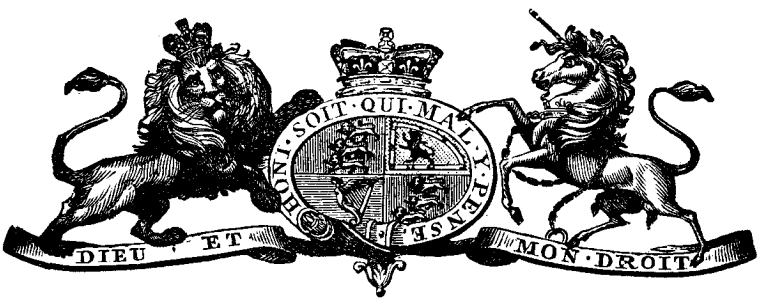


SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, JUNE 15, 1905.

Published by Authority.

WELLINGTON, THURSDAY, JUNE 15, 1905.

CONTENTS.

	Page
Official Notices	1485
Despatches	1486
Complete Specifications accepted	1489
Provisional Specifications accepted	1494
Letters Patent sealed	1494
Letters Patent on which Fees have been paid	1495
Notice of Request to amend Specification	1495
Request for Correction of Clerical Error in Application for Letters Patent	1495
Applications for Letters Patent abandoned	1495
Applications for Letters Patent void	1496
Applications for Letters Patent lapsed	1496
Application for Letters Patent withdrawn	1496
Letters Patent void	1496
Designs registered	1496
Design expired	1496
Applications for Registration of Trade Marks	1496
Trade Marks registered	1501
Trade Mark Renewal Fees paid	1501
Trade Marks removed from Register	1501
Illustrations of Inventions.	

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 23rd February, 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 March, 1905.

Index of Applicants.

Subject-matter Index.

Commissioner of Patents Journal, &c.(a).

Trade Marks Journal to January, 1905.

Canada.

Patent Office Record (containing illustrated abridgments of inventions, &c.) to November, 1904(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 April 1905(d).

Mexico.

The Official Gazette of the Patent and Trade Mark Office.

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.

(a) Discontinued.

(b) These may also be seen at the Public Libraries, Auckland and Christchurch.

(c) In arrear. Not now being printed.

(d) May also be seen at the Public Library, Christchurch.

BOOKS AND DOCUMENTS OPEN TO INSPECTION.

The following documents and books are open to public inspection:—

Patents.

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

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

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(f).
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(g).
Provisional specification(g).
Complete specification and copy thereof(g).
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(g).
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 1903 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) Key is in card index.
(b) 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.
(c) 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.
(d) The names of proprietors of subsequent letters patent appear in the Index of Patentees.
(e) Contains classified abridgments of specifications from 1861, with extracts from drawings from July, 1904.
(f) 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.
(g) May also be obtained at any local Patent Office or money-order office.

Despatch.—Accession of Japan and Mexico and Cuba to Industrial Property Convention.

Department of Justice,
Wellington, 30th May, 1905.

THE following despatch, with enclosures, from His Majesty's Principal Secretary of State for the Colonies, is published for general information.

JAS. McGOWAN.

(New Zealand.—General.)

Downing Street, 29th March, 1905.

MY LORD,—I have the honour to transmit to you, for the information of your Government, copies of parliamentary papers (Treaty Series No. 12, 1899; Treaty Series No. 13, 1903; Treaty Series No. 12, 1904) containing correspondence respecting the accession of Japan to the Industrial Property Convention, 1883, and of the Republics of Mexico and Cuba to the Convention of 1883 and the Additional Act of Brussels, 1900. Copies of the Orders in Council (7th October, 1899, and 12th January, 1905) giving effect in this country to the accessions of Japan and Cuba are also enclosed.

2. With regard to Mexico, I enclose a copy of the Order in Council of 28th May, 1889, giving effect to the treaty between Great Britain and the republic of 27th November, 1888, and have to state that on the accession of Mexico to the Industrial Property Convention His Majesty's Government were advised that it was not necessary in the circumstances to issue a further Order in Council.

I have, &c.,
ALFRED LYTTELTON.

Governor the Right Hon.
Lord Plunket, K.C.V.O., &c.

TREATY SERIES NO. 12, 1899.—ACCESSION OF JAPAN TO THE INDUSTRIAL PROPERTY CONVENTION OF 20TH MARCH, 1883.

No. 1.

M. BOURCART to the MARQUESS OF SALISBURY.

(Translation.)

London, 4th May, 1899.

M. LE MARQUESS,—By a note dated the 18th April last the Japanese Minister at Vienna has notified to the Swiss Federal Council the accession of his Government to the Convention of the 20th March, 1883, creating a Union for the Protection of Industrial Property, to take effect from the 15th July, 1899. The note adds that the Japanese Government does not intend, for the present, to accede to the two protocols of Madrid of the 14th April, 1891, the one relating to false indications of origin, and the other to the international registration of trade-marks.

As regards the contribution to the expenses of the International Bureau at Berne, the Japanese Empire will be placed in the second class.

I am instructed by my Government to request Your Lordship to be so good as to take note of this accession, and I avail myself, &c.

C. D. BOURCART.

No. 2.

THE MARQUESS OF SALISBURY TO M. BOURCART.

Foreign Office, 15th May, 1899.

SIR,—I have the honour to acknowledge the receipt of your note of the 4th instant, notifying the accession of Japan to the Convention of the 20th March, 1883, creating a Union for the Protection of Industrial Property, which accession is to take effect from the 15th July next.

I note that, for the present, Japan does not intend to accede to the first two protocols which were adopted by the Conference of Madrid on the 14th April, 1891, viz.: The arrangement respecting the prevention of false indications of origin of goods; and the arrangement respecting the international registration of trade-marks.

I note also that Japan will rank in the second class with respect to the contribution to the expenses of the International Bureau.

I beg leave to thank you for this communication, and I have, &c.,
SALISBURY.

At the Court at Balmoral, the 7th day of October, 1899.

Present:

THE QUEEN'S MOST EXCELLENT MAJESTY.
HIS ROYAL HIGHNESS THE DUKE OF CONNAUGHT AND STRATHEARN, LORD BALFOUR OF BURLEIGH, SIR FLEETWOOD EDWARDS.

WHEREAS by section one hundred and three of "The Patents, Designs, and Trade-marks Act, 1883," as amended by section six of "The Patents, Designs, and Trade-marks (Amendment) Act, 1885," it is enacted as follows: If Her Majesty is pleased to make any arrangement with the Government

or Governments of any foreign State or States for mutual protection of inventions, designs, and trade-marks, or any of them, then any person who has applied for protection for any invention, design, or trade-mark in any such State shall be entitled to a patent for his invention, or to registration of his design or trade-mark (as the case may be) under this Act, in priority to other applicants; and such patent or registration shall have the same date as the date of the application in such foreign State: Provided that his application is made, in the case of a patent, within seven months, and, in the case of a design or trade-mark, within four months, from his applying for protection in the foreign State with which the arrangement is in force: Provided that nothing in this section contained shall entitle the patentee or proprietor of the design or trade-mark to recover damages for infringements happening prior to the date of the actual acceptance of his complete specification, or the actual registration of his design or trade-mark, in this country, as the case may be. The publication in the United Kingdom or the Isle of Man during the respective periods aforesaid of any description of the invention, or the use therein during such periods of the invention, or the exhibition or use therein during such periods of the design, or the publication therein during such periods of a description or representation of the design, or the use therein during such periods of the trade-mark, shall not invalidate the patent which may be granted for the invention, or the registration of the design or trade-mark. The application for the grant of a patent, or the registration of a design, or the registration of a trade-mark, under this section must be made in the same manner as an ordinary application under this Act; provided that, in the case of trade-marks, any trade-mark the registration of which has been duly applied for in the country of origin may be registered under this Act. The provisions of this section shall apply only in the case of those foreign States with respect to which Her Majesty shall from time to time by Order in Council declare them to be applicable, and so long only in the case of each State as the Order in Council shall continue in force with respect to that State:

And whereas it has pleased Her Majesty to make an arrangement of the nature contemplated by the said Act by and in virtue of a declaration signed and sealed by Her Majesty's Ambassador at Paris on the seventeenth March, one thousand eight hundred and eighty-four, duly conveying the accession of Great Britain to the International Convention and Protocol for the Protection of Industrial Property, signed by representatives of certain Powers on the twentieth day of March, one thousand eight hundred and eighty-three, and duly ratified on the sixth day of June, one thousand eight hundred and eighty-four, power being reserved to Her Majesty to accede hereafter to the provisions of the convention and protocol on behalf of the Isle of Man, the Channel Islands, and any of Her Majesty's possessions, which declaration of accession was duly accepted by the French Government on behalf of the signatory Powers by and in virtue of a declaration dated the second April, one thousand eight hundred and eighty-four:

And whereas by an Order in Council dated the twenty-sixth day of June, one thousand eight hundred and eighty-four, and by various subsequent Orders in Council, Her Majesty was pleased to declare that the hereinbefore-recited provisions of the said Act should apply to the several foreign countries named in the said Orders parties to the said convention:

And whereas on the fifteenth day of July, one thousand eight hundred and ninety-nine, the Empire of Japan duly acceded to the said convention:

Now, therefore, Her Majesty, by and with the advice of Her Privy Council, and by virtue of the authority committed to her by the said first-mentioned Act, doth declare, and it is hereby declared, that the provisions of section one hundred and three of the said Act as amended by section six of "The Patents, Designs, and Trade-marks (Amendment) Act, 1885," shall also apply to Japan.

And it is hereby further ordered and declared that this Order shall take effect from the day and date first above written.

A. W. FITZROY.

TREATY SERIES No. 13, 1903.—ACCESSION OF MEXICO TO THE INDUSTRIAL PROPERTY CONVENTION, 1883, AND ADDITIONAL ACT OF 1900.—7TH SEPTEMBER, 1903.

No. 1.

M. CARLIN to the MARQUESS OF LANSDOWNE (received 15th August).

(Translation.)

London, August, 1903.

M. LE MARQUIS,—At the request of my Government, I have the honour to acquaint your Lordship that the United States of Mexico have acceded to the convention of the 20th March, 1883, creating a Union for the Protection of Industrial Property, as completed and modified by the additional Act of the 14th December, 1900.

As regards its share in the expenses of the International Bureau, Mexico has requested to be placed in the third of the classes provided by section 6 of the final protocol annexed to the above convention.

No fixed date having been mentioned by the Mexican Government as that of its entry within the Union, the above accession will, in accordance with Article XVI. of the revised convention, take effect one month after the date of the note of the Swiss Federal Council—viz., on the 7th September, 1903.

I shall be much obliged if Your Excellency will be good enough to take note of this communication, and I avail, &c.,

CARLIN.

No. 2.

The MARQUESS OF LANSDOWNE to M. CARLIN.

Foreign Office, 25th August, 1903.

SIR,—I have the honour to acknowledge the receipt of your note of the 13th instant, announcing the accession of the United States of Mexico to the convention of the 20th March, 1883, creating a Union for the Proctection of Industrial Property, as completed and modified by the additional Act of the 14th December, 1900.

I note that Mexico will rank in the third class with respect to its contribution to the expenses of the International Bureau, and that, since no date of accession has been fixed by the Mexican Government, the entry of Mexico within the Union will, in accordance with Article XVI. of the revised convention, take effect one month after the date of the note of the Federal Council communicating this intelligence—viz., on the 7th September, 1903. I have, &c.,

LANSDOWNE.

At the Court at Windsor, the 28th day of May, 1889.

Present:

THE QUEEN'S MOST EXCELLENT MAJESTY.

LORD PRESIDENT, EARL OF COVENTRY, LORD ASHBOURNE.

WHEREAS by the provisions of "The Patents, Designs, and Trade-marks Act, 1883," as amended by "The Patents, Designs, and Trade-marks (Amendment) Act, 1885," it is, amongst other things, provided that if Her Majesty is pleased to make any arrangement with the Government or Governments of any foreign State or States for mutual protection of inventions, designs, and trade-marks, or any of them, then any person who has applied for protection for any invention, design, or trade-mark in any such State shall, subject to the conditions further provided and set forth in the said Act, be entitled to a patent for his invention or to registration of his design or trade-mark (as the case may be) under the said Act in priority to other applicants, and such patent or registration shall have the same date as the date of the application in such foreign State:

And whereas it has pleased Her Majesty to make an arrangement with the Government of Mexico, by and in virtue of a treaty entered into between Her Majesty and that State, dated the twenty-seventh day of November, one thousand eight hundred and eighty-eight, and duly ratified on the eleventh day of February, one thousand eight hundred and eighty-nine, as regards the rights to which subjects or citizens of each of the contracting parties shall be entitled in the dominions and possessions of the other in regard to patents for inventions, designs, and trade-marks:

Now, therefore, Her Majesty, by and with the advice of her Privy Council, and by virtue of the authority committed to her by the said first-mentioned Act, doth declare, and it is hereby declared, that the provisions of the said Acts hereinbefore specified shall apply to the following country—viz.,

MEXICO.

And it is further ordered and declared that this Order shall take effect so far as regards patents at the expiration of seven months, and so far as regards designs and trade-marks at the expiration of four months, from the day and date first above written.

C. L. PEEL.

TREATY SERIES No. 12, 1904.—ACCESSION OF CUBA TO THE INDUSTRIAL PROPERTY CONVENTION, 1883, ETC., 17TH NOVEMBER, 1904.

No. 1.

M. CARLIN to the MARQUESS OF LANSDOWNE (received 22nd October).

(Translation.)

Swiss Legation, London,

17th (21st) October, 1904.

M. LE MARQUIS,—By a note dated the 22nd September last the Secretary of State of the Republic of Cuba notified to

my Government the accession of that country to the Union for the Protection of Industrial Property as governed by the convention of the 20th March, 1883, the protocol of the 15th April, 1891, and the additional Act of the 14th December, 1900, at the same time stating that the Cuban Government reserves to itself the right of ultimately acceding to the arrangement relative to the international registration of trade-marks and to that respecting false indications of origin on goods.

No special date having been indicated for the coming into force of the convention so far as concerns the relations between Cuba and the other States of the Union, the convention will, in accordance with the terms of Article XVI. as revised, take effect one month after the notification of the accession has been made by the Swiss Government to the other States of the Union. Consequently the convention will come into force, so far as regards Cuba, on the 17th November next.

