

Bridge, iron, P. Johnson.....	144,766
Bronzing machine, Chaput & Braidwood.....	144,741
Brush, fly, J. A. Lyle.....	144,779
Butter worker, D. W. Dake.....	144,662
Can, measuring, Tice & Smalley.....	144,713
Car brake, M. Karg.....	144,681
Car brake, J. B. Pelton.....	144,787
Car coupling, W. A. Cochran.....	144,658
Car coupling, A. Langellier.....	144,624
Car, dumping, L. C. Brady.....	144,654
Car spring, E. T. Bussell.....	144,600
Car, stock, O. Severance.....	144,798
Car safety platform, R. Strode.....	144,804
Carriage top, J. N. Gill.....	144,612
Carriage top, H. Saylor.....	144,704
Cartridge holding vest, J. H. Black.....	144,594
Carving machine, H. Cottrell.....	144,745
Case, numerical filing, G. W. Bettesworth.....	144,598
Chair, tilting, J. Enger.....	144,603
Churn, J. P. Friest.....	144,755
Clasp, corset, J. P. MacLean.....	144,689
Clothes wringer, T. E. McDonald.....	144,627
Clothes wringer, J. Seaman.....	144,705
Cock, lubricating, E. F. Brooks.....	144,735
Cock, stop, Redler & Bates.....	144,700
Coffee cooler, J. Burns, (r).....	5,658
Coffin, sheet metal, Farrington, Jr., et al.....	144,604
Collar and cuff, E. P. Furlong.....	144,611
Corn husking machine, L. A. Aspinwall.....	144,590
Corset clasp, J. P. MacLean.....	144,689
Cotton gin, N. W. Gaddy.....	144,668
Cotton gin, R. McKenna, (r).....	5,663
Cultivator, R. S. Cavett.....	144,740
Cylinder and piston valve, Pickling et al.....	144,788
Desk, etc., writing, D. Schafer.....	144,636
Door securer and key ring, J. P. Tuck.....	144,642
Dough, machine for sheeting, O. B. Fuller.....	144,666
Eaves trough, P. F. Kiblinger.....	144,770
Embalming fluid, W. E. Chenoweth.....	144,602
Engine, compound, W. Wright.....	144,817
Engine, rotary, P. Worrall.....	144,722
Engines, frame for horizontal, W. Wright.....	144,818
Engine reversing mechanism, G. W. Bishop.....	144,731
Engine relief valve, fire, W. Jeffers.....	144,765
Excavator, D. Judd.....	144,679
Eyelet making machinery, W. R. Landfear, (r).....	5,662
Feather duster, C. L. W. Baker.....	144,685
Fence, portable, B. L. Taylor.....	144,728
Fire arm, revolving, D. Williamson.....	144,814
Fire arm, revolving, D. Williamson.....	144,815
Fire extinguisher, G. Booth.....	144,595
Fire water pipe, T. Miller.....	144,690
Fire place, W. Hoyland.....	144,675
Fire, protecting buildings against, W. McAllister.....	144,625
Fires, distributor for extinguishing, G. J. Orr.....	144,696
Food, preserving, W. G. Barbee.....	144,582
Furnace, evaporating, M. L. Keen.....	144,682
Furnace, blast for boiler, R. Gigodot.....	144,757
Game table, R. R. Crawford.....	114,659
Garment, under, O. P. Flynt.....	144,609
Gas dip pipe, sealing, E. Jones.....	144,619
Gate, G. W. & G. S. Mackey.....	144,780
Generator, carbonic acid, F. W. Wiesebrock.....	144,719
Glass blowers, tool for, J. G. Mustin.....	144,628
Glove, T. G. Foster.....	144,665
Grain distributor, rotary, A. D. Foote.....	144,753
Grain dryer, A. Soper.....	144,710
Gum, compound vulcanizable, D. M. Lamb.....	144,622
Gums, etc., treating, D. M. Lamb.....	144,623
Hammer, revolving, G. Stacy.....	144,638
Harness saddle, A. Gilliam.....	144,613
