

# Applications for Patents.

The following list of applications for Patents, filed in New Zealand during the fortnight ending 1st Oct., has been specially prepared for PROGRESS.

- 23410—C. H. E. Hope-Johnstone, Aramoho: Treatment of milk.
- 23411—B. H. Ihiwaite and W. Defries, London, Eng.: Manufacture of molten metals
- 23412—C. H. E. Hope-Johnstone, Aramoho: Preparing milk for food.
- 23413—F. A. Alcock, Melbourne, Vic.: Cushion rails for forming billiard tables.
- 23414—S. Doyle, Melbourne, Vic.: Potato washer.
- 23415—H. J. West and Co., Ltd., Saxilby, Eng.: Counter-pressure bottling machine.
- 23416—J. L. Ohlson, Adelaide, S.A.: Sewing machine.
- 23417—W. J. Green, London, Eng.: Branding machine for boxes, casks, etc.
- 23418—R. P. Myers, Walthamstow, Eng.: Arc lamp.
- 23419—R. H. Millar, Wellington: Trolley pole.
- 23420—A. E. Macindoe, Onehunga: Feed regulator for boilers, etc.
- 23421—W. J. O'Connor, Nightcaps: Hammer and spanner.
- 23422—J. E. Crowle, Ballarat, Vic.: Lifting jack.
- 23423—T. O. Tutnbul Kinohaku: Ridging
- 23424—Manufacturers Machine Company, Montclair, U.S.A.: Buffing machine pad covers for boot and shoe manufacture.
- 23425—J. Delbridge, Windsor, Vic.: Air-compressor, usable also as a pump.
- 23426—C. H. Harris, Wellington: Fire-extinguisher.
- 23427—T. N. Brocas, Opatiki: Dublin.
- 23428—W. E. Chamberlain, Feilding: Packing-case opener.
- 23429—E. D. Bilham, [Poverty Bay: Fencing standard.
- 23430—D. W. McLean, Methven: Tyre protector.
- 23431—J. C. Drewet, Auckland: Method of bleaching fibres.
- 23432—W. W. Harverson, Wellington: Trolley pole.
- 23433—J. L. Wilson, Waima: Sharpening chaff-cutter knives.
- 23434—C. Craig, Doyleston: Collapsible crate.
- 23435—T. R. Christie, Dunedin: Hot-water pressure supply cylinder.
- 23436—C. H. Gannaway, Wellington: Bowlers' measure.
- 23437—A. H. and D. J. Byron and T. M. Scott, Wellington: Flax dressing and drying machine.
- 23438—W. Miller, Christchurch: Checking wall plates and similar timbers.
- 23439—D. A. Watt, Levin: Construction of globes for geographical instruction
- 23440—H. Quertier, Dunedin: Motor bicycle and cleaner.
- 23441—W. Diack, Centre Bush: Earthenware drain.
- 23442—F. Schneider, Christchurch: Track-gauging implement for permanent way.
- 23443—J. and R. Lindsay, Dunedin: Trolley pole.
- 23444—J. C. Drewet, Auckland: Celluloid egg-shield.
- 23445—W. Brierly, Auckland: Obtaining power from the tides.
- 23446—P. Speirs, Tulla Marine, Vic.: Plough disc.
- 23447—A. O. Penwarden, Okato: Cow bail.
- 23448—N. Bourard, Otahuhu: Post card.
- 23449—N. Bourard, Otahuhu: Envelope.
- 23450—W. Aston, Blenheim: Spring check for force feed drill.
- 23451—C. Suttie, Waharoa, and M. H. Wynyard, Auckland: Catching flax after stripping.
- 23452—C. Suttie, Waharoa and M. H. Wynyard, Auckland: Cleaning flax after stripping.
- 23453—C. Suttie, Waharoa, and M. H. Wynyard, Auckland: Operating mechanical catcher for flax.
- 23454—G. Fmdlay, Dunedin: Bicycle support
- 23455—"Z" Electric Lamp Syndicate, Limited, London, Eng.: Manufacture of filaments for incandescent electric lamps
- 23456—W. F. Chamberlain, Feilding: Lock-nut
- 23457—J. Brockbank, Auckland: Device for tuning pianos, etc.
- 23458—W. H. Blackham, Melbourne, Vic.: Equalising the vacuum in the pipe lines of milking machines.
- 23459—W. A. Johnston, Hobart, Tas: Saucepan, etc., cleaner
- 23460—C. G. Whitaker, Christchurch: Egg-carrier.
- 23461—A. H. Brownley, Onehunga: Locket.
- 23462—A. Jack, Palmerston North: Production of gas from hydrocarbon oils
- 23463—W. P. McIndoe, Invercargill: Truing up surfaces of flax-stripper beaters.
- 23464—A. I. Carr, Wharekopae: Wire-strainer.
- 23465—W. Beamish, Wellington: Cigar holder.
- 23466—The Konomax Rock-drill Syndicate, Limited, Johannesburg, Transvaal: Rock-drill and water spray therefor.
- 23467—The Konomax Rock-drill Syndicate, Limited, Johannesburg, Transvaal: Fluid actuated rock-drill, etc.
- 23468—The Konomax Rock-drill Syndicate, Limited, Johannesburg, Transvaal: Cutting machine
- 23469—O. Coates, Christchurch: Tram or railway point-sluifer.
- 23470—F. J. Swanston, Dunedin: Broom-handle coupling
- 23471—J. and R. Lindsay, Dunedin: Securing trolley-pole to car.
- 23472—R. F. Sorenson, Hastings: Gig.
- 23473—R. F. Sorenson, Hastings: Road-cart.
- 23474—R. G. Saxby, Tokomaru Bay: Girth and surcingle.
- 23475—A. J. Roycroft, Waihi: Fire alarm.
- 23476—A. H. Byron and T. M. Scott, Wellington: Wool-pressing apparatus.
