

# SUPPLEMENT

TO THE

# NEW ZEALAND GAZETTE

THURSDAY, JUNE 27, 1895.

Published by Authority.

### WELLINGTON, THURSDAY, JUNE 27, 1895.

Notice of Acceptance of Complete Specifications.

Patent Office,

Patent Office,

Wellington, 26th June, 1895.

OMPLETE specifications relating to the under-mentioned 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, in duplicate, of opposition to the grant of any such patent, stating in such notice the particular grounds of his objection. A fee of 10s. is payable with such notice:—

No. 7066.—22nd August 1894.—FEREBERGY HENRY WELG.

of 10s. is payable with such notice:

No. 7066.—22nd August, 1894.—FREDERICK HENRY WRIGLEY, of Opaki, Masterton, New Zealand, Farmer. An invention entitled "Wrigley's Stump-extractor and Claw Attachment." (Specification, 5s. 6d.; drawings, 10s.)\*

No. 7141.—19th September, 1894.—Tom Murray, of Riddiford Street, Newtown, Wellington, New Zealand, Bricklayer. An invention entitled "Murray's Improved Kiln," for burning double-pressed bricks, earthenware, pipes, terracotta, and all sorts of clayware. (Specification, 11s. 6d.; drawings, 15s.)\*

No. 7145.—19th September, 1894.—John Warnock, of Victory Square, Nelson, New Zealand, Lithographer. An invention entitled "Warnock's Movable Headline Machine," for use in schools and other places. (Specification, 2s. 6d.;

for use in schools and other places. (Specification, 2s. 6d.;

for use in schools and other places. (Specification, 2s. 6d.; drawings, 5s.)\*

No. 7160.—22nd September, 1894.—Andrew William Alexander Richardson, of Owaka, Otago, New Zealand, Blacksmith. An invention for an improved apparatus for straining and joining wires upon fences and some other places. (Specification, 13s. 6d.; drawings, 5s.)\*

No. 7288.—26th November, 1894.—Arthur Octavius Collier, of Lower Mosley Street, Manchester, England, Cycle Agent. An invention for improvements in driving-mechanism for bicycles, tricycles, and other velocipedes. (Specification, 4s.; drawings, 5s.)\*

No. 7498.—20th March, 1895.—Jules Gersant, of 71, College Road, Deal, Kent, England, Engineer, and Archibald George Buttifant, of 8, St. Benet's Place, Gracechurch Street, London, England, Accountant. An invention for improvements in the method of and means for hermetically sealing metal boxes, tins, or cans destined for preserving alimentary products and other articles. (Specification, 11s.; drawings, 10s.)

No. 7673.—25th May, 1895.—WILLIAM SHIELDS, of Invercargill, New Zealand, Railway-guard. An invention entitled "Shields's Flag-station and Excess Ticket." (Specifi-

titled "Shields's Fiag-station and Elecess Floret. (Specialistics, 4s. 6d.)
No. 7676.—11th June, 1895.—James Coppell Lee, Samuel Walton, and Walter George Scott, all of 458, Bourke Street, Melbourne, Victoria, Brassfounders. An invention for improvement in liquid-fuel burners. (Specification, 9s.;

for improvement in liquid-fuel burners. (Specification, 9s.; drawings, 5s.)

No. 7679.—11th June, 1895.—John Davies, of Maria Road, South Dunedin, New Zealand, Engineer. An invention for improvement in churns. (Specification, 8s.; drawings, 10s.)

No. 7680.—11th June, 1895.—John Anderson, of Moray Place, Dunedin, New Zealand, Tinsmith. An invention for a milk-aërator, to be called "Anderson's Milk-aërator." (Specification, 1s.; drawings, 3s.)

No. 7681.—13th June, 1895.—George Claydon, of Addington, Engineer, and Henry Wood, of Christchurch, Miller, both in New Zealand. An invention for a new or improved automatic stoking, smoke-consuming, and fuel-economizing apparatus to be attached to steam-boilers. (Specification, 9s.; drawings, 10s.)

No. 7683.—13th June. 1895.—John Mayerang Jones of

apparatus to be attached to steam-boilers. (Specification, 9s.; drawings, 10s.)

No. 7683.—13th June, 1895.—John Maitland Jones, of Vogel Street, Dunedin, New Zealand, Agent. An invention for a new or improved method of and apparatus for churning cream. (Specification, 13s.; drawings, 5s.)

