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Official Notices.

PATENT OFFICE LIBRARY.

THIS library contains the following publications, viz. :—

United Kingdom.

The full text of the specifications and complete drawings of inventions patented from the year 1617 up to the 8th June, 1905.

Classified abridgments of inventions to 1900.
 Illustrated Official Journal, containing lists of recent applications, abridgments of inventions for which patents have been lately granted, patents void, &c., to August, 1905.

- Index of Applicants.
- Subject-matter Index.
- Commissioner of Patent Journal, &c. (*)
- Trade Marks Journal to June, 1905.

A

Canada.

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

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^(c).

United States.

The Official Gazette of the United States Patent Office (containing illustrated abridgments of specifications, &c.) to August, 1905.

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.
- Miscellaneous publications.
- Illustrated catalogues, price-lists of machinery, &c.

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^(d).

3. Register of Application for Letters Patent.
4. Register of Patents.
5. Register of Subsequent Proprietors of Letters Patent^(a).
6. Index of Patentees^(b).
7. Index of Proprietors of Letters Patent granted prior to 1890^(c).
8. Index of Specifications^(d).

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^(e).
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^(f).
- 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) These may also be seen at the Public Libraries, Auckland and Christchurch.
 (c) In arrears. Not now being printed.
 (d) Key is in card index.
 (e) 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.
 (f) 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.
 (g) The names of proprietors of subsequent letters patent appear in the Index of Patentees.
 (h) Contains classified abridgments of specifications from 1861, with extracts from drawings from July, 1904.
 (i) 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.
 (j) 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. 19991.—7th September.—G. and O. Hoskins, Limited, Sydney.
 Joint for locking-bar pipes.* (*G. J. Hoskins*).
- No. 19992.—7th September.—J. T. Hooker, Hokitika.
 Luncheon-can.
- No. 19993.—2nd September.—R. Wilson, Dunedin.
 Street-cleaning machine.
- No. 19994.—8th September.—J. W. Davis, Auckland.
 Exposure and focus distributor.
- No. 19995.—8th September.—R. H. G. Sibley and A. Brown, Auckland.
 Game.
- No. 19996.—8th September.—G. Griffiths, Birchfield.
 Forming bearings of wheels.*
- No. 19997.—8th September.—J. Troup, Christchurch.
 Bag-printing machine.
- No. 19998.—4th September.—T. Branton, Blenheim.
 Flax-tailing appliance.
- No. 19999.—5th September.—A. M. Grainger, Oamaru.
 Bird-trap.
- No. 20000.—6th September.—M. Sinclair, Dunedin.
 Drainpipe.*
- No. 20001.—7th September.—W. E. Cook, Christchurch.
 Venetian-blind cord-grip.
- No. 20002.—9th September.—G. E. Humphries, Wellington.
 Scaffolding bracket.
- No. 20003.—6th September.—J. H. Love, Auckland.
 Protector for dress.
- No. 20004.—6th September.—H. H. Oxley, Auckland.
 Reversible brush.
- No. 20005.—9th September.—A. S. Ford, Coromandel.
 Ejecting liquid from one receptacle to another.
- No. 20006.—9th September.—J. W. Fletcher, jun., Wellington.
 Clothes dryer.*
- No. 20007.—5th September.—W. J. Jaggs, Auckland.
 Laundry-iron.*
- No. 20008.—6th September.—D. T. McPhedran, Timaru.
 Maul-ring fastener.
- No. 20009.—6th September.—J. E. McLean, Dunedin.
 Garment match-striker.
- No. 20010.—6th September.—J. R. Park, Wellington.
 Brooch-pin catch. (*W. H. Fahey*.)
- No. 20011.—6th September.—J. H. Roberts, Waipiata.
 Swingletree and equalising-bar connection.
- No. 20012.—6th September.—J. H. Roberts, Waipiata.
 Plough-chain connecting-hook.
- No. 20013.—7th September.—J. Mason, T. Brydone, and G. Armstrong, Dunedin.
 Rope-block or lifting-tackle.
- No. 20014.—9th September.—Kempthorne, Prosser, and Co.'s N.Z. Drug Company, Dunedin.
 Culinary-essence manufacture.*
- No. 20015.—11th September.—J. W. Fowler, Whangarei Heads.
 Exit-door.
- No. 20016.—11th September.—V. Karl, Rotorua.
 Weed-eradicator.
- No. 20017.—11th September.—F. J. Shelton, Wellington.
 Valve.*
- No. 20018.—11th September.—F. E. A. Gordon and E. Hepworth, Palmerston North.
 Washing-fluid.
- No. 20019.—12th September.—Pintsch's Patent Lighting Company, Limited, London.
 Inverted incandescent gas-lamp.* (*J. Pintsch*.)
- No. 20020.—12th September.—E. H. J. Mitchell, Triavunna, Tasmania, and B. F. Mellor, Moonee Ponds, Victoria.
 Plough.
- No. 20021.—12th September.—J. M. Bawden, Traralgon, Victoria.
 Egg-boiling cruet-stand.
- No. 20022.—12th September.—P. T. Louat, Waihi.
 Slimes-treatment.
- No. 20023.—12th September.—W. E. Hughes, Wellington.
 Steam-distribution for locomotive.* (*H. Lentz and C. Bellens*.)
- No. 20024.—12th September.—R. C. Bishop, Christchurch.
 Gas-heated boiler.*
- No. 20025.—12th September.—J. Murphy and C. Harper, Fordell.
 Vehicle-shafts.*
- No. 20026.—13th September.—H. G. Cornwall, Wellington.
 Envelope and sheet of paper.

- No. 20027.—13th September.—Henry R. Worthington, New York.
Centrifugal turbine pumps.* (F. Ray.)
- No. 20028.—13th September.—M. A. Hoppe, Wellington.
Muscle-developer for fingers.
- No. 20029.—13th September.—R. C. Noedl, Woodville.
Clothes-prop.
- No. 20030.—13th September.—R. H. White and G. T. Pritchard, Wanganui.
Sash-fastener.
- No. 20031.—14th September.—J. S. Scarr, Hobart, Tasmania.
Vermin-trap.
- No. 20032.—14th September.—J. S. Scarr, Hobart, Tasmania.
Portable bed.
- No. 20033.—14th September.—Henry R. Worthington, New York.
Centrifugal turbine pumps.* (F. Ray.)
- No. 20034.—14th September.—T. H. Perrott, Broken Hill, New South Wales.
Lubricator.
- No. 20035.—14th September.—F. W. Smith, Rangiwhia.
Fruit-gatherer.
- No. 20036.—14th September.—J. R. Hatmaker, Paris.
Milk food.*
- No. 20037.—14th September.—J. R. Hatmaker, Paris.
Milk food.*
- No. 20038.—14th September.—E. P. Andreas, Leura, New South Wales.
Acetylene generator.*
- No. 20039.—14th September.—A. L. Falls, Cambridge.
Slasher-handle fastener.*
- No. 20040.—9th September.—J. Macalister, Invercargill.
Manure feed.
- No. 20041.—12th September.—E. J. Hatcher and C. Henry, Dunedin.
Steam cooker.
- No. 20042.—15th September.—C. J. Alley, Farndon, New Zealand.
Chiming and crozing machine.
- No. 20043.—15th September.—E. J. Parrish, Sydney.
Window-sash sustainer.*
- No. 20044.—16th September.—C. Craig, Marton.
Sighting apparatus for lifting rails.
- No. 20045.—13th September.—A. McCole, Onehunga.
Sock or stocking.*
- No. 20046.—18th September.—H. J. Mallabar, Liverpool, England.
Printing and developing photographs.
- No. 20047.—14th September.—F. Blackburn and J. Robertson, Auckland.
Non-refillable bottle.*
- No. 20048.—14th September.—W. Harvey, Auckland.
Pressure block for cheese-press.*
- No. 20049.—14th September.—A. Johnston, Devonport, and C. Jenkins, Ponsonby.
Scrubber and mop.
- No. 20050.—14th September.—T. McNab, Lawrence.
Ball-socket joint for gas-hangings.
- No. 20051.—18th September.—G. W. Lucy, Capetown.
Aerial roundabout.
- No. 20052.—18th September.—A. B. Wilson, Brisbane, Queensland.
Rotary engine.
- No. 20053.—18th September.—J. D. Jackson, Prahran, Victoria.
Spark-arrester.
- No. 20054.—18th September.—J. D. Jackson, Prahran, Victoria.
Water-heater.
- No. 20055.—18th September.—R. S. Haughton, Wellington.
Emptying kerosene-tin.
- No. 20056.—15th September.—J. Coe and V. Johansen, Auckland.
Cycle-valve connection.*
- No. 20057.—19th September.—A. E. Green, Dannevirke.
Hose-coupling.
- No. 20058.—10th September.—R. D. Kelly, Wellington.
Letter-envelope, &c.
- No. 20059.—19th September.—J. McCallum, Blenheim.
Bale-band fastener.*
- No. 20060.—20th September.—F. Cotton, Hornsby, New South Wales.
Refuse-furnace.*
- No. 20061.—20th September.—H. Stebbing, Auckland.
Post and letter cards.
- No. 20062.—20th September.—T. B. Baty, Greymouth.
Steam-engine.
- No. 20063.—20th September.—F. J. Shelton, Wellington.
Gas-heated laundry-iron.*

Notice of Acceptance of Complete Specifications.

Patent Office.

Wellington, 23rd September, 1905.

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. 18399.—3rd September, 1904.—THOMAS FALVEY, of 22, Clyde Quay, Wellington, New Zealand, Engineer. An improved steam-turbine.*

Extract from Specification.—According hereto inclined vanes arranged in concentric circles are fixed to a main revoluble disc, and enter annular spaces formed between concentric circles of vanes fixed to the casing of the turbine and inclined in a direction reverse to the movable vanes. Steam is admitted to the inner circles of fixed vanes, and passing through the outer circles is expanded, and finally exhausted into a condenser or to the atmosphere. Annular partitions forming a disc divide the vanes into two sets or series, the directions of the vanes of one set being the reverse of those of the other set. A valve admits steam to either set as desired for forward or backward motion. The set of vanes used for forward driving is subdivided by other partitions forming a second disc. Steam is admitted to one set of the subdivided vanes when half only of the power of the turbine is required, and when the full power is required steam is admitted to the whole of the subdivided vanes. A valve is provided with ports arranged for admitting the steam as above described. The casing of the turbine surrounds the disc and vanes and conducts the exhaust steam to a valve, valves, or stop-cocks operated simultaneously with the steam-admission valve as required during forward or backward driving. The exhaust valve or valves may be operated by cranks and rods or by the pressure of the exhaust steam, and may be held open by friction springs or counterpoise weights. The main disc has a boss fitting a socket upon the cover of the casing, and a shaft secured in the boss of the main disc has bearings and thrust-blocks. The turbine may be simple or compound, and two or more may be arranged in series, in which case the end thrust of the steam upon the shaft is balanced.

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

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

No. 18526.—1st October, 1904.—SAMUEL FORD, Sanitary-pipe Maker, and JAMES SPIERS FREEMAN, Land Agent, both of Dannevirke, New Zealand. Improved compound and method of manufacturing the same for the production of railway-sleepers, building-blocks, and other articles.*

Claims.—(1.) For the purpose indicated, an improved compound consisting of boiling tar, pumice, lime, and sulphur in the proportions stated, substantially as set forth. (2.) The improved method of manufacturing a compound for the purpose indicated consisting in boiling tar for several hours and mixing it with pumice in a mixing-machine, the mixing-vessel of which is steam-jacketed, substantially as set forth. (3.) A railway-sleeper comprising a casing having bolt-holes and its ends flanged, end plates held in position within the casing by the flanges, bolts for securing the rails passed through the bolt-holes, washer-plates upon the bolts, and a compound of tar, pumice, lime, and sulphur filling the said casing, substantially as set forth.

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

No. 18564.—8th October, 1904.—ALEXANDER McLEAN, of Brae Side, Ti-tree Point, Hawke's Bay, New Zealand, Farmer. An improved protector for pneumatic tires for motor-cars and similar vehicles.*

Claim.—In combination, a vehicle-wheel, a pneumatic tire carried in the rim thereof, a continuous ring of semi-circular section surrounding and receiving said pneumatic tire, and disc plates secured upon each side of the said ring, substantially as and for the purposes specified, and illustrated in the drawing.

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

No. 18602.—17th October, 1904.—GEORGE WILLIAM DAVALL, of 64, Brougham Street, Wellington, New Zealand, Signwriter. An improved combined bottle-stopper, measure, and eye-bath.*

Claims.—(1.) In combination with a bottle, a stopper fitted to the neck of the bottle and having its lower end oval in shape and having a recess the mouth of which is oval, the said recess being adapted for use as a measure, substantially as set forth. (2.) A bottle-stopper and an eye-bath integral with and projecting above the stopper, substantially as set forth. (3.) A combined stopper, eye-bath, and measure, the measure being made by forming a recess in the body of the stopper, substantially as set forth.

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

No. 18635.—20th October, 1904.—THOMAS MERCER, of Stratford, Taranaki, New Zealand, Hairdresser. Improved pneumatic sole or sock for boots, shoes, and the like.*

Claims.—(1.) A pneumatic sock for boots and the like, constructed, arranged, and operating substantially as specified and illustrated. (2.) A pneumatic sock for boots and the like, constructed in two parts cemented together around their edges and for a space which comes below the instep of the foot, so that the sock is inflated at the front part of the foot and beneath the heel only, substantially as specified and illustrated.