The class in which the Republic of Cuba will rank as regards its contribution to the expenses of the international office of the Union will be indicated by the latter in its official organ *La Propriété Industrielle*, and in its official report.

At the request of my Government, I hasten to bring the foregoing to your Lordship's knowledge, with the request that I may receive a formal acknowledgment of this communication.

Be good enough, &c.,

CARLIN.

No. 2.

The MARQUESS OF LANSDOWNE to M. CARLIN.

Foreign Office, 31st October, 1904.

SIR,—I have the honour to acknowledge the receipt of your note of the 17th (21st) instant, stating that, on the 22nd ultimo, the Government of Cuba notified to the Swiss Government the accession of Cuba to the Union for the Protection of Industrial Property, so far as regards the convention of the 20th March, 1883, the protocol of the 15th April, 1891, and the additional Act of the 14th December, 1900, while reserving to themselves the right of accession at a later date to the arrangement respecting the international registration of trade-marks and the prevention of false indications of origin of goods.

I note that, no special date having been mentioned for the coming into force of the convention so far as regards the relations between Cuba and the other States of the Union, the convention will, in accordance with Article XVI. of the revised convention, take effect one month after the date of the notification made by the Swiss Government to the other States of the Union, viz., on the 17th November next.

I also note that the class in which Cuba will rank with respect to its contribution to the expenses of the International Bureau will be specified in the official organ of the Union, *La Propriété Industrielle*, and in its official report.

I have, &c.,

LANSDOWNE.

At the Court at Buckingham Palace, the 12th day of January, 1905.

Present:

THE KING'S MOST EXCELLENT MAJESTY IN COUNCIL.

WHEREAS by section one hundred and three of "The Patents, Designs, and Trade-marks Act, 1883," as amended by section six of "The Patents, Designs, and Trade-marks (Amendment) Act, 1885," it is enacted as follows: (1.) If Her Majesty is pleased to make any arrangement with the Government or Governments of any foreign State or States for mutual protection of inventions, designs, and trade-marks, or any of them, then any person who has applied for protection for any invention, design, or trade-mark in any such State shall be entitled to a patent for his invention or to registration of his design or trade-mark (as the case may be) under this Act, in priority to other applicants, and such patent or registration shall have the same date as the date of the application in such foreign State: Provided that this application is made, in the case of a patent within seven months, and in the case of a design or trade-mark within four months, from his applying for protection in the foreign State with which the arrangement is in force: Provided that nothing in this section contained shall entitle the patentee or proprietor of the design or trade-mark to recover damages for infringements happening prior to the date of the actual acceptance of his complete specification or the actual registration of his design or trade-mark in this country, as the case may be. (2.) The publication in the United Kingdom or the Isle of Man during the respective periods aforesaid of any description of the invention, or the use therein during such periods of the invention, or the exhibition or use therein during such periods of the design, or the publication therein during such periods of a description or representation of the design, or the use therein during such periods of the trade-mark, shall not invalidate the patent which may be granted for the invention, or the registration of the design or trade-mark. (3.) The application for the grant of a patent, or the registration of a design, or the registration of a trade-mark, under this section must be made in the same manner as an ordinary application under this Act; provided that, in the case of trade-marks, any trade-mark the registration of which has been duly applied for in the country of origin may be registered under this Act. (4.) The provisions of this section shall apply only in the case of those foreign States with respect to which Her Majesty shall from time to time by Order in Council declare them to be applicable, and so long only in the case of each State as the Order in Council shall continue in force with respect to that State:

And whereas it pleased Her late Majesty Queen Victoria to make an arrangement of the nature contemplated by the said enactment, by and in virtue of a declaration signed and sealed by Her Majesty's ambassador at Paris on the seventeenth day of March, one thousand eight hundred and eighty-four, duly conveying the accession of Great Britain and Ireland to the International Convention and Protocol for the Protection of Industrial Property, signed by representatives of certain Powers on the twentieth day of March, one thousand eight hundred and eighty-three, and duly ratified on the sixth day of June, one thousand eight hundred and eighty-four, power being reserved to Her Majesty to accede thereafter to the provisions of the said convention and protocol on behalf of the Isle of Man, the Channel Islands, and any of Her Majesty's possessions, which declaration of accession was duly accepted by the French Government on behalf of the signatory Powers by and in virtue of a declaration dated the second day of April, one thousand eight hundred and eighty-four:

And whereas by various Orders in Council Her late Majesty Queen Victoria was pleased to declare that the hereinbefore-recited provisions of the said Act should apply to the several foreign countries named in the said Orders parties to the said convention and protocol:

And whereas on the fourteenth day of December, one thousand nine hundred, an additional Act was agreed upon between Her late Majesty Queen Victoria and the Governments of the foreign countries parties thereto for the purpose of modifying certain of the provisions of the said international convention and the protocol annexed thereto, the ratifications of which additional Act were duly effected except as regards the Dominican Republic and Servia:

And whereas by section one of "The Patents Act, 1901," it is enacted as follows: 1. (1.) In the first proviso to subsection one of section one hundred and three of "The Patents, Designs, and Trade-marks Act, 1883" (which section relates to the time for making applications for protection under international arrangements) the words "twelve months" be substituted for the words "seven months." (2.) An application under that section shall be accompanied by a complete specification, which, if it be not accepted within the period of twelve months, shall, with the drawings (if any), be open to public inspection at the expiration of that period:

And whereas on the first day of May, one thousand nine hundred and three, the German Empire duly acceded to the said international convention, protocol, and additional Act:

And whereas by an Order in Council dated the ninth day of October, one thousand nine hundred and three, His Majesty was pleased to declare that the provisions of section one hundred and three of "The Patents, Designs, and Trade-marks Act, 1883," as amended by section six of "The Patents, Designs, and Trade-marks (Amendment) Act, 1885," and by section one of "The Patents Act, 1901," should apply to the German Empire:

And whereas on the twenty-second day of September, one thousand nine hundred and four, the Republic of Cuba duly acceded to the said international convention, protocol, and additional Act:

Now, therefore, His Majesty, by and with the advice of his Privy Council, and by virtue of the authority committed to him by the above enactments, doth declare, and it is hereby declared, as follows:—

1. The provisions of section one hundred and three of "The Patents, Designs, and Trade-marks Act, 1883," as amended by section six of "The Patents, Designs, and Trade-marks (Amendment) Act, 1885," and by section one of "The Patents Act, 1901," shall apply to the Republic of Cuba.

2. This Order shall take effect from the seventeenth day of November, one thousand nine hundred and four.

A. W. FITZROY.

Notice of Acceptance of Complete Specifications.

Patent Office,
Wellington, 14th June, 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. 17978.—31st May, 1904.—JAMES THOMAS HUNTER, of Queen's Chambers, Wellington, New Zealand, Engineer (nominee of John William Hardley and Samuel Hardley, both of Hamilton, Waikato, New Zealand, Plumbers). Improved means for securing the covers of nightsoil and other pans in position thereon.*

Claims.—(1.) In nightsoil and other pans, a cover of truncoated-cone shape adapted to fit upon the pan, a springy metal strip extending across the flattened top of the cover and secured thereto, with its ends projecting outwards therefrom, and lugs pivoted one to each end of the strip and provided with shoulder-pieces on their free ends, in combination with a projecting rim formed on the outer top edge of the pan and beneath which the shoulders on the lugs are adapted to engage, substantially as specified. (2.) The general arrangement, construction, and combination of parts in my improved means for securing the covers of nightsoil and other pans in position thereon as described and explained, as illustrated in the drawings, and for the several purposes set forth.

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

No. 18093.—28th June, 1904.—THOMAS WILLIAM SOPER, of Titiroa, Southland, New Zealand, Farmer. Improvements in seed-sowers and ridgers.*

Claim.—In seed-sowers and ridgers, providing means to enable the coulters or sowers to be moved laterally, substantially as and for the purposes set forth.

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

No. 18100.—24th October, 1903.—CHESTER CHARLES SMALL, of Newton Highlands, Massachusetts, United States of America, Inventor. Improvements in or relating to top lifts for boots and shoes.*

[This is an application, under section 106 of the Act, the date given being the official date of the application in the United States of America.]

Claims.—(1.) As a new article of manufacture, a top lift comprising a blank cut from a piece of leather, and thereafter compressed and condensed by great pressure, both upon its faces and its edges, to such an extent that substantial changes are effected in its characteristics or qualities, substantially as described. (2.) As a new article of manufacture, a top lift cut from soft or spongy leather, and thereafter compressed and condensed by great pressure, both upon its faces and its edges, to such an extent that substantial changes are effected in its characteristics or qualities, substantially as described. (3.) As a new article of manufacture, a top lift comprising a piece of leather compressed and condensed, and having its tread-face and its edges hardened by great pressure exerted positively and directly upon the top lift to such an extent that substantial changes are effected in its characteristics or qualities, substantially as described. (4.) As a new article of manufacture, a top lift comprising a blank cut from a piece of leather, and thereafter compressed and condensed by great pressure, both upon its faces and its edges, to such an extent that substantial changes are effected in its characteristics or qualities, substantially as described, and having a design impressed in one of its faces by such pressure. (5.) As a new article of manufacture, a top lift comprising a blank cut from a piece of leather, and thereafter compressed and condensed by great pressure, both upon its faces and its edges, to such an extent that substantial changes are effected in its characteristics or qualities, substantially as described, and having its flesh side corrugated or roughened by such pressure. (6.) As a new article of manufacture, a top lift comprising a blank cut from a piece of leather, and thereafter compressed and condensed by great pressure, both upon its faces and its edges, to such an extent that substantial changes are effected in its characteristics or qualities, substantially as described, and having its diameter reduced by such pressure. (7.) As a new article of manufacture, a top lift comprising a blank cut from a piece of leather, and thereafter compressed and condensed in all its dimensions to a uniform thickness to such an extent that substantial changes are effected in its characteristics or qualities, substantially as described. (8.) As a new article of manufacture, a top lift of leather the characteristics and qualities of which have been substantially changed by the compression and condensation of said lift throughout and in all of its dimensions, substantially as described. (9.) A top lift for the heels of boots and shoes manufactured substantially as described.

(Specification, 7s.; drawing, 1s.)

No. 18233.—28th July, 1904.—THOMAS MACALPINE, of 22, Sutton Court Road, Chiswick, London, England, Doctor of Science, Consulting and Research Chemist, and Chemical Engineer. Improvements in means and apparatus for refining oils.*

Extract from Specification.—According to this invention, firstly, the crude oil is subjected to the action of a saline solution which separates the acids in the oil from the oil, and enables the other impurities to be capable of being easily and cheaply oxidized, which oxidation destroys the affinity of the impurities for the oil. Secondly, the impurities, after being treated as described and partially oxidized during the saline treatment, are further oxidized during distillation by mixing into the oil before distillation a compound that will mix into the oil and give off oxygen by the heat of the distillation, such as a preparation of manganese, which further oxidizes the impurities; and during this part of the process—that is, during distillation—it is advantageous to introduce into the oil, while in the still, steam of a lower temperature than 212° Fahr.—preferably about 170° Fahr.: the effect of such low-temperature steam in combination with the oxygen from the manganese finishes the complete separation of the impurities from the oil, so that they (the impurities) do not pass over with the distillate, but remain in the still with the residuum of the distillation.

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

(Specification, 5s.; drawings, 2s.)

No. 18257.—1st August, 1904.—HILARY QUERTIER, of Wood's Hotel, Dunedin, New Zealand, Engineer, and CHARLES CLARKE ARMSTRONG, of Dunedin aforesaid, Photographer. Improved flashlight apparatus.*

Extract from Specification. — This invention provides improved apparatus for use in producing flashlight from magnesium and other similar powders, and for collecting the smoke and other products of combutsion arising therefrom. The apparatus comprises a metal chamber of any convenient shape, open at one side for the escape of the flashlight, and provided with a hood or dome into which the smoke and fumes pass. Above the hood is removably arranged an expansible receptacle for said fumes, said receptacle preferably being constructed so that it may be collapsed after the manner of an accordion when out of use, and a spring or springs is provided by which the receptacle is expanded, whereby products of combustion are drawn into it from the hood referred to.

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

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

No. 18274.—4th August, 1904.—ROWE'S PATENT LOCK AND BLOCK, LIMITED, a company registered according to the laws of New South Wales, Australia, having their registered office at No. 14, O'Connell Street, Sydney, New South Wales aforesaid (assignees of William Rowe, of "Mayville," Victoria Road, Marrickville, near Sydney aforesaid, Signal-fitter). Improvements in railway-traffic-control systems.*

Extract from Specification.—The nature and function of the methods and apparatus are as follows: (*a.*) The combination (in the excludable cabin) with revolving switching through contacts, as well understood, and the slide-bar of the instrument, of a check-bar or retaining-bolt in such a manner that the electrical switching-contacts be operated to cut out the instrument until the departure of the train from the operator's rear section and its entry into his advance section releases the electro-mechanical lock of said slide-bar, which in turn in its locked position holds the said check-rod or retaining-bolt from movement, and so that on such release of the electro-mechanical lock the contacts may be operated to switch through the instrument circuit to cause said check-bar or retaining-bolt to retain or lock said slide-bar while the switching-contacts are in the cut-out position. (*b.*) The combination with said check-bar or retaining-bolt, of a similar electro-mechanical lock to that on the slide-bar,

whose electro-magnet is energized on the closing of circuit by the train over an additional insulated rail or rail-contact at or about the point in the line where the outdoor signal controlling the entrance to the advance-block section (referred to as "starting signal") is situated, and on the closing of said circuit by the manipulation of a switch (in the cabin) for such purpose. (*c.*) The combination with the slide-bar of the instrument, of a supplementary electro-mechanical lock of similar construction to the main electro-mechanical lock on the slide-bar (preferably arranged on one leg of the slide-bar of the instrument, bifurcated for the purpose), and having its electro-magnet in a battery-circuit closed by a train on an additional insulated rail or other rail-contact at a predetermined position in the line, preferably near the signal protecting said points (generally the "home signal"), and a check-bar or retaining-bolt connected with a locking-pin of the operative lever of joints of cross-overs, sidings, or off-sets, adapted to be thrust across the supplementary leg of the slide-bar as it releases or unlocks said points-lever, and to be prevented from being so thrust across until after the energizing of the electro-magnet of said supplementary electro-mechanical lock. (*d.*) The combination with the outdoor semaphore signal of the excludable cabin, of a supplementary manually operative lever at any convenient position, and similar locks on the switching through contacts in said cabin and on the signal-lever, and a key common to both said locks.

