineers and Ironworkers. An improved hauling and lifting lever-jack.

Claims.—(1.) An improved hauling and lifting lever-jack, comprising a short casing and a long rack, an operating-pawl having an inclined rib on one side and pivotally mounted on a lever fulcrumed upon a pin on the casing with a central bearing for said pin, a retaining-pawl pivotally mounted upon said casing, a spring rod for holding both pawls in engagement with the rack, and spring mechanism for releasing the pawls alternatively, substantially as set forth. (2.) In lever-jacks, a spring attached at one end to and coiled around a vertical

spindle journalled on the casing and secured at the other end to about the centre of a rod loosely attached to one pawl and bearing against the other pawl, substantially as set forth. (3.) In lever-jacks, a spring attached at one end to and coiled around a vertical spindle journalled on the casing and secured at the other end to about the centre of a rod, said rod being attached at its lower end to a pin on the retaining-pawl, and adapted to bear at its upper end against the operating-pawl, substantially as set forth. (4.) In lever-jacks, a spring-operated vertical spindle journalled on the casing and provided with two lateral arms for throwing the pawls out of engagement with the teeth of the rack-bar, and means to throw said arms out of engagement with the pawls, substantially as set forth. (5.) In lever-jacks, a spring-operated vertical spindle journalled on the casing and provided with a bell-crank lever having a bevelled arm, and a pivoted cam-release lever, in combination with a pawl having a lateral inclined rib, substantially as set forth. (6.) Mechanism as described in claim 5 in combination with a lateral arm on the lower end of the spring-operated spindle adapted to engage a projecting-pin on the retaining-pawl, substantially as set forth. (7.) In lever-jacks, a claw or grab hook hung by a short chain from a hook formed on the lower end of the casing, in combination with a retaining-claw or grab-hook loosely attached by a pair of triangular links to the foot of the rack, substantially as set forth. (8.) In lever-jacks, means for rigidly attaching the casing to a shear-leg or derrick-pole, in combination with a retaining grab-hook attached to said shear-leg or pole, substantially as set forth. (9.) In lever-jacks, a casing having side flanges provided with bolt-holes as and for the purpose set forth. (10.) In lever-jacks, a pair of lifting-horns extending laterally from the upper end of the jack-casing, and provided with side flanges having bolt-holes formed therein, as and for the purpose set forth.

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

No. 20663.—31st January, 1906.—CHARLES HENRY VON MYLIUS and THOMAS PROBIN VON MYLIUS, both of Adam Street, Burnley, Bourke, Victoria, Australia, Manufacturers. Improvements in smoke-consuming furnaces.

Extract from Specification.—With our invention the unburned gases, fresh from the coal, instead of striking against comparatively cold surfaces such as the walls of the furnace, the combustion-chamber, or the tubes, and then being liberated into the chimney, impinge against the hot surface of a refractory material or firebrick. This is presented by a refractory diaphragm and also by a refractory mixture-chamber. In addition to which steam (wet or superheated) and an auxiliary heated current of air is supplied to the gases in the mixture-chamber, which chamber provides the conservation of temperature which is essential to smokeless combustion, and effectually mixes the unburned gases from the fire, the air, and the steam.

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

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

No. 20679.—6th February, 1906.—ANDREW JACK, of Palmerston North, New Zealand, Plumber. Improved means for use in the generation of gas from hydrocarbon oils.

Claims.—(1.) In means for use in the generation of gas from hydrocarbon oils, a carburetting-chamber into which air is introduced under pressure, and heated if desired, and into which a quantity of oil is fed, and a drum mounted longitudinally within the chamber and provided with means for rotating it, such drum being provided with a number of small vanes or buckets extending in parallel lines along its peripheral face and adapted to dip into and raise the oil and spread it over the drum's surface as the drum is rotated, substantially as specified. (2.) In means for use in the generation of gas from hydrocarbon oils, the combination with means for storing air under pressure and for heating it of a carburetter comprising a chamber with an enclosed space beneath it into which space the heated air is admitted, a rotating drum mounted longitudinally within the chamber and provided with a number of small vanes or buckets extending along its peripheral face, a pipe leading from the space beneath the chamber and extending along in front of the drum, such pipe being formed with perforations in it throughout its length, and means whereby a constant quantity of oil is automatically supplied to the chamber, substantially as specified. (3.) In means for use in the generation of gas from hydrocarbon oils, a carburetting-chamber approximately of the form shown in the drawings, an enclosed space beneath such chamber into which heated air under pressure is fed, a pipe leading from such space into the

chamber and extending along one side thereof, such pipe being formed with perforations in it throughout its length, a rotating drum mounted longitudinally within the chamber and provided with vanes or buckets extending along its face, and means whereby a constant level of oil is maintained within the chamber, substantially as specified. (4.) The general arrangement, construction, and combination of parts in my improved means for use in the generation of gas from hydrocarbon oils, as described and explained, as illustrated in the drawings, and for the several purposes set forth.

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

No. 20681.—7th February, 1906.—THOMAS KEEPING FINNIGAN, of Koroit, Victoria, Australia, Saddler. Improvements in saddles.

Claims.—(1.) In combination with a saddle, a flap or flaps having a removable pad or pads. (2.) In combination with a saddle, a flap or flaps having an adjustable pad or pads. (3.) In combination with a saddle, a flap or flaps having a pad or pads in part pivoted and in part movable into a different adjustment, and fastenable as adjusted. (4.) In combination with a saddle, an adjustable pad having a metal plate therein substantially as described. (5.) In combination with a saddle-flap, a metal plate slotted as described, with or without means pivoting the pad thereto. (6.) In combination with a saddle, all parts illustrated in Fig. 1 which are lettered a to j.

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

No. 20682.—7th February, 1906.—CHARLES LEANDER HIGGINS, of No. 740 Lagachetiere Street, Montreal, Quebec, Canada, Manufacturer. Improvements in overshoes.

Claims.—(1.) In a rubber overshoe, a pronounced inwardly-projecting bead extending around the ball of the foot, such bead being elastic in its axial direction and adapted to clasp the boot over the edge of the sole for the purpose of retaining the overshoe upon the boot. (2.) In a rubber overshoe, an elastic retaining-bead consisting of a cylindrical spring, substantially as described and illustrated in Figs. 1, 3, and 5, or Figs. 2, 4, 7, and 8, or Fig. 6, of the drawings. (3.) In a rubber overshoe, an elastic retaining-bead consisting of a cylindrical spring, substantially as described, and of the cross-section illustrated in Fig. 9 of the drawings.

(Specification, 3s. 6d. ; drawing, 2s.)

No. 20684.—5th February, 1906.—HENRY CHARLES PLAYTER, Storeman, and PHILLIP LOUIS POMEROY, Cabinetmaker, both of Dunedin, New Zealand. An improved clamp for use in the manufacture of picture-frames and other analogous articles.

Claims.—(1.) A clamp of the kind indicated, comprising, in combination, radial arms, and shoes right-angularly shaped adapted to be slid along and secured to the arms, blocks to which the arms are loosely attached, and a thumb-screw connecting the blocks, as and for the purposes set forth. (2.) The general arrangement, construction, and combination of parts constituting our improved device for cramping picture-frames and other analogous articles, substantially as described and as illustrated.

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

No. 20692.—7th February, 1906.—JOHN ROBERTSON, of Auckland, New Zealand, Engineer, and WILLIAM CHARLES WHEELER, of Clevedon, Auckland, New Zealand, Creamery-manager. An improved automatic skim-milk delivery-box and pump.