- 23477—G. F. Double and E. S. Quicke, Invercargill: Holding razor blades when setting or stropping.
- 23478—I. Lewis, Hokitika: Gold concentrator.
- 23479—J. W. Synnerholm, Lower Matakana: Extracting kauri gum from sand.
- 23480—J. Ross, Wellington: Grease trap for sinks, etc.
- 23481—D. E. Davis and S. H. Knight, Hastings, and C. D. Lightbrand, Wellington: Leather roofing.
- 23482—J. H. Beamish, Auckland: Method of glass roofing.
- 23483—K. R. Macdonald, Wanganui: Combination cash and receipt book.
- 23484—C. Giorgi, Palmerston North: Mail-bag and basket lock.
- 23485—G. Beaumont, Dunedin: Belt dressing.
- 23486—F. J. I. Brown, Wanganui: Damper of register-grate.
- 23487—J. R. Brown, Los Angeles, U.S.A.: Lining for grinding mill.
- 23488—W. McKeegan, Wellington: Tension apparatus for wire-hauling ropes.
- 23489—I. J. Heskett, Brunswick, Vic.: Extraction of zinc from its sulphide.
- 23490—E. McCorrigan and E. M. Payne, Dunedin: Puzzle-box for matches.
- 23491—W. B. Curtis and D. Morrison, Auckland and Gisborne, respectively: Stripping and washing flax.
- 23492—United States Automatic Box Machinery Company, Boston, U.S.A.: Paper box-making machine.
- 23493—S. G. Roseman, Auckland: Sweeping brush or broom.
- 23494—W. H. Triggs and W. H. Denton, Christchurch: Preventing trotting horses breaking into a gallop.
- 23495—I. R. Bond, Wanganui: Hoe.
- 23496—P. Rafferty, Wellington: Trolley head attachment
- 23497—J. C. Atkinson, Auckland: Umbrella, hat and book rack combined.
- 23498—W. S. Clark, Melbourn, Vic.: Fire kindler.
- 23499—W. G. Iandells, Coburg, Vic., and H. J. Hucksion, Takenham, Vic.: Self-heating soldering bolt and blow lamp.
- 23500—A. P. Bond, Auckland: Spark arrester.
- 23501—C. C. Wakefield, London, Eng.: Gas burner.
- 23502—W. Walkerden, Marrickville, N.S.W.: Boot or shoe.
- 23503—D. Brisbane, Ardmore: Economical form of power.
- 23504—W. F. Chamberlain, Feilding: Washer.
- 23505—A. R. Wilfley, Denver, U.S.A.: Ore-roasting process.
- 23506—C. P. Stewart, Los Angeles, U.S.A.: Process for making sugar.
- 23507—American Cork and Seal Company, New York, U.S.A.: Bottle seal.
- 23508—B. Ward, Auckland: Fastening the ends of fencing wire
- 23509—A. G. Jackson, Brisbane, Queensland: Electrical releasing mechanism for clocks, etc.
- 23510—C. Loomes, Wellington: Coin-free apparatus for selling stamps, etc.
- 23511—A. K. W. Rissel and W. H. Hennah, Wellington: Recording and indicating course of a vessel.
- 23512—I. J. McBride, Christchurch: Resilient wheel for vehicles.
- 23513—G. Westinghouse, Pittsburg, U.S.A.: Yielding resistance mechanism.
- 23514—A. Ravelli, Arenzano, Italy: Utilising the movement of sea-waves.
- 23515—H. Corbett, S. Yarra, Vic.: Manure and method of manufacturing same.
- 23516—H. Corbett, S. Yarra, Vic.: Food for stock and method of manufacturing same.
- 23517—R. M. Kemp, Durham Ox, Vic.: Subsoil cultivator for attachment to ploughs
- 23518—F. G. Cottrell, Berkeley, U.S.A.: Manufacture of sulphuric acid.
- 23519—T. S. Royds, Invercargill: Milk bucket holder.
- 23520—R. Millis, Dunedin: Preparing fibre from *Phormium tenax*.
- 23521—C. M. Chamberlain, Pueblo, U.S.A.: Ore-extraction apparatus.
- 23522—W. Dixey, Burwood: Range hot-water boiler.
- 23523—J. C. Drewet, Auckland: Fibre-bleaching method.
- 23524—L. F. J. N. de Farelle, Te Kopuru: Screw propeller.
- 23525—L. H. Rogers and A. Myers, Wellington: Puncture composition for tyres.
- 23526—L. R. Ingey, Wellington: construction of metallic letters, etc., for signs.
- 23527—G. L. Burton, Napier: Acetylene generator.
- 23528—E. G. Langton, Masterton: Shirt-cuff fastener and protector.
- 23529—C. R. Skipage, Wellington: Cow-bail.
- 23530—A. E. Shipper and D. J. Smith, Kohunui: Belt fastener.
- 23531—H. W. Mears, Balfour: Feed-gear of chaff-cutters.
- 23532—M. Ruping, Charlottenberg, Ger.: Impregnating wood and other porous material.
- 23533—W. H. J. Ridley, Penrose: Furnace for extracting metals from ores.
- 23534—G. E. Partridge, Cromwell: Device for tying bundles of flax.
- 23535—H. Stephenson, Edenham: Fencing standard.
- 23536—Commonwealth Manufacturing and Galvanising Company, Limited, Brisbane, Queensland: Machine for folding edges of sheet metal.
- 23537—J. Owen, Wollstonecroft, N.S.W.: Draught fitting for retailing arated liquids from bulk.
- 23538—I. F. McCarva, Christchurch: Baby cradle.
- 23539—H. A. Fry, Nelson: Acetylene generator.
- 23540—F. C. White, Auckland: Range.

