

Applications for Patents.

THE following list of applications for Patents filed in New Zealand, 15th November to 12th December, 1905, has been specially prepared for PROGRESS.

- 20324—Urquhart, D. and Sloper, C., Smithfield, N. Z.: Depilating hides.
- 20325—Hart, G. H., Koromiko lock
- 20326—Hawkins, T. H., London Acetylene lamp and generator.
- 20327—Martin, E. J. and Sutton, A. C., Auckland: Half-tone process block.
- 20328—Wilson, J., Christchurch Index file.
- 20329—Dugdale, T., Waimate Rainwater head and strainer.
- 20330—Cooper, S. T., Eltham Timber-wagon.
- 20331—Hutton, E. W. H., Dunedin Flax-dressing.
- 20332—Totman, G., Auckland Brooch-fastening.
- 20333—McIntyre, W., Westport Coal-boring machine (J. Smith).
- 20334—Phillips, E., Melbourne Rendering apparatus. (E. H. Fallows—J. H. Cayford)
- 20335—Park, J. R., Wellington Shackle (W. Beamish).
- 20336—Smith, H. T. and Brown, A. E., Christchurch Station indicator.
- 20337—Porch, W., Epsom, Auckland Suction collar for pile-driving.
- 20338—Thomas, R. F., Melbourne, and Bradley, S. A., Kilmore Fruit case.
- 20339—Wilson, T. H., Brisbane Journal bearings
- 20340—Gresham, E. G., Dunedin Dental plates
- 20341—Gresham, E. G., Dunedin Dental instrument.
- 20342—Trounson, J., Kaihu Scrub and fern cutter
- 20343—Wood, H. J., Christchurch Cooking utensil.
- 20344—Middleton, G., London Road-vehicle wheel.
- 20345—Rutland, C. and Hardwick, T. J., Perth, W. A. Cycle inflation connection.
- 20346—Winch, W. J., Kalgoorlie Beer pump
- 20347—McGregor, J. and E., Turakina, and Ross, C. G., Taihape Sheep shears.
- 20348—Hugo, A. J. C., Kalgoorlie Locomotive valve-setting machine.
- 20349—The Arcanum Limited, London Mineral-water manufacture, and delivery on draught
- 20350—Park, J. R., Wellington Waterproof-fabric manufacture. (L. A. Bond).
- 20351—Gibbons, R. G., Sydney Dynamo electric generator
- 20352—Garner, W. R., Melbourne Cycle gear
- 20353—Beldam, A. G. W., and C. A., London: Packing for rods and plungers (G. H. Robmson).
- 20354—Heeb, M., Port Legar Turbine.
- 20355—Hughes, W. E., Wellington Casting curved stereotypes (The Printing Machinery Co., Ltd.,—H. A. W. Wood).
- 20356—Kaiser, A., Sydney Glass polishing machine (N. Weiderer & Co).
- 20357—Allen, A. H., Worcester, England Painter's lamp.
- 20358—Mellor, G. W., London Compound deal forming machine (G. S. Mayhew).
- 20359—Hatmaker, J. R., Paris Dry compound of coffee and milk.
- 20360—Hatmaker, J. R., Paris Blood-drying process.
- 20361—Hatmaker, J. R., Paris Fruit-drying process.
- 20362—Gray, J. H., San Francisco Shaft-bearings.
- 20363—Collins, R. J., Auckland Directory.
- 20364—Williams, A., Auckland Funnel or filter.
- 20365—McPhedran, D. T., Tamaru Music-holder for piano.
- 20366—Stone, W., Dunedin Sash raiser and lock.
- 20367—Billens, A., Christchurch Spraying plants.
- 20368—Loone, A. W., Scottsdale, Tasmania Cycle toe-clip (W. Kilworth).
- 20369—Ravn, N. J., and Duncan, P., Christchurch: Boot-sock.
- 20370—Samuel, T., Westport Elevating and concentrating black sand.
- 20371—Robertson, D., Wellington Postmarking machine.
- 20372—Louden, J. A. E., Auckland Ice-chest.
- 20373—Burgoyne, L. H., Auckland Game.
- 20374—McConnell, J. N., Dunedin Cigarette-making by hand and for advertising
- 20375—Lyell, A., Palmerston North Tea-fuser.
- 20376—Holmes, G. B., and Allen, A. D., Wellington Trolley head.
- 20377—Slemitz, C., Auckland Spray pump.
- 20378—French, A. G., Motupipi Cement manufacture.
- 20379—Nicholls, J. H., Wellington: Carpenter's