Claims.—(1.) In an improved automatic skim-milk delivery-box and pump in combination, the pump-cylinder fitted with an inlet suction-pipe at its bottom, with outlet delivery-pipe at its top, piston-valve fitted to within said cylinder, piston-rod of which working through top cover fitted to top of said cylinder, suction-valve fitted to bottom of said cylinder, rubber rings fitted to keep top and bottom connections tight, top and bottom feet to connect to bed-plate, suction-valve chamber connecting suction-pipe to suction-valve, said piston-rod produced upwardly through crosshead, with its upper end fitted and working in stay-bracket connected to wall or bed-plate, rods fitted to crank-webs by crank-pin working in bearings, and ends of crank-web projected at right angles to crank-shaft, said crank-webs slotted as shown in Fig. 5,

special washers provided with teeth to fit in teeth on outer faces of said crank-webs, said crank-shaft held in place by main bearings, friction-clutch mounted on said crank-shaft against loose friction-pulley, collars fitted to crank-shaft to keep said clutch and pulley in place, friction-clutch fork fitted to wall, rod working therefrom fitted to quadrant, keys for holding said clutch to shaft, bevelled cog-wheel engaging said quadrant, quantity-rod fitted to said bevelled cog-wheel, eccentric fitted to said shaft, sheave-rod fitted to said eccentric and actuating lever-flange of box, large-toothed wheel within box worked by pawl actuated by said lever, pinion mounted on shaft carrying said large-toothed wheel, key fitting in slot so as to engage said pinion holding key-pawls and quantity key-pawl, lever connected to said quantity key-pawl and actuating said quantity-rod, for the purpose set forth, substantially as described and illustrated. (2.) In an improved automatic skim-milk delivery-box and pump-box fitted and shaped to be fitted to wall, special washers provided with teeth to fit in teeth on outer faces of crank-webs, and said crank-webs slotted as shown in Fig. 5, for the purpose set forth, substantially as described and illustrated.

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

No. 20697.—12th February, 1906.—ANDREW JACK, of Palmerston North, New Zealand, Plumber. An improved gas-burner.

Claim.—A gas-burner comprising a solid body portion formed with an annular recess within it, and with a ring of small apertures leading upwards from the recess through the body, in combination with a socket portion into which the body fits or to which it is connected, formed with gas-passages leading to the bottom of the annular recess, substantially as and for the purposes specified.

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

No. 20712.—14th February, 1906.—GEORGE RIDGWAY, of the Great Boulder Gold-mine, near Kalgoorlie, Western Australia, Australia, Engineer. An atmospheric filter.

Extracts from Specification.—For the purpose of my invention I make a hollow spindle, consisting of a number of compartments. At the end of the spindle I make a compartment A, which consists of a plunger-casing having a number of pipe connection-hubs B, and in this I fit a plunger C operated by a crank and connecting-rod, or by similar suitable means. I may fit one or more snifting-valves to this plunger-casing to admit air, or I may admit compressed air from a receiver or such similar source of supply. . . . Lower down the spindle I make another compartment D, also having a similar number of pipe connecting-hubs E. This compartment D is connected to a vacuum chamber or vacuum pump by means of an internal pipe or passage F and the stationary chamber G. I now make a third compartment H, also having a similar number of pipe connecting-hubs K. This compartment H is connected to a separate vacuum chamber or pump, or to the same vacuum chamber having separate compartments, or such means as will enable the solutions to be kept separate, if desired, by the passage surrounding the aforesaid internal pipe and a second stationary chamber L. . . . I make angle-iron rings U to which I attach bearings V supporting the gudgeons P_r and Q_t. On the end of the gudgeons P_r I place a pinion or finger wheel W_r, which is adjusted to engage in a rack X_r at the position where it is required to turn the tray over. This rack is just long enough to make the tray take one complete revolution. I may attach a light spring catch or the like to engage with edge of the tray, to normally hold it in a horizontal position. For this process the pulp and wash solutions and water are introduced direct to these trays by pipes F_r, and automatically controlled valves or cocks, which can be operated by means of the passing trays.

[NOTE.—The above extracts from the specification are inserted in place of the claims.]

(Specification, 12s. ; drawings, 2s.)

No. 20713.—14th February, 1906.—JAMES PALMER CAMPBELL, of No. 15 Featherston Street, Wellington, New Zealand, Solicitor (nominee of RUDOLF BRAUN, of Westinghouse Works, Trafford Park, Manchester, England, Electrical Engineer). Improvements relating to systems of electrical distribution.

Claims.—(1.) A load-equaliser for an alternating-current-supply circuit, comprising a rotary converter the alternating-current winding of which is connected across the circuit at

a point intermediate the power-station and the point of supply, the direct-current brushes of the said converter being connected to the brushes of a shunt-wound direct-current machine the rotor of which is provided with a fly-wheel, and means whereby either the resistance in the field winding of the said machine or the voltage impressed on the said winding may be varied either manually or automatically in accordance with the load on the supply circuit, substantially as and for the purpose specified. (2.) In a load-equaliser of the kind described, a rotary converter having shunt and series field windings so connected that when the converter is operating to transform from alternating current to direct current the field excitation produced by the shunt and series windings may oppose one another, substantially as and for the purpose specified. (3.) In an equaliser of the kind described, means for varying the resistance in the shunt field winding of the direct-current machine according to the load on the supply circuit, comprising a liquid rheostat having a fixed electrode and a movable electrode, the movable electrode being mounted on the shaft of an alternating-current motor the primary winding of which is connected either directly or indirectly to the supply circuit, the said shaft being prevented from completely rotating by a spring, substantially as and for the purpose specified. (4.) In an equaliser of the kind described, means for varying the voltage impressed on the terminals of the shunt field winding of the direct-current machine, comprising a rectifying-device the alternating-current terminals of which are connected to a series-transformer in the supply circuit, the direct-current terminals of the said device being connected in series with the said field magnet winding, substantially as described. (5.) The modification of the invention in which an adjustable rheostat is connected in series with the field magnet winding of the direct-current machine, the said rheostat being automatically operated by a speed-actuated governor to decrease the field excitation of the said machine with an increase of speed, substantially as described.

(Specification, 8s. 6d. ; drawings, 2s.)

No. 20717.—14th February, 1906.—LEON SERPOLLET, of 9 and 11 Rue Stendhal, Paris, France, Civil Engineer. Improvements in or relating to steam automobiles.

Claims.—(1.) A steam automobile with instantaneous steam-generator heated by petrol burners in which a special small motor or "feed-engine" controls simultaneously the pump which forces the water to the generator and the pump which forces the petrol to the burners, while at the same time producing a draught of air to the burners in proportion to the quantity of petrol injected, the exhaust steam passing to a blast-pipe located in the chimney of the boiler, where it produces an artificial draught, in combination with a steam-supply regulator, enabling by a single operation the steam to be supplied either to the small feed-motor alone or simultaneously to the feed-motor and to the principal motor of the automobile, or the supply of steam to the feed-motor and to the principal motor to be stopped, and in combination with a feed-water heater into which are led simultaneously for circulation in contrary directions in contact with the metallic walls which separate the same the exhaust steam from the principal motor on its way to the condenser and the feed-water on its way to the boiler, substantially as described. (2.) In a steam automobile according to claim 1, the arrangement on the steam-pipe which leads from the regulator to the feed-engine of a lever operated by the driver, and which permits of throttling said tube more or less, so as to regulate the area of admission to the feed-engine, and thereby to regulate the feed and thereby the speed of the vehicle. (3.) In a steam automobile according to claim 1, the use of a feed-water heater comprising several coupled elements, each formed of a tubular body and a group of small tubes passed through said tubular body, the water which passes to the boiler circulating in the small tubes and the exhaust steam from the principal motor which passes to the condenser circulating in the tubular body around the small tubes in the direction contrary to that of the water, substantially as described. (4.) In a steam automobile according to claim 1, the arrangement on the steam-pipe which leads from the boiler of a regulator comprising a plane-surface plate in which are bored three small orifices 1, 2, 3 leading into the pipe / which connects to the feed-engine, and a larger orifice 4 leading into a pipe g which connects to the principal motor, in combination with the circular slides t and t' carried by a lever g, and which move over the plate in the interior of the steam-inlet chamber so as to close all the orifices, or to open either the orifice 1 alone, or simultaneously the orifices 1, 2, and 4, or the orifices 1, 2, 3, and 4, substantially as described.