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

No. 18774.—21st November, 1904.—JOHN GEORGE DENNISON, of West Belt, Timaru, Canterbury, New Zealand, Carpenter. An improved potato-digging machine.*

Claims.—(1.) A machine for the purpose indicated consisting of the parts constructed, combined, arranged, and operating substantially as specified, and as illustrated in the drawings. (2.) In a machine for the purpose indicated, the employment, in combination, of a series of inclined stationary grids arranged one behind the other behind a share scoop and rakes carried upon endless chains adapted to travel up such grids and to carry up the potatoes delivered upon the lower grid by said share scoop, substantially as specified. (3.) In machines for the purpose indicated, the employment, in combination, of a series of inclined grids, rakes pivoted upon endless chains adapted to travel up said grids, each rake having a projecting tail-piece, an endless belt working between the rake-chains, against which the tail-pieces rest when the rakes are travelling up the grids for the purpose of maintaining the rakes approximately at right angles to the grids while they are free to yield under abnormal pressure, substantially as specified and illustrated. (4.) In machines for the purpose indicated, the combination of the shute for delivering potatoes carried up the grids and the parts co-operating therewith, substantially as set forth. (5.) In machines for the purpose indicated, the employment of a series of inclined grids arranged one behind the other beneath a share scoop, substantially as set forth. (6.) In machines for the purpose indicated, the employment of rakes pivotally supported between travelling sprocket chains, a tail-piece projecting from each rake, and means for causing the rakes to project at right angles to the chains through a portion of their travel, substantially as set forth.

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

No. 18785.—24th November, 1904.—JOHN JAMES WARD, of Onamalutu, Wairau, Marlborough, New Zealand, Builder. Improved means for use in tightening fencing-wires.*

Claim.—In means for use in tightening fencing-wires, a hollow frame, preferably of elliptical form, provided with recesses on its under-side, one at each end of the frame, adapted to receive the wire to be tightened, and with bearings upon its upper side, in combination with a round bar adapted to extend at right angles across the frame and to rest and revolve in the bearings formed therein, such bar being formed with a slot extending inwards from one end thereof to a point about midway in its length, and with means whereby it may be rotated and held from rotation, substantially as specified.

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

No. 18821.—1st December, 1904.—HERBERT HENRY NICHOLSON, of Pukeuri, Otago, New Zealand, Inventor. Improved apparatus for trapping birds.*

Claims.—(1.) Apparatus for trapping birds consisting of the several parts, arranged, combined, and operating substantially as specified and illustrated. (2.) Apparatus for trapping birds comprising, in combination, a chamber having sides and roof of wire netting, openings in one or more of the sides for entrance of birds, tunnels over said openings, an opening in the upper part of one side, a box fitting over said opening having an inclined bottom and a glass top, swinging doors upon the open lower end of said box, and a collecting-cage having an opening corresponding to the opening which has said swinging doors, substantially as specified, and illustrated in the drawing.

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

No. 19047.—6th February, 1905.—GEORGE THOMAS MACFARLANE, of No. 139, Queen Street, Woollahra, near Sydney, New South Wales, Australia, Retired Sub-lieutenant Royal Indian Marine. Improvements in shipping animals and in boxes therefor.*

Extract from Specification.—The slinging or horse box which is used in this shipping of animals is peculiarly constructed, in that one end and one side of said box are hinged at opposite corners so that such end and side will move radially away from one another to the extent of from ninety degrees (90°) to one hundred and eighty degrees (180°) or more. When these hinged side and end gates are opened to their fullest extent no difficulty, or but a minimum, is experienced in leading an animal into the open corner, to which or to the shorter wall said animal's head is securely fastened. On closing the side or longer gate the animal naturally moves towards the longer stationary wall, or if he does not the force of a few men will quickly push him snugly there. The shorter or end gate is closed with the same effect and likewise.

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

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

No. 19199.—14th March, 1905.—JAMES MACADAM DAWSON, of Ashburton, Canterbury, New Zealand, Hawker. An improved siphon.*

Claims.—(1.) An improved siphon consisting of the parts constructed, arranged, and operating substantially as and for the purposes specified, and illustrated in the drawing. (2.) A siphon characterized by having a sleeve which receives the shorter leg of a siphon-tube, substantially as and for the purposes specified, and illustrated in the drawing.

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

No. 19288.—12th April, 1904.—FREDERICK WILLIAM FARR, of Cogenhoe, near Northampton, England, Boot-manufacturer. Improvements in or relating to protectors or top pieces for heels of boots and shoes.

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

Claims.—(1.) A protector or top piece for the heels of boots and shoes consisting of rubber or rubber composition in which is imbedded a strip of wire gauze, substantially as and for the purpose described. (2.) A protector for the heels of boots and shoes comprising a base-piece of rubber in which is imbedded wire gauze, and which is provided with one or more projections or tips of rubber, substantially as and for the purpose described. (3.) Protectors or top pieces for the heels of boots and shoes, made substantially as described, and illustrated in the drawing.

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

No. 19514.—25th May, 1905.—ALEXANDER REID, of Whangamomona, Taranaki, New Zealand, Farmer. Improved hook for reins, traces, plough-chains, and other similar purposes.

Extract from Specification.—This invention provides an improved hook for employment in connection with reins, traces, plough-chains, and the like; and according hereto a hook is formed in the shape of a chain-link, having a portion cut out of one side to form a passage for a link, chain, or the like which is to be secured to the hook. When the hook is in use the cut-out portion is closed by a clasp which is hinged to the opposite side of the hook. Spring ears upon the clasp and a screw secures the clasp in position.

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

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

No. 19707.—11th July, 1905.—CHARLES EDWIN HIBBERD, of Albert Road, Devonport, Auckland, New Zealand, Inventor. Improvements in coin-freed machines.

Extracts from Specification.—My improvements in machines of this class provide means by which coins of different denominations may be used in one and the same machine to obtain quantities of a given commodity corresponding to the value of the coin employed. The coins are all passed through one slot and run down an inclined race until they meet directors, of which there is one for each size of coin. The directors change the course of the coins, and direct them according to their sizes to different slots. A coin falls through its slot into a receptacle at the end of a coin-lever, which lever when operated by the weight of the coin liberates mechanism described. . . . The worm 1 is adapted to slide vertically upon the revolvably mounted registering column 2, and this worm engages with the correspondingly screwed column 83, which is freed so that it may be revolved by an operator through a certain number of revolutions according to

the value of the coin placed in the machine. The quantity of gas obtained by means of the machine is determined by the height to which the worm 1 is raised upon its column 2, the flow of the gas being utilised to revolve the column 83 and cause the downward descent of the worm, which then operates mechanism to cut off the supply of gas.

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

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

No. 19728.—13th July, 1905.—HORACE JOHN BAKER HARDING, of Grafton, New South Wales, Australia, Watch-maker and Jeweller. Improvements in numerical recording machines specially applicable for election voting.

Extracts from Specification.—A numerical recording machine constructed according to this invention has presser bars or plungers, referred to as "plungers," each to be operated in voting for any candidate to actuate a "counter" or group of revolving dials or drums bearing numbers on each of said dials or drums for the units, tens, hundreds, thousands as well understood. Such machine has also a controlling-lever and warning-mechanism, all these being contained in a shell or cover with the plungers and controlling-lever protruding therethrough. The plungers pass through the casing and have movement against rods or bars adapted to slide in a bed or groove and to limit the number of votes castable, and hereinafter called "limiting-slides." There is one of these slides to each plunger, though the series of them are placed end to end to form one continuous rod, hereinafter referred to as the "limiting-rod," the whole being retained in normal rear position by a spring or springs. The limiting-slides have upon their faces projections or pins against which engages a V or wedge-shaped striking-piece upon the plungers when a plunger is depressed, thus forcing forward all the slides forwardly of it. As soon as the striking-piece is lower than the pin on its limiting-slide said slide escapes and the springs return the limiting-rod to normal position. At the same time a spring catch engages over the top of said striking-piece and holds the plunger in its lowermost position in the case of casting a single vote, or in the case of plural voting (no plumping allowed) the plunger cannot be released until the controlling or releasing lever is operated as explained by the presiding or other officer in charge or otherwise. The plunger is allowed to regain its normal position after being released, being raised thereto by means of a spring. In the case of plural voting (plumping allowed) the before-mentioned spring catch is held out of action by an appropriate device, and the plunger recovers its normal position by the action of said spring. In both plural and single voting each limiting-slide (except the most forward one) has fixed on its forward end a block or stop which passes freely under the striking-piece of the more forward plunger when this plunger is in normal position. . . . The forward end of the limiting-rod has an arm reaching to the limiting-wheel, and this arm carries a limit-pawl adapted to engage a spring-toothed wheel, called the "limiting-wheel," which has a drum containing a spring to insure the return of said wheel to normal position when it is released as set forth. As each plunger is operated, or each time one plunger is operated, the limit-pawl moves said wheel to the extent of one tooth, and this wheel is retained in such advanced position by means of a spring catch or retaining-pawl adapted to be released by the movement of the controlling and releasing lever. In voting, as the last allowed vote is cast a stop or post on said limiting-wheel, referred to as the "operating-post," and which is adjusted according to the number of votes allowed, operates a sliding rod parallel to the arbor of the counters, called the "engaging-rod." This engaging-rod carries discs, or tappets, or arms to engage with one end of spring levers, called the "clutch-levers," the other end of each of which clutch-levers takes into a boss on the actuating or unit wheel of its counters. As the engaging-rod is moved along it operates the clutch-levers, thus moving the actuating-wheels of all the counters within the paths of pawls on the lower end of the plungers, so that as a depressed plunger actuated by its return spring is recovering its normal position the pawl thereon engaging with the actuating-wheels of the counters moves the unit drum or disc one-tenth of a revolution, or, say, one number or one vote. The movement of this engaging-rod carries a disc or tappet thereon over or past a spring catch or hook on a lock cam or tumbler pivoted on the frame of the machine and adapted to be operated by one member of the controlling and releasing lever so that as this cam or tumbler is moved against the disc or tappet on the engaging-rod it prevents the return of the said engaging-rod, and thus holds the actuating-wheels of the counters in operative position or within the influence of the pawls on the plungers. When said controlling and releasing lever is operated to disengage the retaining-pawl from the limiting-wheel (to allow said

wheel to return to its normal predetermined position) this lock cam or tumbler is removed from the disc or tappet on the engaging-rod so that said rod will be returned to normal position by the action of the springs of the clutch-levers removing the actuating-wheels of the counters from operative position. In single voting or in plural voting (no plumping allowed), as this controlling and releasing lever is operated it engages a stop on one of the series of limiting-slides and moves them all backwardly just sufficient to cause the rear end of the front blocks or stops on these limiting-slides to push a spring catch off the striking-piece of each of the plungers so that their springs may return them to their normal position ready for action again. In plural voting (plumping allowed) these last-mentioned spring catches are all held by a continuous holding-rod, or individually by a screw or other device clear of the striking-pieces, and the engaging-rod is locked so that the actuating-wheels of the counters are normally in operative position. As the last available vote is cast a warning-bell is sounded by a hammer being released by the operating stop or post on the limiting-wheel lifting a spring or drop-catch while said hammer is again engaged by the operation of the controlling or releasing lever. The arbor upon which the limiting-wheel revolves extends across the width of the machine, having bearing in brackets fastened to the bed of the machine. On this arbor is a wheel or disc bearing numbers, referred to as the "regulating-wheel," with one of its numbers visible through an orifice in the casing and denoting the number of votes allowed. This number may be alterably fixed by means of a set-screw through the frame taking into orifices in a companion disc affixed to the arbor of the regulating-wheel, and so regulating or adjusting the position of a regulating fixed stop or post on said regulating-wheel. A second controlling stop or post on the limiting-wheel will be arrested against this regulating stop-vote post on the spring-actuated return movement of said limiting-wheel when it is freed from its holding catch or pawl on operation of the releasing or controlling lever. Instead of being alterably fixed, the number of votes might be changeable—that is, the number might be changed for each elector having different qualifications, in which case a spring lever or other holding-device with a point or stop engages in the orifices in the companion disc of the regulating-wheel, which latter is actuated or partially revolved by the presiding officer by means of a key on its arbor extending through the casing.

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

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

No. 19748.—17th July, 1905.—THOMAS RICHARD MOSES, of Christchurch, New Zealand, Bootmaker. An improved draught and dust excluder for doors.*

Claim.—A draught and dust excluder for doors consisting in the combination with a roller placed upon the floor against or near to the lower edge of a door of inverted hooks secured in the door and partly embracing the roller, a stud in the door at one end of the roller, and a spring upon its other end, as specified and for the purposes set forth.

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

No. 19756.—19th July, 1905.—JAMES THOMAS HUNTER, of Queen's Chambers, Wellington, New Zealand, Registered Patent Agent (nominee of Maurice Leblanc, of Villa Montmorency, Auteuil, Paris, France, Engineer). Improvements in refrigerating-apparatus.

Claims.—(1) In an ice-machine of the kind in which the reduction of temperature is obtained by the partial evaporation of water in a vacuum, creating and maintaining the vacuum by means of a steam-ejector exhausting into a vacuum condenser or a series of steam-ejectors in tandem, the last of which exhausts into a vacuum condenser, substantially as set forth. (2) An ice-machine comprising a refrigerating vacuum chamber, means for the gradual introduction of water into said chamber, and a steam-ejector or series of steam-ejectors in tandem exhausting into a vacuum condenser, substantially as described with reference to the drawings. (3) The ice-machines shown in the drawings.

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

No. 19757.—19th July, 1905.—The Honourable CHARLES ALGERNON PARSONS, of Heaton Works, Newcastle-on-Tyne, Northumberland, England, Engineer. Improvements in the production of high vacua and in cooling by evaporation.