No. 7684.—17th June, 1895.—George Lansell, of The Fortuna Crushing Works, Bendigo, Victoria, Quartz-miner. An invention for an improved method of and appliances for raising water from mines or elsewhere by means of compressed air. (Specification, 9s.; drawings, 7s. 6d.)

No. 7686.—19th June, 1895.—Hugh Dixson, trading as

pressed air. (Specification, 9s.; drawings, 7s. 6d.)

No. 7686.—19th June, 1895.—Hugh Dixson, trading as "Dixson and Sons," of Park and Elizabeth Streets, Sydney, New South Wales, Tobacco-manufacturer (assignee of Frederick William Schroeder, of Newtown, near Sydney aforesaid, Engineer). An invention for improvements in mouth-pieces for smoking-pipes, and cigar- and cigarette-holders. (Specification, 9s. 6d.; drawings, 15s.)

No. 7687.—17th June, 1895.—Sir Alfred Seale Haslam, Knight, of Union Foundry, Derby, England, Mechanical Engineer. An invention for improvements in apparatus for cooling air and other gases. (Specification, 6s.; drawings, 10s.)

No. 7689.—20th June, 1895.—Addison Crittenden Rand, of 23, Park Place, New York, United States of America

Manufacturer. An invention for improvements in explosive

Manufacturer. An invention for improvements in explosive compounds. (Specification, 10s. 6d.)

No. 7690.—20th June, 1895.—ABRAHAM WEIL, of 291, Höxterstrasse, and Wilhelm Prasse, of Bahnhofstrasse, both in Steinheim, Westphalia, Germany, Merchants. An invention for improvements in apparatus for moulding tiles. (Specification, 4s. 6d.; drawings, 10s.)

No. 7694.—21st June, 1895.—David Williams, of Reefton, New Zealand, Blacksmith. An invention for an improved tumbler for dredging-machines. (Specification, 6s.; drawings, 10s.)

ings, 10s.) No. 7695.-No. 7695.—21st June, 1895.—Herbert Oberlin Brown, of Auckland, New Zealand, Gentleman. An invention for a combined ruler and blotting-roller. (Specification, 3s. 6d.;

drawings, 3s.)
No. 7696.—22nd June, 1895.—The Diamond Match Com-PANY, a corporation organized under the laws of the State of Illinois, one of the United States of America, and having Illinois, one of the United States of America, and having their principal place of business in the Pullman Building, Chicago, Ilinois aforesaid (assignees of Ebenezer Benton Beecher, of 25, Franklin Street, Westville, and Jacob Pulver Wright, of 46, Avon Street, New Haven, both in Connecticut, United States of America, aforesaid). An invention for improvements in and relating to machines for making matches. (Specification, £6 10s.; drawings, £7.)

No. 7700.—24th June, 1895.—Grahham Sarjeant Cory and Colin Cory, both of Port Tennant Chemical Company's Works, Swansea, England, Manufacturers. An invention for improvements in the manufacture of artificial fuel. (Specification, 4s. 6d.)

F. WALDEGRAVE

Deputy Registrar.

Note.—The cost of transcribing the specification and an estimate of the amount required for copying the drawings order for a copy or copies should be accompanied by a postoffice order or postal notes for the cost of copying.

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

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

#### Provisional Specifications.

Patent Office,

Patent Office,
Wellington, 26th June, 1895.
A PPLICATIONS for Letters Patent, with provisional specifications, have been accepted as under:—
No. 7654.—7th June, 1895.—George Airkens, of Foxton, New Zealand, Clerk in Holy Orders. An invention for an improved letter-card for use in postal correspondence.
No. 7674.—7th June, 1895.—WILLIAM GEORGE GREY, of Remuera, Auckland, New Zealand, Storeman. An invention entitled "The Grey Safety Hurdle," in connection with hurdle-racing.

No. 7677.—10th June, 1895.—Charles Burgess Duff and James Naughtie Duff, trading as "Duff and Son," Balclutha, New Zealand, Blacksmiths. An invention for an

improved rabbit-trap.

No. 7678.—10th June, 1895.—George Frost, of Seafield View Road, Auckland, New Zealand, Mariner. An invention

View Road, Auckiand, New Zealand, Mainter. An invention for an improved carriage, without axletrees or springs, for the transport on land of goods or passengers.