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

No. 20718.—14th February, 1906.—AGNES EDMOND, of Dunedin, New Zealand, Married Woman. Improvements in brooch and other pin fastenings.

Extract from Specification.—By this invention there is provided a peculiarly arranged slot or recess in which the pin to be fastened is to be introduced; and the recess has a gap which, instead of being always open, is normally closed, and is opened only when necessary to allow the pin to pass.

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

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

No. 20728.—18th February, 1905.—JOSEPH DUFFY, of Gainsborough Road, Victoria Park, London, England, Flooring and Paving Contractor. Improvements in and relating to wood-paving and in the manufacture of blocks therefor.

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

Claim.—In constructing wood-paving blocks consisting of a plurality of sections or slices, the saw-cuts *b, b* formed on the bases of the sections or slices, and the bonding or locking bars *b', b'*, as and for the purposes described in reference to Figs. 1 to 4 inclusive.

(Specification, 3s. 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 drawing 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 accepted.

Patent Office,
Wellington, 21st March, 1906.

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

- No. 20612.—J. F. Stephenson, combination bedstead and mattress.
No. 20643.—Pillatt and Co., Limited, furnace and furnace-bars. (A. E. Pillatt.)
No. 20650.—H. E. McDonald, egg-carrier.
No. 20655.—A. Ashcroft, bicycle and motor wheel hub.
No. 20703.—C. J. Tuck, compasses.
No. 20707.—G. R. Warren, priming-coat for paint-work.
No. 20735.—I. Stevenson and J. Cook, stone-shoot for dredge.
No. 20738.—F. E. Ward, gold-saving appliance. (A. E. B. Ward.)
No. 20742.—A. J. Border and L. M. Coventry, indicator.
No. 20743.—A. S. Ford, liquid-ejector.
No. 20749.—H. G. Cornwall, message and envelope form.
No. 20755.—H. Storey, boiler.
No. 20763.—C. Cannell, lamb's tail cutting and searing machine.
No. 20764.—R. Glendining and G. Beaumont, positive take-up motion in looms.
No. 20765.—R. Glendining and G. Beaumont, gearing for the picking motion in looms.
No. 20770.—G. Grimmer, arresting sparks from steam boilers.
No. 20775.—J. E. P. Cannell, brake-grip for cars.
No. 20784.—W. T. Weekley, treating slimes, &c.
No. 20788.—P. W. Hughes, T. S. A. Widdop, and F. Drew, operating railway-brakes.
No. 20789.—W. H. Osborn, handle for culinary receptacles.
No. 20791.—H. W. Downing, horse-cover.
No. 20792.—P. and D. Duncan, Limited, loading-crane for dray or wagon. (J. Keir.)
No. 20793.—W. S. Gillies, tramway-point.
No. 20794.—N. Amrein, stone-breaker.
No. 20795.—E. Hill, harness-tug.
No. 20796.—A. Hay, wire-strainer.

No. 20797.—J. Shepherd and G. H. Chapman, rotary engine.

No. 20798.—J. Hughes, attaching spout of "chaffey" to threshing-mill.

No. 20799.—G. B. Cartwright and S. J. G. Douglas, removing cavings from threshing-machines.

No. 20812.—W. J. Bradford, toasting-fork.

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.

Letters Patent sealed.

LIST of Letters Patent sealed from the 8th to the 21st March, 1906, inclusive:—

- No. 18739.—R. Simmonds, carrier for eggs, fruit, &c.
No. 18770.—D. Bower, milk-can.
No. 18790.—J. Simmonds, wire-strainer.
No. 18825.—T. Danks, windmill.
No. 18826.—T. Danks, oiling-apparatus for machinery.
No. 18925.—United Shoe Machinery Company, assorting and delivering eyelets, rivets, &c. (M. H. Pearson and A. E. Jerram.)
No. 18926.—United Shoe Machinery Company, fastening-machine. (F. H. Perry.)
No. 19650.—C. A. Sahlstrom, electrical ozonizer.
No. 19667.—Colorado Ironworks Company, vibrating-screen. (N. V. Fitts and R. P. Atkins.)
No. 19685.—F. G. Price, preventing leakage round bolt-holes.
No. 19862.—G. S. Mayhew, preparing and cutting veneers.
No. 19863.—G. S. Mayhew, fireproof plaster slab for building.
No. 19883.—W. J. Walleit, lock-nut.
No. 19891.—T. F. Brown, D. and J. Solomon, studless house.
No. 19924.—Bram Patent Switch Company, Limited, operating street railway-switch. (W. H. Bram.)
No. 19930.—P. Schou, shaft-bearings.
No. 19958.—V. J. Kuess, soap-manufacture.
No. 19985.—O. C. Beale and C. J. Vader, piano-door.
No. 20023.—W. E. Hughes, steam-distribution for locomotive. (H. Lentz and C. Bellens.)
No. 20036.—J. R. Hatmaker, milk food.
No. 20037.—J. R. Hatmaker, milk food.
No. 20038.—E. P. Andreas, acetylene-generator.
No. 20060.—F. Cotton, refuse-furnace.
No. 20064.—P. H. O'Keeffe, salting or corning meat.
No. 20067.—W. E. Hughes, steam-distribution for locomotive. (H. Lentz and C. Bellens.)
No. 20068.—J. Sharpe, wire suspender for bottles.
No. 20069.—J. J. Bruer, piano.
No. 20071.—C. H. Bissaker, acetylene-generator.
No. 20080.—International Cigar Machinery Company, cigar machinery. (O. Tyberg, W. S. Luckett, L. Lake, H. Knight, and F. Herrington.)
No. 20098.—J. Nicholson, separation of gold.
No. 20099.—J. Nicholson, saving gold.
No. 20107.—Regenerated Cold Air Company, treating air. (F. White.)
No. 20124.—F. W. Brittan and L. H. Cross, locking-nut.
No. 20125.—H. B. Stocks, power hammer.
No. 20141.—Mergenthaler Linotype Company, monoline composing-machine. (J. McNamara.)
No. 20163.—H. S. W. Palmer and R. V. Webster, tea-preparation.
No. 20166.—J. R. Hatmaker, cacao, sugar, and milk preparation.
No. 20167.—J. R. Hatmaker, obtaining milk-sugar and casein from milk.
No. 20218.—R. L. Morrell, carburetted-apparatus.
No. 20247.—G. Cradock, rope or cable grip.
No. 20252.—H. A. Cutmore, telephone transmitter.
No. 20253.—W. E. Martin, side-delivery rake.
No. 20258.—F. Cotton, liquid-fuel burner.
No. 20268.—W. H. Nosworthy and S. J. Prescott, non-refillable bottle and stopper.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

- No. 14604.—T. Ballinger, skylight. 10th March, 1906.
No. 14654.—J. H. Vautier, manufacture of carburetted water-gas. (H. W. G. Henderson.) 16th March, 1906.
No. 14677.—F. Cooper, cultivator. 12th March, 1906.