- 20380—Haigh, T. G., Linwood Whisking machine.
- 20381—Bram, W. B., Auckland Tonic and antidote.
- 20382—Smith, P. A. N., and Bram, W. B., Auckland Electrical and oil motor-car and marine engine.
- 20383—Nicol, W., Wanganui Removing coal from railway-truck.
- 20384—Craven, A. T., Nelson Music roller.
- 20385—Leshie, G., Wanganui Enriching and preserving natural colours of timbers.
- 20386—Sable, E., Korong Vale, Vic. Rabbit trap.
- 20387—Angus, A. R., Neutral Bay, N.S.W. Railway brake.
- 20388—Angus, A. R., Neutral Bay, N.S.W. Railway brake
- 20389—Angus, A. R., Neutral Bay, N.S.W. Railway brake.
- 20390—Staines, F., Melbourne Pea-shelling machine.
- 20391—Hogan, M., Edendale Grain and seed cleaning machine.
- 20392—Glossop, J., Dunedin Boring apparatus
- 20393—Chapman, A. H., Kurow Meat preserving.
- 20394—Jones, J. H., and Kane, W., Cromwell Gold-saving dredge.
- 20395—Swan, A. M., Otautau Turnip thinner
- 20396—Potton, L. H. and Winston, E. C., Christchurch Attaching models to dental articulators.
- 20397—Caithness, D. and Graham, J. P., Waikaka Dredge anchor.
- 20398—Johnson, C. J. and Carlaw, J. Auckland Fire bridge
- 20399—Anderson, F. H., Christchurch: Bedroom chamber.

Full particulars and copies of the drawings and specifications in connection with the above applications, which have been completed and accepted, can be obtained from Baldwin & Rayward, Patent Attorneys, Wellington, Auckland, Christchurch, Dunedin, &c

Complete Protection for Inventions.

BY E. S. BALDWIN, M.E., Queen's Prizeman, South Kensington.

AN article appeared in the last issue of PROGRESS on provisional protection, at the end of which period of nine months the application must be completed by filing a complete specification, and drawings when the invention cannot be clearly understood without them. If, however, by inadvertence the complete specification is not filed within the nine months, it may be filed within a further month by making application for extension of time and paying fees therefor.

The term "complete" is somewhat misleading and it frequently occurs that inventors are under the erroneous impression that, after filing a complete specification and paying the fees connected therewith, they will obtain their patent deed. Such is not the case, however, as application must be made and a sealing fee paid before the deed can issue.

Reasons for filing a provisional application were given in last issue, but a complete application may be filed in the first instance, that is, without being preceded by a provisional application. The complete specification must "particularly describe and ascertain the nature of the invention" whereas the provisional specification contains merely a statement of the nature of the invention. It must distinguish between what is claimed as new and what is old, and must terminate with a distinct statement of the novelty or novelties claimed. Upon receipt by the Patent Office the specification is examined to see whether it is in order and properly describes the invention, and if it has been preceded by a provisional specification, whether the invention is the same. If the complete specification describes more than, or matter different from, the provisional, it will be considered a different invention and will be rejected for disconformity until it is amended. The complete specification will not be refused if it narrows the scope, that is, leaves out a part, of the provisional. The New Zealand Patent officers are now following the procedure recently brought into vogue in Great Britain, and are making a search in the interest of the inventor with regard to novelty of each invention brought before them. If the registrar finds a specification in the New Zealand or British records describing an invention similar to the applicant's, he sends a notification to that effect, and the specification must be amended if it entrenches on the anticipating patents. The search made by the Patent officers is extensive, but does not carry a guarantee that the specification is good in law. The complete specification must be accepted within twelve months from the date of filing the application, or within a further extended period of three months on obtaining consent of the registrar and paying a fee thereon. After the specification has been

accepted, the registrar advertises the acceptance in the Patent Office Supplement to the Gazette. Any person may lodge opposition, giving particulars of his objections to the application within two months from the date of gazetting the application. If there is no opposition the registrar notifies the applicant that fees are payable and the patent may be sealed.