No. 7682.—15th June, 1895.—Henry Shattky, of Hastings, New Zealand, Engineer. An invention entitled "Zealandia University procedure".

Horse-race Starting-machine.

Horse-race Starting-machine."

No. 7688.—19th June, 1895.—WILLIAM TYREE, of 42, Lambton Quay, Wellington, New Zealand, Photographer. An invention for an improved method of and apparatus for hanging window-curtains and the like.

No. 7691.—20th June, 1895.—The Cassel Gold Extracting Company (Limited), of 108A, Hope Street, Glasgow, North Britain (assignees of John Stewart MacArthur, of 12, Knowe Terrace, Pollokshields, North Britain aforesaid, Technical Chemist, and John Yates, of 13, West Scotland Street, Kinning Park, Glasgow aforesaid, Engineer). An invention for improvements in the process of and apparatus for extracting gold and silver from ores and the like.

No. 7693.—21st June, 1895.—Henry Montague Mere-Dith, of Morkesprings, Qininidi, New South Wales, Station Manager. An invention for an improved apparatus for cutting drains and tracks.

cutting drains and tracks.

No. 7698.—24th June, 1895.—Francis Brady, of 42,
Lambton Quay, Wellington, New Zealand, Carpenter. An
invention for improved box or bin for storing and weighing

coal and produce.

No. 7699.—24th June, 1895.—John Valentine, of 42,
Lambton Quay, Wellington, New Zealand, Engineer. An
invention for an improved cover for washing-coppers and the

No. 7701.—21st June, 1895.—ROBERT WALKER, of Stuart Street, Dunedin, New Zealand, Tinsmith. An invention for improvements in milk-cans and other similar vessels

No. 7702.—25th June, 1895.—James Copeland, of Brunswick Line, near Wanganui, New Zealand, Farmer. An invention for an improved totalisator.

F. WALDEGRAVE,

Deputy Registrar.

Note.—Provisional specifications cannot be inspected, or their complete specifications in connection therewith have been accepted.

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

Notice of Request to amend Specification.

Patent Office.

Patent Office,

Wellington, 26th June, 1895.

A REQUEST for leave to amend the specification (including drawings) relating to the under-mentioned application for letters patent has been received, and is open to public inspection at this office. Any person may at any time within one month from the date of this Gazette give me notice in writing of opposition to the amendments. Such notice must set forth the particular grounds of objection, and be in duplicate. A fee of 10s. is payable thereon.

notice must set forth the particular grounds of objection, and be in duplicate. A fee of 10s. is payable thereon.

No. 6914.—20th June, 1894.—Edgar Arthur Ashcroff, of Broken Hill, New South Wales, Electrical Engineer. An invention for an improved process of treating refractory ores, and apparatus to be used therein.

The particular fitting proceed amendments is as follows:

The nature of the proposed amendments is as follows,

viz.:-
1. To strike out the words "ores, and apparatus to be used

1. To strike out the words "ores, and apparatus to be used the 1. To strike out the words "ores, and apparatus to be used therein," appearing in the title, and to insert instead the words "zinc-bearing ores or products, particularly applicable to those containing zinc and lead sulphides."

2. To strike out the words "and apparatus to be used for," line 2, page 2.

3. To strike out the word "mechanical," lines 9 and 10,

page 2.

4. To insert at the end of the paragraph terminating in the word "solutions," line 28, page 2, the words "and residues, and the treatment of ores hitherto impracticable on

the word "solutions," line 28, page 2, the words "and residues, and the treatment of ores hitherto impracticable on a commercial scale, is rendered practicable and profitable."

5. To 'strike out the word "neutral," and to add the letter "s" to the word "Sulphate," line 18, page 3.

6. To prefix to the word "Sulphate," lines 29 and 31, page 4, the letters or word, &c., "hydr-".

7. To alter the formula, line 30, page 4, by inserting "+3H<sub>2</sub>O" immediately after "(SO<sub>4</sub>," and by substituting "Fe<sub>2</sub>(OH)<sub>6</sub>" for "Fe<sub>2</sub>O<sub>3</sub>."