No. 14721.—T. W. Messenger, ear-trumpet. 8th March, 1906.
 No. 14807.—C. B. Cottrell and Sons Company, printing-plate. (E. Waters, jun.—C. B. Cottrell and Sons Company—M. A. McKee.) 7th March, 1906.

THIRD-TERM FEES.

No. 11314.—D. Donald, journal-lever. 12th March, 1906.
 No. 11458.—The Foreign McKenna Process Company, renewing old steel rails. (E. W. McKenna.) 12th March, 1906.

Subsequent Proprietors of Letters Patent registered.

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

NO. 14150 and 14866.—The Christchurch Brick Company, Limited, a company incorporated under the New Zealand Companies Acts, whose registered office is at 193 Tuam Street, Christchurch, in the Colony of New Zealand.
 No. 14150.—Manufacturing building-blocks. [V. Barreto.]
 No. 14866.—Slaking lime. [E. J. Parrott.] 12th March, 1906.

No. 14583.—The Royal Bank of Australia, Limited, carrying on business in the State of Victoria. Steam-condenser. [C. E. Nicholas.] 21st March, 1906.

No. 17151.—Whitfields Foreign Patents, Limited, of 24 Coleman Street, in the City of London, England. Gas-manufacture. [W. Gunn—C. Whitfield.] 21st March, 1906.

No. 19478.—The Edison Ore-milling Syndicate, Limited, of Fitzalan House, Arundel Street, Strand, London, England. Magnetic separator. [E. N. Waters—The Edison Ore-milling Syndicate, Limited—T. A. Edison.] 12th March, 1906.

No. 19916.—Carl Weber, of 159 La Salle Street, Chicago, Illinois, United States of America, Civil Engineer. Chimney. [J. R. Park—C. Weber.] 21st March, 1906.

Applications for Letters Patent abandoned.

LIST of applications, with which provisional specifications only have been filed, abandoned (*i.e.*, complete specifications not lodged), from the 8th to the 21st March, 1906, inclusive:—

No. 19440.—G. F. Hutchinson, acetylene-generator.
 No. 19448.—A. Argles, extracting gold.
 No. 19452.—H. Griffiths, boot.
 No. 19455.—W. E. Spencer, altazimuth dial.
 No. 19456.—H. W. Earp-Thomas, tire-protector.
 No. 19459.—H. G. W. L. Noy, clothes-drying rod.
 No. 19461.—A. E. Brown, physical-culture apparatus.
 No. 19462.—A. Chenhall, bicycle support and carrier.
 No. 19474.—N. Nielsen, roofing-tile.
 No. 19475.—P. Lanigan, digging kauri-gum.
 No. 19477.—D. Rait, wire mattress.
 No. 19485.—J. W. Perry and E. Richardson, jun., vehicle-wheel.
 No. 19487.—W. A. Rawson, batten for the travelling canvasses of binders, &c.
 No. 19489.—C. Duckett, spanner. (E. C. Rudolph.)
 No. 19492.—R. Clark, non-slip stair or door tread.
 No. 19497.—E. Kelly, boring-machine.
 No. 19498.—R. J. Dickie and J. H. Brown, postage-stamp vending machine.
 No. 19499.—C. Mills, platform-bracket.
 No. 19502.—A. F. Roy, chair support for poles, &c.
 No. 19503.—A. J. Roberts, meat-brand.
 No. 19504.—B. Porter, bust-support or corset.
 No. 19505.—A Taylor, game.

Application for Letters Patent void.

APPLICATION for Letters Patent, with which complete specification has been lodged, void, owing to non-acceptance of such complete specification, from the 8th to the 21st March, 1906, inclusive:—

No. 18848.—G. Mahlstedt, candle-protector.

Applications for Letters Patent lapsed.

LIST of applications lapsed, owing to Letters Patent not being sealed, from the 8th to the 21st March, 1906, inclusive:—

No. 18437.—A. S. Burgess, tipping wagon. (A. Hatrick—W. Thompson.)
 No. 18454.—T. J. A. Hicks and R. F. Way, wire-woven mattress.

Application for Letters Patent withdrawn.

THE following application for Letters Patent, has been withdrawn:—

No. 19566.—C. J. McMaster, windmill wheel and mounting. (Advertised in Supplement to *New Zealand Gazette*, No. 57, of the 15th June, 1905.)

Letters Patent void.

LETTERS Patent void through non-payment of renewal fees, and through expiry of term of fourteen years, from the 8th to the 21st March, 1906, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 14317.—R. W. England, chimney.
 No. 14320.—J. D. Ashby, gymnastic apparatus.
 No. 14322.—W. Conyers, raising and lowering venetian-blinds. (E. A. Powell.)
 No. 14323.—E. G. Sjöstrand, "Kite" sinking-apparatus for logs, sounding-apparatus, &c.
 No. 14325.—L. Grote, machine for manufacturing glass bottles.
 No. 14326.—W. G. Williams and H. H. Edwards, self-registering target.
 No. 14328.—W. J. Rawling, water-bag and cooler.
 No. 14329.—A. Wolfe, stirrer for culinary operations.
 No. 14330.—A. J. Park, chimney. (R. W. England.)
 No. 14333.—F. Haar, sewing palm-attachment.
 No. 14349.—F. Smith, dredging machinery.
 No. 14351.—W. A. E. Henrici, rotary engine.
 No. 14357.—W. A. Tuck, jun., wire-strainer.
 No. 14359.—C. Perdrisat, coin-freed sale apparatus.
 No. 14360.—W. F. Ellis and E. C. Davis, vehicle-wheels.
 No. 15731.—G. N. Pifer, coin-controlled photographic machine.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

No. 11127.—P. H. Dixon, freezing meat. (G. J. A. Richardson.)
 No. 11228.—The Renboy Syndicate, Limited, sheep-brand. (G. Renner and W. H. Boyens.)
 No. 11244.—W. Dreyer, machine for washing clothes, flax, &c.
 No. 11246.—J. Wright, cask-tilt. (W. N. E. Mason.)
 No. 11248.—H. E. D'Albites, medicated aperient.
 No. 11253.—H. A. Ross, supply and ejector cistern.

THROUGH EXPIRY OF TERM.

Nil.

Applications for Registration of Trade Marks.

Patent Office,

Wellington, 21st March, 1906.

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: 5562.

Date: 5th October, 1905.



The essential particulars of the trade mark are as follow: the combination of devices, the word "Velma," and the name "Suchard" printed in the particular and distinctive manner shown; and any right to the exclusive use of the added matter is disclaimed.

NAME.

SUCHARD (SOCIETE ANONYME), of Neuchatel, Switzerland,
Chocolate-manufacturers.

No. of class: 42.

Description of goods: Chocolate.

No. of application: 5647.

Date: 22nd November, 1905.

TRADE MARK.



The applicants claim that the above trade mark has been used by them and their predecessors in business in respect of the said goods since upwards of six years before 2nd September, 1889.

NAME.

THOMAS SHELDON AND Co., LIMITED, of Springvale Foundry,
near Wolverhampton, England, Ironfounders and Manufacturers.