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

(Specification, 18s.; drawings, 3s.)

No. 18291.—9th August, 1904.—WILLIAM HENRY SPILLER, of 58, Greig Street, Albert Park, Victoria, Ironworker. An improved combined automatic cream-separator and milk-cooler.*

Claims.—(1.) The combination and arrangement of the water-cylinder C with the milk-receiver A, dome-shaped ventilated cover G, telescoping tubes B and D, water-chambers K, and the annular flanges H and N, as described, and as illustrated in my drawings. (2.) The combination and arrangement of the milk-receiver A provided with the perforations L, M, and B^1, of the flanges H and N, perforations I in said flange H, vertical water-chambers K, central tube B, floor E, and milk-outlet pipe R with cock S, as described, and as illustrated in my drawing. (3.) The combination with the water-cylinder C, having the perforations F^1 at its upper portion, of the central tube D, ventilated dome-cover G, water-feed tube P, and cap U, as described, and as illustrated in my drawings.

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

No. 18316.—15th August, 1904.—WILLIAM EDINBOROUGH CHAMBERLAIN, of Feilding, New Zealand, Engineer. An improved fencing-standard.*

Claim.—A fencing-standard formed of a length of wire, and bent at intervals throughout its length in such a manner as to form kinks or indentations of sufficient depth to receive the fencing-wires when laid across them, substantially as described, and as illustrated in the drawings.

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

No. 18363.—25th August, 1904.—UNITED SHOE MACHINERY COMPANY, of Paterson, State of New Jersey, United States of America, a corporation duly organized under the laws of said State of New Jersey, and having a place of business at 205, Lincoln Street, Boston, Massachusetts, United States of America (assignees of George Goddu, of Winchester, Middlesex, Massachusetts aforesaid, Inventor). Improvements in or relating to welt-attaching apparatus.*

Claims.—(1.) A machine provided with mechanism for securing a welt to stock, a device for slitting a welt, and a common actuator for said securing mechanism and said slitting-device. (2.) Means for slitting a welt, in combination with mechanism for securing the welt to the stock, and means whereby the slitting-means are for the purpose desired rendered inoperative while the securing mechanism continues in operation. (3.) Means for slitting a welt, in combination with mechanism for securing the welt to the stock, and means under the control of the workman for suspending for the purpose described the operation of the slitting-means without affecting the operation of the securing mechanism. (4.) In a machine for uniting a welt to stock, the combination with a stock-support, a welt-guide, a welt-presser acting on the surface of the welt in said guide, of an auxiliary presser adapted to act on the welt-presser, yielding means for operating said auxiliary presser to firmly clamp the welt, and means to simultaneously lower the stock-support and put the auxiliary presser in an inoperative position. (5.) In a machine for uniting a welt to stock, the combination of a reciprocating cutter, a welt-guide having an opening formed in its lower face for receiving said cutter, a presser for bearing upon the upper surface of the welt at one side of the cutter-opening, and a yielding gauge for acting upon the edge of the welt at the other side of said opening, substantially as described. (6.) In a machine for uniting a welt to stock, the combination with a welt-guide, of a spring-actuated presser mounted in said guide and adapted to bear upon the upper service of the welt, and a yielding gauge for acting upon the edge of the welt, said gauge having a notched end to overlap the edge of the welt and also having a handle for moving the gauge into an inoperative position, substantially as described. (7.) In a machine for uniting a welt to stock, the cutter controlling and actuating devices, substantially as described, and illustrated in Figs. 3 and 4 of the drawings.

(Specification, 10s.; drawings, 3s.)

No. 18371.—25th August, 1904.—EMILY SCHULZE, of Franklin Road, Auckland, New Zealand, Married Woman. An improved catamenial appliance.*

Claim.—An improved catamenial appliance, the same consisting essentially of a piece of oval waterproof material with novel yet useful accessories, such as adjustable sponges with patent fasteners attached; also six flannelettes to fit No. 1, with eyelets worked in centres and button-holes worked in the ends, covering linen buttons which are sewn on end of No. 1. Each end of No. 1 is provided with a broad elastic band to button or loop as the wearer desires; such elastic bands are fastened substantially as specified. There are also waterproof bags as receptacles for all spare parts.

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

No. 18431.—8th September, 1904.—HENRY CLAYLANDS FIELD, of Aramoho, Wellington, New Zealand, Civil Engineer. A fire- and earthquake-resisting building-material.*

Claim.—Such a concrete of pumice, lime, and water as is described, to be used for the purpose of erecting houses or other buildings, with a view to enabling such houses or buildings to resist the action of fire or earthquake to a far greater extent than brickwork or stonework do so, both on account of its much less weight and non-conductive nature, and because of its being of a homogeneous character, without horizontal or vertical joints.

(Specification, 1s. 6d.)

No. 18688.—3rd November, 1904.—AUGUSTE JOSEPH FRANÇOIS DE BAVAY, of "Florimel," Gellibrand Street, Kew, Victoria, Australia, Brewer and Chemist. An apparatus for separating by flotation parts of the constituents of ores and other solid bodies from the remainder thereof.*

Claims.—(1.) In an apparatus for the purpose specified, a feed-trough provided with a discharge-lip the position of which is capable of adjustment, combined with a rotary feed-appliance having toothed blades, and between each pair of said teeth adjustable twisted distributing-fingers, substantially as described and shown. (2.) In an apparatus for the purpose specified, a rotary feed-appliance consisting of four toothed blades secured on a square shaft, and between each adjoining pair of said teeth distributing-fingers, the twist or pitch of which are capable of adjustment, substantially as described and shown. (3.) In an apparatus for the purpose specified, a rotary adjustable ore-feed appliance and a supply-pipe for water, both assembled at the upper part of a shoot leading to or at the upper part of and combined with an inclined surface, table, or race, whereby pulverised ores in a pasty condition are delivered to and carried in a thin stream down the said inclined table and delivered at its lower part to a trough or well of water having an endless travelling-belt combined therewith, substantially in the manner described and shown. (4.) In an apparatus for the purpose specified, a controlled and adjustable ore-supply appliance and a supply-pipe for water, both assembled at the upper part of and combined with an inclined surface, table, or race, whereby pulverised ores in a pasty condition are delivered to and carried in a thin stream down the said inclined table and evenly distributed by means of transverse lines of tags over the surface of such table and delivered at its lower part to a trough or well of water having an endless travelling-belt combined therewith, substantially in the manner described and shown. (5.) In an apparatus for the purpose specified, in combination, a rotary feed-appliance and feed-trough, a feed-shoot, an inclined surface, table, or race, having its lower end terminating in a well or trough of water

furnished with a fixed or an adjustable outlet-lip, an endless travelling-belt or table supported on suitable rollers, a gutter to which said lip delivers, and a perforated water-pipe for operating on the under-side of the endless belt, substantially as described and shown. (6.) In an apparatus for the purpose specified, in combination, a feed-appliance, an inclined surface, table, or race, having its lower end terminating in a well or trough of water furnished with a fixed or an adjustable outlet-lip and an endless travelling-belt or table, a gutter to which said lip delivers, whereby ores fed to said inclined table or race in a pasty condition and evenly distributed thereon by means of tags or transverse brushes over the surface of such table, and floated down with a small or thin stream of water or other liquid, are delivered to upon the surface of the water in a thin film and in such a manner that the floatable particles float and pass over the said lip to the gutter, and the remaining parts sink in the well containing the water or other liquid to upon an endless travelling-belt which delivers the non-floatable ore to another similar table, substantially in the manner described and shown. (7.) An apparatus for the purpose specified, consisting, in combination, of a cistern in which the sifted pulverised ores are chemically treated, a washing-bin for the ores, a pulverised-ore feed-trough furnished with a rotary feed-appliance, a water-supply pipe, a feed-shoot, an inclined surface or table, race or series of races, having distributors thereon, a well or trough for water furnished with an adjustable lip, an endless travelling-belt or table, a water-spray pipe for the latter and a gutter at its side next said lip whereby suitably treated pulverised ores fed from said feed-appliance in a pasty condition are floated down the inclined table with a regulated stream of water and delivered to the surface of the water in the trough or well, whereon the floatable particles float and pass to the gutter and the remaining parts sink in the water in said trough or well or to upon the travelling-belt, substantially in the manner described and shown.

(Specification, 9s.; drawings, 4s.)

No. 18820.—1st December, 1904.—GEORGE BARNES, of 10, Hampden Street, North Sydney, New South Wales, Australia, Inventor. Improvements in curtain-suspenders.*

[NOTE.—The title in this case has been altered. See list of Provisional Specifications, *Gazette* No. 3, of 12th January, 1905.]

Claims.—(1.) An improved curtain-suspender, characterized by a pair of pivotally attached armatures, each armature having at or near its top end a bracket pivotally attached thereto, said brackets being adapted to support a cross-piece or cross-pieces, substantially as described, and as illustrated in the drawings. (2.) In an improved curtain-suspender, a pair of pivotally attached armatures having pivotally attached brackets at or near their top ends, in combination with a cross-piece or cross-pieces for the purpose as carrying curtains, substantially as described, and as illustrated in the drawings.

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

No. 18985.—24th January, 1905.—WILLIAM COWERN, of Hawera, New Zealand, Estate Agent. Improved means for use in filtering or purifying water or other liquids.*

Claims.—(1.) In water-purifiers, a casing divided into three chambers by horizontal divisional plates, an inlet leading to the top chamber, an outlet leading from the bottom chamber, and communication between the top and middle chamber, in combination with hollow pillars of porous stone arranged vertically within the middle chamber, and apertures formed in the lower divisional plate, over each one of which a hollow pillar rests, substantially as specified. (2.) In water-purifiers, a casing divided into three chambers by horizontal divisional plates, an inlet leading to the top chamber, an outlet leading from the bottom chamber, an aperture in the top divisional plate, a slide-valve adapted to cover and uncover such aperture, and a pipe, controlled by a valve, leading from the bottom of the middle chamber to outside the casing, in combination with a number of hollow pillars of porous stone arranged vertically within the middle chamber, apertures formed in the lower divisional plate, over each one of which a hollow pillar rests, and a number of perforated pipes opening from the top chamber and extending downwards through the middle chamber interspersed with the hollow pillars, substantially as specified. (3.) In water-purifiers, a casing divided into three chambers by horizontal divisional plates, an inlet leading to the top chamber, an outlet leading from the bottom chamber, communication between the top chamber and middle chamber, apertures formed in the bottom divisional plate and arranged in concentric circular rows, hollow pillars of porous stone mounted vertically within the middle chamber and one of which rests above each of the apertures in the divisional plate beneath, concentric rings secured within the middle chamber vertically above each ring of pillars, set-screws passing through such rings, and caps adapted to fit upon the tops of the hollow pillars and to be held in position thereon by means of the set-screws, substantially as specified. (4.) The general arrangement, construction and combination of parts in my improved means for use in filtering or purifying water or other liquids, as described and explained, as illustrated in the drawings, and for the several purposes set forth.

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

No. 19287.—3rd April, 1905.—FRANK CROOM BUCK, of 47, Perth Street, Prahran, Victoria, Australia, Mechanical Engineer. Improvements in valves and cocks.*

Claims.—(1.) In combination, a lift-valve or the like, in a valve-chamber between a main inlet and outlet, an inlet by-pass and a discharge by-pass joining said valve-chamber above the lift-valve, with the main inlet and outlet respectively, and means to open and close the discharge by-pass, substantially as indicated. (2.) In combination, a lift-valve or the like, in a valve-chamber between a main inlet and outlet, an inlet by-pass and a discharge by-pass joining said valve-chamber above the lift-valve with the main inlet and outlet respectively, means to limit the lift of the valve in its chamber, and means to open and close the discharge by-pass, substantially as indicated. (3.) A main inlet and a main outlet passage, an inlet by-pass and a discharge by-pass, a valve-chamber communicating with the said passages and by-passes, a discharge by-pass valve, and a main valve adapted to be raised by fluid pressure without closing the by-pass ports when said by-pass valve is opened, substantially as indicated, (4.) A lift-valve in a valve-chamber, means for supplying fluid under pressure to both sides of the valve in all its positions, and means, including by-passes and an outlet by-pass valve, for reducing or increasing the fluid pressure of the lift-valve upper side at will, whereby the valve will be raised above or be forced down upon its seat, and whereby also an outflow through the by-passes may be obtained. (5.) The valve parts or adjuncts q to u, and w, in combination with a valve-chamber, having an interiorly recessed cap k, and by-pass ports as indicated. (6.) In devices of the class indicated, a lift-valve chamber in combination with inlet and discharge by-passes, and a discharge by-pass valve upon a screwed plug having a handle adapted to be thrown over against either of two stops at the respective sides of the plug casing, as and for the purposes set forth.

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

No. 19347.—14th April, 1905.—ROBERT WALKER ASHCROFT, of Hawera, New Zealand, Plumber. An improved spouting-bracket.

Claims.—(1.) A spouting-bracket comprising in combination inner and outer members independent of each other, the said inner member being capable of adjustment in position upon a building independent of the other member, the outer member having a hook at its upper end and being shaped to the contour of the spouting and having a foot at its lower end, and a screw for attaching the foot to the building, substantially as specified. (2.) The combination and arrangement of parts comprising the improved spouting-bracket, substantially as and for the purposes set forth, and illustrated in the drawing.

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

No. 19373.—18th April, 1905.—LEEDE PROCESS COMPANY, a corporation organized and existing under the laws of the State of New Jersey, United States of America, whose principal office is at 1307, Stephen-Girard Building, Philadelphia, Pennsylvania, United States of America, Exploiters of Gas Apparatus and Mining Machinery (assignees of Julius Leede, of 2520, Druid Hill Avenue, Baltimore, Maryland, United States of America, Mechanical Engineer). Improvements in apparatus for making gas.