Claims.—(1.) Combining two or more vacuum intensifiers to work in series, with or without intermediate coolers, for

the production of high vacua. (2.) Employing vacuum intensifiers in series to effect cooling by evaporation for the purpose of obtaining efficient refrigeration or cooling for cold storage or other purposes from steam-power. (3.) The combination of two or more vacuum intensifiers in series with coolers, the circulating medium in one or more of the coolers of most reduced vapour density being artificially cooled. (4.) Employing vacuum intensifiers in series for cooling the circulating fluid of one or more coolers or the like. (5.) In high vacua cooling or condensing plant, cooling the circulating fluid in an evaporator in which a very low vapour-density is obtained by a vacuum intensifier working in series with a condenser, substantially as described. (6.) In high vacua cooling or condensing plant, providing a vacuum intensifier to draw directly from the evaporative or other chamber to be evacuated and discharged into a condenser from which vapour and non-condensable fluid are drawn off by a second vacuum intensifier and a vacuum pump, substantially as described. (7.) In high vacuum cooling or condensing plant, arranging vacuum intensifiers and condensers in series so that the first intensifier in the series draws directly from the chamber to be evacuated and discharges into a cooler or condenser from which the next intensifier draws, and so on through the series, the condensed vapour and non-condensable fluid from the condensers being drawn off through dip seals or the like by one or more vacuum pumps and intensifiers, substantially as described. (8.) In high vacua cooling or condensing plant, arranging a vacuum intensifier to draw vapour directly from the chamber to be evacuated and discharge it into a cooler or condenser from which vapour and non-condensable fluid are drawn off by a further intensifier discharging into a further cooler or condenser having a vacuum intensifier, while the condensed vapour is drawn from both coolers or condensers by a pump through pipes having dip seals, substantially as described. (9.) In high vacua cooling or condensing plant as set forth in claim 8, cooling in one or more evaporators the circulating fluid of one or more coolers or condensers in which is a highly attenuated vapour by means of one or more additional vacuum intensifiers drawing from said evaporator or evaporators and discharging into one or more condensers or coolers of less attenuated vapour-density, substantially as described. (10.) In vacuum intensifiers, forming the nozzles with a ratio of area of neck to mouth of 10 to 250 and upwards. (11.) Vacuum intensifiers constructed and proportioned substantially as described, and illustrated with reference to Figs. 1 and 2 of the drawings. (12.) In a high vacua cooling or condensing plant, means for regulating the level of the liquid in an evaporative chamber or chambers, substantially as described. (13.) In high vacua cooling or condensing plant in which an evaporator is employed to cool the circulating fluid according to claim 5, automatically compensating for the loss of cooling fluid due to evaporation by means of a pipe connecting the evaporator with a hot well or other suitable supply, in which pipe is a valve operated by the liquid-level in the evaporative chamber, substantially as described. (14.) Apparatus as and for the purposes described with reference to Figs. 3, 4, and 5 of the drawings. (Specification, 12s. 6d.; drawings, 3s.)

No. 19817.—1st August, 1905.—HENRY BROWN, of Wairoa, Hawke's Bay, New Zealand, Blacksmith. Apparatus for use in connection with the collection of rain-water.

Claims.—(1.) Apparatus for the purpose indicated consisting of the parts arranged, combined, and operating substantially as and for the purposes specified, and as illustrated on the drawing. (2.) Apparatus for the purpose indicated comprising a branch-pipe the upper end of which receives a downpipe from the roof, a bracket upon which said branch-pipe is pivotally mounted at an inclination, a diaphragm at the upper end of the short leg of said branch-pipe having a port covered with gauze wire, an aperture for the escape of water through the lower end of said leg, a door covered with gauze wire hinged upon the end of the lower leg, a trigger upon said door engaging with a catch upon the branch-pipe, and an extension from said bracket adapted to engage with said trigger and to open the door, and a chain from said door to the bracket whereby the door is closed when the leg is swung outwardly, substantially as and for the purposes specified and illustrated. (3.) In apparatus of the nature indicated, a door covered with wire gauze hinged upon the longer leg of the branch-pipe, said door being designed to open to allow foreign matter to pass out when the apparatus is in the position for delivering water to waste, and means whereby said door is closed when the apparatus is in position to deliver water to the storage-tank, substantially as and for the purposes specified and illustrated. (4.) In apparatus of the nature indicated, the employment of a bracket upon

which the branch-pipe is pivotally mounted at an inclination, said bracket having an extension by which the door of the longer leg of the branch-pipe is opened, substantially as and for the purposes specified, and illustrated on the drawing.

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

No. 19850.—8th August, 1905.—WILLIAM FREDERICK WILLIAMS, of 4, Denman Street, Piccadilly Circus, London, England, Gentleman. Improvements in and relating to the means of raising and lowering railway-carriage and other sash windows and shutters.

Claims.—(1.) In a counterbalanced railway-carriage or other similar sash window or shutter which is suspended by means of a flexible connection wound upon a spring barrel, the combination of means of raising and lowering the sash by a push or pull exerted transversely thereof consisting of a hand-operated slider mounted to work in guides transversely of the window and carrying a rack and a pinion in gear with the rack and turning as one with said spring barrel, and of means for causing the sash to be on the one hand automatically locked at the height to which it may be moved, and on the other hand automatically unlocked when said push or pull is exerted upon the slider in either direction, consisting of a stationary locking-rack, a handle pivoted to the slider and retained by spring pressure in a mid position, and a latch-bolt spring-pressed in the direction to engage the locking-rack teeth, and so connected to said handle as to be by the angular movement thereof displaced transversely of the locking-rack, substantially as specified. (2.) In apparatus for operating a sliding sash as specified in claim 1, the combination with the spring barrel of a rotatable stud forming the stationary abutment for the spring, and provided with a head which is adapted to be engaged by a spanner and to be secured in various angular positions, substantially as and for the purpose specified. (3.) In apparatus for operating a sliding sash as specified in claim 1, the employment of a latch-bolt provided with a duplex operative extremity as and for the purpose specified. (4.) The means for enabling the effective length of the cord whereby the sash is suspended to be so adjusted that the sash may hang at the proper level when the slider stands at either end of its stroke, substantially as described with reference to Figs. 2 and 6 of the drawings.

(Specification, 9s. 6d.; drawings, 3s.)

No. 19856.—8th August, 1905.—BENJAMIN STANLEY NICHOLLS, JOHN HERBERT NICHOLLS, and CHARLES ALLWOOD BENNETT, trading as "Nicholls Bros.," of Auckland, New Zealand, Ironfounders. An improvement relating to high-pressure boilers and similar water-heaters.

Claim.—In a water-heater, the formation of a wall or walls exposed to the fire, with projecting bosses as and for the purpose specified, and as illustrated in the drawing. (Specification, 1s.; drawing, 1s.)

No. 19862.—10th August, 1905.—GEORGE SKAATS MAYHEW, of 2, Basinghall Avenue, London, England, Engineer. Improved process and apparatus for preparing and cutting veneers.

Claims.—(1.) A process of manufacturing veneers faced with paper cut in a continuous sheet from a rotating boiled, steamed, or green log in which the face of the log as it rotates is first dried and then lined with a continuous sheet of tough paper or fabric, and then dried again over its faced surface, and finally the dried faced surface shaved off in the form of a thin continuous strip of veneer, substantially as described. (2.) In a machine for the manufacture of faced veneers in continuous sheets, the combination with adjustable supporting centres for a revolving log of a heated rotating adjustable roller adapted to dry the face of the log, a facing-roller adapted to press a continuous sheet of paper or fabric on the dried face of the log as it rotates, a heated roller or rollers adapted to press and dry the cemented sheet of paper or fabric upon the face of the log, an adjustable knife adapted to shave off a paper-faced veneer from the log, and a series of drying-rollers to extract the remainder of the moisture from the veneer as it passes over them from the log to the reel, substantially as described. (3.) In a machine for the manufacture of faced veneers, the construction and arrangement of parts substantially as described, and shown in the drawings. (Specification, 3s. 6d.; drawing, 1s.)

No. 19863.—10th August, 1905.—GEORGE SKAATS MAYHEW, of 2, Basinghall Avenue, London, England, Engineer. Improved fireproof wooden-cored plaster slab for building and other purposes.

Claims.—(1.) The process for producing a wooden-cored plaster slab in a continuous sheet consisting in coating a thick plaster face on both sides of a perforated wooden core and pressing said plaster faces so that said faces are locked to the core through said perforations. (2.) The process for producing a wooden-cored plaster slab in a continuous sheet consisting in perforating a compo.-board core in lines, distributing a thin coating of sizing material over said perforated compo.-board core, drying said sized core on both sides, feeding ridges or lines of thick plaster on both sides of said perforated core, and pressing the faces of the core when completely coated with lines of plaster so that said lines of plaster are locked to the core through said perforations and are formed with the core into a solid plaster slab. (3.) The process for producing a wooden-cored plaster slab in a continuous sheet consisting in perforating a compo.-board core with lines of perforations at regular intervals, feeding ridges or lines of thick plaster over said lines of perforations on both sides of said perforated core, forming said lines of plaster into regular rows, drying said plaster ridged core, re-perforating said core between said ridges of plaster, feeding lines or ridges of plaster on both sides of said core above said new perforations, and pressing the faces of the core when completely coated with lines of plaster so that said lines of plaster are locked to the core through said perforations and are formed with the core into a solid plaster slab. (4.) A wooden-cored plaster slab, produced in a continuous sheet, consisting of a perforated wooden core and a thick plaster coating on both sides firmly pressed and locked on to said core through said perforations. (5.) A wooden-cored plaster slab, produced in a continuous sheet, consisting of a perforated compo.-board core and a thick plaster coating on both sides fed on to said core in regular rows corresponding with said lines of perforations and firmly pressed and locked on to said core through said perforations. (6.) A wooden-cored plaster slab, produced in a continuous sheet, consisting of a plaited core and a thick plaster coating on both sides firmly pressed and locked on to said core through the perforations in the plaited core. (7.) In a machine for forming a plaster slab with a plaited core of the character described, the combination of a pair of feeding-rollers, upper and lower cement-rollers adapted to distribute a thin coating of sizing-material evenly over the faces and perforations of said core, a hot-air chamber adapted to dry said core on both sides, a pair of upper and lower plastering-tanks provided with a series of spouts adapted to feed lines or ridges of thick paste or plaster on both faces of the core, a pair of adjustable grooved rollers adapted to be moved into a position to form said lines of plaster into regular rows, and a pair of adjustable flat rollers adapted to be moved into a position to press the faces of the core when completely coated with lines of plaster into a solid plaster slab. (8.) In a machine for forming a plaster slab with a perforated compo.-board core of the character described, the combination of a pair of feeding-rollers, perforating and countersinking rollers adapted to perforate the core and countersinking the perforations on both sides of the core, a pair of cleaning-rollers adapted to remove any particles of wood or paper left adhering to the core, upper and lower sizing-rollers adapted to distribute a thin coating of sizing-material evenly over the faces and perforations of said core, a hot-air chamber adapted to dry said core on both sides, a pair of upper and lower plastering-tanks provided with a series of spouts adapted to feed lines or ridges of thick paste or plaster on both faces of the core over the lines of perforations, a pair of adjustable grooved rollers adapted to be moved into a position to form said lines of plaster into regular rows, and a pair of adjustable flat rollers adapted to be moved into a position to press the faces of the core when completely coated with lines of plaster into a solid plaster slab. (9.) In a machine of the character described, guides or stops for adjusting the position of the core in the machine, substantially as described. (10.) In a machine for forming a plaster slab with a perforated wooden core, the construction and arrangement of parts substantially as described and shown in Figs. 5 and 6 of the drawings.

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

No. 19865.—10th August, 1905.—DANIEL CORCORAN, of No. 33, George Street, Launceston, Tasmania, Australia, Grocer. An improved device for measuring liquids.

Extract from Specification.—This invention relates to a device for accurately measuring liquids which may be readily discharged of its contents. It consists of a glass or other transparent tube marked with graduations, and pivot-

ally suspended from a clamping-bracket in such a manner as to retain the surface of the liquid therein at spirit-level. At the bottom of the tube is a detachable funnel provided with a cock by which the measured quantity may be transferred to another receptacle.

(NOTE.—The above extract from the specification is inserted in place of the claims.)

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

No. 19866.—10th August, 1905.—AKTIEBOLAGET SEPARATOR, a corporation existing under the laws of Sweden, and having their place of business at 8, Fleminggatan, Stockholm, Sweden, Manufacturers (assignees of Anders Johan Ericsson, of 8, Fleminggatan aforesaid, Engineer). Improvements relating to centrifugal separating-apparatus.

Claims.—(1.) In centrifugal separating-apparatus, which for the purpose of carrying away the solid matters stratified on the inner wall of the bowl are provided with rotating scoop-discs operated by gearing from a separate driving-shaft, the means consisting of one or more inclined shields fastened either on the bowl or on the guide-disc of the scoop-discs in such a manner that the heavier particles thrown out from the scoops nearer to the centre of the bowl opposite to the shields are caught by these shields and slide along the same out through the openings in the bowl. (2.) In the device indicated in claim 1, the improvement that the shields themselves or prolongations of the shields are scraped off by scrapers which convey the solid matters to the outlet. (3.) In the device indicated in claim 1, the improvement that the scoops or the scoop-discs have such an inclined form that the solid matters slide off the same in an oblique direction over to the shields mentioned in claim 1.

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

No. 19867.—10th August, 1905.—AKTIEBOLAGET SEPARATOR, a corporation existing under the laws of Sweden, and having their place of business at 8, Fleminggatan, Stockholm, Sweden, Manufacturers (assignees of Birger Ljungstrom, of 8, Fleminggatan aforesaid, Engineer). Improvements relating to centrifugal separating-apparatus.

Claims.—(1.) In centrifugal separating-apparatus of the kind provided with a liner dividing the bulk of the liquid into layers thin in the direction of the radius, the improvement consisting in that outside the liner, between the same and the inner wall of the bowl, one or more obliquely arranged scrapers are located, said scrapers being put in a rotary motion relatively to the bowl and to the liner by means of a separate driving-shaft in order that the solids stratified on the inner wall of the bowl may be scraped down along the wall of the bowl and further be carried off from the bowl in a suitable manner. (2.) A constructional form of the device claimed in the first claim characterized thereby that the obliquely running scrapers are arranged on a trellised drum.

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

No. 19868.—10th August, 1905.—AKTIEBOLAGET SEPARATOR, a corporation existing under the laws of Sweden, and having their place of business at 8, Fleminggatan, Stockholm, Sweden, Manufacturers (assignees of Anders Johan Ericsson, of 8, Fleminggatan aforesaid, Engineer). Improvements relating to centrifugal separating-apparatus.