Canada's "Harnessing of Niagara."

TUNNELS, power houses, and gathering dam being all finished, the turbines and generators set in place, and every connection accurately completed, what is to be done with the 125,000 of horse-power which can be produced? Here steps in another company—to wit, the Toronto and Niagara Power Company, composed of the same interests, but having a different mission, for its business will be to dispose of the power that has been created, to play the part of the middleman, in fact. In order to do this a step-up transformer house, 200ft in length, will be erected on top of the Niagara embankment, to which the power will be conducted underground, and thence transmitted to Toronto, Hamilton, and other cities, for the use of the consumer, over wire cables carried upon steel towers nearly 50ft in height, placed 400ft apart. Between Niagara and Toronto a right-of-way 80ft in width has been acquired, upon which the steel towers are placed, and over this right-of-way, in the not distant future, an electric road will run connecting the two places. In Toronto itself the street railway system, the electric lighting system, the radical railway system, and other large consumers of power have already been contracted with, while it is a matter of certainty that, once the power is ready in abundance, the manufacturers now using steam will hasten to avail themselves of the simpler, safer, cleaner, and more economical method of driving their machinery.

Furthermore, and finally, with a faith in the future that shall surely not be disappointed, a town site, having a frontage of two miles upon the Welland River, three miles from Niagara, has been secured, and will be laid out in lots, to accommodate industries attracted thither by the advantages of the situation. The expectation is that many large American industries whose output finds a market in the British Empire will be induced to establish branches there by the fact that goods manufactured in Canada enjoy the benefit of a preferential duty in many parts of the Empire, and can consequently be disposed of at a higher profit.—J. Macdonald Oxley, in the "World To-day."

The Federal Government has ordered new machinery, at a cost of £5600, for printing the new Commonwealth postage-stamps. They are to bear the King's effigy, and for economical reasons are to be of small size. The present designs will be retained till the close of the bookkeeping period. Prices were obtained for the printing from all the States, and as the South Australian figure was the lowest, it is the present intention of the Postmaster-General to have the stamps printed at Adelaide; though his colleague, Sir William Lyne, demurred, alleging that if Adelaide printing was the cheapest, it was also the worst. The larger States, notably New South Wales, are protesting against the change, as it will throw many skilled stamp-printers out of work and render costly machinery useless.

Weighing a letter on a platform scale, such as is commonly seen at warehouses, railway stations, etc., is quite possible, even though these scales are not usually graduated to weigh to a smaller unit than $\frac{1}{4}$ lb. Platform scales are usually designed so that 1 lb. of weights hung on the tip of the beam will balance some definite amount, usually 100 lb., on the platform. This ratio is commonly indicated on the weights. Knowing this, it is only necessary to place the letter or package on the counterpoise, and then to place enough of any available material on the platform to balance the scale. Remove the letter, weigh the load on the platform in the usual manner, and divide this amount by the ratio, in this case 100. For example: suppose the weight of the material which just balances the letter to be $5\frac{3}{4}$ lb., then 5.75 divided by $100 = .0575$ lb. Reducing this to ounces, $.0575 \times 16 = .92$ oz., which is the weight of the letter. On the other hand, if it is wished to weigh out exactly 1 oz. of something, it is only necessary to remember that it will require 100 oz. ($6\frac{1}{4}$ lb.) on the platform. If the ratio of the weights is not known, it may be found by weighing one of them. If the weight which is marked 100 lb. weighs 1 lb., the ratio is, of course, 1 to 100; or if the 100-lb. weight weighs $\frac{1}{2}$ lb., the ratio is 1 to 200.