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 and Rayward, Patent Attorneys, Wellington, Auckland, Christchurch, Dunedin, etc.

## Benzol.

Benzol is a product of the distillation of hard coal. For a long time the only source was the coal tar of the gas works, which contained from 1 to 1.5 per cent. benzol and toluol together. This source was not sufficient to supply the demand in the chemical industries. A new source was opened out in the manufacture of coke by distillation. In this process tar, benzol, and ammonia were made as by-products. In 1904 Germany had 19,309 stills, of which 9110, or 47.2 per cent., delivered these by-products; the rest did not. The amount of benzol produced was but small, being only about 0.5 per cent. In that year there were made about 60,000 tons of benzol from twelve million tons of coal. Of these 60,000 tons the greatest part—about 75 per cent.—was used in the dye industry as the source of nitro-benzol, anilin, etc., for in the coal-tar dye industry Germany now has the lead. In 1906 the exportation of that country in anilin and other coal tar products amounted to 116.6 million marks, equalling, say, £5,500,000. The gas industry also used benzol for improving the quality of gas of low illuminating power. A mixture of two-thirds coal gas and one third water gas, such as now generally made by the gas-works, is usually enriched by about forty grams of benzol per cubic metre. This uses up 6000 tons per year in Germany alone. Not only in gas-works is it employed, for benzol is also used for increasing the heating power of furnaces, etc., and it is also utilised in open-air burners, such as are used for street lighting. In all, for these purposes about 1000 tons per year are used. The same material is also used as a solvent for fats, resins, guttapercha, and indiarubber; also to remove varnishes and in the extraction from bones of oil for oil-cake. The consumption for these purposes amounts to between 3000 and 4000 tons per year. There are, therefore, left for the purpose of automobiles only between 3000 and 4000 tons!