8. To strike out the word "This," line 3, page 5, and to substitute therefor the words "The foregoing."

9. To strike out the words, "In either case it is preferable to employ the solution hot and to conduct the operation in two," lines 8-10, page 5, and to insert in place thereof the words, "It has been found experimentally that this leaching can be best accomplished by sliming or grinding the ore to extreme fineness after or before roasting, then stirring a given quantity of ore up with the solution, the quantity being calculated so that when sufficient zinc has been extracted from the ore to render the residues of a convenient composition for subsequent smelting, the solution will be freed from iron. For instance, with ores containing 30 per cent. of zinc, probably some 5 per cent. would preferably be allowed to remain in the residues on account of the higher cost of total extraction. The operation may be conducted in one."

10. To strike out the words, "together with the due complement of iron oxide flux for the same, are preferably dried," lines 10, 11, page 6, and to insert in place thereof the words, "containing ferric hydroxide are preferably dried at a suitable temperature."

11. To insert immediately after the word "substances," line 13, page 6, the words "such as lime."

11. To insert immediately after the word "substances," line 13, page 6, the words "such as lime."

12. To insert at the end of the paragraph terminating in the word "furnace," line 17, page 6, the words, "and will also act as valuable flux in the smelting operation."

13. To strike out the words "as sulphate of silver," line

22, page 6.

14. To strike out the word "formed," line 23, page 6, and to insert in place thereof the word "derived."

15. To insert, immediately after the word "silver," line 24, page 6, the words, "and the removal of objectional impurities by."

16. To strike out the words "by the action of." line 24.

16. To strike out the words "by the action of," line 24,

page 6.
17. To strike out the words "Alkaline reagent such as lime, soda, or magnesia," lines 25, 26, page 6, and to insert in place thereof the words, "other suitable chemical reagent, in manner well known to all persons versed in the art to which this invention appertains, and in no way constituting part of my invention.

18. To strike out the words "cooling and," line 27, page 6.
19. To strike out the word "returned," line 27, page 6, and to insert in place thereof the word "passed."

to insert in place thereof the word "passed."

20. To insert at the end of the paragraph terminating in the word "Sulphate," line 2, page 7, the words, "by the second stage of the electrolysis."

21. To strike out all the words contained in lines 3-11, page 4, and to insert instead the following words, &c.: Viz., "The electro depositing plant consists essentially of a number of depositing-vats, provided with metallic-iron anodes and suitable cathodes (preferably, zinc plates), and a number of similar vats having anodes of insoluble material (such as carbon), the total depositing-capacity of the plates in the iron anode vats being about twice that of the carbon anode vats. The vats."

vats. The vats."

22. To strike out all the words from and including the word "These," line 19, page 7, to and including the word "latter," line 29, page 7, and to insert instead the following words, &c.: viz., "The material employed in the vats illustrated in the drawings herewith is filter-cloth. While the electrolysis is in progress the liquid is first circulated round the zinc or other cathodes (where the zinc is deposited), then around the iron anodes (where ferrous salt is posited), then around the iron anodes (where ferrous salt is imparted to the solution), and finally around the carbon or other insoluble anodes (where the ferrous salt is oxidized to ferric state)."

23. To strike out the words "descending past," line 29, page 7, and to substitute therefor the words "circulating around."

24. To strike out the words "ascending past the," line 31, page 7, and to insert instead the words "circulating around the iron.'

25. To strike out the words "two cells," line 1, page 8, and to substitute therefor the word "vats."

26. To strike out all the words contained in lines 3-25, page 8, and to insert in place thereof the words "whilst the by the carbon or other insoluble anodes, as shown by the following equation."

27. To strike out the words "first two cells," line 28,

page 8, and to insert in place thereof the words "iron anode

- 28. To strike out the words "last or third cell," line 30, page 8, and to insert instead the words "carbon anode wats"
- 29. To strike out the words "three cells," line 31, page 8,

and to insert instead the words "the vats."

30. To strike out the word "two," line 32, page 8, and to insert instead the words "the iron anode vats."

insert instead the words "the iron anode vats."

31. To strike out the words "solution free from iron for the electrolysis and," lines 2, 3, page 9.

32. To strike out the word "oxide," line 28, page 9, and to insert instead the word "hydrate."

33. To strike out the word "reduced," line 33, page 9, and to insert instead the word "produced."

34. To strike out all the words from and including the word "stout," line 7, page 10, to and including the word "minimum," line 16, page 10, and to insert in place thereof the following words: viz., "Sheets of zinc, which may be melted up in a melting-pot with the deposit obtained, or may be stripped and used again and again."

35. To strike out all the words within brackets, lines 20-22, page 10.

- 30. To strike out all the words within brackets, lines 20-22, page 10.