Claims.—(1.) In an apparatus for making gas, a retort having a mass of refractory material therein, means for introducing oil and air thereto, the whole constituting a combustion and heating chamber, and means operating during the passage of the gas through the retort for admitting air to the retort for mixture with the gas, beyond the refractory material, adjacent to the discharge end of said retort. (2.) In an apparatus for making gas, a retort having a mass of refractory material therein, means for introducing oil and air thereto, the whole constituting a combustion and heating chamber; means operating during the passage of the gas through the retort for admitting air to the retort for mixture with the gas, beyond the refractory material, at or adjacent to the discharge end of said retort, and means for regulating the quantity of air admitted. (3.) In an apparatus for making gas, a

retort having a mass of refractory material therein, means for introducing oil and air thereto, the whole constituting a combustion and heating chamber, the said retort having an air-admission opening, beyond the refractory material, at or adjacent to its discharge end, a valve or cover controlling the passage through said opening, means for adjusting the position of said valve, and means operating during the passage of the gas through the retort for drawing in air through said opening. (4.) In an apparatus for making gas, a retort having a mass of refractory material therein, means for introducing oil and air thereto, the whole constituting a combustion and heating chamber, the said retort having an air-admission opening, beyond the refractory material, at or near its discharge end, a gas-delivery pipe or conduit leading from said retort, and means operating during the passage of the gas through the retort for drawing air into said retort through said opening to mix with the gas, for positively withdrawing the mixed air and gas from said retort, and for forcing the same into and through said delivery-pipe. (5.) In an apparatus for making gas, a retort having a mass of refractory material therein, means for introducing oil and air thereto, the whole constituting a combustion and heating chamber, the said retort having an air-admission opening, beyond the refractory material, at or near its discharge end, a gas-delivery pipe or conduit leading from said retort, and a fan interposed between said retort and said delivery-pipe and operating during the passage of gas through the retort for drawing air into said retort through said opening to mix with the gas, and for withdrawing the mixed air and gas from said retort by suction, and for forcing the same into and through said delivery-pipe. (6.) In an apparatus for making gas, a retort having a mass of refractory material therein, means for introducing oil and air thereto, the whole constituting a combustion and heating chamber; means operating during the passage of the gas through the retort for admitting air to the retort at its discharge end, a gas-delivery pipe or conduit leading therefrom, a rotary fan interposed between said retort and said delivery-pipe for withdrawing the gas from said retort by suction and forcing it into and through said pipe, and means under the control of the operator for controlling the speed of said fan from a source of constant power.

(Specification, 11s.; drawings, 3s.)

No. 19383.—19th April, 1905.—THOMAS GRUNDY, of Waiwera, Auckland, New Zealand, Engineer. An improved propeller-blade.

Claims. — (1.) The improved propeller-blade specified, having its cutting edge curved inwardly in the semi-crescent shape shown on drawing. its under or throwing-off edge curved outwardly in the semi-crescent shape shown on drawing, end of under or throwing-off edge turned over with an inclination inwards in the direction of the concavity as shown on drawing, and shaped as shown on drawing, for the purpose set forth, substantially as described and illustrated. (2.) The improved propeller-blade specified, having its cutting edge curved inwardly in the semi-crescent shape shown on drawing, its under or throwing-off edge curved outwardly in the semi-crescent shape shown on drawing, end of under or throwing-off edge turned over with an inclination inwards in the direction of the concavity as shown on drawing, and shaped as shown on drawing, in combination with the propeller and boss thereof, fitted to a vessel for propelling the same, for the purpose set forth, substantially as described and illustrated.

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

No. 19394.—26th April, 1905.—JOSEPH BOWRING, of 24, Bellott Street, Cheetham Hill, Manchester, England, Engineer. Improvements in obstruction-removers.

Claims.—An automatic obstruction-remover for tramcars, consisting of a pivoted tray and swing-gate, a lever fast on the tray-axis and a lever fast on the gate-axis, a rod connecting such levers, a spring acting on the tray in such manner as to tend to lower its front edge on to the roadway, a further lever fast on the gate-axis, and a resetting-rod, with latching shoulder or a projection on its edge, connected to such further lever and passing through the car-floor, a loosely mounted cam on the gate-axis, a lever pivotally suspended from the car and lying against the cam at one end and against the resetting-rod at the other end, so that on the gate swinging rearwardly the cam passes against the suspended lever and the lever against the resetting-rod, substantially as and for the purposes set forth, and illustrated on the drawing. (2.) In latching and unlatching devices for life-guards, the arrangement of rods, levers, cam, gate-axis, and gate as set forth, and shown in Fig. 4 of the drawing.

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

No. 19416.—2nd May, 1905.—RALPH DUNNE, of Dunedin New Zealand, Picture-framer. Non-refillable bottle.

Extract from Specification.—When the bottle is filled the stopper 1 is thrust into the neck until it rests on and is supported by the flange 15, and an ordinary cork 16 is inserted in the neck above the stopper. The stopper cannot be withdrawn by any instrument inserted down the neck, on account of the hardness of the material of which the stopper is composed. The construction of the openings and chamber, and their relative positions in the stopper, and the position of the valve, prevents the insertion of a wire to destroy or remove the valve. This arrangement permits of the contents of the bottle being poured out, but prevents any fluid from being passed into the bottle.

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

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

No. 19417.—2nd May, 1905.—PAUL BOCK, of the firm of Paul Bock and Co., of Customs Street West, Auckland, New Zealand, Merchant. Improved means for attaching packets to show-cards.

Claims.—(1.) For the purpose indicated, in combination, a show-card adapted to carry a packet upon its face, slots cut through the card at each end of the packet, and tabs passed through said slot, secured to the back and adapted to be secured to the ends of the packet, substantially as specified. (2.) The means for securing the packet to a show-card substantially as described, and illustrated in the drawing.

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

No. 19422.—4th May, 1905.—ALFRED SPAULDING PATTERSON, of Nos. 570-576, Bourke Street, Melbourne, Victoria, Australia, General Manager for the Massey-Harris Company, Limited (nominee of Massey-Harris Company, Limited, a company duly incorporated under the Joint-stock Companies Act of the Dominion of Canada, of 915, King Street West, Toronto, Ontario, Canada, Manufacturers; assignees of Wilbur W. Marsh and Charles H. Hackett, both of Waterloo, Iowa, United States of America). Improvements in centrifugal liquid-separators.

Extracts from Specification.—In Figs. 1, 2, and 3 is shown a separating-disc of the ordinary type (that of a hollow truncated cone) at A, while on the upper surface thereof is formed a number of raised ridges B, B, each in the form of a helix, with channels between of the desired width, through which may course the liquid in process of separation. . . . Another improvement is the method of truncating the discs, as shown at C, so as to provide the upper edges thereof with a scalloped outline. The ascending lighter constituent of the liquid is thus allowed freer passage to the exit. . . . With this end in view, in a liner composed of separating-discs A supported on uprights G attached to an upper plate L and a lower plate M there is introduced a depending helical corrugated plate H attached to an upper plate K. The plate K is detachable from the plate L, and also bears an exit-tube J for the egress of the lighter constituent of the liquid. The corrugated plate H has its corrugations arranged in a series of parallel troughs, with a single perforation I at the outer angle of the lower end of each trough. Each one of the perforations I is placed opposite to and communicating with one only of the spaces between adjacent pairs of the separating-discs.

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

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

No. 19423.—21st May, 1904.—PIERCE HENRY WATTS, of Long Street, Dursley, Gloucester, England, Dairy Engineer, Improvements in cream-separators.

[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.) The improvements in centrifugal liquid-separators consisting of a bowl or drum the internal laminations or cones of which are so corrugated with ribs and valleys commencing at or near the base of the cones, and increasing in depth as they ascend to the upper part of the cones, when the ribs and valleys are very pronounced, so as to form two different inclines, with suitable filling and exit provisions, substantially as set forth, and shown upon the drawings. (2.) In improvements in liquid-separators, making the cone-plates for the separation of cream and the like with corrugations or ribs and valleys which com-

mence at or near the base of the cone-plate, and deepening so as to become more pronounced as they ascend, substantially as set forth, and shown by Figs. 2, 3, 4, 5, and 6 upon the drawings.

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

No. 19426.—4th May, 1905.—HENRY JULIUS HORSTMANN, of 402, East Berry Street, Fort Wayne, Indiana, United States of America, Mechanical Engineer. Improvements in mercury-vapour amalgamators.

Extract from Specification.—In the operation of this invention the cam 27 and the sprocket wheel 28 are set in motion by the driving mechanism 29, and thereby the barrels will rotate continuously and the valves 19 and 20 will successively and alternately close and open. The wheel 16 of the feeding-device is also rotated continuously by means of its pulley 45. Heat is then applied to the barrels by building a fire in the heating-chamber 8, and, when suitably heated, vapour of mercury is supplied to said barrels by turning the valve 46 which controls the supply from the retort 44. The ore to be treated is in pulverulent form, and dry, and, if desired, may be hot when placed in the hopper 15. The ore thus supplied is carried by the rotating wheel 16 beneath the gate 17, from whence it gravitates into the chute 14, through which it passes as the valves 19 and 20 are actuated. A small vent 47 is made in the chute 14 to allow the passage of air or gas from within the hood into the chute, or *vice versâ*. From said chute the ore enters the inner barrel, and, because of the wings 4, is more or less disseminated within said barrel, and caused to move therein towards its rear end, from whence it is discharged into the corresponding end of the outer barrel. The behaviour of the ore in the outer barrel is similar to that in the former barrel, except that its movement is in the opposite direction, and is discharged at the forward end of said outer barrel into the funnel 32, from whence it passes through the discharge-pipe 33 into the water in the tank 36. Water is suitably supplied to the cylinder 34, and a body of water is thereby maintained therein above the perforated web 35, and the water which passes through the web condenses the vapour in the cylinder 34, which enters therein with the discharged ore from the pipe 33. The ore upon entering the tank 36 is chilled by the water contained therein, and the escape of mercury-vapour is thereby prevented. During the passage of ore through the barrels as above described the mercury-vapour contained in the barrels intermingles with the ore, with the result that the amalgamable portion of the ore becomes more or less affected by the vapour, such as to render said portion readily recoverable by subsequent treatment with amalgamating-plates such as are common in the art for treating ore.

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

(Specification, 7s.; drawing, 5s.)

No. 19443.—10th May, 1905.—HENRY R. WORTHINGTON, a corporation organized and existing under the laws of the State of New Jersey, and having its principal place of business at 114, Liberty Street, New York, United States of America (assignees of Frederick Ray, of East Orange, New Jersey aforesaid, Mechanical Engineer). Improvements in centrifugal, turbine, and similar pumps.

Claims.—(1.) In a centrifugal, turbine, or similar pump of that class having an enclosed impeller, the use of a pressure-equalising connection between the spaces outside the opposite side walls of the impeller. (2.) In a multi-stage centrifugal, turbine, or similar pump of that class having a plurality of enclosed impellers, the use of a pressure-equalising connection between the spaces outside the opposite side walls of each impeller. (3.) In a centrifugal, turbine, or similar pump of that class having one or more enclosed impellers taking suction on one side of the impellers and means for balancing the suction pressures, the use of a pressure-equalising connection between the spaces outside the opposite side walls of the impeller or impellers. (4.) In a centrifugal, turbine, or similar pump of that class having one or more enclosed impellers and diffusing-vanes outside the impeller or impellers, the use of a pressure-equalising connection between the opposite sides of the impeller or impellers formed through the diffusing-vanes.

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

No. 19444.—10th May, 1905.—HENRY R. WORTHINGTON, a corporation organized and existing under the laws of the State of New Jersey, and having their principal place of business at 114, Liberty Street, New York, United States of America (assignees of Frederick Ray, of East Orange, United States of America, Mechanical Engineer.) Improvements in multi-stage centrifugal, turbine, and similar pumps.

Claims.—(1.) In a centrifugal, turbine, or similar pump, a plurality of impellers having suction openings on opposite sides at the hub, with passages connecting the pump suction with both suction openings of the first impeller, and passages connecting the delivery of the first impeller with both suction openings of the next impeller, and so on through the series of impellers. (2.) In a centrifugal, turbine, or similar pump, the casing A, and the series of double-suction impellers E^1, E^2, &c., having suctions s^1, s^2, delivery-passages e^1, e^2, &c., connecting the delivery of each impeller with the suction s^1 of the next impeller, passage f^1 connecting with the pump suction, passages f^2, f^3, &c., connecting with the delivery-passages e^1, e^2, &c., and suction chambers or passages g^1, g^2, &c., extending inward from the passages f^1, f^2, &c., to the suction s^2. (3.) A multi-stage centrifugal or turbine pump, substantially as described, and shown in the drawings.

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

No. 19464.—15th May, 1905.—JAMES HOLDEN, of Hermon Hill, Wanstead, Essex, England, Engineer, and EDMUND SPENSER TIDDEMAN, of 14, Elgin Road, Seven Kings, Essex, England, Engineer. Improvements in and relating to spark-arresting apparatus.

Extract from Specification.—A suitable appliance for the purpose is composed of a number of plates, of which each is inclined upwardly backwards, and each except the lowest is arranged above another, so that a spark striking any of the plates (except the lowest) will be deflected thereby downwardly and against a lower plate, which will in turn deflect it away from the fire-tubes and into a position whence it will not be carried upwards by the current. The appliance so arranged will present practically no impediment to the free flow of the gases of combustion. Furthermore, to prevent sparks from passing direct from the fire-tubes into the blast, a suitable deflecting-device—for example, one or more plates—is arranged in front of the fire-tubes above the blast-pipe and between it and the tubes.

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

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

No. 19476.—16th May, 1905.—CHARLES TREVETHICK, of the Lower Hutt, New Zealand, Brush-manufacturer. Improvements in brushes.

Claims.—(1.) The improved brush constructed and arranged substantially as described in the specification and illustrated in the drawings. (2.) In a brush, the construction of the stock by hollowing out the back of same, and the formation thereby of a raised ledge or rim around same to permit of holes being bored at the ends and sides of the stock at such angles as to allow the knots of bristles being fixed so as to project at the ends and sides of the stock, substantially as described and illustrated. (3.) A brush lightened in weight by the excavation or hollowing of the back of the stock, substantially as described and illustrated. (4.) I disclaim any of the usual elements of construction disclosed by the description or drawings.