Harvester, binder attachment, H. Porter.....	144,739
Harvester, binder attachment, T. Urdahl.....	144,715
Harvester, cotton, W. H. Pedrick.....	144,629
Harvester rake, E. Lippoldt.....	144,683
Heating apparatus, W. C. Baker.....	144,650
Hinge for vault doors, H. Gross.....	144,669
Horses, heel boot for, W. Mathis.....	144,732
Hub boring machine, F. Jonas.....	144,618
Hydrocarbon, burning, C. H. Cushing.....	144,660
Ice house, A. Wilbur.....	144,720
Ingot mold, J. Felix.....	144,605
Inking apparatus, I. Hart.....	144,673
Insulating compound, Reed & Phillips.....	144,794
Ironing machine, G. W. Cottingham.....	144,743
Kneading board, H. P. Jones.....	144,768
Knife, hay, J. S. Ball.....	144,591
Knobs, attaching, S. A. Brackett.....	144,597
Liquids, drawing effervescent, T. Warker.....	144,809
Lithographic printing form, I. Reynolds.....	144,796
Lock, permutation, H. Gross.....	144,670
Locomotive wheel, J. R. Richardson (r).....	5,685
Loom, narrow ware, R. B. Fowler.....	144,610
Loom shuttle, N. D. Chapman.....	144,657
Loom temple, Allen & Stimpson.....	144,647
Looms, take-up mechanism for, C. Gahren.....	144,756
Mangle, E. Gundlach.....	144,671
Match safe, J. & A. Helm.....	144,615
Measure, hatter's head, F. A. Fenton.....	144,606
Meter, fluid, H. A. Desper.....	144,747
Middlings bolt, A. G. & H. W. Mowbray.....	144,733
Mill, guide for rolling, C. H. Perkins.....	144,632
Mill, guide for rolling, C. H. Perkins.....	144,633
Mill, paint, R. Byrne.....	144,656
Mill, rolling, C. H. Perkins.....	144,631
Miner's pick, R. K. Walton.....	144,808
Mower, lawn, W. Allen.....	144,725
Mug, shaving, Furr & Knaus.....	144,667
Mustache shield, J. J. Gneoush.....	144,614
Net, mosquito, T. M. Prentiss.....	144,792
Nippers, etc., cutting, P. Broadbooks.....	144,734
Oil, etc., purifying, D. M. Lamb.....	144,621
Ore stamp reeder, J. Tullock.....	144,714
Ores, separating metals from, S. W. Kirk.....	144,772
Organ action, reed, W. N. Manning.....	144,781
Overhoe, G. Watkinson.....	144,810
Pantaloon stretcher, J. D. Ryan.....	144,703
Pantaloon, steaming and drying, E. B. Viets.....	144,644
Paper to fix marks, treating, H. M. Johnston.....	144,678
Paper holder, shelf, G. F. Hawkins.....	144,763
Pavement, W. H. De Vallin.....	144,748
Pavements, treating brick for, W. H. De Vallin.....	144,749
Photograph negatives, retouching, D. H. Wright.....	144,723
Picture frame, J. A. Burch.....	144,599
Picture frame and exhibiter, B. Anyan.....	144,648
Pipe joint, J. Demarest.....	144,663
Planter, corn, L. Sipe.....	144,708
Planter, corn, A. Springsteen.....	144,711
Planter, cotton, C. H. Nixon.....	144,784
Planter, cotton seed, D. P. Ferguson.....	144,607
Planter, hand corn, E. Rogers.....	144,701
Plow, E. Bourne.....	144,653
Plow, J. S. Hall.....	144,760
Plow, J. Oliver.....	144,785
Plow, Shipp, Peterson, & McLurd.....	144,707
Plow, draft attachment for, N. Westcott.....	144,811
Plug and faucet connection, tap, J. F. Kane.....	144,680
Pocket attachment, safety, R. L. Russell.....	144,704
Polishing tool, H. Cottrell.....	144,744
Postal card, H. M. Johnston.....	144,677
Press, cotton, T. D. Leonard.....	144,775