Claim.—In centrifugal separating-apparatus of the kind having scoop-discs located in the centrifugal bowl and driven by a separate shaft and moving planetwise along the periphery of the bowl, the improvement which consists of scrapers partially embracing the scoop-discs and having their points near to the periphery of the bowl and directed with the motion of the separate shaft relative to the bowl in order that the solid matters may be caught by the points of the scrapers and be carried further by the scoop-discs, whereby the scrapers act as guides.

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

No. 19873.—8th August, 1905.—JOHN HERCUS, Agent, FREDERICK WILLIAM BARTON, Gardener, and WILLIAM MORTON, Mechanical Engineer, all of Dunedin, New Zealand. An automatic food-protector for domestic animals and birds.

Claims.—(1.) In feeding-boxes for supplying artificial food to domestic animals or birds, in combination, the feeding-receptacle, with a door arranged that it moves away when said animal or bird for which said food was intended steps on a platform, to which it is so connected that by depressing

said platform the box or receptacle is open, all substantially as set forth, and as shown on the drawing. (2.) In a feeding-box, the combination of a platform connected with a door and balance-weight so that when sufficient weight as calculated is applied to said platform the door opens and allows the contents to be extracted, all substantially as set forth, and as shown on the drawing. (3.) In a feeding-box, a hinged transparent or perforated door so connected with a combined platform that when a creature of sufficient weight or sufficient weight is applied to said platform said door opens allowing the contents to be extracted, and when said weight is withdrawn from said platform said door automatically closes by the action of the balance-weight, all substantially as set forth, and as shown on the drawing.

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

No. 19874.—9th August, 1905.—OTENE PAORA, of Orakei, Auckland, New Zealand, Farmer. An improved adjustable cant hook or lever.

Claims.—(1.) A cant hook or lever constructed of a staff or bar with an adjustable and slidable cross-bar having a hooked-shaped tongue on its working end or head fitted thereto, all for the purpose set forth, substantially as described, and illustrated by the drawings. (2.) A cant hook or lever constructed of a staff or bar with an adjustable and slidable rack or ratchet cross-bar having a hook-shaped tongue on its working end or head fitted thereto, with a movable tongue or pawl for engaging and holding such rack or ratchet cross-bar controlled by a spiral compression-spring, such tongue or pawl working in guide attached to the staff and operated by a small hand-lever attached to the handle of such staff, all for the purpose set forth, substantially as described, and illustrated by the drawings.

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

No. 19882.—15th August, 1905.—GEORGE CHRISTIAN JOHN RICHARD, of 73, King Street, Newtown, near Sydney, New South Wales, Australia, Art Metal-worker. A new device in collapsible gates and collapsible shutters for shop-fronts, warehouses, doorway-entrances, and the like.

Claims.—(1.) In collapsible gates and shutters, the use of slot-pieces marked "A" on No. 2 drawing with slot in same marked "D" on No. 2 drawing fixed between lattice-bars of gate for them to work in same. (2.) The use of any number of slot-pieces marked "A" on No. 2 drawing with slot in same marked "D" on No. 2 drawing fixed in different positions so as lattice-bars can work in same.

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

No. 19883.—15th August, 1905.—WILLIAM JOHN WALLERT, of 5, Equitable Buildings, Durban, Natal, Contractor. Improvements in lock-nuts.

Extract from Specification.—According to my invention the nut on the under-side is formed with two (more or less) indentations, recesses, or cavities of a suitable shape and depth, and on the surface of the washer next the nut are formed two (more or less) inclined planes or tapering projections. The under-side of the washer, or that surface which comes into contact with the plate or other object into which the bolt is placed, is fluted or formed with shallow channels or grooves at a suitable angle, which flutes, channels, or grooves run preferably in the reverse direction to the pitch of the screw-thread.

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

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

No. 19890.—17th August, 1905.—JACOB DAVID WOLF, of 17, Throgmorton Avenue, London, England, Gentleman. Improvements in or relating to the separation of metals from their ores.

Claims.—(1.) In apparatus for the separation of metals from their ores in which a travelling belt coated with tacky material is used to separate finely divided metals and gangue in a wet pulp—ridging, roughening, or corrugating the viscous oil, grease, or tacky material upon the surface of the travelling belt. (2.) In apparatus for the separation of metals from their ores in which a travelling belt coated with tacky material is used to separate finely divided metals and gangue in a wet pulp, imparting by suitable means a vertical movement or movements to such travelling belt coated with tacky material. (3.) In apparatus for the separation of metals

from their ores in which a travelling belt coated with tacky material is used to separate finely divided metals and gangue in a wet pulp, the use of an apron or grid or the like above the surface of such travelling belt for the purpose of facilitating the separation of the metallic particles from the gangue. (4.) In apparatus for the separation of metals from their ores in which a travelling belt coated with tacky material is used to separate finely divided metals and gangue in a wet pulp—ridging, roughening, or corrugating the viscous oil, grease, or tacky material upon the surface of the travelling belt, and imparting by suitable means a vertical movement or movements to such travelling belt coated with tacky material. (5.) In apparatus for the separation of metals from their ores in which a travelling belt coated with tacky material is used to separate finely divided metals and gangue in a wet pulp—ridging, roughening, or corrugating the viscous oil, grease, or tacky material upon the surface of the travelling belt, and the use in combination therewith of an apron or grid or the like above the surface of such travelling belt, and arranged to act in conjunction therewith for the purpose of facilitating the separation of the metallic particles from the gangue. (6.) In apparatus for the separation of metals from their ores in which a travelling belt coated with tacky material is used to separate finely divided metals and gangue in a wet pulp, imparting by suitable means a vertical movement or movements to such travelling belt coated with tacky material, and the use in combination therewith of an apron or grid or the like above the surface of such travelling belt, and arranged to act in conjunction therewith for the purpose of facilitating the separation of the metallic particles from the gangue. (7.) In apparatus for the separation of metals from their ores in which a travelling belt coated with tacky material is used to separate finely divided metals and gangue in a wet pulp—ridging, roughening, or corrugating the viscous oil, grease, or tacky material upon the surface of the travelling belt, imparting by suitable means a vertical movement or movements to such travelling belt coated with tacky material, and the use in combination therewith of an apron or grid or the like above the surface of such travelling belt, and arranged to act in conjunction therewith for the purpose of facilitating the separation of the metallic particles from the gangue.

(Specification, 13s.; drawings, 3s.)

No. 19896.—17th August, 1905.—ALBERT EDWARD BREGMAN, of Churchill, Waikato, Auckland, New Zealand, Farmer. An improved combined saw-set, gauge, and stripper.

Claims.—(1.) The arrangement, construction, and combination of a saw-set, gauge, and stripper, all for the purposes set forth, substantially as described, and as illustrated by the drawings. (2.) A saw-set gauge constructed of a plate having a straight edge with a rectangular portion cut out of one corner, having a graduated scale marked or cut on the lower inner side of said cut-out corner, and a thumb gauge-screw working through a top projecting piece controlled by a thumb set-screw working through and parallel to such projecting piece, such saw-set gauge being in combination with a saw-set and stripper, for the purposes set forth, substantially as described, and as illustrated by the drawings. (3.) A saw-stripper constructed of a plate with a straight edge thereon, said plate broadening out to an ovate, oval, or rectangular shape, with recesses cut thereout to permit of a file or suchlike being inserted into one, and of a thumb-screw to turn in the other working through a projection between the two recesses, the corner of the straight edge and one of the recesses being cut off diagonally, such saw-stripper being in combination with a saw-set and saw-set gauge, all for the purposes set forth, substantially as described, and as illustrated by the drawings.

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

No. 19899.—16th August, 1905.—CHARLES BOWTELL SMITH, of Dunedin, New Zealand, Printer. Improved counter-sales or check book.

Claims.—(1.) In counter-sales or check books where more than one fac-simile entry is needed, in combination, a book composed of sets of leaves, all of regular different sizes for ease in working said sets, with the means of fixing said books to cases or covers, all substantially as set forth, and as shown on the drawing. (2.) In counter-sales or check books where triplicate sets are worked in combination, leaves of said book arranged in three sizes for convenience of working the sets, the middle leaf of each set being transparent, with double-faced carbon paper placed between the second and third leaf of each set, and the book being secured to its cover by the device as set forth, all substantially as shown, and as described and as set forth.

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

No. 19910.—19th August, 1905.—JAMES COE and VALDEMAR JOHANSEN, both of Auckland, New Zealand, Merchants. A continuously heated soldering-iron.

Claim.—The combination in the continuously heated soldering-iron specified of the holder or reservoir with a pump fitted therein and valve attachment, the tube screwed into the top of the said holder, the wick held by ring at inner top of tube and falling down into top of said holder, transverse channel leading from top of said tube to horizontal channel, said horizontal channel opening up into up outlet-channel with head having pin-hole therethrough placed at top of said up outlet-channel, perforated hood screwed round so as to cover said head, spindle screwed into projection so that its point will close or open said horizontal channel, loose cross-arm for working said spindle, iron fixed to rod slidably held in grip fitted to tool-tray swung to tool screw-nut for holding rod fixed to iron in position for the purpose set forth, substantially as described and illustrated.

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

No. 19922.—23rd August, 1905.—EDWARD TAYLOR, of Charlotte Street, Brisbane, Queensland, Australia, a member of the firm of Taylor and Colledge, Limited, Wholesale Druggists, &c. Improvements in siphons for withdrawing liquids from vessels, and particularly in the means for starting and controlling the siphonic action therein.

Claims.—(1.) In combination with an ordinary siphon, an "ejector" and "deflector" as described and illustrated. (2.) In combination with an ordinary siphon, an outer tube on the longer leg, said outer tube being closed at the bottom (but not at the top) and provided at the top with a lip or spout, and with means for retaining and holding same in any desired position, as described and illustrated. (3.) An appliance for withdrawing liquids from vessels consisting of a siphon having on the shorter leg an "ejector" and "deflector," and on the longer leg an outer tube having a lip or spout, and means for retaining and holding said outer tube in any desired position, as described and illustrated.

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

No. 19933.—22nd August, 1905.—FRANK WILLIAM LEIGHTON, of High Street, Auckland, New Zealand, Bookbinder. An improved locking-device for loose-leaf ledgers.

Claims.—(1.) The arrangement, construction, and combination of the locking-device for loose-leaf ledgers as and for the purpose set forth, substantially as described, and as illustrated by the drawings. (2.) A locking-device for loose-leaf ledgers consisting of a horizontal central shaft controlled by a spring pawl with trip thereon, said horizontal central shaft having right- and left-hand threads respectively cut therein near its ends, nuts with female threads cut therein respectively working on said right- and left-hand threads with connecting rods or bars attached to said nuts and to frame of ledger-back, the extreme ends of said horizontal central shaft squared and tapering to permit of being operated with a key, all for the purposes set out, substantially as described, and as illustrated by the drawings. (3.) A locking-device for loose-leaf ledgers consisting of a horizontal central shaft having right- and left-hand threads respectively cut therein near its end, nuts with female threads cut therein respectively working on said right- and left-hand threads with connecting rods or bars attached to said nuts and to frame of ledger-back, the extreme ends of said horizontal central shaft squared and tapering to permit of being operated with a key, all for the purposes set forth, substantially as described, and as illustrated in Fig. 1 of the drawings.

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

No. 19996.—8th September, 1905.—GEORGE GRIFFITHS, of Birchfield, New Zealand, Ironfounder. An improved manner of forming the bearings of wheels or other metal castings.

Claim.—The improved manner of forming the bearings of wheels or other castings, the same consisting in casting the wheel or other casting around a bush of soft metal placed within the casting-mould, substantially as specified.

(Specification, 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, 20th September, 1905.

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

- No. 19519.—C. Robertson, book-binder.
No. 19599.—J. F. Farra, skylight.
No. 19815.—H. Corbett, siphon (F. J. Corbett).
No. 19877.—H. B. Williams, protecting tires from puncture and slipping.
No. 19894.—R. H. Owen, securing match-striker to coats, &c.
No. 19908.—T. H. Rutherford, toasting-fork.
No. 19938.—J. Nelson, inflater-pump.
No. 19941.—J. B. Henderson pulley-block.
No. 19944.—C. J. R. Richardson, railway-rails.
No. 19967.—C. F. F. Allan, carving-table, hot closet, and plate-rack.
No. 19969.—H. Jane, water-heater.
No. 19971.—J. Pomeroy, paper-file.
No. 19972.—J. Pomeroy, ear-marker.
No. 19973.—C. Lorrett, horse-controller.
No. 19974.—W. J. Dil, bicycle roller brake.
No. 19981.—J. Henry and A. G. Gabites, combined pocket flask and heater.
No. 19982.—W. Madder, vote-recorder.
No. 19984.—D. W. Martyn, saucepan.
No. 19989.—J. N. Dewar, ore-feeder for stamper batteries.
No. 19992.—J. T. Hooker, luncheon-can.
No. 19994.—J. W. Davis, exposure and focus distributor.
No. 19998.—T. Branton, cleaning tails off flax.
No. 20001.—W. E. Cook, venetian-blind cord-gripper.
No. 20002.—G. E. Humphries, scaffolding-bracket.
No. 20003.—J. H. Love, saddle-safe for horse-riding skirt.
No. 20004.—H. H. Oxley, circular-broom rotating-device.
No. 20008.—D. T. McPhedran, maul-ring fastener.
No. 20011.—J. H. Roberts, swingletree and equalising-bar connection.
No. 20012.—J. H. Roberts, plough-chain connecting-hook.
No. 20013.—J. Mason, T. Brydone, and G. Armstrong, lifting-tackle.
No. 20021.—J. M. Bawden, egg-boiling cruet-stand.
No. 20022.—P. T. Louat, extracting liquid from pulpslimes.
No. 20026.—H. G. Cornwall, combined envelope and sheet of paper.
No. 20030.—R. H. White, and G. T. Pritchard, sliding sash-fastener.
- 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.

Letters Patent sealed.