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

No. 19515.—23rd May, 1905.—TOM WILSON, of Otahuhu, Auckland, School-teacher. An improved altimeter or quadrant.

Claims.—(1.) In an altimeter or quadrant, a rectangular base with the quadrant of a circle attached thereto, with a stile or gnomon slidably fitted to the arc of the quadrant, substantially as described, for the purpose above set forth, and illustrated by the drawings. (2.) In an altimeter or quadrant, the combination of a rectangular base with meridian and zero lines marked or inscribed thereon at right angles to one another, a triangular strut hinged to said base for securing quadrant, and a quadrant of a circle hinged to said base so that its front side fits on the meridian line and back end of its bottom edge fits on to the zero line, the front side of the said quadrant having a graduated scale marked or inscribed on the arc of the quadrant, with a stile or gnomon slidably fitted to said arc, substantially as described, and illustrated by the drawings.

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

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

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

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

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

F. WALDEGRAVE,
Registrar.

Provisional Specifications.

Patent Office,
Wellington, 14th June, 1905.

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

No. 19067.—13th February, 1905.—SAMUEL MCCULLY, of Seadown, New Zealand, Farmer. An improved solution for destroying sweetbriar, Californian thistle, and other noxious weeds.

No. 19100.—20th March, 1905.—AUGUSTUS WILLIAM JONES, Sen., and AUGUSTUS WILLIAM JONES, Jun. (trading as "Jones and Sons"), of 248, High Street, Christchurch, New Zealand, Watchmakers and Jewellers. An improved electro-medical appliance.

No. 19299.—4th April, 1905.—JAMES BRODIE MACK, of Wellington, New Zealand, Customhouse Officer. A composition for destroying weeds and the like.

No. 19379.—20th April, 1905.—ROBERT WILLIAM FAIRBROTHER, of Carterton, New Zealand, Cooper. An improved steamer and boiler.

No. 19441.—6th May, 1905.—DAVID MCKENZIE, of Tennyson Street, Grey Lynn, Auckland, New Zealand, Cabinetmaker. An easy-chair.

No. 19455.—9th May, 1905.—WILLIAM EDWARD SPENCER, of New Plymouth, New Zealand, Inspector of Schools. Altazimuth dial.

No. 19479.—16th May, 1905.—JAMES GRAY, of Dunedin, New Zealand, Agricultural-implement Maker and Importer. Improvements in cultivators.

No. 19486.—15th May, 1905.—JAMES BAIRD, of Devonport, near Auckland, New Zealand, Engineer. An improved method of crushing auriferous and other ore.

No. 19487.—17th May, 1905.—WALTER ANDERSON RAWSON, of Smithfield, New Zealand, Mechanic. An improved batten for the travelling-canvases of binders and other machines.

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

No. 19499.—20th May, 1905.—CHARLES MILLS, of 33, Ferry Road, Woolston, near Christchurch, New Zealand, Painter and Glazier. Improved adjustable bracket for supporting a platform.

No. 19510.—25th May, 1905.—CHARLOTTE HANNAH FULLBROOK, of Seamount, Shorncliffe, Sandgate, Queensland, Australia, Spinster. An improved curtain-ring.

No. 19511.—25th May, 1905.—OWEN SINCLAIR, of 177, Bay Street, Port Melbourne, Victoria, Australia, Mechanic. Improvements in rifle back-sights.

No. 19512.—25th May, 1905.—JOHN ALBERT NAPIER, of Goldsmith Road, Napier, Hawke's Bay, New Zealand, Clerk. Improved apparatus, for employment in connection with threshing-machines, for removing the ears of grain from the straw.

No. 19513.—25th May, 1905.—JOHN EDWARD FRIEND, Engineer, and EDWARD HENRY FRIEND, Agent, both of Auckland, New Zealand. An improved motor.

No. 19517.—22nd May, 1905.—JOHN POMEROY, of Invercargill, New Zealand, Fish-curer. Improvements in spreaders for hauling-chains, leading-harness, and the like.

No. 19518.—26th May, 1905.—RAFFAELLO PALADINI, of Arney Street, Newtown, Wellington, New Zealand, Cabinetmaker. An improved fastener for mail-bags and the like.

No. 19522.—29th May, 1905.—THOMAS STANLEY PHILPOTT, of Riddiford Street, Newtown, Wellington, New Zealand, Saddler. An improvement relating to windows, for facilitating the cleaning and repairing of same.

No. 19523.—29th May, 1905.—THOMAS STANLEY PHILPOTT, of Riddiford Street, Newtown, Wellington, New Zealand, Saddler. Improvements relating to windows.

No. 19532.—30th May, 1905.—HERBERT AMBROSE COOPER, of Wellington, New Zealand, Law Student. A combined scraper and broom, for use specially in cleaning ships' hulls.

No. 19533.—31st May, 1905.—WILLIAM HENRY, Timber-merchant, and GEORGE CUDBY, Settler, both of the Lower Hutt, Wellington, New Zealand. Improvements in or relating to drays for carting timber.

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

No. 19535.—29th May, 1905.—MONTAGUE HARRISON WYNYARD, of Auckland, New Zealand, Solicitor. A means of preventing entanglement of fibres in flax-drying operations.

No. 19536.—29th May, 1905.—MONTAGUE HARRISON WYNYARD, of Auckland, New Zealand, Solicitor. An apparatus for use in flax drying or bleaching operations.

No. 19537.—1st June, 1905.—EDWARD MARTIN EDKINS, of Dannevirke, New Zealand, Engineer. Improved reversing-gear, for use specially in connection with sawmills.

No. 19540.—1st June, 1905.—GEORGE HUTCHINSON, of Seatoun, Wellington, New Zealand, Inventor. Improvements relating to milking machinery.

No. 19541.—1st June, 1905.—JAMES DUNNING, Company-manager, and JOSHUA EDWARD GAVEY, Manufacturers' Agent, both of Auckland, New Zealand. An improved life-belt.

No. 19543.—2nd June, 1905.—GEORGE GARIBALDI TURRI, of Salisbury Buildings, 150, Queen Street, Melbourne, Victoria, Australia, Registered Patent Attorney, &c. (nominee of William Valentine Paley, Apiarist, and George Samuel Fenton, Engineer and Fitter, both of Charters Towers, Queensland, Australia). Improvements in apparatus for discharging ash or other suitable material for deodorising and sanitary purposes.

No. 19544.—2nd June, 1905.—GEORGE FREDERICK NEWMAN, of Sumner, near Christchurch, New Zealand, Oilskin-manufacturer. Cinder grid or basket for attachment to fire-grates.

No. 19545.—2nd June, 1905.—THOMAS PRYCE OBBINSON, of 310, Lygon Street, Carlton, Melbourne, Victoria, Australia, Dentist. An improved segmental driving-belt of vulcanite or like material for motor cycles and the like.

No. 19549.—1st June, 1905.—THOMAS CHARLES HEMENT, of Hereford Street, Christchurch, New Zealand, Engineer. Improved means for ventilating soil-pipe.

No. 19550.—2nd June, 1905.—RICHARD JAMES ECROYD, of Christchurch, New Zealand, Importer. Improvements relating to boilers for heating water, but specially applicable to wash house boilers.

No. 19555.—6th June, 1905.—FREDERICK WILLIAM ROWLANDS, of Long Lookout, Nelson, New Zealand, Clergyman. A device for use in cleaning lamp-chimneys and the like.

No. 19556.—6th June, 1905.—WILLIAM JOHN FRYER, of Dalmore, Pahia, Southland, New Zealand, Sawyer. Improved ironing-board and shirt-clamp.

No. 19558.—5th June, 1905.—WILLIAM BREW, of Christchurch, New Zealand, Engineer. An improved bearing, for use principally on plough and other like wheels.

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

No. 19565.—7th June, 1905.—REGINALD FREDERICK BARKER, of 36, Macleay Street, Sydney, New South Wales, Australia, Consulting Engineer. An improved process for recovering the fatty matter from the water in which wool has been scoured.

No. 19566.—7th June, 1905.—CATHERINE JANE MCMASTER, of Corfield, North Queensland, Australia, Grazing Farmer. An improved windmill-wheel and mounting therefor.

No. 19567.—7th June, 1905.—JOHN ROBERT HARRISON, of 47, Albert Street, Ballarat, Victoria, Australia, Iron-founder. An improved amalgamator and concentrator for ores and tailings.

No. 19570.—7th June, 1905.—ENOCH RICHARDSON, of 9, Creswick Street, Hawthorn, Victoria, Australia, Engineer. An improved apparatus for the more complete combustion of fuel and the consequent prevention of smoke.

No. 19572.—5th June, 1905.—WILLIAM STEPHEN TRAYES, of Mangere, Auckland, New Zealand, Stonemason. An improved tape or chain measure for the use of bowlers, surveyors, and the like.

No. 19573.—6th June, 1905.—CLIFFORD JOHN JOHNSON, of Point Chevalier, near Auckland, New Zealand, Engineer, and JAMES CARLAW, of Auckland aforesaid, Waterworks Engineer. An improved fire-bridge, smoke-consumer, and fuel-economizer.

No. 19575.—5th June, 1905.—CHARLES RICHARD MASSEY, of Customs Street West, Auckland, New Zealand, Engineer. An improved zinc holder for boilers.

No. 19576.—6th June, 1905.—THOMAS WILLIAM MAYSON, of Kent Street, Grey Lynn, Auckland, New Zealand, Agent. Improvements in speed-recorders.

No. 19577.—7th June, 1905.—ARMIT HANE SIMPSON, of Totara Valley, New Zealand, Farmer. Improvements relating to brooch-fastenings.

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

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

F. WALDEGRAVE,
Registrar.

Letters Patent sealed.

LIST of Letters Patent sealed from the 1st to the 14th June, 1905, inclusive:—

No. 17139.—R. R. Douglas, bucket and link protector.
No. 17512.—W. Hoyland, couch.
No. 17519.—G. Dennis, jun., raking material from sluice-boxes.
No. 17550.—A. Ashcroft, combustible dip composition.
No. 17551.—A. Ashcroft, fuse fire-lighter.
No. 17552.—R. P. Gibbons, galvanic plate for boots, &c.
No. 17638.—J. A. Merrett, cylinder drying-machine.

No. 17746.—A. Weaver, wool-scouring apparatus.
No. 17850.—T. Harkins, fixing tops and bottoms on tins.
No. 17923.—United Shoe Machinery Company, skiving-machine (F. L. Alley).
No. 17968.—J. Gray, seed-sower.
No. 17996.—J. Gallagher, temperature-indicator.
No. 18376.—J. S. Raworth, electrically propelled vehicle.
No. 18537.—M. Woods and T. J. Gilbert, dressing rails.
No. 18605.—H. Symes, earth-elevator.
No. 18637.—H. Walters and J. A. Appleton, anti-fouling and anti-corrosive composition.
No. 18680.—G. Finn and A. S. Pike, egg-carrier.
No. 18795.—G. Finn and A. S. Pike, egg-carrier.
No. 19002.—Aktiebolaget Separator, centrifugal separator (A. J. Ericsson).
No. 19027.—D. H. and E. J. Burrell, milking-machine (L. Burrell).
No. 19028.—E. Norton, bottle-stopper.
No. 19052.—J. F. Ohmer, ticket issuing and recording machine.
No. 19053.—J. F. Ohmer, ticket and transfer issuing machine.
No. 19054.—A. G. Meyer, treating creosote.
No. 19074.—J. P. Campbell, distribution of electric energy (B. G. Lamme).
No. 19079.—A. Z. Clark, precipitating gold from cyanide-solutions (T. W. Clark).
No. 19080.—Henry R. Worthington, engine (W. C. Brown and O. H. Mueller).
No. 19083.—N. Hill, wire-mattress retainer (F. Davis).
No. 19091.—R. W. Gallagher, bill-delivery mechanism for meters.
No. 19111.—J. R. Hatmaker, dry milk.
No. 19117.—W. B. Devereux, agitating-apparatus.
No. 19124.—A. Beaton, judger for foot-runners.

F. WALDEGRAVE,
Registrar.

Letters Patent on which Fees have been paid.

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

SECOND-TERM FEES.

NO. 13535.—G. H. Grapes, hoe, 5th April, 1905.
No. 13693.—F. L. Lorden, tobacco-cutter, 30th May, 1905.
No. 13717.—J. C. Bowring, grate-bar for steam-boiler, 2nd June, 1905.
No. 13786.—The Hall Signal Company, signal apparatus (C. W. Coleman, J. A. Wilson, and C. L. Thomas), 2nd June, 1905.
No. 13797.—J. P. Roe, puddling-machine, 8th June, 1905.
No. 13821.—F. Kuschenitz, support for osmium filament (Oesterreichische Gasgluhlicht and Electricitätsgesellschaft—C. A. von Welsbach), 7th June, 1905.
No. 13850.—Ammonal Explosives, Limited, explosives (J. Führer), 7th June, 1905.
No. 13872.—W. Deering, manufacture of twine (W. E. Hughes—W. Deering—G. H. Ellis), 8th June, 1905.

THIRD-TERM FEES.

No. 10688.—J. Whitefield and F. S. Parker, closet-pan, 8th June, 1905.
No. 10690.—W. Humble and W. Nicholson, baling-press (T. S. Humble), 2nd June, 1905.
No. 10715.—P. and D. Duncan, Limited, plough, 5th June, 1905.
No. 10726.—H. Higgins, treating separated milk, 8th June, 1905.

F. WALDEGRAVE,
Registrar.

Notice of Request to amend Specification.

Patent Office,
Wellington, 14th June, 1905.

A REQUEST for leave to amend the specification and drawing relating to the undermentioned application for Letters Patent has been received, and is open to public inspection at this office. Any person may, at any time from 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. 17982.—25th May, 1904.—FREDERICK CAPILL BROWN, Mine-superintendent, and SAMUEL DOUGLAS MCMIKEN, Battery-manager, both of Komata, Auckland, New Zealand. Improvements relating to apparatus for circulating and mixing crushed ore or other materials in a liquid or semi-liquid state. (Advertised in Supplement to *New Zealand Gazette*, No. 28, of the 23rd March, 1905.)

The nature of the proposed amendments is as follows:—

(1.) To insert the word "material-conducting" before the word "tube," line 1, page 3 of the specification.