Press, hay, H. F. Blank.....	144,733
Printing press, G. W. Prouty (r).....	5,664
Printing press, rotary, C. C. Child.....	144,742
Pumps, sucker rod joint for, A. M. Williams.....	144,813
Purifier, middlings, G. Parker.....	144,697
Rake, L. A. Powers.....	144,791
Register, hot air, W. Highton.....	144,616
Rice, machine for separating, H. B. Stevens.....	144,803
Salt and pepper dredge, D. C. Ripley (r).....	5,666
Sash fastener, E. Burstow.....	144,655
Sawing machine, band, Roche & Orton.....	144,797
Scraper, road, J. W. Weston.....	144,717
Screw blanks, etc., shaving, Nugent & Fanning.....	144,693
Seaming machine, A. S. Munger.....	144,691
Sewing machine hemmer, W. L. Apthorp.....	141,649
Sewing machine hemmer, Bryant & McGaw.....	144,736
Sewing machine hemmer, L. Sexauer.....	144,706
Sewing machine button hole stitcher, Hansen et al.....	144,672
Shoe blacking, J. L. Sneed.....	144,801
Skate, J. A. Forbes (r).....	5,660
Skate, J. A. Whelpley.....	144,718
Skirt protector, J. Jenkinson.....	144,617
Slate and blackboard rubber, H. W. Holly.....	144,764
Sleigh, A. D. De Lano.....	144,746
Soda water draft tube, O. Zwietusch.....	144,646
Spark arrester and conductor, E. Shoemaker.....	144,637
Spinning machine spindle, W. T. Carroll.....	144,661
Spinning rings, repairing, H. L. Pierce.....	144,630
Spool case, A. W. Harper.....	144,762
Spring for chairs, etc., W. T. Doremus.....	144,664
Stair rod fastener, W. B. Gould.....	144,758
Stair rod fastener, W. B. Gould.....	144,759
Stilts, T. J. Sheears.....	144,799
Stone cutter, G. Stacy.....	144,640
Stone cutter tools, etc., fastening, G. Stacy.....	144,639
Stool or chair, revolving, J. J. Vollrath.....	144,806
Stove damper, H. H. Huntley.....	144,676
Stove pipe damper, J. M. Read.....	144,634
Stud and button, F. E. Brown.....	144,598
Sugar draining machine, C. Fischer.....	144,752
Syringe and pump, J. Speak.....	144,802
Syringe, hypodermic, E. Cutter.....	144,661
Table and desk, combined, C. Kade.....	144,769
Tackle block, chain, S. D. Backus.....	144,727
Tacks, etc., coating, G. Starks.....	144,712
Tea kettle, N. Plympton.....	144,698
Teeth, fastening, G. F. C. Reese.....	144,699
Telegraph, signaling, Unger & Towle.....	144,643
Telegraph key, Billings & Stockly.....	144,730
Telegraph, stop for printing, C. J. Wiley.....	144,812
Thrashing machine, J. M. Wilders.....	144,721
Toy gymnast, F. A. Bancker.....	144,651
Toy propeller, G. W. Jones.....	144,767
Track clearer, E. Abbiati.....	144,724
Trimming, W. Walker.....	144,804
Tag holder, T. J. Bottomley (r).....	5,657
Tweezers, Bessemer steel, J. E. Atwood.....	144,726
Tyre tightener, Bellairs & Ough.....	144,729
Valve, C. F. Murdock.....	144,692
Vegetable cutter, J. Kram.....	144,773
Vegetable cutter, J. R. Wharry.....	144,645
Vegetable slicer, N. Botsford.....	144,596
Vehicles, seat for, U. C. Snyder.....	144,709
Vehicles, shifting top for, H. K. Porter.....	144,790
Wagon axle skeins, clip for, J. M. Orput.....	144,695
Wagon, dumping, W. Fields.....	144,668
Wagon draw bar, J. M. Orput.....	144,694
Warp threads, rod for drawing in, M. S. Jordan.....	144,620
Washing machine, J. Trickett.....	144,805
Water, purifying mine, H. Burgess.....	144,737
Wells, steaming oil, T. B. Carothers (r).....	5,659
Whiffletree, J. Parker.....	144,736
Windmill, Atwood & Bodwell (r).....	5,656
Window fastening, storm, A. J. Lovejoy.....	144,634
Wood joining, R. McChesney.....	144,626

APPLICATIONS FOR EXTENSIONS.