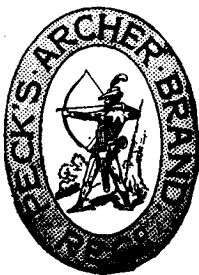
No. of class: 13.

Description of goods: Metal goods not included in other classes, with the exception of nails and spikes.

No. of application: 5649.

Date: 23rd November, 1905.

TRADE MARK.



The essential particulars of the trade mark are the device and the word "Archer"; and the applicants disclaim any right to the exclusive use of the added matter, except in so far as it consists of their own name.

NAME.

HARRY PECK AND Co., of 34 and 35 Snow Hill, London, E.C., England, Manufacturers.

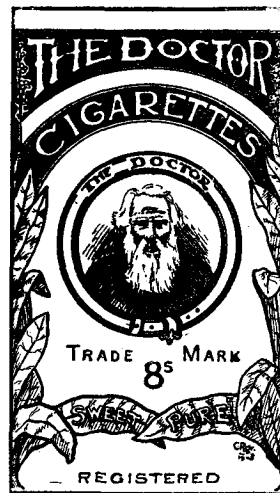
No. of class: 42.

Description of goods: Butter, lard for food, bacon, condiments, creams for foods, potted meats, cheese, honey, and condensed milk.

No. of application: 5693.

Date: 22nd December, 1905.

TRADE MARK.



The essential particulars of this trade mark are the words "The Doctor Cigarettes," together with the circular medallion headed "The Doctor," and containing the bust of an old man with white hair and beard, and also the frame of tobacco-leaves; and any right to the exclusive use of all other words and devices in the trade mark is disclaimed.

NAME.

JOSEPH WHITEFIELD, of Queen and Shortland Streets, Auckland, in the Colony of New Zealand, trading as "Ludzki and Co."

No. of class: 45.

Description of goods: Cigarettes.

No. of application: 5733.

Date: 18th January, 1906.

TRADE MARK.



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

NAME.

THE WIGAN COAL AND IRON COMPANY, LIMITED, of Kirkless Hall, Wigan, England, Coal-proprietors and Iron-manufacturers.

No. of class: 5.

Description of goods: Steel.

No. of application : 5790.
Date : 20th February, 1906.

TRADE MARK.



The essential particular of this trade mark is the device of a flying horse; and any right to the exclusive use of the word "Velox" is disclaimed.

NAME.

HERBERT H. SMITH, of Farish Street, Wellington, in the Colony of New Zealand, Importer of Bicycles, &c.

No. of class : 22.
Description of goods : Cycles.

No. of application : 5793.
Date : 20th February, 1906.

TRADE MARK.



BRITANNIA.

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

NAME.

HERBERT H. SMITH, of Farish Street, Wellington, in the Colony of New Zealand, Importer of Bicycles, &c.

No. of class : 40.
Description of goods : Indiarubber tires.

No. of application : 5811.
Date : 1st March, 1906.

TRADE MARK.

The words

GOLD MEDAL BINDER TWINE.

The applicant company claims that the said trade mark has been in use by it or its predecessors in business in respect of the articles mentioned since before 1st January, 1890.

NAME.

DONAGHY'S ROPE AND TWINE COMPANY, LIMITED, of 10 Lower Rattray Street, Dunedin, in the Colony of New Zealand, Rope-manufacturers.

No. of class : 50.
Description of goods : Rope and twine.

No. of application : 5814.
Date : 3rd March, 1906.

TRADE MARK.

The word

NATURU.

NAME.

WARNOCK BROS., of Durham Street, Auckland, in the Colony of New Zealand, Manufacturers.

No. of class : 47.
Description of goods : Soap (household), starch, candles, detergents, blue, and other preparations for laundry purposes.

No. of application : 5821.
Date : 8th March, 1906.

TRADE MARK.

The word

GIANT.

NAME.

WHITE AND Co., LIMITED, of 193 Princes Street, Dunedin, New Zealand, Merchants.

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

No. of application : 5822.
Date : 8th March, 1906.

TRADE MARK.

The word

VIGOURINE.

NAME.

JOHN STANLEY IRVIN, of Arthur Street, Ponsonby, Auckland, in the Colony of New Zealand, trading as "Vigourine Company."

No. of class : 3.
Description of goods : Patent medicines (pills, &c.).

No. of application : 5826.
Date : 8th March, 1906.

TRADE MARK.

The word

FEATHERBONE.

NAME.

THE WARREN FEATHERBONE COMPANY, of Illinois, in the United States of America, and having its principal place of business at Three Oaks, in the State of Michigan, United States of America.

No. of class: 38.

Description of goods: Stiffening materials for garments, girdles, collar foundations, sun-hat foundations, and similar articles.

No. of application: 5827.

Date: 10th March, 1906.

TRADE MARK.



The essential particulars of this trade mark are the words "All Black" and the distinctive label; and applicants disclaim any right to the exclusive use of the added matter, except their name and address.

NAME.

L. D. NATHAN AND Co., LIMITED, of Auckland, in the Provincial District of Auckland, in the Colony of New Zealand.

No. of class: 43.

Description of goods: Whiskies.

No. of application: 5828.

Date: 9th March, 1906.

TRADE MARK.



NAME.

WILLIAM HENRY COY, of Constable Street, Wellington, in the Colony of New Zealand, Chemist, and ROBERT ALFRED SCOTT, of 107 Grant Road, Wellington aforesaid, Settler, trading as "The Universal Medicine Company."

No. of class: 3.

Description of goods: Medical preparations.

No. of application: 5833.

Date: 14th March, 1906.

TRADE MARK.

The word

EMBLO.

NAME.

MARK BLOW, trading as "The Crown Bromide Enlargement Company" and "The Crown Studios," of 448 George Street, Sydney, in the State of New South Wales.

No. of class: 39.

Description of goods: Photographs, photographic pictures, enlargements, prints, and reproductions and mounts for same.

No. of application: 5834.

Date: 14th March, 1906.

TRADE MARK.

The word

VICTOR.

NAME.

W. H. PALING AND Co., LIMITED, a registered company carrying on business as importers of musical instruments and music, at No. 338 George Street, Sydney, in the State of New South Wales and Commonwealth of Australia.

No. of class: 9.

Description of goods: Pianos.

No. of application: 5836.

Date: 15th March, 1906.

TRADE MARK.

The word

NARLÉ.

NAME.

ELIZABETH MILSOM, of King's Chambers, Willis Street, Wellington, in the Colony of New Zealand, Hair Physician.

No. of class: 48.

Description of goods: A liquid polisher for the nails.

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 8th to the 21st March, 1906, inclusive:—

- No. 4463; 5644.—C. W. Hawkins. Class 3. (*Gazette* No. 103, of the 1st December, 1905.)
 No. 4464; 5638.—Lever Bros., Limited. Class 47. (*Gazette* No. 110, of the 14th December, 1905.)
 No. 4465; 5669.—Lever Bros., Limited. Class 48. (*Gazette* No. 110, of the 14th December, 1905.)
 No. 4466; 5670.—Lever Bros., Limited. Class 47. (*Gazette* No. 110, of the 14th December, 1905.)
 No. 4467; 5671.—Lever Bros., Limited. Class 48. (*Gazette* No. 110, of the 14th December, 1905.)
 No. 4468; 5672.—Lever Bros., Limited. Class 47. (*Gazette* No. 110, of the 14th December, 1905.)
 No. 4469; 5673.—Lever Bros., Limited. Class 48. (*Gazette* No. 110, of the 14th December, 1905.)
 No. 4470; 5674.—Lever Bros., Limited. Class 47. (*Gazette* No. 110, of the 14th December, 1905.)
 No. 4471; 5675.—Lever Bros., Limited. Class 48. (*Gazette* No. 110, of the 14th December, 1905.)
 No. 4472; 5147.—C. B. Smith and Co. Class 39. (*Gazette* No. 11, of the 9th February, 1905.)