  36. To prefix to the word "oxide," line 27, page 10, the letters or word, &c., "hydr-".

  37. To alter the formula, line 2, page 11, by inserting " $+3\text{H}_2\text{O}$ " immediately after "Fe<sub>2</sub>Cl<sub>6</sub>," and by substituting "Fe<sub>2</sub>(OH)<sub>6</sub>" for "Fe<sub>2</sub>O<sub>3</sub>."

  38. To insert between the words "way" and "by," line 16, page 11, the words "and may be recovered."

- 38. To insert between the words "way" and "by," line 16, page 11, the words "and may be recovered."
  39. To insert between the words "chloride" and "may," line 21, page 11, the words "and silver."
  40. To insert between the words "silver" and "in," line 23, page 11, the words "or other objectionable impurities."
  41. To insert between the words "way" and "is," line 24, page 11, the words "such as by known chemical reagents."
- 42. To strike out all the words contained in lines 26-30,

page 11.

43. To add "+O" to "SO<sub>3</sub>," line 8, page 12.

44. To strike out all the words from and including the word "A," line 33, page 13, to and including the word "adi," line 17, page 15.

45. To strike out the words "and cooled," line 23, page 15.

46. To insert between the words "electrolytic" and "cells," line 24, page 15, the words "vats or."

47. To strike out the words "two cells," line 25, page 15, and to insert instead the word "vats."

48. To strike out the words "one cell," line 26, page 15, and to insert instead the word "vats."

49. To strike out the words "fourth, and apparatus where the resulting solution is heated by convenient means, and fifth," lines 27, 28, page 15, and to insert instead the words "and fourth." -" and fourth."

50. To strike out the word "machines," line 2, page 16, and to insert instead the word "apparatus."

51. To insert immediately after the word "knowledge," line 6, page 16, the words "and form no part of my invention" tion.