Applications have been duly filed, and are now pending for the extension of the following Letters Patent. Hearings upon the respective applications are appointed for the days hereinafter mentioned:

27,241.—PHOTOGRAPH CAMERA.—A. Semmendinger, Feb. 4

27,291.—SEED PLANTER.—J. S. Huggins, Feb. 11

27,406.—CULTIVATOR.—R. Craig, Feb. 18

EXTENSIONS GRANTED.

26,177.—MAKING RUBBER BELTING.—D. C. Gately.

26,178.—RUBBER BELTING.—D. C. Gately.

DESIGNS PATENTED.

6,996.—LOCK CASE.—W. H. Andrews, New Haven, Conn.

6,997.—WHEEL HUBS.—J. R. Locke, Amesbury, Mass.

6,998 to 7,001.—C. T. & V. E. Meyer, Bergen, N. J.

TRADE MARKS REGISTERED.

1,527.—ICE PITCHERS.—Adams & Co., Brooklyn, N. Y.

1,528.—SOAP POWDERS.—B. T. Babbitt, New York city.

1,529.—BAKING POWDER.—B. T. Babbitt, New York city.

1,530.—COMPOUND SPOKE.—E. R. Durkee & Co., N. Y. city.

1,531.—MEDICINE.—W. H. Gregg & Co., Elmira, N. Y.

1,532.—KID GLOVES.—F. Hegle, New York city.

1,533.—CUTLERY.—I. T. Meyer & Co., New York city.

1,534.—GOLD AND SILVER SOLUTIONS.—A. B. Morrison, Portland, Me.

1,535.—AGRICULTURAL IMPLEMENTS.—Rumsey & Co., St. Louis, Mo.

1,536.—DRYERS, ETC.—G. C. Liszka, Williamsburgh, N. Y.

SCHEDULE OF PATENT FEES.

On each Caveat.....	\$10
On each Trade Mark.....	\$25
On filing each application for a Patent (17 years).....	\$15
On issuing each original Patent.....	\$20
On appeal to Examiners-In-Chief.....	\$10
On appeal to Commissioner of Patents.....	\$20
On application for Reissue.....	\$30
On application for Extension of Patent.....	\$50
On granting the Extension.....	\$50
On filing a Disclaimer.....	\$10
On an application for Design (3 1/2 years).....	\$10
On an application for Design (7 years).....	\$15
On an application for Design (14 years).....	\$30

[Specially reported for the Scientific American.]

CANADIAN PATENTS.

LIST OF PATENTS GRANTED IN CANADA

FROM NOVEMBER 13 TO NOVEMBER 24, 1873.

2,841.—J. M. Killin, Pittsburg, Pa., U. S. Improvement on molder's gates or sprues, called "Killin's Molders' Gate." Dated Nov. 13, 1873.
2,842.—O. Sherwood, Jr., Brome township, P. Q. Machine for coupling railway cars, called "Sherwood's Self Railway Car Coupler." Nov. 13, 1873.
2,843.—D. DeCastro, of Mortlake, Surrey county, Eng., and R. Burton, Camden town, Middlesex county, Eng. Im-