(2.) To alter the word "are" to "is a," and the word "pipes" to "pipe," line 3, page 3.

(3.) To alter the word "are" to "is a," line 6, and the word "pipes" to "pipe," line 7, page 3.

(4.) To strike out the words "not shown or claimed for," lines 12 and 13, page 3.

(5.) To insert the sentence, "P denotes a sectional decanting-pipe of any suitable construction, and J^2 denotes a plurality of stay-rods acting as a suspension-means for the pipe B," after the word "explained," line 22, page 3.

(6.) To strike out "at M" after the word "liquid," line 9, page 4.

(7.) To insert the words "solution or" before the word "liquid," line 12, page 4.

(8.) To strike out the words "and the solution" down to "central tube or pipe B," lines 13, 14, 15, 16, page 4, and insert instead the following words: "through the solution-pipe C, supplying the circular pipe G, discharging through jets G^1; the solution is allowed to flow into the said tank until it has risen therein to a height within a short distance from the top of the central tube or pipe B."

(9.) To strike out the words "The air, sand, and solution," down to "impinges on the sides or wall," lines 18 to 26, page 4, and to insert instead "with the result that a mixture of sand, solution, and air rises through and is discharged from the top of the central pipe B. The solution or liquid issuing from the circular pipe G through the small pipes, sprouts, or nozzles, or other devices G^1 impinges on the sides or wall."

(10.) To alter "discharge" to "charge," line 29, page 4.

(11.) To strike out the word "clear," line 6, and to alter "washers" to "washes," line 8, page 5.

(12.) To insert the words "herein specified" after the word "method," line 1, claim 1.

(13.) To insert the words "herein specified" after the word "apparatus," line 1, claim 3; to insert the word "the" before the word "means," and the words "herein described" after the word "means," line 2, claim 3.

(14.) To insert the words "herein described" after the word "devices," line 1, claim 4.

(15.) To alter the drawings by marking the upper part of the tank or vessel shown in Fig. 1 as "A" instead of "A^1."

The applicants state, "Our reason for making the amendments is that we desire to more clearly and fully explain the nature of and what we claim as our invention."

F. WALDEGRAVE,
Registrar.

Request for Correction of Clerical Error in Application for Letters Patent.

NO. 18150.—B. F. Dunn, wire-mattress tightener. (Advertised in Supplement to *New Zealand Gazette*, No. 42, of the 4th May, 1905.)

To substitute the words "bar" and "bars" in place of the words "roller" and "rollers" respectively wherever such words occur throughout the specification and claim.

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent abandoned.

LIST of applications for Letters Patent, with which provisional specifications only have been filed, abandoned (*i.e.*, complete specifications not lodged) from the 1st to the 14th June, 1905, inclusive:—

No. 18260.—W. Sneddon, garment-suspender.
No. 18261.—A. and F. J. Nathan, and J. A. Merrett, drying milk, &c.
No. 18262.—A. P. Westbury and F. Lee, sash-bar.
No. 18265.—J. A. Butler, and G. S. Stevenson, rifle wind-gauge.
No. 18266.—A. Crook, fertiliser-press.
No. 18267.—E. Maine, boot or shoe stand.
No. 18269.—P. Lanigan, lifting venetian-blind.
No. 18272.—J. Bennett and J. Friezer, drawing off beer from barrels.
No. 18275.—F. Mitchell, brake.
No. 18276.—A. C. McNeill, cow-leg-roping appliance.
No. 18277.—W. Cochrane, raising sunken vessels.
No. 18279.—W. Borlase, cistern.

No. 18281.—P. C. Maxwell, A. A. Peart, and W. L. Wells, laying-card holder.
No. 18283.—J. A. Nikander, floor-cramp.
No. 18286.—J. H. Love, saddle.
No. 18288.—K. Boyd, fish-hook.
No. 18294.—A. J. Park, rotary engine (F. Kettle).
No. 18295.—R. A. D. Sutherland and J. H. Brass, candle-holder.
No. 18297.—P. Nunn, clay-remover for grain-drill.
No. 18304.—A. Harvey, button attachment.
No. 18308.—P. J. Devine, piggery.
No. 18309.—E. W. H. Dyer, lidded receptacle.
No. 18310.—G. M. Scott, sash-balance.
No. 18311.—R. Wales, mitre-cutter.
No. 18313.—F. J. Maindonald, oil-engine.
No. 18315.—A. McLecd, brand.
No. 18318.—P. Lanigan, digging for kauri-gum.
No. 18321.—A. Anderson, flax-stripper.

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent void.

APPLICATIONS for Letters Patent, with which complete specifications have been lodged, void owing to non-acceptance of such complete specification, from the 1st to the 14th June, 1905, inclusive:—

No. 17615.—S. Austin, electric starting-gate.
No. 17641.—C. J. Tattam and G. Archer, adding-machine.
No. 17654.—J. Dunn, drawing off beer.

F. WALDEGRAVE,
Registrar.

Applications for Letters Patent lapsed.

LIST of applications lapsed owing to Letters Patent not being sealed, from the 1st to the 14th June, 1905, inclusive:—

No. 17264.—T. Earnshaw and N. S. Prichard, brake.
No. 17324.—J. and T. R. Christie, wire-cutter (W. Borlase).
No. 17329.—W. Goodwin, window-sash.
No. 17332.—H. S. Woolcott, drain-pipe connection.
No. 17347.—J. Dunbar, ribber for flax-stripper.
No. 17359.—J. Marks, hose-coupling.
No. 17369.—J. Cook, feeding calves.
No. 17374.—J. and T. R. Christie, wire-strainer (W. Borlase).

F. WALDEGRAVE,
Registrar.

Application for Letters Patent withdrawn.

APPLICATION for Letters Patent No. 19235—G. Barnes, curtain-suspender—(advertised in Supplement to *New Zealand Gazette*, No. 38, of the 20th April, 1905), has been withdrawn.

F. WALDEGRAVE,
Registrar.

Letters Patent void.

LETTERS Patent void through non-payment of renewal fees, and through expiry of term of fourteen years, from the 1st to the 11th June, 1905, inclusive:—

THROUGH NON-PAYMENT OF SECOND-TERM FEES.

No. 13435.—J. Anschau, sealed buckle.
No. 13436.—The Godfrey Calciner, Limited, furnace (J. Godfrey and H. J. Hayes).
No. 13437.—A. G. Jackson, bicycle carrying attachment.
No. 13439.—B. G. A. Harkness, feed-water heater.
No. 13443.—J. G. Howard, storage case.
No. 13445.—J. Webster, tin or can.
No. 13447.—Cox and Co., Incorporated, box-covering machine (H. B. Blackinton, W. F. Cox, and M. E. Ginn).
No. 13450.—P. A. Hadley, printing-machine.
No. 13451.—J. Robertson, furniture.
No. 13453.—The British Westinghouse Electric and Manufacturing Company, Limited, system of electrical distribution (W. E. Hughes—B. G. Lamme).
No. 13455.—G. G. Turri, bicycle-pedal (F. N. Cullen).
No. 13456.—C. G. Sudre and C. V. Thierry, treating oxides of metals.
No. 13457.—J. H. Lancashire and J. W. Worsey, treating ores.
No. 13458.—B. Ljungström, endless curved track of rotary steam-engine.
No. 13459.—J. G. Daw, stamper for crushing ore.
No. 13461.—W. E. Hughes, motor vehicle (The British Motor Traction Company, Limited—W. Maybach).
No. 13462.—B. H. Locke, converting rotary into reciprocating motion.
No. 13463.—The British Westinghouse Electric and Manufacturing Company, Limited, system of electrical distribution (J. P. Campbell—B. G. Lamme).
No. 13467.—T. Clark, leggings-fastening.
No. 13468.—W. S. Hazelton, amalgamator.
No. 13469.—J. Downs, spark-arrester.
No. 13470.—W. S. Rawson and R. D. Littlefield, manufacture of refractory bricks.
No. 13473.—G. B. H. Austin, propulsion of cycles.
No. 13476.—G. C. Paramore, generating chlorine gas.
No. 13477.—M. D. Larkin, relief-valve.

THROUGH NON-PAYMENT OF THIRD-TERM FEES.

No. 10406.—J. Pender, motor vehicle.
No. 10434.—F. Parsons and W. Nelson, water-heater.

THROUGH EXPIRY OF TERM.

No. 4875.—W. R. Carruthers and G. T. Stevens, fish joint for railways.
No. 4881.—The Mond Nickel Company, Limited, manufacture of nickel (L. Mond).
No. 4885.—M. J. Wightman, electric-motor controller.

F. WALDEGRAVE,
Registrar.

Designs registered.

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

No. 230.—George Adcock, of Dundas Street, Christchurch, in the Colony of New Zealand. Class 1. 31st May, 1905.
No. 231.—Arthur Joseph Hutchinson, of Auckland, in the Colony of New Zealand, Manufacturers' Representative. Class 5. 6th June, 1905.
No. 232.—Alfred Adcroft of No. 7, Hall Street, Wellington, in the Colony of New Zealand, Mechanic. Class 1. 8th June, 1905.
No. 233.—Walter Horace Brent, of Invercargill, in the Colony of New Zealand, Company-manager. Class 1. 12th June, 1905.

F. WALDEGRAVE,
Registrar.

Design expired.

THE copyright in the following design has expired:—

No. 118.—7th June, 1900.—J. H. Robinson, of Wellington, New Zealand; Class 2.

F. WALDEGRAVE,
Registrar.

Applications for Registration of Trade Marks.

Patent Office,
Wellington, 14th June, 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: 5077.
Date: 14th December, 1904

TRADE MARK.

The essential particulars of the trade mark consist of the general combination and arrangement of designs, including the representation of a globe engirdled by a buckled

strap having the word "Schlitz" thereon, also the word "Schlitz" adjoining the said globe; and the applicant company disclaim any right to the exclusive use of the added matter, save and except their trading name and address.

NAME.

THE JOS. SCHLITZ BREWING COMPANY, of the City of Milwaukee, in the County of Milwaukee, and State of Wisconsin, one of the United States of America, a corporation carrying on the business of brewing, organized and existing under the laws of the said State.

No. of class: 43.

Description of goods: Malt liquors, including bottled beer.

No. of application: 5101.

Date: 12th January, 1905.

TRADE MARK.

NAME.

W. A. TYZACK AND CO., of Stella Works, Hereford Street, Sheffield, England, Manufacturers.

No. of class: 5.

Description of goods: Steel.

No. of application: 5102.

Date: 12th January, 1905.

TRADE MARK.

(The mark as shown in preceding notice, No. 5101.)

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

NAME.

W. A. TYZACK AND CO., of Stella Works, Hereford Street, Sheffield, England, Manufacturers.

No. of class: 7.

Description of goods: Agricultural and horticultural machinery, and parts thereof, including chaff-knives, reaper sections, and similar goods included in Class 7.

No. of application: 5103.

Date: 12th January, 1905.

TRADE MARK.

(The mark as shown in preceding notice No. 5101.)

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

NAME.

W. A. TYZACK AND CO., of Stella Works, Hereford Street, Sheffield, England, Manufacturers.

No. of class: 12.

Description of goods: Cutlery and edge tools, including files, saws, scythes, sickles, hay-knives, reaping and similar hooks having a cutting edge, included in this class.

No. of application: 5191.

Date: 7th March, 1905.

TRADE MARK.

NAME.

G. SCHWECHTEN, of Kochstr 61, Berlin, Germany, Piano forte-manufacturers.

No. of class: 9.

Description of goods: Pianos.

No. of application: 5282.

Date: 10th May, 1905.

TRADE MARK.

The essential particulars of this trade mark are a sunflower and the word "Sunflower"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

J. H. TODD AND SONS, of Victoria, British Columbia, Canada, Merchants.

No. of class: 42.

Description of goods: Tinned salmon.

No. of application: 5283.
Date: 10th May, 1905.

TRADE MARK.

The essential particulars of this trade mark are a tiger's head and the word "Tiger"; and any right to the exclusive use of the added matter is disclaimed.

NAME.

J. H. TODD AND SONS, of Victoria, British Columbia, Canada, Merchants.

No. of class: 42.
Description of goods: Tinned salmon.

No. of application: 5285.
Date: 10th May, 1905.

TRADE MARK.

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

NAME.

ATKIN BROS., of Truro Works, Matilda Street, Sheffield, England, Manufacturers.

No. of class: 12.
Description of goods: Cutlery, including razors and scissors.

No. of application: 5286.
Date: 10th May, 1905.

TRADE MARK.

(The mark as shown in the preceding notice, No. 5285.)

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

NAME.

ATKIN BROS., of Truro Works, Matilda Street, Sheffield, England, Manufacturers.

No. of class: 14.
Description of goods: Goods of precious metals and imitations thereof.

No. of application: 5287.
Date: 10th May, 1905.

TRADE MARK.

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

NAME.

ATKIN BROS., of Truro Works, Matilda Street, Sheffield, England, Manufacturers.

No. of class: 14.
Description of goods: Britannia-metal and plated goods.

No. of application: 5307.
Date: 25th May, 1905.

TRADE MARK.

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

NAME.

GEORGE WILLIAM HEAN, of Wanganui, in the Colony of New Zealand, Chemist.

No. of class: 3.
Description of goods: Cough-syrup and teething-syrup.

No. of application: 5309.
Date: 29th May, 1905.

TRADE MARK.

The word

"EAGLE."

NAME.

ISAAC BROWN AND Co., of Thames, in the Colony of New Zealand, Cycle Makers and Repairers.

No. of class: 22.

Description of goods: Bicycles.

No. of application: 5310.

Date: 29th May, 1905.

TRADE MARK.

The word

ZOLAK.

NAME.

C. LUSCOMBE AND Co., of P.O. Box 559, Wellington, New Zealand.

No. of class: 48.

Description of goods: Skin-food.

No. of application: 5311.

Date: 30th May, 1905.

TRADE MARK.

ZIG-ZAG

NAME.

BRAUNSTEIN FRÈRES, of 81–83, Boulevard Exelmans, Paris, France, Cigarette-paper Manufacturers.

No. of class: 39.

Description of goods: Cigarette-papers.

No. of application: 5312.

Date: 30th May, 1905.

TRADE MARK.

