

# Applications for Patents.

THE following list of applications for Patents, filed in New Zealand during the month ending 15th Jan., has been specially prepared for PROGRESS

- 22181—A. Parker, Dannevirke Ticket-issuing machine.  
 22182—C. Cooper, Mangatoki Scales  
 22183—C. Harper, Guildford W A Disposal of effluent from septic tanks.  
 22184—J. Attwill, Perth, W A Railway-ticket dater.  
 22185—L. Decker, Sturgis, U S A Whistle-free attachments.  
 22186—E. B. Baker, Melbourne, Vic Treating substances under pressure  
 22187—W. C. V. Harwood and S. Reed, London, Eng. Supplying disinfectant to flushing-cistern.  
 22188—J. Layfield and A. V. Crisp, Vancouver, B.C. Cement building-blocks  
 22189—H. Braby, Sydney, N S W Liquid-fuel burner.  
 22190—A. E. Moir, Melbourne, Vic Milk-can  
 22191—W. E. Hughes, Wellington Bicycle support.  
 22192—H. E. Billson, Christchurch Lapped plug for soles of boots and shoes  
 22193—S. A. Bradley, Merrigum, Vic. Fruit-carrying case.  
 22194—S. A. Bradley, Merrigum, Vic Punnet  
 22195—T. Sutherland, Wellington Cooking-vessel  
 22196—M. Fry, Port Awanui Sheep-race  
 22197—G. Gilchrist, Invercargill, and J. A. Milne, Alexandra South Water-motor  
 22198—R. J. Turnbull, Dunedin Rotary shaking-table  
 22199—T. J. P. Cobb, Masterton Folding crate  
 22200—C. S. Bayley and W. H. Matkile, Auckland Ticket-holder.  
 22201—G. Stevenson, Christchurch Bottle  
 22202—R. Hopkins, Dunedin Vehicle-tire.  
 22203—C. M. Trebilcock, Malvern, Vic Milk-bucket cover and strainer.  
 22204—J. Edey, Dunedin Wire cheese-cutter.  
 22205—J. Graham, Auckland Street-watering method.  
 22206—W. B. Eyre, Auckland Rendering and keeping accounts.  
 22207—A. McLean, Brae Side Wheel.  
 22208—F. F. Twemlow, sen Invercargill Skimmer for ploughs.  
 22209—W. Robinson, Riverton Trolley-brake  
 22210—T. Smith, Dunedin Dinner-plate  
 22211—W. Wilson and T. P. Burke, Dunedin Egg-carrier.  
 22212—T. R. Christie, Dunedin Skylight  
 22213—A. H. Imbert, Grand-Montrouge, France Treating zinc and lead sulphide ores  
 22214—E. A. Holman, Opatiki Cart-jack  
 22215—L. Anderson, New York, U S A Hydro-carbon-engine  
 22216—A. C. Raine, Melbourne, Vic Germ-excluder  
 22217—A. Morgan, Palmerston North Operating electric bells.  
 22218—W. J. Prouse, Wellington Rusticated boarding.  
 22219—A. C. Webber, Marrickville, N S W Tool for removing and replacing tires.  
 22220—F. E. Penfold, Sydney N S W Hand-sweeper for street-cleaning  
 22221—J. T. Keane, Bendigo, Vic Displaying mathematical tables  
 22222—United Shoe Machinery Company, Paterson U S A Machine for inserting fastenings  
 22223—H. S. Marks, Leongatha, Vic Door or gate holder.  
 22224—A. J. Webster, Pirron Yallock, Vic Milk-ing-bail  
 22225—R. S. Badger, Christchurch System of advertising  
 22226—H. E. Parry, Guildford W A Compound counting-machine  
 22227—D. Houston, St George Queensland. Acetylene-gas generator  
 22228—J. D. Jackson, Prahara, Vic Bath-water heater.  
 22229—H. J. Best, Fitzroy, Vic Boot or shoe sole sewing-machine  
 22230—A. A. Carson, Palmerston North Water-heater  
 22231—F. E. McLean, Henley Fastening for mouth-piece of teat cup  
 22232—A. Jack, Palmerston North Gas-production from hydrocarbon oils  
 22233—F. W. Munt, Wellington Stamp-affixer  
 22234—J. O. Galbally, Wellington Weather-boarding.  
 22235—J. S. Plummer, Auckland Portable cot or stretcher.  
 22236—J. K. Hitchens, Petone Axe-handle attachment  