Trade Mark Renewal Fees paid.

FEES paid for the renewal of the undermentioned Trade Marks for fourteen years from the dates first mentioned:—

- No. 433/369.—23rd March, 1906.—The Goodyear Shoe Machinery Company, of Boston and Hartford, U.S.A. 7th March, 1906.
 No. 450/374.—19th April, 1906.—Tarr and Wonsou, of Gloucester, U.S.A. 7th March, 1906.
 No. 451/329.—19th April, 1906.—C. W. Hawkins, of Dunedin, N.Z. 7th March, 1906.
 No. 431/343.—23rd May, 1906.—F. Wilkinson, of Caversham, N.Z. 16th March, 1906.
 Nos. 482/350 and 483/351.—23rd May, 1906.—H. E. Partridge, of Auckland, N.Z. 19th March, 1906.

Subsequent Proprietor of Trade Mark registered.

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

NOS. 4156/3737 and 4517/3539.—McArthur, Atkins, and Company, Limited, a joint-stock company, trading at No. 98 St. Georges Street, in Cape Town, in the Colony of Cape of Good Hope. [H. Atkins.] 9th March, 1906.

Trade Marks removed from the Register.

TRADe Marks removed from the Register, owing to the non-payment of the renewal fees, from the 8th to the 21st March, 1906, inclusive:—

- No. 380/295.—12th December, 1891.—Lister, Henry, and Co., of Sydney, N.S.W. Class 30.
 No. 381/285.—16th December, 1891.—Whittingham Bros. and Instone, of Invercargill, N.Z. Class 42.
 No. 382/287.—17th December, 1891.—J. Hamilton, of Nelson, N.Z. Class 44.
 No. 383/457.—17th December, 1891.—The J. W. Wurster Soap Company, of Invercargill, N.Z. Class 48.

Advertisements.

ADVERTISEMENTS are charged at the rate of 6d. per line for the first insertion, and 3d. per line for the second and any subsequent insertion.

All advertisements should be written on one side of the paper, and signatures, &c., should be written in a legible hand.

The number of insertions required must be written across the face of the advertisement.

Communications should be addressed to the Government Printer, Wellington, to whom post-office money-orders should be made payable. Cheques should be crossed "Public a/c," and exchange added.

Postage or duty stamps cannot be received in payment from any place at which postal notes or post-office orders are issued.

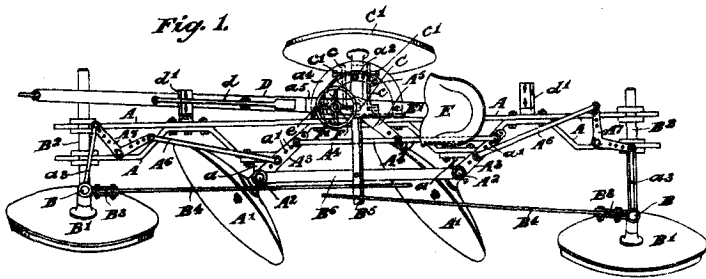
Prepayment may be demanded in any case. In order to prevent delay in publication a sufficient remittance should accompany every advertisement. Any surplus will be returned with receipted account.

By Authority: JOHN MACKAY, Government Printer, Wellington.

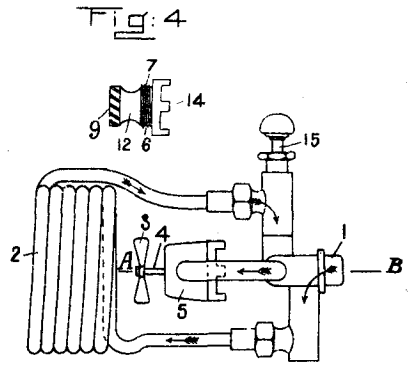


ILLUSTRATIONS OF INVENTIONS.

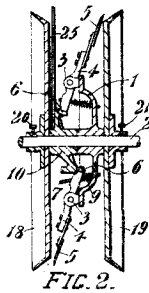
[These illustrations refer to the complete specifications accepted, and advertised in this *Gazette*.]



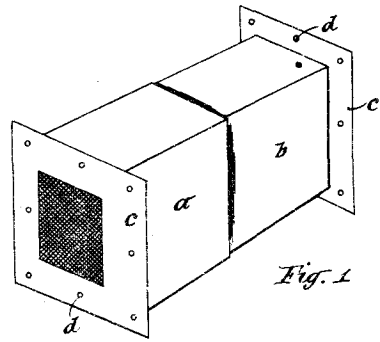
19183
Nelson and Cleghorn. Disc-plough.



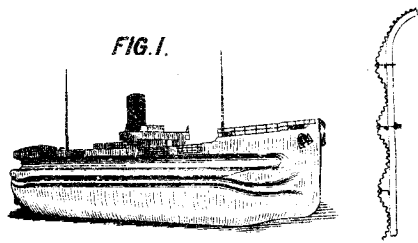
19367
Braby. Gas-burner.



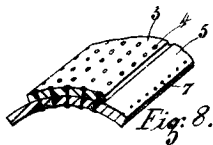
19534
Storrie. Turnip-thinner.



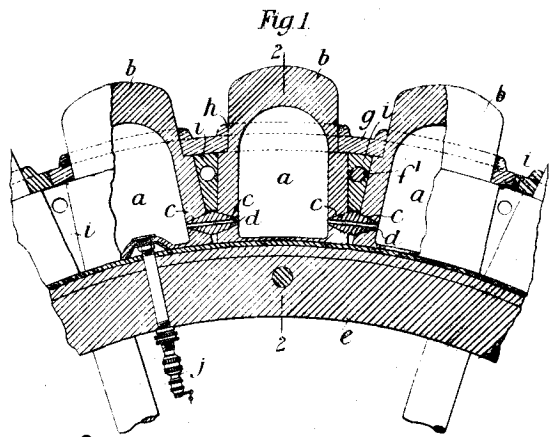
19559
Berg. Ventilator.



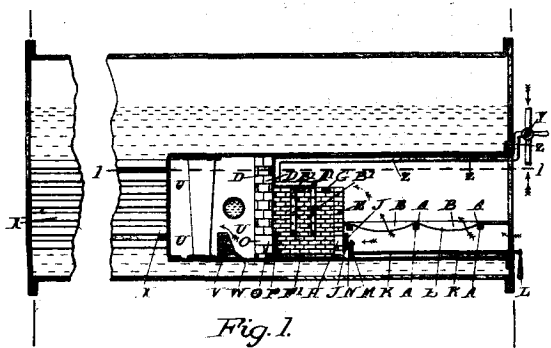
19861
The Monitor Shipping Corporation (Limited). Vessel. (Petersen.)