52. To strike out all the words from and including the word "The," line 7, page 16, to and including the word "described," line 14, page 17.
53. To insert, between the word "described," line 14, page 17, and the word "Having," line 15, page 17, the following words, figures, &c.: viz., "The accompanying drawings illustrate one arrangement of apparatus which I have found suittrate one arrangement of apparatus which I have found suitable and useful for the carrying-out of my process. Any suitable number of such sets of apparatus may be employed, and the connections and arrangement of the same may be designed to suit varying conditions and requirements. Figure 1 is a section of a leaching-vat, with stirrers. Figure 2 shows the arrangement of depositing-vats in a cascade, and the reservoirs. Figure 3 is a general plan of the electrolysis plant. The leaching-vat shown in Figure 1 consists of a plain round vat, provided with stirring appliances. These may be a number of shoes or prongs fastened to a suitable frame, upon the upper portion of which is a pulley, which may be driven by a belt from any convenient motive-power. The vat is charged from the top, and suitable outlets are provided for withdrawing the contents. The electro depositing-vats are arranged in such a manner, and with such pipe and vided for withdrawing the contents. The electro depositing-vats are arranged in such a manner, and with such pipe and trough connections between them, that a continual circula-tion of three separate batches of solution is maintained in the system, the liquids being circulated at sufficient speed to in-sure a brisk and continual motion at every part of the plates. The depositing plant consists of a series of electrolysis vats, A¹, A², A³, A⁴, A⁵, A6, A², A³, A³, Preferably arranged as shown in Figures 2 and 3, and a number of reservoirs, B¹, B³, B³, B³, B⁵, B⁵. Each of the vats is divided by diaphragms C of filter-cloth or other suitable material into a number of compartments, each of which has an inlet-pipe with a funof filter-cloth or other suitable material into a number of compartments, each of which has an inlet-pipe with a funnel D entering near the bottom, and an outlet-pipe E discharging near the top of the compartment. Each of the vats, A¹, A², A³, A⁴, A⁵, A⁴, contains three iron anodes H, and two zinc cathodes K, while each of the vats, A႗, A⁶, Aዏ, contains three carbon anodes M, and two zinc cathodes K. The electrical connections may be made in any suitable manner. As shown in the drawings, all the plates in one vat are connected in parallel, and all the vats in series. The reservoir B¹ has a number of exit-pipes, which discharge into the funnels of the cathode compartments of the vats A², A⁴, and A႗. The outlet-pipes of these compartments discharge into the funnels of the cathode compartments of the vats A², A⁵, and A⁶. The outlet-pipes of these compartments of the vats A³, A⁶, and Aൟ, and the outlet-pipes of these compartments of the vats A³, A⁶, and Aൟ, and the outlet-pipes of these compartments discharge into the funnels of the reservoir B². The reservoir B³ has a number of exit-pipes, which discharge into the funnels of the iron-anode compartments of the vats A¹ the funnels of the iron-anode compartments of the vats A<sup>1</sup> and A<sup>4</sup>. The outlet-pipes of these compartments discharge into the funnels of the iron-anode compartments of the next vats, A<sup>2</sup> and A<sup>5</sup>. The outlet-pipes of these compartments discharge into the iron-anode compartments of the vats A<sup>3</sup> and A<sup>5</sup>, and the outlet-pipes of these compartments discharge into the reservoir B<sup>1</sup>. The reservoir B<sup>5</sup> has exit-pipes which discharge into the funnels of the carbonhas exit-pipes which discharge into the funnels of the carbon-anode compartments of the vat A<sup>7</sup>. The outlet-pipes of these compartments discharge into the funnels of the carbon-anode compartments of the vat A<sup>8</sup>. The outlet-pipes of these compartments discharge into the funnels of the carbon-anode compartments discharge into the funnels of the carbon-anode compartments discharge into the reservoir B<sup>6</sup>. The pumps for raising the solutions from the reservoir B<sup>2</sup> to the reservoir B<sup>3</sup>, from the reservoir B<sup>4</sup> to the reservoir B<sup>5</sup>, as indicated by the arrows on Fig. 3, and from the reservoir B<sup>6</sup> to the leaching-vat again, may be of any suitable construction and materials, and the reservoirs preferably communicate with larger storage-tanks. The three batches of solution thus circulating consist of portions of the same stock solution, each undergoing different stages of the operations. That circulating round the zinc cathodes must be the solution of the zinc salts, freed from iron or other harmful impurities, which has been obtained by leaching the ores, and subsequently purifying (if necessary) as hereinbefore described. quently purifying (if necessary) as hereinbefore described.
The solution circulating around the iron anodes is a similar lot of solution which has been previously used around the zinc cathodes, and has thus become more or less depleted of its zinc. It is circulated around the iron anodes until a sufficient quantity of iron has gone into solution as ferrous salt to impart the proper strength for a subsequent leaching solution. The solution circulating around the carbon anodes is a solution which has formerly circulated around the iron anodes as above described. It is circulated around the carbon anodes until all the iron it contains has been converted than the former to the from the ferrous to the ferric state. The periods at which such changes are made will depend upon various circumstances, mainly on the amount of the iron which it is found convenient to impart to the solution, and the amount of zinc

to remove therefrom at each cycle. It will be seen from the chemical reactions hereinbefore described that for the comchemical reactions hereinbefore described that for the complete and continuous operation of this process two iron anodes are required to one carbon-anode vat of equal depositing-capacity. A study of the above-described conditions of working will show that the process is continuous, and that each portion of the solution passes through a cycle of operations thus: Beginning with a ferric solution containing more or less zinc, and acting on the oxidized ore, the operations are as follows: First, leaching, whereby iron is thrown out of solution and zinc substituted; Second, circulation past the cathodes in the zinc electro depositing plant, where the excess of zinc is taken out; Third, circulation past the iron anodes, where ferrous salts are imparted to the solution; Fourth, circulation past the carbon anodes, where the ferrous salts are oxidized to ferric salts, and the solution thereby regenerated and ready to be again employed for leaching. Although I have found carbon anodes the most efficient and economical means for oxidizing the ferrous-salt solution to the ferric state, I would have it understood that this may be

Although I have found carbon anodes the most efficient and economical means for oxidizing the ferrous salt solution to the ferric state, I would have it understood that this may be effected by known and suitable chemical reagents, such, for instance, as chlorine gas, as will be well understood."

54. To strike out the present claims—i.e., from and including the word "First," line 19, page 17, to and including the word "Gescribed," line 18, page 21.