LIST of Letters Patent sealed from the 7th September to the 20th September, 1905, inclusive:—

- No. 17743.—J. B. Waters, W. Andrews, and A. W. Beaven, cleaning rye-grass seeds.
No. 17965.—A. G. Baker, door-lock.
No. 17998.—H. L. Mainland, gold dredging appliance.
No. 18100.—C. C. Small, top lift for boot.
No. 18233.—T. Macalpine, refining oils.
No. 18274.—Rowe's Patent Lock and Block, Limited, railway-traffic-control system (W. Rowe).
No. 18291.—W. H. Spiller, cream-separator and milk-cooler.
No. 18363.—United Shoe Machinery Company, welt-attaching apparatus (G. Goddu).
No. 18493.—A. G. French, obtaining ammonium-chloride from coal.
No. 18688.—A. J. F. de Bavay, separation by flotation.
No. 19287.—F. C. Buck, valves and cocks.
No. 19394.—J. Bowring, obstruction-remover.
No. 19422.—A. S. Patterson, separator (Massey-Harris Company, Limited—W. W. Marsh and C. H. Hackett).
No. 19426.—H. J. Horstmann, mercury-vapour amalgamator.
No. 19443.—Henry R. Worthington, centrifugal turbine pump (F. Ray).
No. 19444.—Henry R. Worthington, centrifugal turbine pump (F. Ray).
No. 19464.—J. Holden and E. S. Tiddeman, spark-arrester.
No. 19476.—C. Trevethick, brush.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

- NO. 13864.—The Linotype Company, Limited, linotype machine (E. Waters, jun.—The Linotype Company, Limited—O. Mergenthaler). 18th September, 1905.
- No. 13986.—A. D. Carmichael and L. Bradford, desulphurising sulphide ore. 6th September, 1905.
- No. 14010.—R. Keyte, fire-escape. 18th September, 1905.
- No. 14011.—R. L. Patterson, bottle-closure. 18th September, 1905.
- No. 14047.—G. A. Overstrom, concentrating-table. 14th September, 1905.
- No. 14059.—F. Gold, nail. 6th September, 1905.
- No. 14060.—C. A. Hege, cutting railroad cross-ties. 6th September, 1905.
- No. 14098.—The British Westinghouse Electric and Manufacturing Company, Limited, electric brake (J. P. Campbell—F. C. Newell). 14th September, 1905.
- No. 14099.—W. Bills, coiler for wire-weaving machine. 6th September, 1905.
- No. 14136.—The British Westinghouse Electric and Manufacturing Company, Limited, electric-heating system (W. E. Hughes—F. C. Newell). 12th September, 1905.
- No. 14247.—D. Drummond, spark-arrester. 18th September, 1905.
- No. 14388.—D. H. and E. J. Burrell, liquid-delivery apparatus (H. Feldmeier). 12th September, 1905.

THIRD-TERM FEES.

- No. 11038.—Hodsdon Patent Totaliser and Enumerating Machines Company, Limited, enumerating-machine (H. Hodsdon). 6th September, 1905.

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

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

- NO. 18545.—John William Wrigley, of Rotorua, in the Provincial District of Auckland, in the Colony of New Zealand, Architect, registered as proprietor of *A. J. Park's* interest. Cleaning and sorting tow. [E. Elliott and A. J. Park.] 16th September, 1905.
- No. 19083.—Harold Ernest Simmonds and Charles Robert Spragg, of Karangahape Road, Auckland, in the Colony of New Zealand, Upholsterers (trading as Simmonds and Spragg), registered licensees for whole colony for residue of the term. Retaining mattress on bedstead. [N. Hill—F. Davis.] 16th September, 1905.

Requests to amend Specifications.

Patent Office,
Wellington, 6th September, 1905.

REQUESTS for leave to amend the specifications relating to the undermentioned Letters Patent have been received, and are open to public inspection at this office. Any person may, at any time within one month from the date of this *Gazette*, give me notice in writing of opposition to the amendments. Such notice must set forth the particular grounds of objection, and be in duplicate. A fee of 10s. is payable thereon.

No. 2733.—Job Osborne, of Doyleston, Canterbury, New Zealand, Farmer. A double-action well-driver.

The nature of the proposed amendments is as follows:—

- (1.) To strike out the words "attached to the end of the lever," and insert instead "of the monkey or boring-rods which are connected to the lever by a connecting-rod and lifting-rope," line 25, page 1 of schedule.
- (2.) To insert the words "to the bifurcated end of a connecting-rod which is coupled by a pin" after the word "attached," line 40, page 2; and the word "sheaves" after the word "these," line 41, page 2.
- (3.) To strike out the words "connected to the lever requiring to be not," and to insert instead "of the lever not required to be," lines 6 and 7, page 3.
- (4.) To insert the word "alternately" in place of the word "alternatively," line 33, page 3.
- (5.) To insert the words "mounted in bearings A¹ and A² fixed to a frame A³ provided with a gantry N³, the said spindle" after the word "spindle," line 39, page 3.

(6.) To insert the words "connecting-rods D⁴ and D⁵ by pins D⁶ and D⁷, the ends D⁸ and D⁹ of the said rods being bifurcated to receive" after the word "attached," line 1, page 4; and the words "and D¹" after "in D," line 2, page 4.

(7.) To strike out the words "is the collar at extremity," and insert instead the words "are collars at the extremities," line 5, page 4; and to insert the word "levers" in place of "lever," line 6, page 4.

(8.) To insert the word "lifting" before the word "ropes," line 8, page 4; and the words "each of" before the word "which," line 9, page 4.

(9.) To insert after the paragraph ending "drilling-rods T respectively" the following sentences: "The lifting-rope M passes upwards from the monkey and around a sheave O mounted revolvably at the top of a derrick O¹, passes downwards to a guide-pulley N mounted on the gantry N³, downwards and around a sheave E¹ mounted in the bifurcated end of the connecting-rod D⁵, upwards to and around a guide-pulley S¹ mounted on the gantry N³, and thence downwards to a winding-drum S² to which its other end is secured. The lifting-rope M¹ of the boring-rods passes upwards from the shackle T to a sheave O mounted revolvably at the top of the derrick O¹, passes downwards to a guide-pulley N mounted on the gantry N³, downwards and around a sheave E mounted in the bifurcated end of the connecting-rods D⁴, upwards to and around a guide-pulley S¹ mounted on the gantry N³, and thence downwards to a winding-drum S² to which the other end of the rod is secured. Ratchets S⁴ prevent the ropes M and M¹ from unwinding until the pawls S⁵ are lifted."

(10.) To strike out the following words: "The other end of the lifting-ropes M, M¹, after running round sheaves E, E¹, turns round sheaves S¹, and are coiled on two sheaves S², S³. A ratchet S⁴ prevents the rope unwinding till attendant lifts pawl S⁵." lines 25 to 28, page 4.

(11.) To insert the words "which is connected to the water-swivel R¹ by a flexible hose R²" after the words "pump R," line 29, page 4.

(12.) To strike out the words "receives the power, but it communicates it only to spindle F¹," and to insert the following words, "is driven by any ordinary motive power, and preferably through a belt (not shown) passing around its periphery. The motion of the fly-wheel is communicated to the spindle F¹ only," lines 32 and 33, page 4.

(13.) To strike out claims 2, 3, 4, and 5, and insert instead the following claims:—

"(2.) Apparatus for the purpose indicated comprising, in combination, a frame provided with a gantry, guide-sheaves revolvably mounted near the top of the gantry, bearings secured to the frame, a driving-shaft journaled in the bearings, a fly-wheel mounted upon the shaft, a friction-clutch connecting the fly-wheel to the shaft, a toothed pinion upon shaft, a second shaft mounted in bearings upon the frame, a spur-wheel gearing with the toothed pinion, disc secured to each end of the shaft, a lever journaled upon each end of the shaft, collars for retaining the levers on the shaft, projections upon the disc to engage the levers, connecting-rods coupled at one end by pins to the levers and bifurcated at their other ends, sheaves mounted in the bifurcations of the connecting-rods, a derrick, guide-sheaves revolvably mounted near the top of the derrick, a lifting-rope secured at one end to a revolvable drum mounted on the frame and passing around a guide-sheave of the gantry, around the sheave of one connecting-rod, and around a guide-sheave at the top of the derrick, a monkey secured to the other end of the rope and provided with a hole, another lifting-rope secured at one end to another revolvable drum and passing around a guide-sheave of the gantry, around the sheave of the other connecting-rod, and around a guide-sheave at the top of the derrick, a shackle secured to the other end of the rope, a water-swivel supported from the shackle by a rod, hollow boring-rods revolvably connected to the swivel and passing through the monkey, a pump mounted on the framing, a sprocket-wheel fixed to the fly-wheel, a sprocket-pinion on the pump-spindle, a chain for transmitting motion from the sprocket-wheel to the sprocket-pinion, and a flexible hose-pipe for delivering water from the pump to the water-swivel, substantially as set forth.

"(3.) Apparatus for the purpose indicated comprising, in combination, a frame provided with a gantry, guide-sheaves revolvably mounted near the top of the gantry, bearings secured to the frame, a driving shaft journaled in the bearings, a fly-wheel mounted upon the shaft, a friction-clutch connecting the fly-wheel to the shaft, a toothed pinion upon shaft, a second shaft mounted in bearings upon the frame, a spur-wheel gearing with the toothed pinion, a disc secured to each end of the shaft, a lever journaled upon each end of the shaft, collars for retaining the levers on the shaft, projections upon the disc adapted to engage the levers, connecting-rods coupled at one end by pins to the levers and bifurcated at their other ends, sheaves mounted in the bifurcations of the connecting-rods, a derrick, guide-sheaves revolvably mounted near the top of the derrick, a lifting-rope secured at one

end to a revolvable drum mounted on the frame and passing around a guide-sheave of the gantry, around the sheave of one connecting-rod, and around a guide-sheave at the top of the derrick, a monkey secured to the other end of the rope and provided with a hole, another lifting-rope secured at one end to another revolvable drum and passing around a guide-sheave of the gantry, around the sheave of the other connecting-rod, and around a guide-sheave at the top of the derrick, a shackle secured to the other end of the rope, boring-rods attached to the shackle and passing through the monkey, substantially as set forth.

"(4.) In apparatus for the purpose indicated, in combination, a frame, bearings secured to the frame, a shaft journaled in the bearings, means for revolving the shaft, a disc fixed upon each end of the shaft, a lever journaled upon each end of the shaft, collars retaining the levers on the shaft, projections upon the disc adapted to engage the levers, and means for connecting the lifting-ropes of a monkey and of boring-rods to the levers, substantially as set forth.

"(5.) Apparatus for the purpose indicated characterized by comprising among its parts revolving discs having projections which engage and revolve two levers alternately through a portion of a circle in order to raise and then release a monkey and boring-rods alternately, substantially as set forth.

"(6.) The combination and arrangement of parts, comprising the double-action well-driver, substantially as and for the purposes set forth herein, and illustrated on the accompanying drawings."

The applicant states:—My reasons for making this amendment are as follows: I desire to more clearly explain the invention and define the scope of the claims.

No. 19086.—13th February, 1905.—Richard Wingfield Stuart, of Sydney, New South Wales. Carburetting air and producing combustible gas. (Advertised in Supplement to *New Zealand Gazette* No. 22, of the 9th March, 1905.)

The nature of the proposed amendments is as follows:—

(1.) To insert the following sentences after the word "statement," line 15, page 1, of specification: "This invention relates to an improved combination of apparatus whereby air may be carburetted and a combustible gas for heating or lighting purposes produced. The invention consists in the combination of apparatus whereby air may be drawn from the atmosphere and forced under pressure through a heating-chamber, from which it passes, a portion of it being sent through a carburetter of peculiar form so as to be converted into gas and then reunited and mixed with the remainder of the air before passing to the burners for consumption. The heated air is also employed to heat the hydro-carbon oil within the carburetter so as to render it more easily volatilisable by contact with the hot air passing through the carburetter."

(2.) To insert after the paragraph ending "burners for consumption," line 28, page 4, the following: "I am aware that apparatus for the generation of hydro-carbon gas has already been employed in which hot air is sent under pressure through a carburetter and mixed with a further quantity of hot air before passing to the burners for consumption, and I wish it to be understood that I do not desire to claim as my invention the use of apparatus of any form by means of which the air may be compressed, then heated, and afterwards treated in the manner herein set out for the production of gas, but."

(3.) To strike out claims 1, 2, 3, and 4, and to insert the following as the first claim: "(1.) In apparatus for carburetting air, in combination, a motor, a bellows adapted to be worked by the motor, a hot-air chamber into which the air from the bellows will be forced, a carburetting-chamber in communication with the hot-air chamber and with a pipe leading away from such hot-air chamber, a revolving drum or drums mounted within the carburetter dipping into the petrol contained therein, a liquid-proof false bottom to the carburetter, an air-chamber below the false bottom, and means for supplying hot air to the chamber beneath the carburetter and for supplying petrol to the carburetter, as herein specified."

(4.) To number claim "5" as claim "2." The applicant states: "My reason for desiring to make the amendments is that since applying for the patent it has come to my knowledge that the matter covered by certain of the claims is old, and I accordingly desire to restrict the specification and claims so as to confine them to what is novel."

F. WALDEGRAVE,
Registrar.

Request to amend Specification allowed.

THE request to amend specification No. 17982—Brown and McMiken—material-circulator (advertised in Supplement to *New Zealand Gazette* No. 57, of the 15th June, 1905)—has been allowed.