The word

VEZET

NAME.

JOHS. M. VERSCHURE AND ZOON, of 26, Boompjes, Rotterdam, Holland, Manufacturers.

No. of class: 42.

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

No. of application: 5314.

Date: 31st May, 1905.

TRADE MARK.

The word

FERRO-STOUT.

NAME.

JOHN GEORGE SWAN and GEORGE HENRY SWAN, of Wanganui, New Zealand, Brewers.

No. of class: 43.

Description of goods: Alcoholic beverages.

No. of application: 5316.

Date: 2nd June, 1905.

TRADE MARK.

(The mark as shown in preceding notice No. 5307.)

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

NAME.

GEORGE WILLIAM HEAN, of Wanganui, in the Colony of New Zealand, Chemist.

No. of class: 48.

Description of goods: Toilet-powder.

No. of application: 5318.

Date: 2nd June, 1905.

TRADE MARK.

The word

CARNO.

NAME.

BELMORE MEAT EXTRACT AND PACKING COMPANY, LIMITED, of 42, Pitt Street, Sydney, New South Wales, Australia, Meat-extractors.

No. of class: 42.

Description of goods: Meats (fresh, salted, preserved, and frozen), extracts of meats, soups, and all preparations of any animal and other substances used as foods or as ingredients in foods.

No. of application: 5319.

Date: 5th June, 1905.

TRADE MARK.

The words

"THE EMPIRE."

NAME.

WILLIAM HALSEY, of Cromwell Buildings, Bourke Street, Melbourne, in the State of Victoria, Commonwealth of Australia.

No. of class: 38.

Description of goods: Boots and shoes.

No. of application: 5320.
Date: 5th June, 1905.

TRADE MARK.

The essentail particulars of this trade mark are the word "Chief," the design of a chief's head, &c., and the distinctive label; and applicant disclaims any right to the exclusive use of the added matter, except his name and address.

NAME.

W. A. ANDERSON, of Vancouver, British Columbia, Canada.

No. of class: 42.

Description of goods: Tinned salmon.

No. of application: 5321.
Date: 5th June, 1905.

TRADE MARK.

The words

BLUE RIBBON.

NAME.

W. SCOULAR AND CO., of Dunedin, New Zealand, Merchants.

No. of class: 42.

Description of goods: Substances used as food, such as cereals, pulses, olive-oil, hops, malt, dried fruit, tea, sago, salt, sugar, confectionery, pickles, and vinegar, excepting condensed milk.

No. of application: 5324.
Date: 7th June, 1905.

TRADE MARK.

The essential particulars of the trade mark are the following: the circular device containing a representation of a lion's head, the whole device surmounted by a crown; and any right to the exclusive use of the added matter is disclaimed.

NAME.

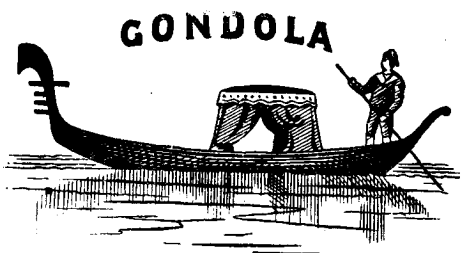
DAVID STOREY AND CO., of 81, York Street, Sydney, in the State of New South Wales, Importers.

No. of class: 38.

Description of goods: Hats.

No. of application: 5325.
Date: 7th June, 1905.

TRADE MARK.



NAME.

G. MOWLING AND SON, of No. 410, Little Flinders Street, Melbourne, in the State of Victoria and Commonwealth of Australia, Candle and Soap Manufacturers.

No. of class: 47.

Description of goods: Candles; common soap; detergents; illuminating, heating, or lubricating oils; matches; and starch, blue, and other preparations for laundry purposes.

No. of application: 5326.
Date: 7th June, 1905.

TRADE MARK.

(The mark as shown in preceding notice, No. 5325.

NAME.

G. MOWLING AND SON, of No. 410, Little Flinders Street, Melbourne, in the State of Victoria and Commonwealth of Australia, Candle and Soap Manufacturers.

No. of class: 48.

Description of goods: Perfumed soap.

No. of application: 5327.

Date: 8th June, 1905.

TRADE MARK.

The essential particulars of this trade mark are the device and the word "Shavo"; and applicants disclaim any right to the exclusive use of the added matter, except in so far as it consists of their own name and address. No claim is made to the exclusive use of the word "shave."

NAME.

SHAVO SHAVING-CREAM COMPANY, of 73, Dunlop Street, Glasgow, Scotland, Manufacturers.

No. of class: 48.

Description of goods: Shaving-cream.

F. WALDEGRAVE,
Registrar.

Trade Marks registered.

LIST of Trade Marks registered from the 1st to the 14th June, 1905, inclusive:—

No. 4077; 5188.—The Neuchatel Asphalte Company, Limited; Class 17. (*Gazette* No. 28, of the 23rd March, 1905.)

No. 4078; 5130.—Hayward Bros., Limited; Class 42. (*Gazette* No. 28, of the 23rd March, 1905.)

No. 4079; 5030.—Californian Fig Syrup Company, Incorporated; Class 3. (*Gazette* No. 28, of the 23rd March, 1905.)

No. 4080; 5032.—Californian Fig Syrup Company, Incorporated; Class 3. (*Gazette* No. 28, of the 23rd March, 1905.)

No. 4081; 5192.—J. Hopkins and Co.; Class 43. (*Gazette* No. 28, of the 23rd March, 1905.)

No. 4082; 5193.—H. W. Manning; Class 3. (*Gazette* No. 28, of the 23rd March, 1905.)

No. 4083; 5203.—G. Williams; Class 47. (*Gazette* No. 31, of the 6th April, 1905.)

No. 4084; 5206.—Chickering and Sons; Class 9. (*Gazette* No. 31, of the 6th April, 1905.)

No. 4085; 5207.—A. E. Sykes; Class 2. (*Gazette* No. 31, of the 6th April, 1905.)

F. WALDEGRAVE,
Registrar.

Trade Mark Renewal Fees paid.

FEES paid for the renewal of the undermentioned Trade Marks:—

For fourteen years from the date first mentioned.

Nos. 233/225, 234/226, 235/227, 236/228, 237/229, 238/230, 239/231, 240/232.—15th June, 1905.—A. Bird and Sons, Limited, of Birmingham, England. 30th May, 1905.

No. 248/199.—26th June, 1905.—R. Brown, Limited, of Glasgow, Scotland. 8th June, 1905.

No. 249/200.—26th June, 1905.—R. Brown, of Glasgow, Scotland. 8th June, 1905.

No. 255/203.—2nd July, 1905.—J. Exshaw and Co., of Bordeaux, France. 8th June, 1505.

F. WALDEGRAVE,
Registrar.

Trade Marks removed from Register.

LIST of Trade Marks removed from Register owing to the non-payment of the renewal fees, from the 1st to the 14th June, 1905, inclusive:—

No. 186/143.—14th March, 1891.—Palmer and Co., of London, England.

Nos. 188/392 and 189/393.—14th March, 1891.—Colgate and Co., of New York, U.S.A.

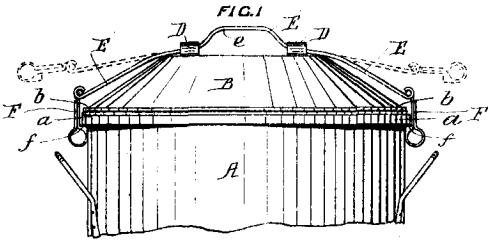
F. WALDEGRAVE,
Registrar.

By Authority: JOHN MACKAY, Government Printer, Wellington.

ILLUSTRATIONS OF INVENTIONS.

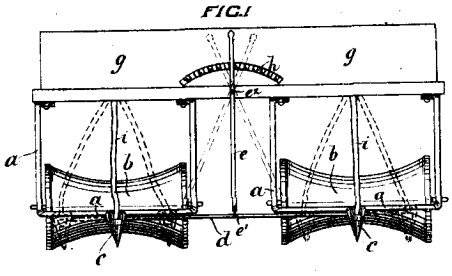
[These illustrations refer to the complete specifications accepted, and advertised in this *Gazette*.]

FIG.1



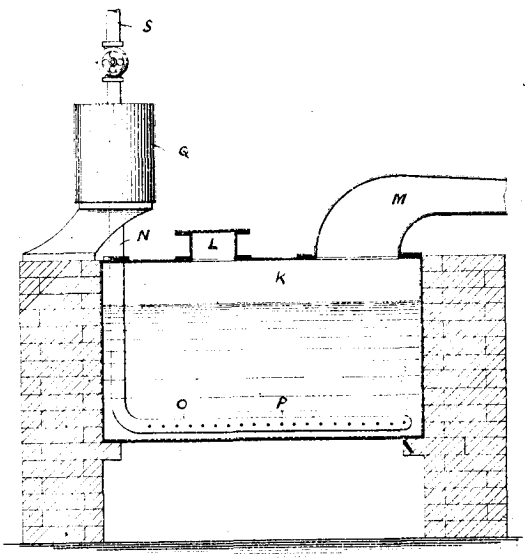
17978
Hunter. Pan-cover. (J. W. and S. Hardley.)

FIG.1



18093
Soper. Seed Sower and Ridger.

Fig: 3.



18233
Macalpine. Oil-refiner.

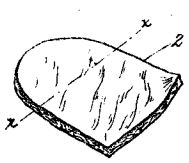
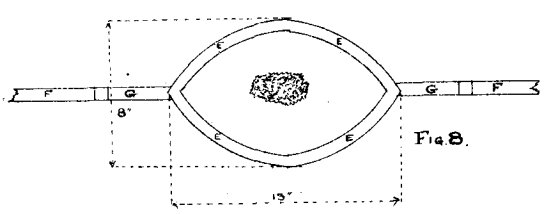
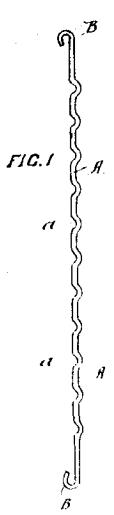


Fig. 1.

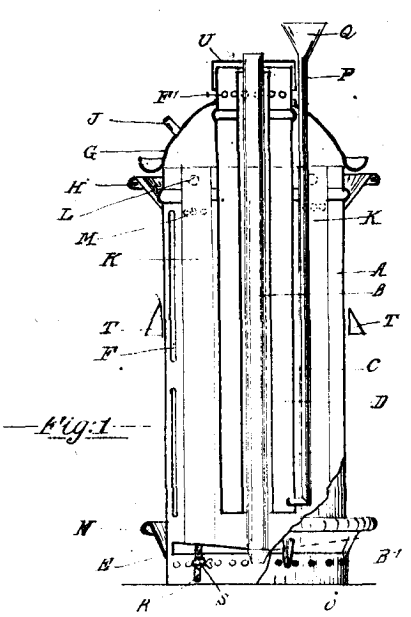
18100
Small. Boot-lift.



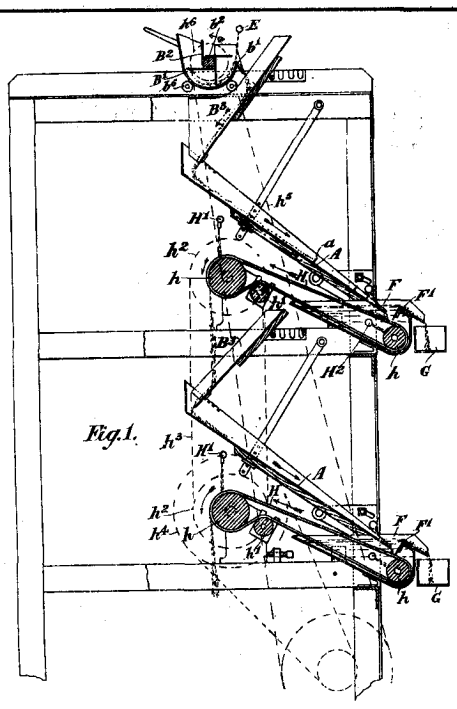
18371
Schulze. Catamenial Appliance.



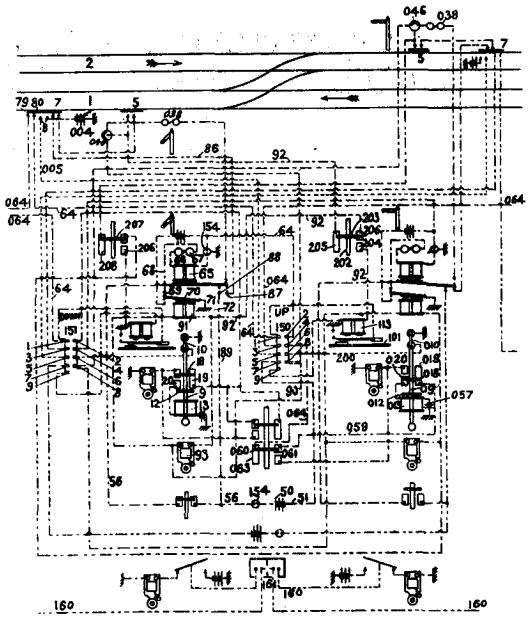
18316
Chamberlain. Fencing-standard.



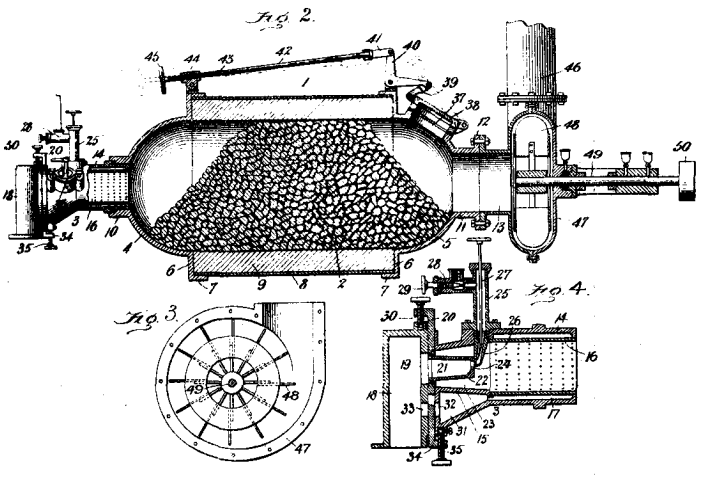
18291
Spiller. Cream-separator and Milk-cooler.