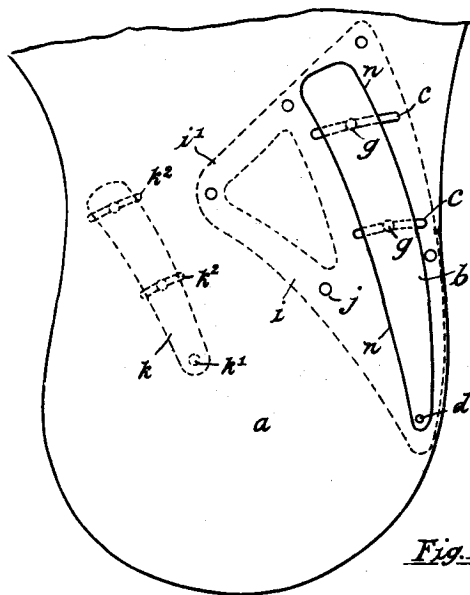
19580
Skeates. Tire-cover.



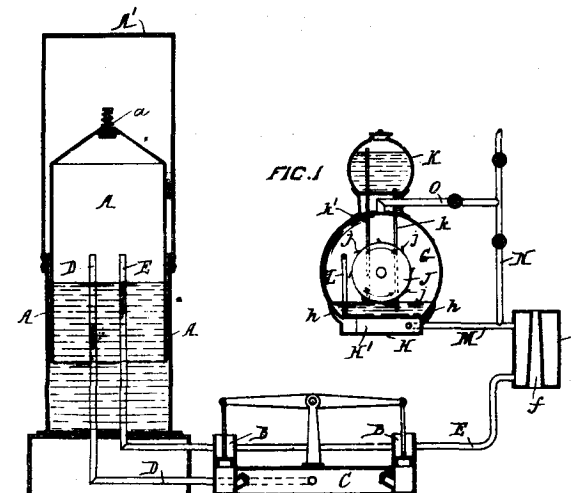
19979
McKim. Tire.



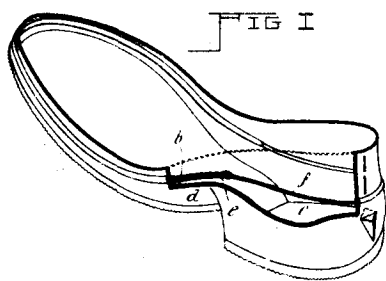
20663
C. H. and T. P. Von Mylius. Furnace.



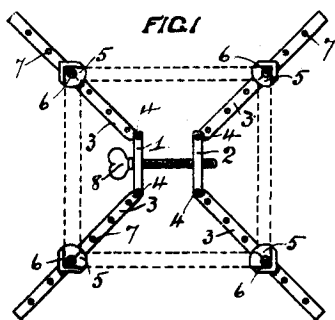
20681
Finnigan. Saddle.



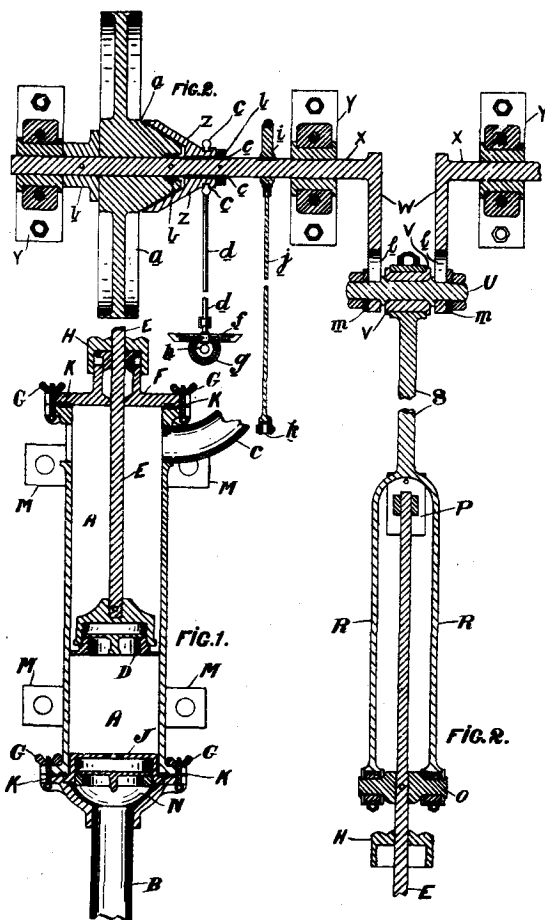
20679
Jack. Gas-generator.



20682
Higgins. Overshoe.



20684
Playter and Pomeroy. Picture-frame Cramp.

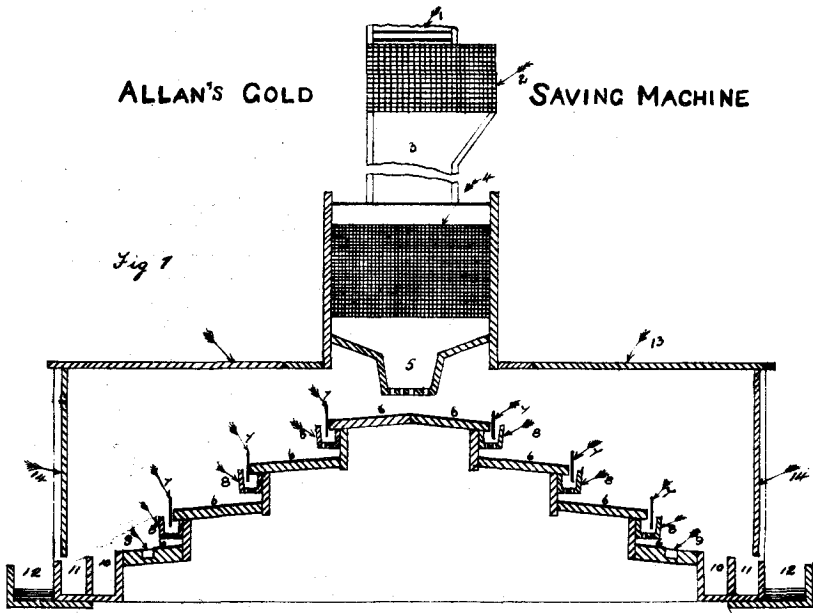


20692
Robertson and Wheeler. Milk-delivery Box and Pump.

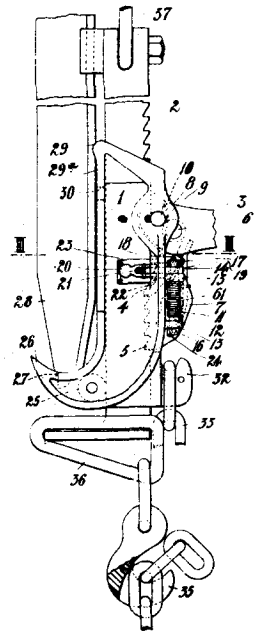
ALLAN'S GOLD

SAVING MACHINE

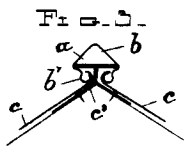
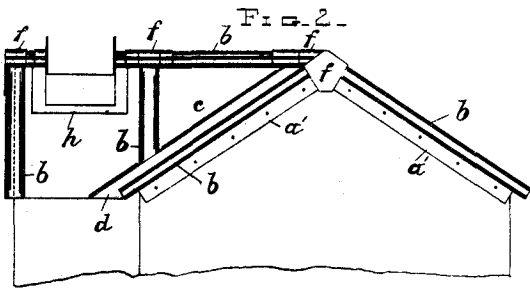
Fig 7



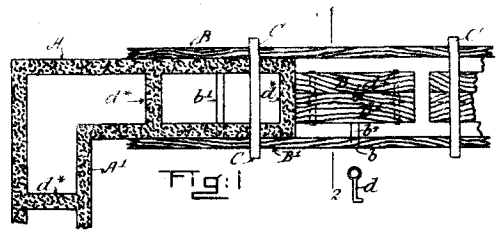
20115 Allan and McCullough. Gold-saving Table.



