

INDEX OF INVENTIONS.

Ammonia, salts of, R. O. Paterson and F. W. Brothers.....	5535
Axle box and axle, A. Payette.....	5580
Bar, pinch, spike and claw, D. Brennan.....	5581
" square and mitre combined, J. C. Rorick	5584
Barrel, D. S. Cornell and W. Aldridge.....	5519
Book-keeping game board, W. F. Lamb and J. B. Atwood.....	5572
Bottle stopper, A. Christin.....	5511
Boxes scale board, H. W. Hutchins.....	5576
Brick and tile machine, G. S. Tiffany.....	5591
Cattle stall, I. R. Marsh and J. Bell.....	5534
Cement, hydraulic, A. W. Shaw.....	5555
Chair legs, pads for, " T. Lintner, M. E. Weller and A. Walrath.....	5507
" &c, tenon fastening for, L. D. Craig.....	5589
Cloth flocking, H. N. Slater.....	5514
Door knob, (extension), C. Carpenter.....	5587
Dusters, J. L. Little.....	5580
Egg beater, J. Howes.....	5552
Fanning mill, W. D. and J. N. Edy.....	5536
" and separator, R. Lean and L. Barthel.....	5538
Fruit honey, L. Hurd.....	5537
Gate, automatic, L. Flagg.....	5539
Harrow, revolving, H. Wells.....	5516
Heating water, T. M. Carroll.....	5585
Horse rake, F. G. Butler.....	5565
Iron, cast, converting into steel, C. L. Jeffords.....	5558
Kneading trough and yeast mill, F. Beauchemin.....	5559
Lamp extinguisher, A. E. Edholm.....	5574
Land roller, J. Woodbridge.....	5569
Lubricating cups, R. W. Drew and M. P. R. B. Shackell.....	5558
Metals, heating and smelting ores, A. Smith.....	5551
Mowing and reaping machine, J. H. Grant.....	5561
Nut lock, J. B. Atwood.....	5532
Ores, smelting, and heating metals, A. Smith.....	5551
Organ, reed, G. Blatchford.....	5570
Paint, climatic and fire proof, J. C. Smith.....	5532
Pegging machine, E. P. Richardson.....	5529
Planter, hand corn, G. W. Robinson.....	5553
" seed, &c, F. B. H. Saxton and W. A. Boyd.....	5531
Pulleys, dead, constructing, A. Newell and A. B. Cook.....	5548
Pump, G. W. Johnson.....	5557
" chain, bucket for, A. D. Crosby.....	5542
" elastic rubber bucket for, S. C. Hamlin.....	5543
" steam, T. Northey.....	5566
Railway carriage coupling, W. Dorr.....	5533
" station indicator, A. Ramsay.....	5536
" stock cars, J. R. McPherson.....	5577
Resonance to metallic bodies, B. Silliman and H. C. Wilcox.....	5575
Sash holder, H. Gilmore.....	5515
Sewing machine, J. Keith.....	5590
Shirt front stretcher and ironing board, S. B. Morrell.....	5578
Skates, P. Rodier.....	5571
Square and mitre bar combined, J. C. Rorick.....	5584
Stave jointing machines, B. Barker.....	5568
Steam, boiler and heating, G. J. Tandy.....	5551
" removal, &c, of scale in, L. Ell, Hurd.....	5510
Stove drum, T. J. O. Sullivan.....	5563
" dumb, G. W. Kennedy.....	5530
Telegraph, copying, W. E. Sawyer.....	5579
Wash board, E. J. and R. P. Duff and E. A. Kitzmiller.....	5573
Watch case spring, A. S. Buckelow.....	5562
Water closet, R. D. O. Smith.....	5564
" filter, P. de la Neuville.....	5533
Weather strip, W. P. Widdfield.....	5517
" W. Milner.....	5560
Well auger, W. W. Jitz.....	5592
Yeast mill and kneading trough, F. Beauchemin.....	5559

INDEX OF PATENTEES.