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 7th September to the 20th September, 1905, inclusive:—

- No. 18713.—F. W. Maddox, broom.
- No. 18715.—R. F. Thomas and S. A. Bradley, fruit-case.
- No. 18716.—J. Herrick, floor-washer.
- No. 18717.—A. Dyke, lifting-jack.
- No. 18718.—A. Dyke, trace-holder for swingletree.
- No. 18719.—A. Dyke, rein-holder for vehicle.
- No. 18726.—P. Henley, hose-coupling.
- No. 18728.—H. Dicke, generating gas.
- No. 18729.—J. T. Hunter, water-gas production (C. Dellwik).
- No. 18732.—F. Cooper, tip road-wagon.
- No. 18733.—D. McCallum, bacon, &c., curing mixture.
- No. 18734.—W. G. Cloke, ironsand-furnace.
- No. 18735.—W. E. Searle and W. Gibb, vehicle-seat slides.
- No. 18738.—J. H. T. Turnbull, fire-lighter.
- No. 18741.—H. A. de Lautour, bowl-testing machine.
- No. 18744.—H. W. Candy, tug-stop for vehicle-shafts.
- No. 18747.—A. H. Byron, smoke-consumer and feeder for furnace.
- No. 18748.—A. H. R. Allen and H. S. Darby, metal-finish-ing process and product.
- No. 18750.—A. McKay, excavating and elevating wash-dirt.
- No. 18756.—C. Lashlie, coat and trouser hanger.
- No. 18759.—R. McKay, truck.
- No. 18760.—W. Sim, oil-gas.
- No. 18761.—P. A. S. Stephens, boot-cleaning machine.
- No. 18762.—H. Ashworth, arrival and departure indicator.
- No. 18763.—W. Sinclair, draught-regulator.
- No. 18764.—J. F. Wilson, friction-clutch.
- No. 18765.—W. S. Campbell, blight-destroyer.
- No. 18766.—T. W. May, steam-exhaust for rotary turbine.
- No. 18768.—W. E. Toxward and D. G. Monrad, milk-stirrer.
- No. 18771.—J. Orr, jun., conveying sheaves from stack to thresher.
- No. 18777.—J. Paterson and A. T. W. Allan, gold-saving.
- No. 18778.—R. Cosslett, building-appliance.
- No. 18779.—W. M. Pritchard, J. S. Boyle, and W. White, boot sole and upper.
- 18780.—J. H. Toner, vehicle-seat.

Applications for Letters Patent void.

APPLICATIONS for Letters Patent, with which complete specifications have been lodged, void, owing to non-acceptance of such complete specifications, from the 7th September to the 20th September, 1905, inclusive:—

- No. 18022.—A. O. P. Batley, legging-fastening.
- No. 18040.—J. K. Hay, clothes-horse.

Applications for Letters Patent lapsed.

LIST of applications lapsed, owing to Letters Patent not being sealed, from the 7th September to the 20th September, 1905, inclusive:—

- No. 17631.—W. S. Cobham, railway wheels and axles.
- No. 17646.—J. T. Prince, whiffletree.
- No. 17647.—N. Wilson, jun., and M. I. Worsley, chair-seat.
- No. 17648.—A. W. Topffer, runaway-horse release.
- No. 17675.—S. Day, securing broom-handle in socket.

Letters Patent void.

LETTERS Patent void through non-payment of renewal fees, and through expiry of term of fourteen years, from the 7th September to the 20th September, 1905, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

- No. 13694.—R. Millar, wave-motor.
- No. 13695.—H. S. Woolley, furnace.
- No. 13700.—C. Miller, camera-slide.
- No. 13704.—J. C. Barnes, sheep-shears.
- No. 13705.—E. Shadgett, boot-polish.
- No. 13708.—P. V. S. Martin, G. Soldani, and L. B. Trant, tanning process.
- No. 13709.—The Cosmopolitan Power Company, condensing steam. (G. G. Turri—Cosmopolitan Power Company—T. M. Colwell.)

No. 13710.—J. T. Thompson, garment-suspender.
 No. 13712.—J. Baker, bicycle-driving mechanism.
 No. 13713.—W. A. Pendry, button-making machine.
 No. 13715.—G. A. H. Pietsch, propulsion of cycles.
 No. 13716.—The New Zealand Glass Company, Limited, forming hollow-glass articles. (L. L. B. Mount—J. Haley—H. H. Bridgwater.)
 No. 13718.—A. H. Borgstrom, ventilating milk.
 No. 13719.—A. H. Borgstrom, ventilating milk.
 No. 13721.—G. Percival, link for bicycle-chain.
 No. 13746.—C. L. Galschiot, cooling granular materials.
 No. 13748.—E. H. Hankins, W. J. Gore, and C. P. Roberts, mechanical counter.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

No. 10659.—J. Colquhoun-Thomson, ore-crusher.

THROUGH EXPIRY OF TERM.

No. 5193.—E. Thomson, E. W. Rice, jun., and N. C. Bassett, electric motor.

Designs registered.

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

Nos. 241, 242, and 243.—A. Beaver and Co., of Wellington, in the Colony of New Zealand, Wholesale Jewellers. Class 2. 31st August, 1905.

No. 244.—George William Phillips, of No. 2, Chancery Lane, Christchurch, in the Colony of New Zealand, Press Advertising Agent. Class 5. 7th September, 1905.

No. 245.—Pither and Carter, of Christchurch, in the Colony of New Zealand, Engineers. Class 1. 5th September, 1905.

No. 246.—H. E. Shacklock, Limited, of Princes Street, Dunedin, New Zealand. Class 1. 18th September, 1905.

No. 247.—Sydney Smith and Sons, of Christchurch, in the Colony of New Zealand, Manufacturers. Class 10. 18th September, 1905.

Design expired.

THE copyright in the following design has expired:—

No. 126.—I. Russell, of Dunedin, New Zealand. Class 5.

Applications for Registration of Trade Marks.

Patent Office,
 Wellington, 20th September, 1905.

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: 5234.

Date: 4th April, 1905.

TRADE MARK.

The word

I D E A L.

The applicants claim that the said trade mark has been used by them and their predecessors before the 1st January, 1890.

NAME.

THE TURNER, DAY, AND WOOLWORTH HANDLE COMPANY, of Louisville, Kentucky, United States of America, Manufacturers of Hickory Handles.

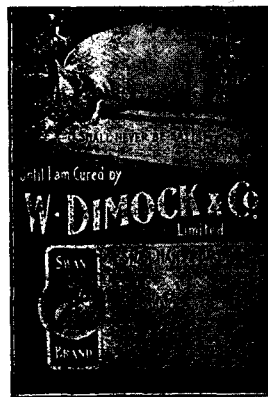
No. of class: 50, subsection 1.

Description of goods: Hickory handles.

No. of application: 5278.

Date: 8th May, 1905.

TRADE MARK.



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

NAME.

W. DIMOCK AND CO., LIMITED, of Waterloo Quay, Wellington, in the Colony of New Zealand, Manufacturers.

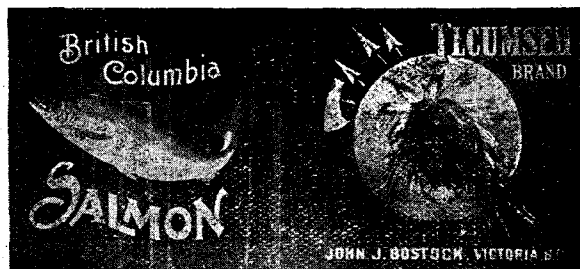
No. of class: 42.

Description of goods: Hams and bacon.

No. of application: 5823.

Date: 5th June, 1905.

TRADE MARK.



The essential particulars of this trade mark are the device of an Indian shield bearing the portrait of an Indian and the weapons; and applicant disclaims any right to the exclusive use of the added matter, except as regards his name and address.

NAME.

J. J. BOSTOCK (care A. Hatrick and Co., of Wanganui, in the Colony of New Zealand, Merchants).

No. of class: 42.

Description of goods: Tinned salmon.

No. of application : 5431.
Date : 4th August, 1905.

TRADE MARK.



The essential particulars of this trade mark are the device and the word "Butterfly"; and any right to the exclusive use of the word "Brand" is disclaimed.

NAME.

FUSSELL AND Co., LIMITED, of No. 4, Monument Street, E.C., London, England, Manufacturers.

No. of class : 42.

Description of goods : Substances used as food or as ingredients in food, with the exception of butter, coffee, tea, baking-powder, egg-powder, and custard-powder.

No. of application : 5488.
Date : 25th August, 1905.

TRADE MARK.



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

NAME.

THE ANGLO-BRITISH COLUMBIA PACKING COMPANY, LIMITED, of Vancouver, British Columbia, Canada, Salmon-packers

No. of class : 42.

Description of goods : Tinned salmon.

No. of application: 5494.
Date: 31st August, 1905.

TRADE MARK.



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

NAME.

KEYSTONE LUBRICATING COMPANY, of Philadelphia, in the State of Pennsylvania, United States of America, Manufacturers.

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

No. of application: 5497.
Date: 4th September, 1905.

TRADE MARK.



The essential particular of this trade mark is the combination of devices constituting the distinctive label as shown; and applicants disclaim any right to the exclusive use of any added matter, save and except their name and address.

NAME.

MARSHALL'S PROPRIETARY, LIMITED, of Dunedin, in the Colony of New Zealand, Chemists.

No. of class: 42.
Description of goods: Cordials (non-alcoholic).

No. of application: 5498.
Date: 4th September, 1905.

TRADE MARK.



The essential particular of this trade mark is the combination of devices constituting the distinctive label as

shown; and applicants disclaim any right to the exclusive use of any added matter, save and except their name and address.

NAME.

MARSHALL'S PROPRIETARY, LIMITED, of Dunedin, in the Colony of New Zealand, Manufacturing Chemists.

No. of class: 42.
Description of goods: Worcestershire sauce.

No. of application: 5502.
Date: 6th September, 1905.

TRADE MARK.



The essential particulars of this trade mark are the device and the coined or fancy words "Fleuron" and "Rosat"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

MRS. MARY BAIRD LUXTON, of Barbadoes Street, Christchurch, in the Colony of New Zealand.

No. of class: 48.
Description of goods: Toilet-preparations.

No. of application: 5503.
Date: 6th September, 1905.

TRADE MARK.

The word
"MASAI."

NAME.

FRANCIS CHAPMAN DEEKES AND Co., of Hopetoun House, Lloyds Avenue, Fenchurch Street, London, England.

No. of class: 5.
Description of goods: Galvanised, corrugated, and plain iron.

No. of application : 5504.
Date : 6th September, 1905.

TRADE MARK.
The word
"NORMYL."

NAME.
ALEXANDER RALPH OGDEN, of "Fairlawn," Waratah Street, Rushcutter's Bay, near Sydney, New South Wales, Australia, Contractor.

No. of class : 3.
Description of goods : A curative medicinal preparation for human use.

No. of application : 5506.
Date : 7th September, 1905.

TRADE MARK.
The word
KEY

NAME.
LEVER BROS., LIMITED, of Balmain, State of New South Wales, Manufacturers.

No. of class : 47.
Description of goods : Common soap, soap-powders, candles, matches, starch, blue, washing-soda, detergents, and oil for illuminating, heating, or lubricating purposes.

No. of application : 5507.
Date : 7th September, 1905.

TRADE MARK.
The word
KEY

NAME.
LEVER BROS., LIMITED, of Balmain, State of New South Wales, Manufacturers.

No. of class : 48.
Description of goods : Perfumed soap, perfumery, and glycerine for toilet purposes.

No. of application : 5508.
Date : 7th September, 1905.

TRADE MARK.
The word
NECTAR

NAME.
LEVER BROS., LIMITED, of Balmain, State of New South Wales, Manufacturers.

No. of class : 47.
Description of goods : Common soap, soap-powders, candles, matches, starch, blue, washing-soda, detergents, and oil for illuminating, heating, or lubricating purposes.

No. of application : 5509.
Date : 7th September, 1905.

TRADE MARK.
The word
NECTAR

NAME.
LEVER BROS., LIMITED, of Balmain, State of New South Wales, Manufacturers.

No. of class : 48.
Description of goods : Perfumed soap, perfumery, and glycerine for toilet purposes.

No. of application : 5510.
Date : 7th September, 1905.

TRADE MARK.
The word
REX

NAME.
LEVER BROS., LIMITED, of Balmain, State of New South Wales, Manufacturers.

No. of class : 47.
Description of goods : Common soap, soap-powders, candles, matches, starch, blue, washing-soda, detergents, and oil for illuminating, heating, or lubricating purposes.

No. of application : 5511.
Date : 7th September, 1905.

TRADE MARK.
The word
REX

NAME.
LEVER BROS., LIMITED, of Balmain, State of New South Wales, Manufacturers.

No. of class : 48.
Description of goods : Perfumed soap, perfumery, and glycerine for toilet purposes.

No. of application : 5512.
Date : 8th September, 1905.

TRADE MARK.
The word
SNOWDRIFT.

NAME.
BYCROFT, LIMITED, of City Roller Mills, Shortland Street, Auckland, in the Colony of New Zealand, Flour-millers and Biscuit-manufacturers.

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

No. of application : 5513.
Date : 8th September, 1905.

TRADE MARK.
SHAMROCK.



REGISTERED
TRADE MARK.

The essential particulars of this trade mark are the device and the words "Shamrock" and "Erin Go Bragh"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

WILLIAM PLOWMAN AND SON, of Shakespeare and Battery Roads, Napier, New Zealand, Manufacturers.

No. of class : 42.

Description of goods : Pepper and spices, ground and dressed.

No. of application : 5514.
Date : 9th September, 1905.

TRADE MARK.
The word
INDUSTRIAL.

NAME.

THE NEW ZEALAND INDUSTRIAL CO-OPERATIVE SOCIETY, LIMITED, of Christchurch, New Zealand.

No. of class : 42.

Description of goods : Substances used as food or as ingredients in food.

No. of application : 5518.
Date : 14th September, 1905.



The essential particulars are as follows : The representation of a waratah and the word "Waratah," an oval panel in the centre of the label bearing certain descriptive words, and the representation of an irregularly formed scroll bearing the picture of a salmon and a river-rapid. The applicant disclaims the exclusive right to the use of the words "Choicest," "Selected," "Red Sockeye," and "Salmon," also the representation of a salmon and the descriptive words on the oval panel.

NAME.

JAMES ROBINSON LOVE, trading as "J. R. Love and Co.," of 99, Bathurst Street, Sydney, in the State of New South Wales, Commonwealth of Australia, Wholesale Grocers.

No. of class : 42.

Description of goods : Salmon.

No. of application : 5515.
Date : 11th September, 1905.

TRADE MARK.
The word
BAW'S.

NAME.