55. To insert fresh claims as follows: viz., "First, The herein-described process for the treatment of zinc-bearing ores and zinc-bearing products, consisting essentially in—first, oxidizing such ores or products as require it; secondly, leaching the oxidized ore or product with a solution containing a ferric salt; thirdly, electrolysing the resulting zinc solution by first passing it around the metallic cathodes and then around the iron anodes, and subsequently around the carbon or other insoluble anodes of an electrolytic system of vats (for the purpose of raising the ferrous salts to the ferric state), substantially as and for the purposes specified. Second, In the treatment of zinc-bearing ores and zinc-bearing products, passing a zinc-bearing solution first around the metallic cathodes, then around the iron anodes, and subsequently around the carbon or other insoluble anodes of an electrolytic system of vats, substantially as and for the purposes specified. Third, In the treatment of zinc-bearing ores and zinc-bearing products the herein-described method of simultaneously raising a ferrous-salt solution to a ferric-salt solution, and depositing zinc from a catholyte free from iron by means of electrolysis with carbon or other insoluble anodes and metallic cathodes, substantially as and for the purposes set forth."

56. To substitute three freeh sheets of drawings, contain-

lic cathodes, substantially as and for the purposes set forth."
56. To substitute three fresh sheets of drawings, containing three figures, in place of those at present attached to the

specification.

The applicant states that "My reasons for making this amendment are as follow: That since the date of my application I have ascertained that some of the claims in my specification are wanting in novelty; and I have been advised that others are not sufficiently precise, and that some of the descriptive parts, especially that relating to the circulation of the liquid in the electrolysis vats, are insufficient, and in part incorrect, and can only be clearly illustrated by reference to further drawings.

F. WALDEGRAVE, Deputy Registrar.

#### Further Fees paid.

ETTERS PATENT on which the second term's fee has been paid (the dates of payment are noted at the end):-

No. 5078.—R. Stanley, tunnelling and mining machines. 24th June, 1895. No. 5094.—F. Y. Wolseley, cutters of sheep-shears. 20th

June, 1895.

No. 5120.—F. Luck, loading wagons. 26th June, 1895.

F. WALDEGRAVE

Deputy Registrar.

#### Dealings with Letters Patent registered.

IST of subsequent proprietors of Letters Patent registered (the names of the patentees are given in brackets, and the dates of registration at the end):—

No. 5207.—The Evening Star Company (Limited), of Dunedin, New Zealand, paper-bag-making machine. [R. Millis.] 13th June, 1895.

F. WALDEGRAVE. Deputy Registrar.

#### Applications for Letters Patent lapsed.

IST of applications for Letters Patent (with which complete specifications have been lodged) lapsed from the 18th June, 1895, to the 26th June, 1895, inclusive:

No. 6591.—J. Curtis, seed or grain separator.

F. WALDEGRAVE, Deputy Registrar.

#### Letters Patent void.

IST of Letters Patent void through non-payment of fee for second term, from the 13th June, 1895, to the 26th June, 1895, inclusive:

No. 4887.—A. and G. Cameron, cigarette-machines (H. No. 4001.—A. M. Bohls).

No. 4888.—L. A. Groth, tanning hides and skins.

No. 4889.—H. T. Smith, oil-lamps.

No. 4893.—N. Dodgshun, tailor's press-board.

No. 4895.—R. P. Rothwell, sinking shafts.

No. 4896.—R. F. Rodiwen, Shiang Shales.

No. 4896.—J. Trevethick, manufacturing brooms, &c.

No. 4898.—T. J. Hood, boots, &c.

No. 4901.—R. Hornsby and Sons (Limited), harvestingmachines (J. Hornsby, J. Innocent, and J. H. Smith).

No. 4905.—W. G. M. Call, washing cotton-waste, &c.

No. 4906.—A. C. Holden, scrubbing and mopping appli-

ance.

No. 4907.—T. O. Bennett, sheep-shears. No. 4908.—W. Clark, watercloset. No. 4909.—A. Gross, locking nuts on bolts.

F. WALDEGRAVE,
Deputy Registrar.

#### Letters Patent sealed.

IST of Letters Patent sealed from the 13th June, 1895,

to the 26th June, 1895, inclusive:

No. 6735.—A. Holmes, landing-nets.
No. 6739.—T. C. Dennison, cycles.
No. 6767.—E. Mazure, corking-machines.
No. 6823.—W. H. Hannam, water-heaters.

No. 6860.—E. Purser, manufacture of briquettes from ironsand.

No. 6936. J. D. Scouler, sheep-shearing machines.

No. 7209.—R. M. Macdonald, engine-governor.
No. 7215.—A. L. J. Tait, churn.
No. 7895.—C. Pratten, moulding and dividing plastic materials.