Aldridge, William, and D. S. Carrell, barrel.....	5549
" barrel and cylindrical box.....	5550
Atwood, James B., lock nut.....	5582
" and W. F. Lamb, book keeping game board.....	5572

Barker, Benjamin, stave jointing machine.....	5563
Barthel, Lewis, and R. Lean, fanning mill and separator.....	5538
Beauchemin, Fulgence, kneading trough and grist mill.....	5559
Bell, Ira, and J. R. Marsh, cattle stalls.....	5534
Blatchford, George, reed organ.....	5570
Boyd, William A., and F. B. H. Saxton, seed, &c, planters.....	5531
Brennan, Dennis, pinch, spike and claw bar.....	5581
Brothers, Francis W., and R. O. Paterson, salts of ammonia.....	5535
Buckelow, Ansel S., watch case spring.....	5562
Butler, Francis G., horse rake.....	5565
Carpenter, Charles, door knob.....	5587
Curroll, Thomas M., heating water.....	5585
Christin, Arthur, bottle stopper.....	5511
Cornell, David S., and W. Aldridge, barrel.....	5519
" " " barrel and cylindrical box.....	5550
Cook, Asa B. and A. Newell, constructing dead pulleys.....	5548
Craig, Lee D., tenon fastening for chairs, &c.....	5589
Crosby, Adam D., bucket for chain pump.....	5512
Dorr, Warren, railway carriage coupling.....	5533
Drew, Reuben W., and M. P. R. B. Shackell, lubricating cups.....	5558
D " Eliza J., and Robert P. and E. A. Kitzmiller, wash board.....	5573
Edholm, Axel F., (assignee), lamp extinguisher.....	5574
Eddy, William D., and James N., fanning mill.....	5556
Flagg, Lysander, automatic gate.....	5539
Gillmore, Harmon, sash holder.....	5545
Grant, John H., mowing and reaping machine.....	5561
Hamlin, Solomon C., elastic rubber bucket for chain pump.....	5543
Howes, John, egg beater.....	5552
Hurd, L. Ell, removal, &c, of scale in steam boilers.....	5540
" Lewis, fruit honey.....	5537
Hutchins, Harrison W., scale board boxes.....	5576
Jeffords, Charles L., converting cast iron into steel.....	5558
Jitz, William W., well auger.....	5592
Johnson, George W., pump.....	5557
Keith, Jeremiah, sewing machine.....	5590
Kennedy, George W., dumb stoves.....	5530
Kitzmiller, Edward A., E. J. and R. P. Duff, wash board.....	5573
Lamb, Watson F., and J. B. Atwood, book keeping game board.....	5572
Lean, Roderick, and L. Barthel, fanning mill and separator.....	5538
Lintner, William T., M. E. Weller and A. Walrath, pads for chair legs.....	5567
Little, John L., duster.....	5586
McPherson, John R., stock cars.....	5577
Marsh, Isaac R., and I. Bell, cattle stalls.....	5534
Milner, William, weather strip.....	5560
Morrell, Sidney B., shirt front stretcher and ironing board.....	5578
Neuville, Paul de la, water filter.....	5583
Newell, Augustus, and A. B. Cook, constructing dead pulleys.....	5548
Northey, Thomas, steam pump.....	5566
O'Sullivan, Thomas J., stove drum.....	5563
Payette, Adolphe, axle box and axle.....	5580
Paterson, Robert O., and F. W. Brothers, salts of ammonia.....	5535
Ramsay, Alexander, railway station indicator.....	5536
Richardson, Everett, pegging machine.....	5529
Robinson, George W., hand corn planter.....	5553
Rodier, Peter, skates.....	5571
Rorick, John C., combined square and mitre bar.....	5584
Sawyer, William E., copying telegraph.....	5579
Saxton, Francis B. H., and W. A. Boyd, seed, &c, planters.....	5531
Shackell, Margaret P. R. B., and R. W. Drew, lubricating.....	5558
Shaw, Angus W., hydraulic cement.....	5555
Sullivan, Benjamin, and H. C. Wilcox, resonance to metallic bodies.....	5575
Slater, Horatio N., flocking cloth.....	5514
Smith, Ananias, heating metals and smelting ores.....	5551
" John C., climatic and fire proof paint.....	5532
" Robert D. O., water closet.....	5564
Tandy, George J., boilers for steam and heating.....	5551
Tiffany, Georges, brick and tile machine.....	5591
Walrath, Alphonzo, W. T. Lintner and M. E. Weller, pads for chair legs.....	5567
Weller, Marvin E., W. T. Lintner and C. Walrath, pads for chair legs.....	5567
Wells, Henry, revolving drag harrow.....	5516
Widdfield, Watson P., weather strips.....	5517
Wilcox, Horace C., and B. Sullivan, resonance to metallic bodies.....	5575
Woodbridge, John, land roller.....	5569