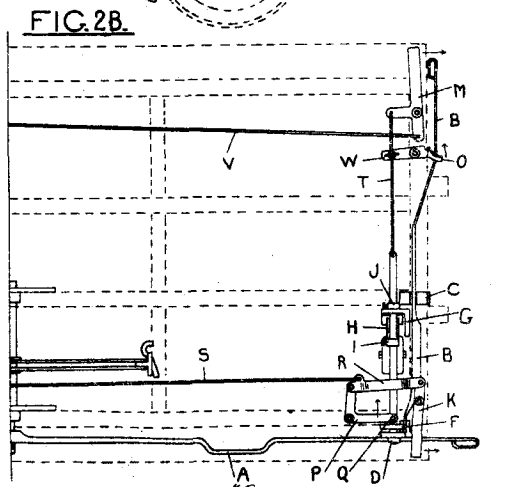
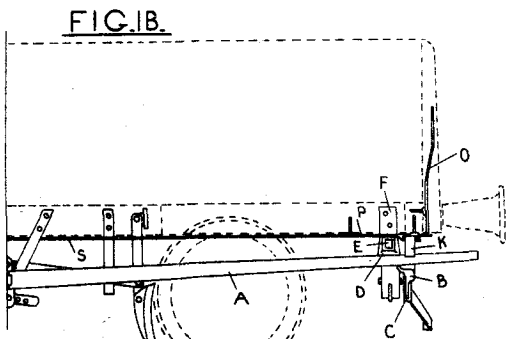
20661 B. and W. Trehella. Jack.



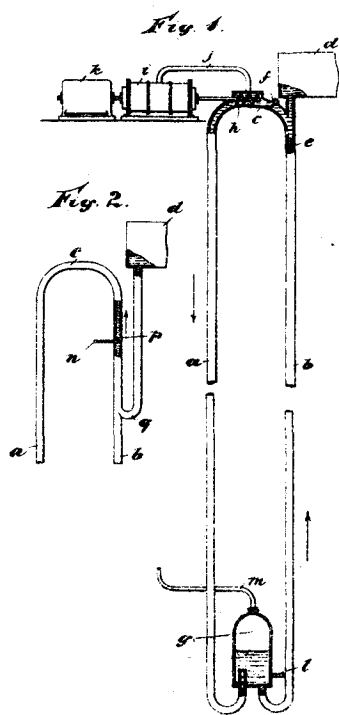
20627 Hunter. Building-construction.



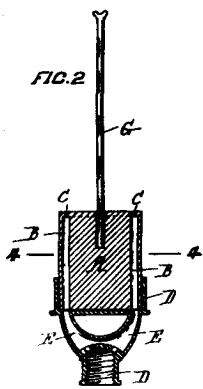
20638 Goddard. Building in Concrete.



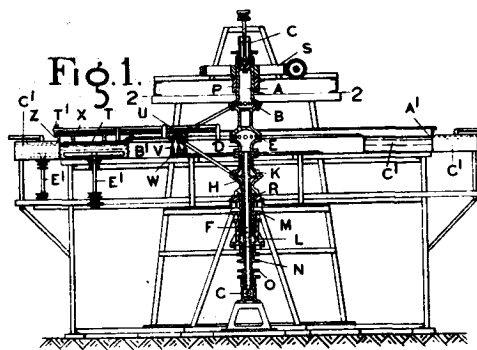
20629 Wood. Railway-brake.



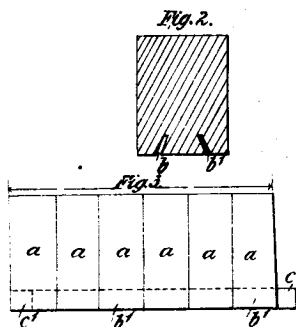
20644 Gill. Air-engine.



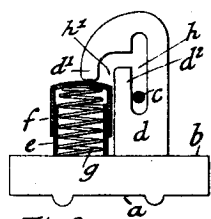
20697
Jack. Gas-burner.



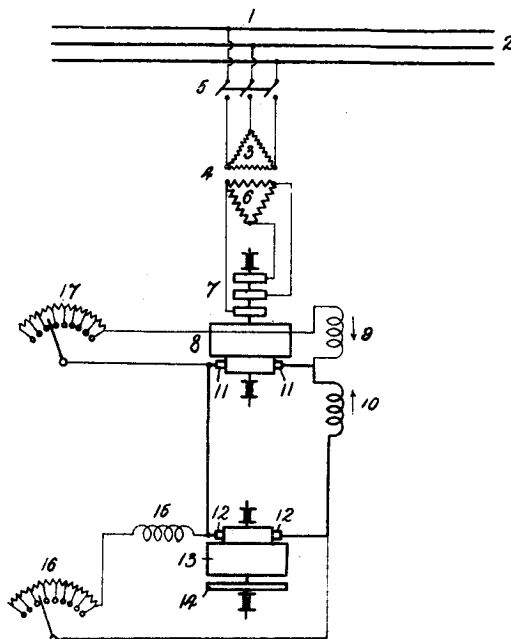
20712
Ridgway. Atmospheric Filter.



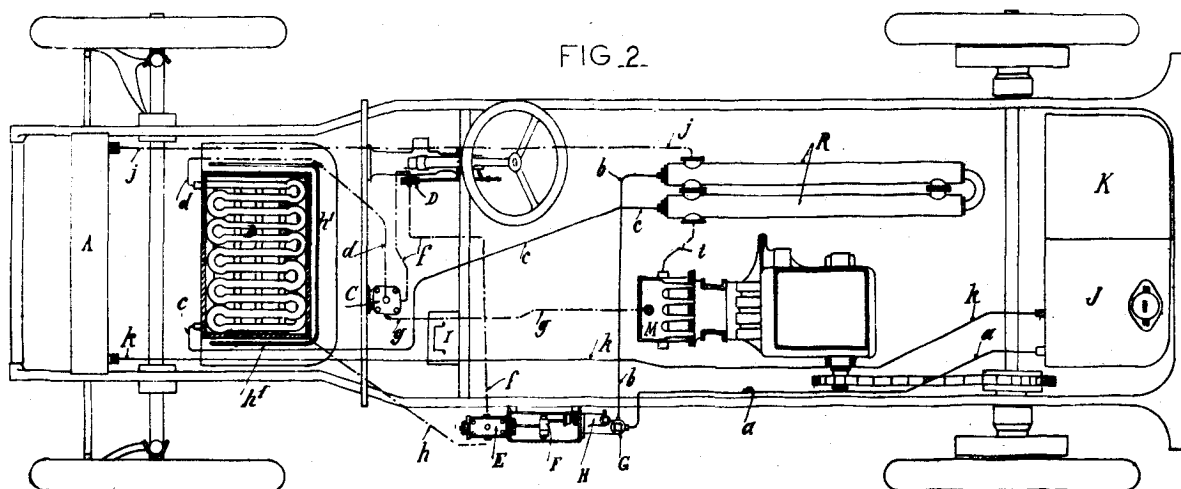
20728
Duffy. Paving-block.



20719
Edmond. Brooch-fastening.



20718
Campbell. Electrical Distribution. (Braun.)



20717
Serpollet. Steam-automobile.