 22237—T. F. McGarva, Christchurch Cradle  
 22238—H. C. Kettle, Dunedin Heating water from waste heat of gas-engines  
 22239—R. R. Woodcock, Napier Flushing apparatus  
 22240—J. B. Davies, Melbourne, Vic Spouting-bracket  
 22241—T. J. Heskett, Brunswick, Vic Extraction of zinc from its sulphide.  
 22242—R. O. Clark, Hobsonville Surface-glazed earthenware blocks  
 22243—R. O. Clark, Hobsonville Yard-sinks  
 22244—R. O. Clark, Hobsonville Strengthening earthenware pipes  
 22245—R. O. Clark, Hobsonville Gate fastening for drains  
 22246—James Hanslow, Cambridge Las Wire gripper and strainer  
 22247—J. Mackie and A. G. Huggins, Riverlea Milk-weighing can  
 22248—J. Darnell, Brisbane Queensland Boot-heel  
 22249—C. Butters, London, Eng Shims-filter  
 22250—J. S. Heithersay, Adelaide S A Perpetual calendar  
 22251—T. S. Humble, Geelong, Vic Combustion chamber of gas-engines  
 22252—J. W. Manley, New Barnet, Eng Electrical Indicator.  
 22253—C. Bristow, Christchurch Milking-machine.  
 22254—W. Platt, Highbank Potato, etc., peeler.  
 22255—C. F. Pummer, Christchurch Centrifugal separator  
 22256—G. Drummond, Waipahi Artificial munnow.  
 22257—T. B. Sutton, Rongotea Cardboard butter-box.  
 22258—G. M. Nichol, Haumi Axe-heads  
 22259—F. W. Smith, Blenheim Milk-samplet  
 22260—J. Taucher, Wellington Clothes-pegs  
 22261—The Malcolm Fraser Wheel Syndicate Ltd., London, E C Tire  
 22262—J. T. Hunter, Wellington Magnetic Separator  
 22263—J. J. Weaver, Southport, Eng. Incubator.  
 22264—R. H. Lucas, Melbourne, Vic. Puncture-seal  
 22265—A. LeBlanc, Cailton, Vic Funnigating rabbits  
 22266—S. A. M. Rose, Richmond, Vic and H. B. Crowle, St Kilda, Vic Target  
 22267—H. Quertier, Dunedin Rail-cleaner  
 22268—H. S. Griffiths, Wairiti Axe-head  
 22269—J. F. P. Berendsen, Wellington. Extracting gold from sand and gravel  
 22270—S. H. Frankland, Wellington Gas burner.  
 22271—W. Wilson and T. P. Burht, Dunedin Egg carrier.  
 22272—A. Belk, Palmerston North Carcase brander.  
 22273—J. R. Jillett, Titahi Bay Pleasure-boat window  
 22274—A. H. Byron and R. R. Richmond, Wellington Signal lamp  
 22275—S. J. Shilton, Wellington Acetylene generator.  
 22276—H. Mander, Feilding Tyre furnace  
 22277—J. D. Jackson, Prahara, Vic Water heater.  
 22278—E. Brandt, Melbourne, Vic Kerosene pump and cutter  
 22279—R. K. Sinclair, London Windguard for tobacco pipe  
 22280—A. G. Brandram, Southsea Eng Pipe joints  
 22281—G. Westinghouse, Pittsburg U S A Draw gear and coupling.  
 22282—A. Cowall, Blackall, Queensland, and John Phillips, Capuga, Queensland Fencing dropper and wire fastener.  
 22283—T. Whittle, Traralgon, Vic and G. G. Turri, Melbourne, Vic (W. Cummings, Malvern, Vic) Ship's progress indicator  
 22284—H. Patanel, Paris France Wheel fellow  
 22285—E. S. Baldwin and H. H. Rayward, Wellington W. Hubbard, Dulwich Hill, N S W Lock nut  
 22286—M. Jurns, Wellington Dumbbells, clubs, etc.  
 22287—G. Hutchinson, Wellington Fencing standard or dropper  
 22288—United Shoe Machinery Company, Paterson, U S A (J. B. Hadaway, Brockton U S A) Shoe sewing machine  
 22289—D. Murchison, Orawia Seed sower  
 22290—F. Sheaf, Tomoana Sraith tuner  
 22291—A. H. Byron and R. R. Richmond, Wellington Pipe joint  
 22292—C. D. E. Usher, Johannesburg S A. Shims treatment  
 22293—C. S. Woledge, Christchurch Teapot and kettle  
 22294—D. Cooper, Christchurch Road watering method  
 22295—I. W. McDonald, Port Fairy, Vic Can soldering machine