provement on gas meters, called "The Imperial Compensating Wet Gas Meter." Nov. 13, 1873.
2,844.—W. A. Telling and Samuel Johnson, Wood Green, Middlesex county, Eng. Improvement on gas meters, called "The Imperial Dry Gas Meter." Nov. 13, 1873.
2,845.—J. Brunet and L. Bellefeuille, Montreal, P. Q. Machine a presser la tourbe, called "Machine a Presser La Tourbe de Brunet et Bellefeuille." "Machine for pressing peat." Nov. 13, 1873.
2,846.—J. K. Home, Almonte, Lanark county P. Q. Improvements on patterns for pipe elbows, describing the swift to form miter joints of elbow pipes at various angles, called "J. H. Holmes' Patterns for Pipe Elbows." Nov. 13, 1873.
2,847.—D. C. Baker, Fulton, N. Y., U. S. Improvement on cultivators, called "Baker's Cultivator." Nov. 13, 1873.
2,848.—D. C. Baker, Fulton, N. Y., U. S. Bolt holders for railroad rails, called "Baker's Railroad Bolt Holder." Nov. 13, 1873.
2,849.—S. Rue, Philadelphia, U. S. Improvements on injectors for steam generators, called "Rue's Little Giant Injector." Nov. 13, 1873.
2,850.—J. W. Stockwell, Portland, U. S. Machine for the manufacture of cement pipe, called "Stockwell's Cement Pipe Machine." Nov. 13, 1873.
2,851.—J. W. Stockwell, Portland, U. S. Improvements in mixing machines, called "Stockwell's Improved Mixing Machine." Nov. 13, 1873.
2,852.—S. B. Munson, Jr., Chicago, U. S. Improvements on fireproof shutters, called "Munson's Fireproof Shutter." Nov. 13, 1873.
2,853.—G. W. Cottingham, St. Mary's, Texas, U. S. Machine for ironing clothes, called "Cottingham's Ironing Machine." Nov. 13, 1873.
2,854.—H. Bolton, Brantford, Ontario. Improvements on piano stools, called "Improved Double Adjustable Piano Stool Back." Nov. 13, 1873.
2,855.—H. Spear, Elizabeth, Cumberland county, Maine, U. S. Improvements on pumps, called "Spear's Pump." Nov. 13, 1873.
2,856.—N. C. Locke, Saicm, Mass., U. S. Improvements on pressure regulators for steam or water, called "Locke's Pressure Regulator for Steam or Water." Nov. 13, 1873.
2,857.—M. Merrick, Oswego, U. S., assignee of H. Tilden, Philadelphia, U. S. Improvements on gas machine, called "Tilden's Improved Gas Machine." Nov. 14, 1873.
2,858.—Ed. Beanes, Toronto, Ontario. Extension of Patent No. 41, for improvements in brewing. Nov. 14, 1873.
2,859.—G. Borden, White Plains, N. Y., U. S., and J. G. Borden, South East, Putnam county, N. Y., U. S. Improvements on the manufacture or product of condensed milk, called "Borden's Manufacture or Product of Condensed Milk." Nov. 14, 1873.
2,860.—G. Borden, White Plains, N. Y., U. S., and J. G. Borden, South East, Putnam county, N. Y., U. S. Process of preserving and condensing milk, called "Borden's Process for Preserving and Condensing Milk." Nov. 14, 1873.
2,861.—W. G. Dunn, Hamilton, Ontario. Movable self feed attachment for coal cooking stoves, called "Dunn's Removable Self-feeding Attachment for Cooking Stoves." Nov. 14, 1873.
2,862.—T. O. Kemp, Clinton, Lincoln county, Ontario. A boiler attachment for removing scum and other impurities from boilers of steam engines, and also for preventing scale attaching to boilers and their tubes, called "Kemp's Patent Boiler Attachment." Nov. 15, 1873.
2,863.—E. C. Flint, Belleville, Ontario, assignee of E. P. Needham, New York city, U. S. Key for musical instrument, called "Needham's Improved Key for Musical Instruments." Nov. 15, 1873.
2,864.—J. R. Finley, Delhi, Ind., U. S. Improvements on gates, called "Finley's Improved Gate." Nov. 15, 1873.
2,865.—C. Kendall, Beloit, Wis., U. S. Machine for renovating and drying feathers, called "Kendall's Paragon Feather Renovator." Nov. 15, 1873.
2,866.—R. Burdett, Erie City, Pa., U. S. Improvement in reed organs, called "Burdett's Improved Reed Organ." Nov. 15, 1873.