No. 7404.—H. T. Reid, oil- and gas-engines.
No. 7432.—R. M. Macdonald, totalisators.
No. 7433.—H. Dixson, smoking-pipes (F. W. Schroeder).
No. 7434.—The Richardsen and Schroeder Patent Smoke-

(Limited), steam-boilers (J. Richardsen).

No. 7437.—G. B. and H. P. Jones, rock-drills.

No. 7438.—O. B. Shallenberger, measuring electrical

currents.

No. 7457.—J. T. Penny and W. H. Richardson, triturating

and amalgamating ores.
No. 7458.—M. A. J. Roux, separating metals, &c., from

blendes.
No. 7466.—F. D. Cummer, drying and disintegrating

naterials.

No. 7467.—F. S. Salberg, disinfecting refuse.

No. 7469.—J. W. Sutton, recovery of gold.

No. 7478.—C. Weygang, manufacture of saponaceous products from petroleum.

No. 7479.—C. Weygang, manufacture of artificial fuel from petroleum.

No. 7479.—C. Weygang, manufacture of artificial fuer from petroleum.

No. 7481.—N. S. Keith, separating gold and silver from other materials.

No. 7488.—C. Ewing, rolling-stock for single rails.

No. 7508.—W. Anderson, J. M. Toomey, and W. F. Schey, determining whether wool, &c., is wet or dry.

No. 7527.—A. H. Hansen, vinegar.

F. WALDEGRAVE, Deputy Registrar.

#### Design registered.

No. 41.—Thomas Erneste Danks, of Linwood, New Zealand, Class No. 3. 21st June, 1895.

F. WALDEGRAVE, Deputy Registrar. Applications for Registration of Trade-marks.

Patent Office.

Wellington, 26th June, 1895.

A PPLICATIONS for registration of the following trademarks have been received. Notice of opposition to the registration of any of them can 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. 1429.)

15th May, 1895.



The essential particular of this trade-mark is the representation of the series of medals arranged in a semicircle; and the applicants disclaim any right to the exclusive use of the added matter, save and except their name and address.

JOHN DEWAR AND SONS (LIMITED), of 48, Lime Street, London, England, Distillers.

Whiskey.

Class No. 43.

(No. 1434.)

29th May, 1895.



The essential particulars of this trade-mark are the words "Australian Gold Drops," the fac-simile signature, and the label as a whole; and the applicant disclaims any right to the exclusive use of the added matter, except the address.

FEBDINAND SCHÜBELER, of 6, O'Connell Street, Sydney, New South Wales, Druggist.

A medical preparation.

Class No. 3.

(No. 1438.) The word 3rd June, 1895.

## STANDARD

NIMMO AND BLAIR, of Dunedin, New Zealand, Seed Merchants.

Bone-manures, bone-dusts, guanos, and artificial manures. Class No. 2.

(No. 1444.)

14th June, 1895.

The word

## IMPERIAL"

ROBERT URQUHART and JOHN INGLIS WRIGHT (trading as "The Imperial Herbal Manufacturing Company"), of North-east Valley, Dunedin, New Zealand.

Medicines.

Class No. 3.

(No. 1446.) The word 14th June, 1895.

## CHALLENGE

WRIGHT, STEPHENSON, AND Co., of High Street, Dunedin, New Zealand, Auctioneers and Station Agents.

Artificial manures.

(No. 1449.) The word 17th June, 1895.

## REGAL

WILLIAM HILL DOWNER, of McDowall's Road, Riccarton, near Christchurch, New Zealand, Soap and Tallow Merchant. Soap. Class No. 47.

(No. 1452.) The word 19th June, 1895.

## MOGUL

The applicants claim to have used this trade-mark in respect of the under-mentioned articles for eight years.

SHARLAND AND Co. (LIMITED), of Auckland and Wellington, New Zealand, Wholesale Druggists.
Curry-powder, sauces, and culinary essences.

Class No. 42.

(No. 1453.)

20th June, 1895.



The essential particulars of this trade-mark are the word "Mutual" and the mark as a whole; and the applicant disclaims any right to the exclusive use of the added matter. GEORGE THOMSON SMYTH, of Tay Street, Invercargill, New Zealand, Grocer.

Tea.

Class No. 42.

F. WALDEGRAVE. Deputy Registrar.

By Authority: Samuel Costall, Govt. Printer, Wellington.