- 22296—F. H. Wilson, Brisbane: Sash adjuster.  
 22297—W. G. Windham, London, Engl.: Vehicle body  
 22298—Barcock & Wilcox Limited, London (A. E. Parker, London) Chain grate stoker.  
 22299—C. J. Johnson, Dunedin: Trolley pole.  
 22300—C. E. Muggeridge, Chapel-en-le-Frith, Eng., and The Van Kannel Revolving Door Company Limited, Eng. (C. E. Muggeridge, Eng.). Door.  
 22301—W. Stone, Dunedin Tent peg.  
 22302—W. E. Potts, Gore. Dredge bucket cleaner.  
 22303—D. Mahoney, Christchurch. Cycle crank.  
 22304—E. G. Kennedy, Feilding Boot.  
 22305—F. Parker and B. T. Wiggins, Gisborne. Scaffolding bracket.  
 22306—T. W. Coulthard, Mangapai Fencing dropper.  
 22307—P. L. Smith, Northcote, Vic. Pneumatic pump connection.  
 22308—D. Dickie and D. C. McMoith, Balfour Skim coulter and plough  
 22309—B. Bidwell, Chicago, U S A.: Electric motor cooler  
 22310—J. Whiting, Paraparaumu Target-repairing apparatus.  
 22311—J. M. Johnson, Woodville. Fattening calves.

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, etc.

## Wireless Telegraphy as Applied to Trains.

Along the railway line running from Madrid to Villa del Prado some highly interesting experiments have just been carried out with a very ingenious apparatus invented by Señor Balsera, telegraphist, of Madrid, for placing a train in motion in continual communication with the nearest railway station by means of wireless telegraphy.

A special tram was run from Madrid direct to Villa del Prado, and a receiver of the Marconi radio-telegraphic type was placed in one of the cars; the necessary "earth" was obtained through the wheels of the cars and the railway lines.

Hardly had the train started when calls began to be received from the transmitting station, which was located in the telegraph office at the Madrid terminus, the messages were received with a Morse apparatus steadily, in a perfectly clear manner, without any hitch, and the working continued quite smoothly even when the train was running at a speed of over thirty miles an hour.

When crossing a bridge of over 500 ft. in length spanning the Jarama river, the speed of the train was reduced to ten miles an hour to enable the action (if any) of the materials of the bridge upon the telegraphic apparatus to be observed. As a matter of fact, some slight changes in the signals received were observed, but they did not suffice to interrupt communication between the two stations.

It was found that the greatest degree of perfection in transmission was obtained when the train was running in a direction perpendicular to the line which connected it to the transmitting station, on the contrary it increased in ratio as the angle formed by the direction of the train and by the telegraphic line which connected it to the transmitting station became more acute.

The experiments made gave very satisfactory results, but Señor Balsera is now arranging for more extensive tests, covering a long stretch of railway line. This gentleman is also busy making improvements in another interesting apparatus he has just invented, for firing and guiding torpedoes by the aid of wireless telegraphy.

## A New Explosive.

Very interesting trials have just been made at Stockholm with a new grenade and explosive invented by Dr Holmgren. Amongst the visitors present were General Wille (German), two delegates from the firm of Krupp, Mr. Jamasaki a Japanese artillery officer, and several Swedish notables. A 12 cm mortar was used. The new explosive is extremely powerful, but it can be handled safely and there is no risk of the shell exploding in the mortar. To show this the inventor bored a hole in the jacket of the shell, and set light to the explosive which burnt with a steady flame for a few seconds and then went out. The whole was then stopped up and the shell fired off. No explosion occurred till it reached the point of impact. Further details as to this material are being kept rather secret.