2,867.—J. C. Ford and A. D. Cable, Montreal. Improvement on attachment for securing horses, called "Ford's Adjustable Leg Halter." Nov. 15, 1873.
2,868.—A. Pelletier, Washington, U. S., Rev. J. B. A. Brouillet, Walla Walla, Washington Territory, U. S., and H. Lafleur, Yamaska, P. Q. Composition of matter for the manufacture of artificial stone and for other purposes, called "Pelletier's Artificial Stone and Cement." Nov. 15, 1873.
2,869.—M. Henry, Parkhill, Ontario, and J. B. Steele, Montreal. Composition of matter for lighting fires, called "Henry's Fire Kindler." Nov. 21, 1873.
2,870.—J. West, Matstone, Kent county, Eng. Method of manufacturing gas and the apparatus to be employed therewith, called "West's Improved Gas Manufacturing Apparatus." Nov. 21, 1873.
2,871.—C. Vandandaigne, dit Sabois, Baltic, Conn., U. S. Improvement on washing machines, called "The Baltic Washing Machine." Nov. 21, 1873.
2,872.—A. Wilson and E. M. Law, Bell Ewart, Simcoe county, Ontario. Improvement on sash fasteners, called "Wilson and Law's Improved Sash Fastener." Nov. 21, 1873.
2,873.—E. B. Sims, Antwerp, Jefferson county, N. Y., U. S. Improved door bells, called "Sims' Improved Door Bell." Nov. 21, 1873.
2,874.—W. Vincent, Arbofield, Berkshire, Eng. Apparatus for manufacturing gas, called "Vincent's Gas Apparatus." Nov. 21, 1873.
2,875.—H. Brewer, East Parsonfield, York county, U. S. Improvement on wagon brakes, called "The Brewer Wagon Brake." Nov. 21, 1873.
2,876.—A. J. Sorenson, Erie, Pa., U. S. Improvement on cases for cabinet organs, called "Sorenson's Improved Case and Sliding Fall." Nov. 21, 1873.
2,877.—W. R. Peck, Chatham, Kent county, Ontario. Machine for molding the frame work of vessels, ships and other material, called "Peck's Adjustable Frame Mold." Nov. 21, 1873.
2,878.—C. B. Hunt, Springville, Susquehanna county, Pa., U. S. Improvement in drills, called "Hunt's Hammer Twist Drill." Nov. 24, 1873.
2,879.—H. Gregory, Rockland, Maine, U. S. Improvement on elastic friction bands for booms of vessels, called "Gregory's Elastic Friction Band for Booms of Vessels." Nov. 24, 1873.
2,880.—H. Hinds, Ottawa, Ontario, assignee of H. Johnson of same place. Improvement on drum heaters for stoves and pipes, called "Johnson's Improved Stove Drum Heater." Nov. 24, 1873.
2,881.—J. Lewis, Manchester, Eng. Improvement on locomotive engine, called "Lewis' Improved Locomotive." Nov. 24, 1873.
2,882.—C. Carpenter, Hamilton, Wentworth county, Ontario. Attachments for door knobs and spindles, called "Carpenter's Door Knob and Spindle Attachments." Nov. 24, 1873.

HOW TO OBTAIN Patents and Caveats IN CANADA.

PATENTS are now granted to inventors in Canada, without distinction as to the nationality of the applicant. The proceedings to obtain patents in Canada are nearly the same as in the United States. The applicant is required to furnish a model, with specification and drawings in duplicate. It is also necessary for him to sign and make affidavit to the originality of the invention.

The total expense, in ordinary cases, to apply for a Canadian patent, is \$75, U. S. currency. This includes the government fees for the first five years, and also our (Munn & Co.'s) charges for preparing drawings, specifications and papers, and attending to the entire business. The holder of the patent is entitled to two extensions of the patent, each for five years, making fifteen years in all.

If the inventor assigns the patent, the assignee enjoys all the rights of the inventor.

A small working model must be furnished, made to any convenient scale. The dimensions of the model should not exceed twelve inches.