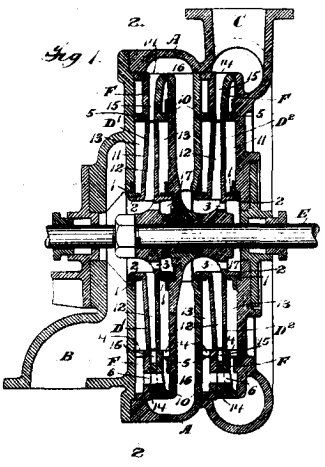
18688
De Bavay. Ore-separator.



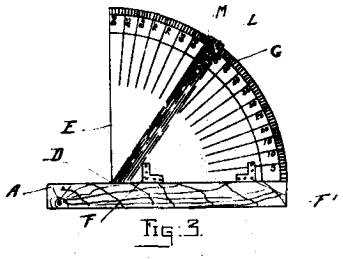
18274
Rowe's Patent Lock and Block (Limited). Railway-traffic Control System. (Rowe.)



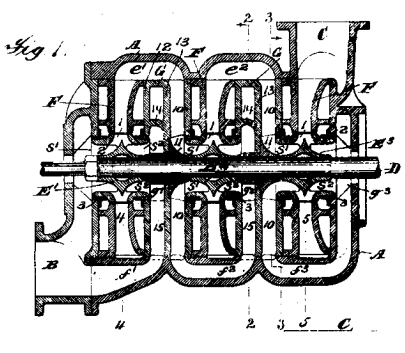
19373
Leede Process Company. Gas-making Apparatus. (Leede.)



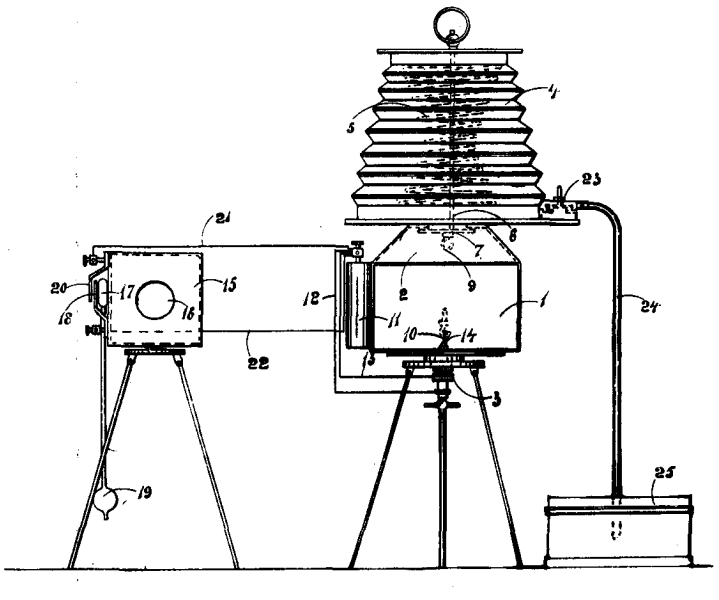
19443
Henry R. Worthington. Turbine Pump. (Ray.)



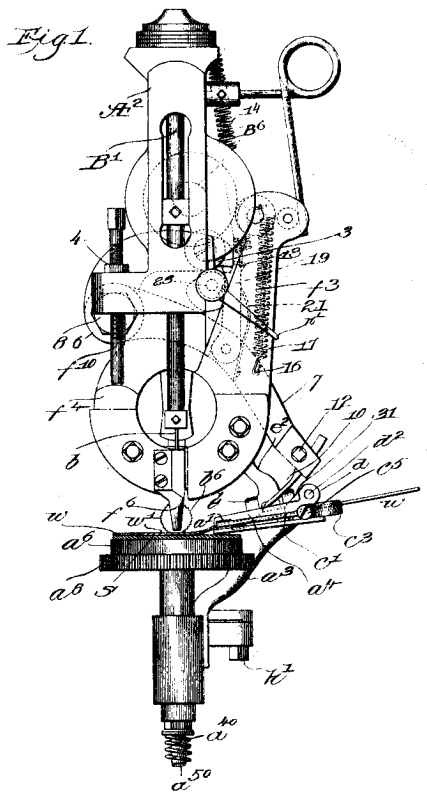
19515
Wilson. Altimeter.



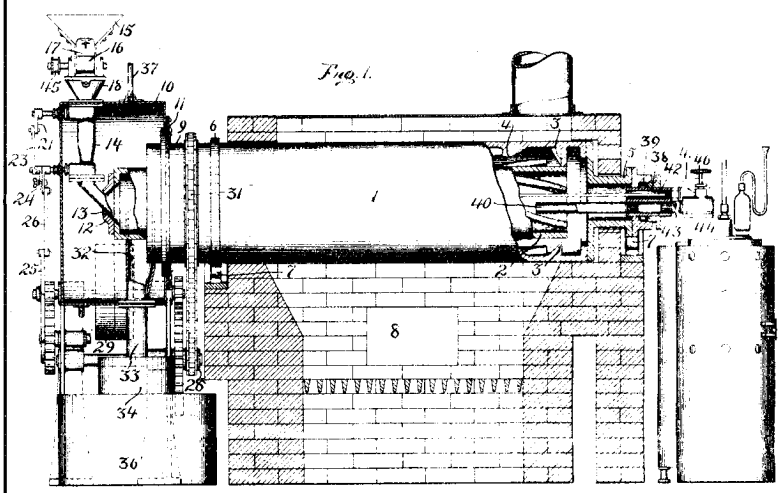
19444
Henry R. Worthington. Turbine Pump. (Ray.)



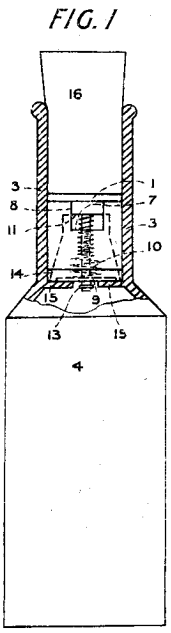
18257
Quertier and Armstrong. Flashlight Apparatus.



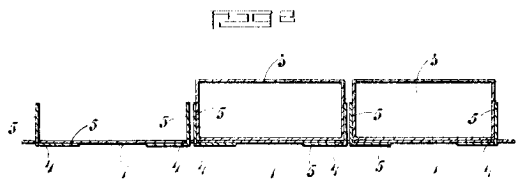
18363
United Shoe Machinery Company. Welt-attaching Apparatus. (Goddu.)



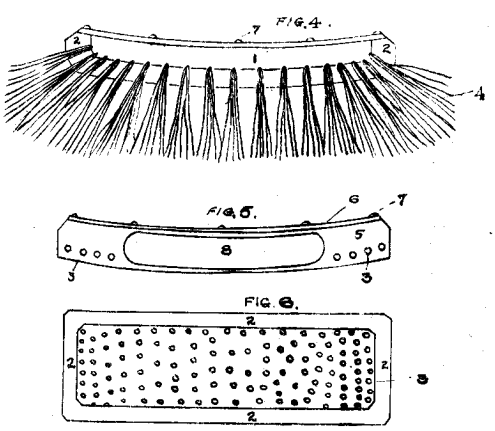
19426
Horstmann. Mercury-vapour Amalgamator.



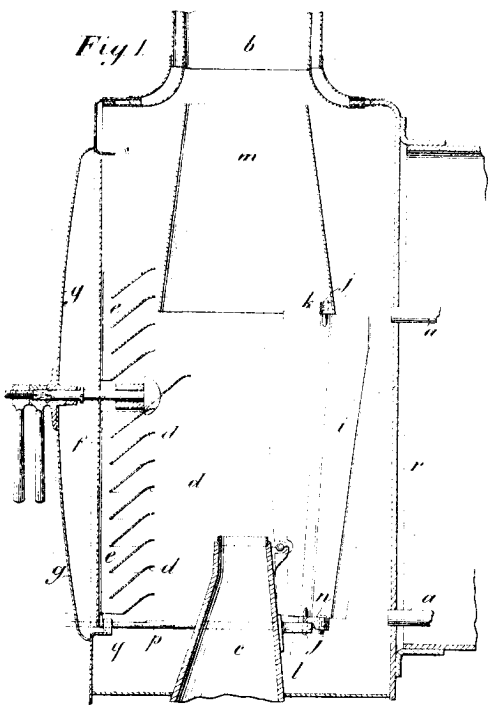
19416
Dunne. Non-refillable Bottle.



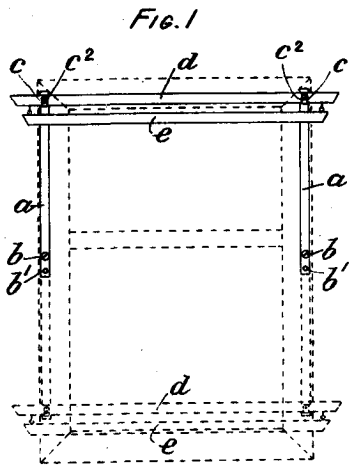
19417
Buck. Packet-attacher.



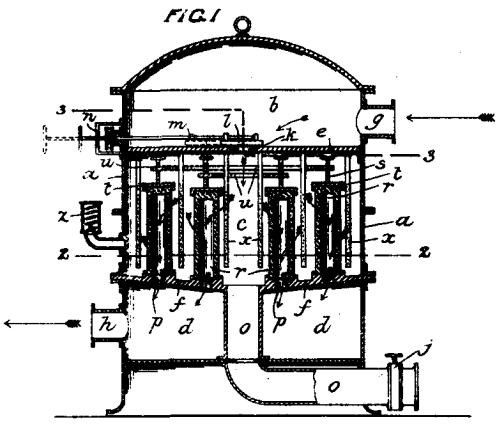
19476
Trevethick. Brush.



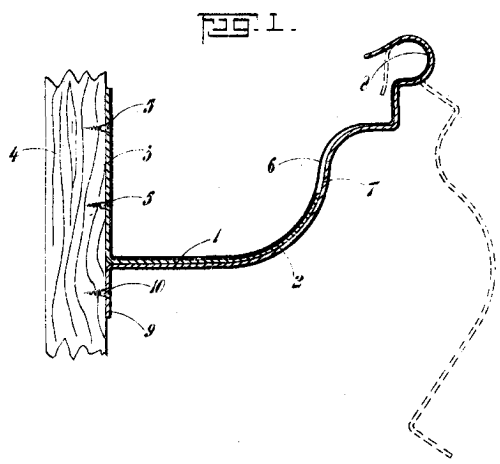
19464
Holden and Tiddeman. Spark-arrester.



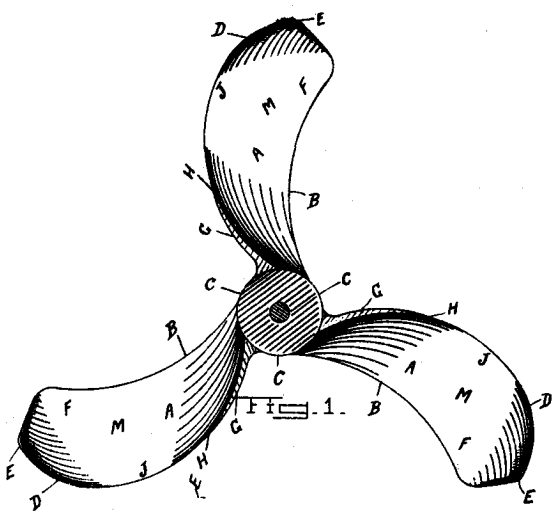
18820
Barnes. Curtain-suspender.



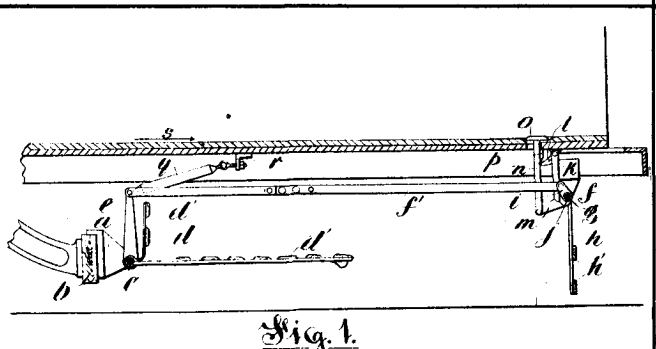
18985
Cowern. Filter.



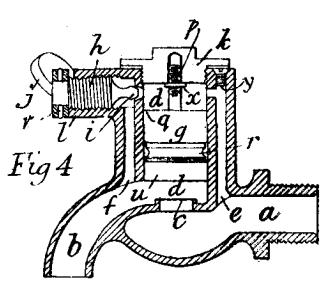
19347
Ashcroft. Spouting-bracket.



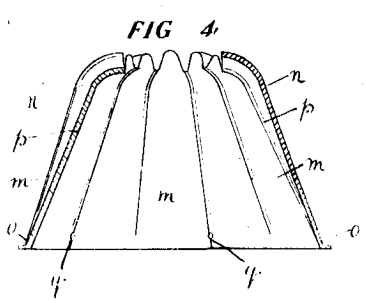
19383
Grundy. Propeller-blade



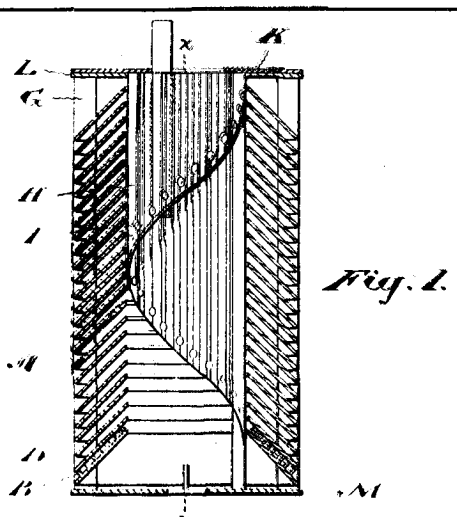
19394
Bowring. Obstruction-remover.



19287
Buck. Valve and Cock.



19423
Watts. Cream-separator.



19422
Patterson. Centrifugal Separator. (Massey Harris Company, Limited Marsh and Hackett.)