P. B. BURGOYNE AND Co., LIMITED, of No. 5, Dowgate Hill, in the City of London, England, Wine-merchants.

No. of class : 43.

Description of goods : Fermented liquors and spirits.

No. of application : 5516.
Date : 12th September, 1905.

TRADE MARK.
The word
"PROTOBEN."

NAME.

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

No. of class : 42.

Description of goods : Dried fruits (i.e., currants, sultanas, figs, &c.).

No. of application : 5517.
Date : 14th September, 1905.

TRADE MARK.
The word
"Karbolo's"

NAME.

MARY JANE GILL, of Wellington; in the Colony of New Zealand, Housewife.

No. of class : 47.

Description of goods : All goods included in this class.

NOTE.—Class 47 is for "Candles; common soap; detergents; illuminating, heating, or lubricating oils; matches; and starch, blue, and other preparations for laundry purposes."

No. of application : 5520.
Date : 14th September, 1905.

TRADE MARK.



The essential particulars of this trade mark are (1) the distinctive word "Chinky," and (2) a distinctive device of a Chinaman's head; and any right to the exclusive use of the words "Laundry Glaze" and "Brand" is disclaimed.

NAME.

ALEXANDER BAGLEY, of 4, George Street, Dunedin, in the Colony of New Zealand, Chemist and Druggist.

No. of class : 47.
Description of goods : A preparation for laundry purposes.

No. of application : 5521.
Date : 14th September, 1905.

TRADE MARK.

The words
"ONE MINUTE."

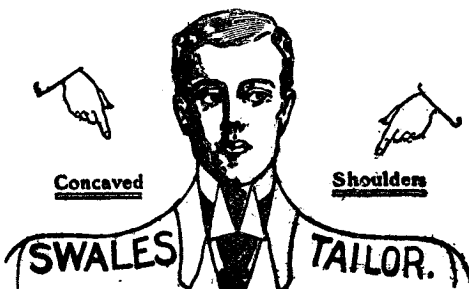
NAME.

CYRIL WINCOTE PRICE, of Hall's Building, Lower High Street, Christchurch, in the Colony of New Zealand, Pharmaceutical Chemist.

No. of class : 3.
Description of goods : Patent medicines.

No. of application : 5522.
Date : 15th September, 1905.

TRADE MARK.



TRADE MARK REGISTERED.

The essential particulars of this trade mark are the combination of devices of two hands pointing in towards the shoulders of a man's bust; and the applicant disclaims any right to the exclusive use of the added matter, except his name.

NAME.

RICHARD HENRY SWALES, of Victoria Street West, in the City of Auckland, in the Provincial District of Auckland, in New Zealand, Tailor.

No. of class : 38.
Description of goods : Articles of clothing, such as suits, coats, waistcoats, shirts, and ready-made suits.

No. of application : 5523.
Date : 15th September, 1905.

TRADE MARK.



NAME.

HENRY DUNSTAN VAVASOUR, of "Ugbrooke," Blenheim, in the Colony of New Zealand, Sheep-farmer.

No. of class : 4.
Description of goods : Wool.

No. of application : 5524.
Date : 15th September, 1905.

TRADE MARK.



NAME.

HENRY DUNSTAN VAVASOUR, of "Ugbrooke," Blenheim, in the Colony of New Zealand, Sheep-farmer.

No. of class : 37.
Description of goods : Skins.

No. of application : 5525.
Date : 15th September, 1905.

TRADE MARK.



NAME.

HOOPER AND HARRISON, of 32, Victoria Street, Wellington, in the Colony of New Zealand, Woollen-merchants and Importers of Tailors' Trimmings.

No. of class : 27.
Description of goods : Tailors' canvas, buckrams, linens, and hollands.

No. of application : 5526.

Date : 15th September, 1905.

TRADE MARK.

(The mark as shown in preceding notice, No. 5525.)

NAME.

HOOPER AND HARRISON, of 32, Victoria Street, Wellington, in the Colony of New Zealand, Woollen-merchants and Importers of Tailors' Trimmings.

No. of class : 34.

Description of goods : Woollen and worsted piece-goods of all classes used for tailoring purposes and clothing-manufacture.

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 7th to the 20th September, 1905, inclusive :—

No. 4205 ; 5319.—W. Halsey ; Class 38. (*Gazette* No. 57, of the 15th June, 1905.)

No. 4206 ; 5096.—J. de Kuyper and Son ; Class 43. (*Gazette* No. 6, of the 26th January, 1905.)

No. 4207 ; 5282.—J. H. Todd and Sons ; Class 42. (*Gazette* No. 57, of the 15th June, 1905.)

No. 4208 ; 5283.—J. H. Todd and Sons ; Class 42. (*Gazette* No. 57, of the 15th June, 1905.)

No. 4209 ; 5318.—Belmore Meat Extract and Packing Company, Limited ; Class 42. (*Gazette* No. 57, of the 15th June, 1905.)

No. 4210 ; 5330.—W. Heppelthwaite ; Class 50. (*Gazette* No. 61, of the 29th June, 1905.)

No. 4211 ; 5347.—The Cudahy Packing Company ; Class 42. (*Gazette* No. 71, of the 13th July, 1905.)

No. 4212 ; 5356.—R. White and Sons, Limited ; Class 44. (*Gazette* No. 71, of the 13th July, 1905.)

No. 4213 ; 4937.—J. A. Bock ; Class 3. (*Gazette* No. 61, of the 29th June, 1905.)

No. 4214 ; 5350.—J. A. Bock ; Class 50. (*Gazette* No. 61, of the 29th June, 1905.)

Subsequent Proprietor of Trade Mark registered.

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

NO. 84/2431.—W. Symington and Co., Limited, of Bowden Steam Mills, Market Harborough, Leicester, England, Millers and Manufacturers. [W. Symington and Co.] 16th September, 1905.

Trade Mark Renewal Fees paid.

FEES paid for the renewal of the undermentioned trade marks :—

For fourteen years from the date first mentioned.

No. 329/275.—23rd September, 1905.—C. W. Brodie, of Wellington, New Zealand. 18th September, 1905.

No. 349/439.—24th October, 1905.—N. Oates, of Christchurch, New Zealand. 14th September, 1905.

Nos. 364/290, 365/291.—20th November, 1905.—The Whitecross Company, Limited, of Warrington, England. 12th September, 1905.

Trade Marks removed from the Register.

TRADE Marks removed from the Register, owing to the non-payment of the renewal fees, from the 7th to the 20th September, 1905, inclusive :—

No. 231/208.—11th June, 1891.—F. S. Cleaver and Sons, of London, England.

No. 232/205.—11th June, 1891.—R. Grun, of Melbourne, Victoria.

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.

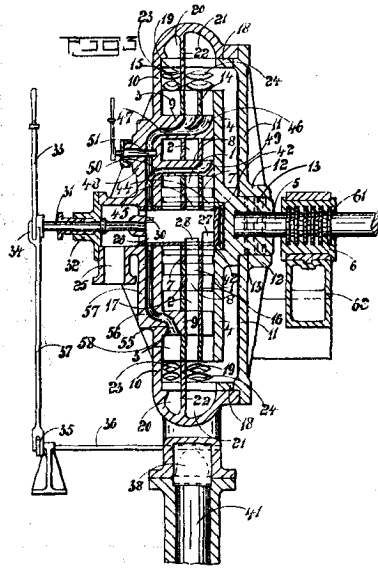
Postage or duty stamps cannot be received in payment from any place at which postal notes or post-office orders are issued.

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*.]



18399
Falvey. Steam Turbine.

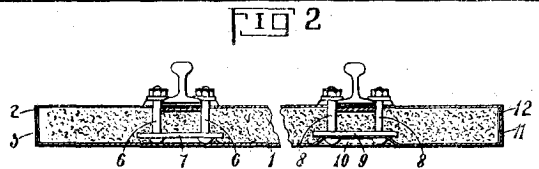


FIG 2
18526
Ford and Freeman. Building Compound.

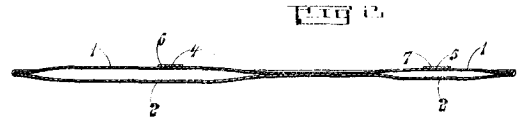


FIG 1
18635
Mercer. Pneumatic Sole.

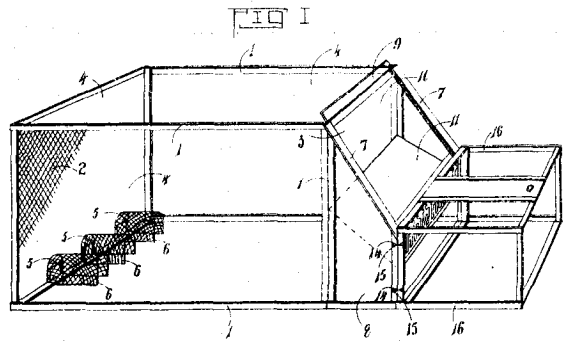
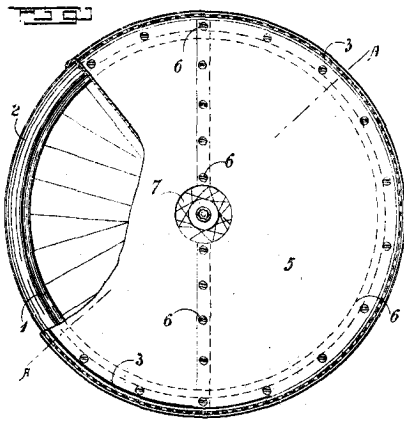


FIG 1
18821
Nicholson. Bird-trap.



18564
McLean. Tire-protector.

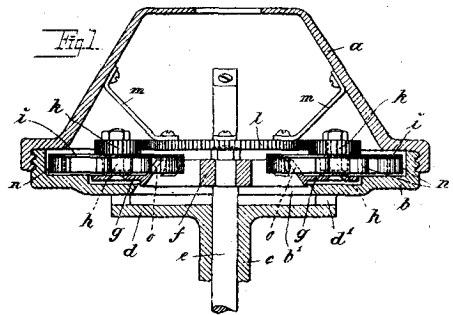


FIG. 1
18866
Aktiebolaget Separator. Centrifugal Separator. (Ericsson.)

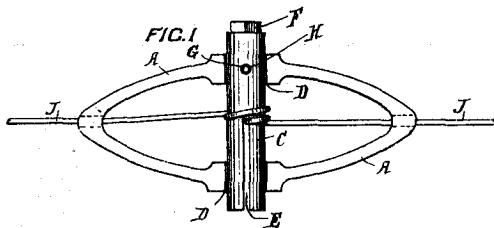
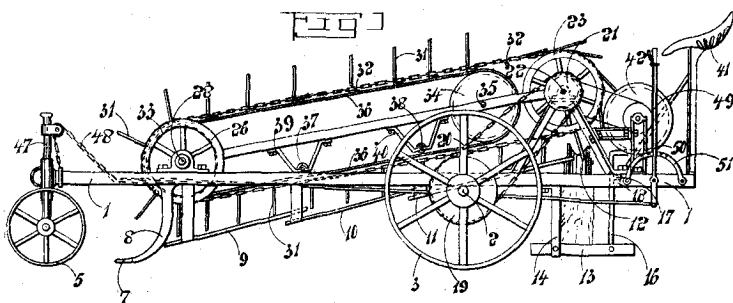


FIG. 1
18785
Ward. Wire-tightener.



18774
Dennison. Potato-digger.

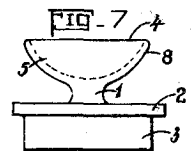
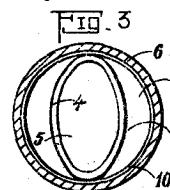
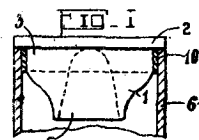
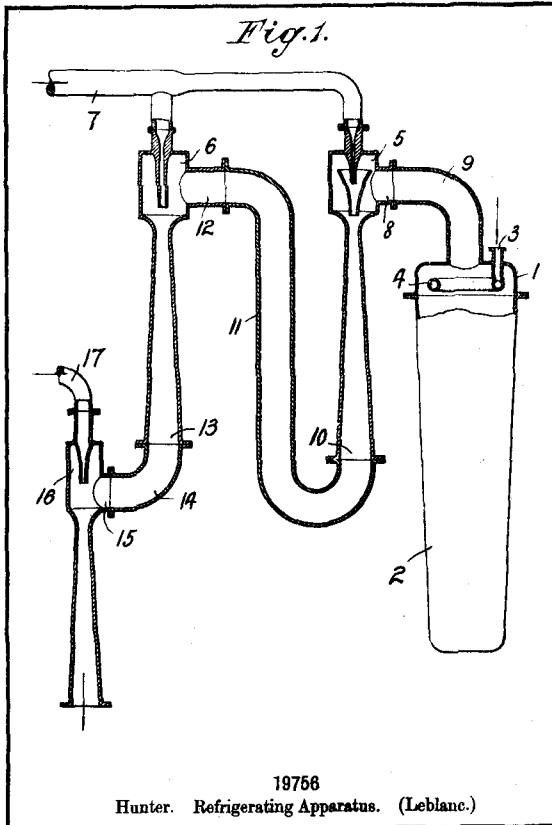
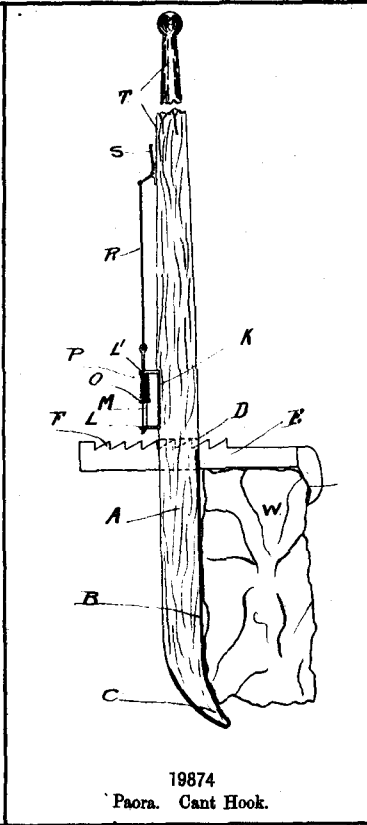


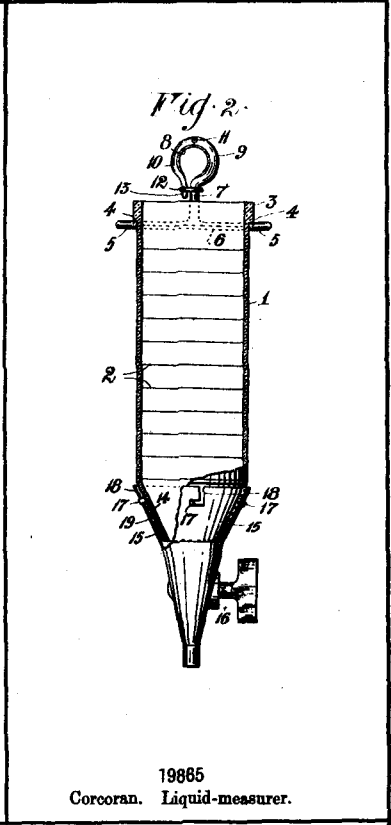
FIG - 1
FIG - 7
FIG - 3
18802
Darvall. Bottle-stopper.



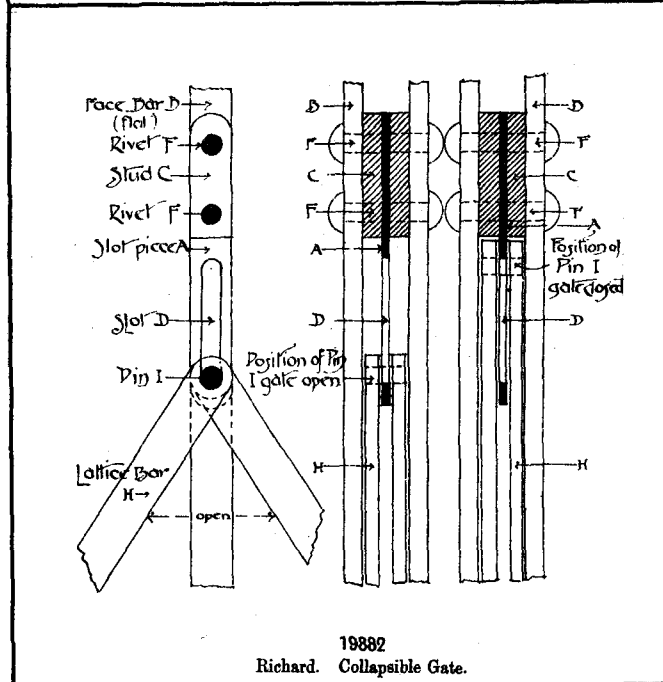
19756
Hunter. Refrigerating Apparatus. (Leblanc.)



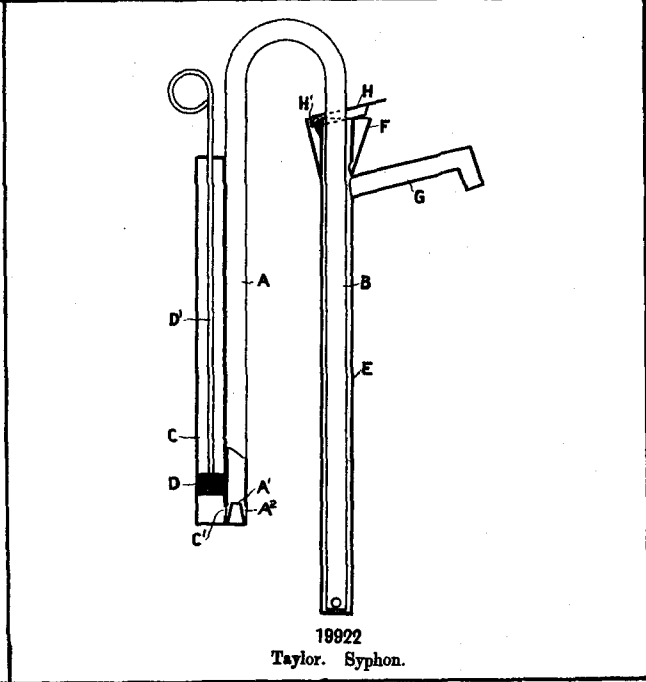
19874
Paora. Cant Hook.



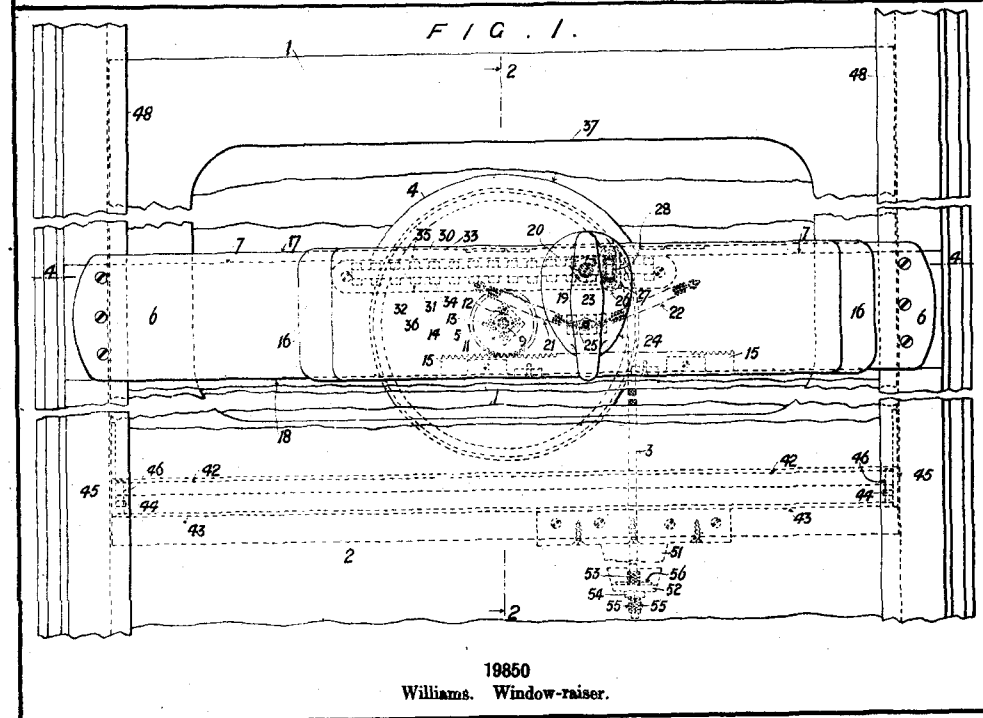
19885
Corcoran. Liquid-measurer.



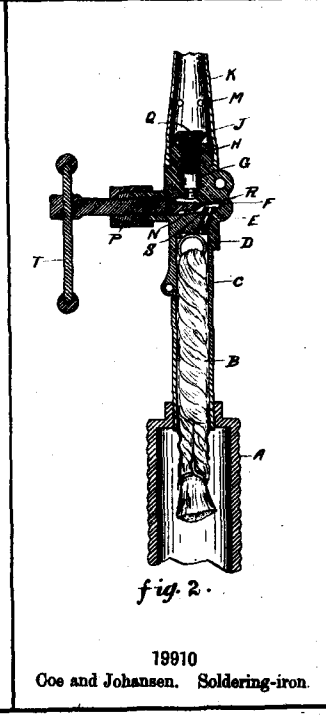
19882
Richard. Collapsible Gate.



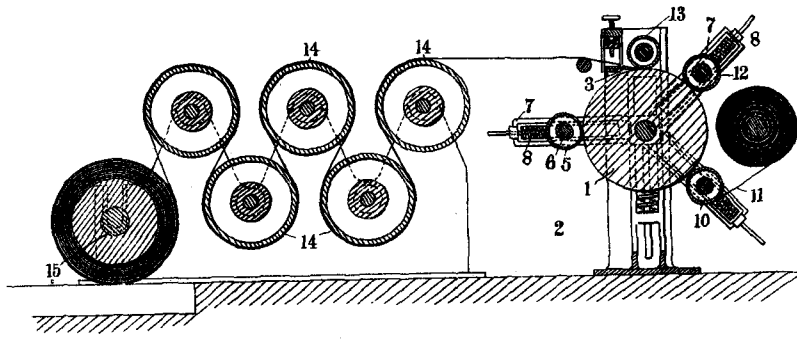
19922
Taylor. Syphon.



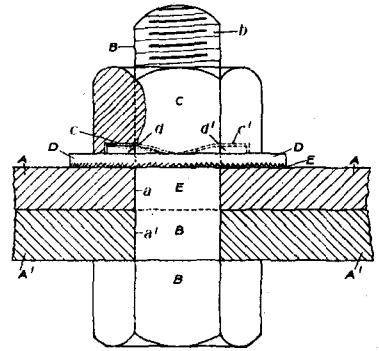
19850
Williams. Window-raiser.



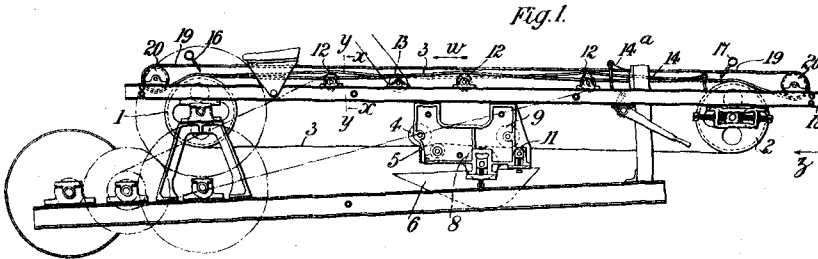
19910
Goe and Johansen. Soldering-iron.



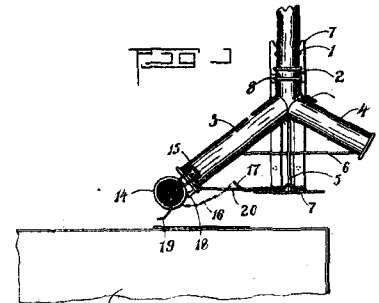
19862
Mayhew. Veneer-cutter.



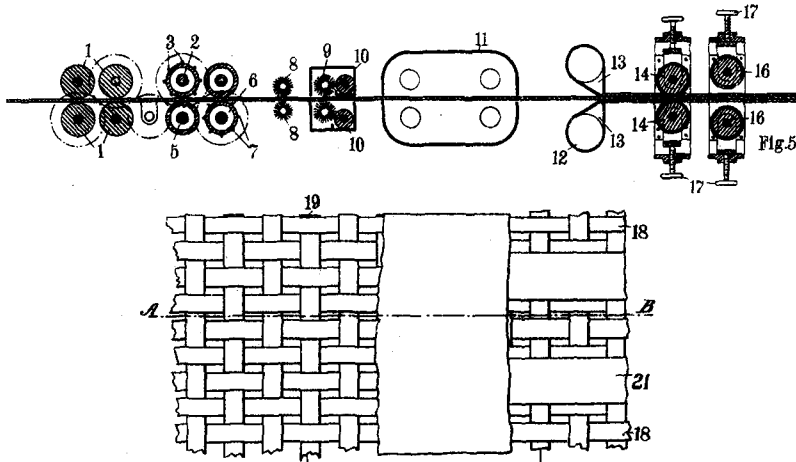
19883
Walleit. Lock-nut.



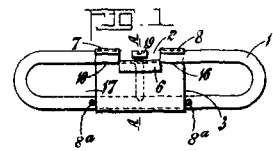
19890
Wolf. Separation of Metals.



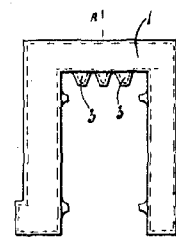
19817
Brown. Rain-water Collector.



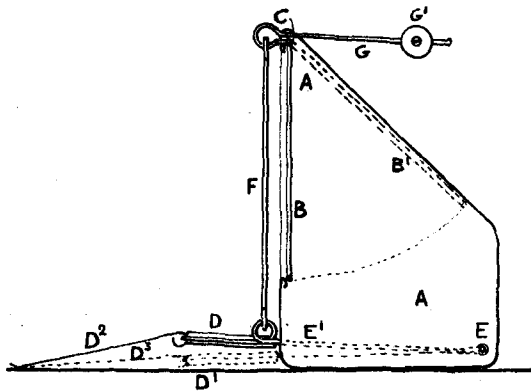
19863
Mayhew. Building-slab.



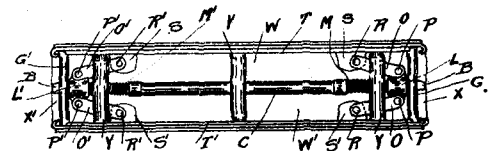
19514
Reid. Harness-hook.



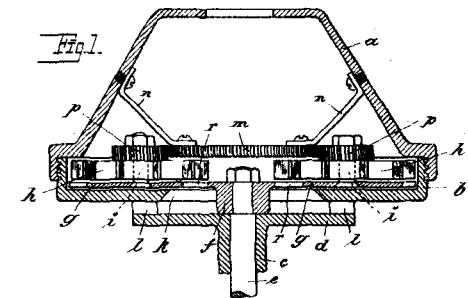
19856
B. S. and J. H. Nicholls and Bennett. Boiler.



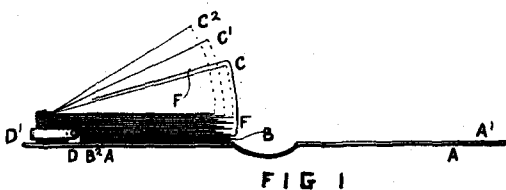
19873
Hercus, Barton, and Morton. Animal Food-protector.



19933
Leighton. Loose-leaf Ledger Lock.



19868
Aktiebolaget Separator. Centrifugal Separator. (Ericsson.)



19899
Smith. Sales-book.

