

Flour mill, A. N. Wolf ..... 255,747  
 Foci meter, A. L. Smith ..... 255,468  
 Foot rail and dash attachment, combined, F. C. Ayer ..... 255,543  
 Frame. See Spectacle frame.  
 Fringe, chenille, J. C. Graham ..... 255,501  
 Fruit drier, C. A. Curran ..... 255,602  
 Furnace. See Portable furnace.  
 Galvanic battery, Childs & Shaw ..... 255,597  
 Gaslighter, electric, Mahon & Green ..... 255,524  
 Gas regulator, G. S. Lacey ..... 255,517  
 Gate, C. H. Allison ..... 255,481  
 Gate, S. S. Durbon ..... 255,486  
 Gear cutting machine, A. H. Brainard ..... 255,409  
 Generator. See Steam generator.  
 Glass, machine for blowing window, Hards, Jr., & Phillips ..... 255,503  
 Grain bin, E. Holmes ..... 255,507  
 Grain binder, J. F. Appleby ..... 255,712  
 Grain binder, J. F. Appleby, W. N. Whiteley et al. .... 255,741  
 Grain drill attachment, H. C. Pratt ..... 255,668  
 Grain drying apparatus, J. Barclay ..... 255,584  
 Grain packer, W. Blyley ..... 255,569  
 Grain separator, J. A. Krake ..... 255,435  
 Grate, fire, Weaver & Norton ..... 255,479  
 Grating, illuminating, T. Hyatt ..... 255,511  
 Grinding mill, roller, R. Birkholz ..... 255,715  
 Guard. See Insect guard.  
 Hammer, drop, C. A. Hague ..... 255,619  
 Hanger. See Chandelier hanger. Clothes hanger.  
 Harness and bridle loop, metallic, J. Watters ..... 255,709  
 Harness fastener, M. Claus ..... 255,416  
 Harrow, mounted, A. J. Nellis ..... 255,529  
 Harvester elevator, J. M. Curtis ..... 255,603  
 Harvester rake, R. T. Tuttle ..... 255,476  
 Harvester raking mechanism, M. M. Hooton ..... 255,510  
 Harvesting machine, J. Keys ..... 255,635  
 Hat, S. D. Robinson ..... 255,674  
 Hatchway door operator, automatic, J. L. Peters ..... 255,663  
 Hay rake, horse, A. A. Noyes ..... 255,658  
 Hay rake, horse, C. Scholz ..... 255,681  
 Hay rake, revolving sulky, T. Miltenberger ..... 255,445  
 Heater. See Car heater. Feed water heater.  
 Heating bath tubs by steam, J. Reilly ..... 255,535  
 Hitching strap, F. Bonelli ..... 255,574  
 Hoe, U. Wassmer ..... 255,708  
 Holder. See Blind slot holder. Lamp shade holder. Mop holder. Music holder. Photographic plate holder. Shade holder. Thread holder.  
 Hook. See Cornice hook.  
 Hoop splints, mechanism for and method of forming, H. F. Campbell ..... 255,412  
 Horse power, T. A. Brewer ..... 255,583  
 Hose clamp, Shepherd & Miller ..... 255,465  
 Hose pipe, B. Holland, Jr. .... 255,730  
 Hose pipe, stand, B. Holland, Jr. .... 255,430  
 Hosiery, manufacturing, Borton & Wilcox ..... 255,579  
 Houses for purposes of ventilation, etc., construction of, P. G. Eaton ..... 255,608  
 Hub block boring machine, J. S. Reid ..... 255,670  
 Ice floor for cold storage houses, H. C. Cain ..... 255,439  
 Ice, method of and apparatus for making, O. Parker ..... 255,660  
 Insect guard, Flood & Kromwell ..... 255,499  
 Iron. See Saw iron. Whifflet-ee iron.  
 Jack. See Lifting jack. Wagon jack.  
 Joint. See Pipe joint.  
 Joint for pipes and fittings, J. R. Moore ..... 255,734  
 Knob attachment, E. L. Phipps (r) ..... 10,066  
 Lamp, W. A. Hull ..... 255,629  
 Lamp, R. Marsh ..... 255,440  
 Lamp, electric, C. Lever ..... 255,521  
 Lamp, electric, C. W. Siemens ..... 255,466  
 Lamp, incandescent electric, P. Diehl ..... 255,497  
 Lamp shade holder, W. A. Hull ..... 255,731  
 Lifting jack, J. Nixon ..... 255,656  
 Light. See Skylight.  
 Line, cord, ropes, cables, and oakum, manufacture and treatment of, J. Coulson ..... 255,600  
 Lock. See Firearm lock. Nut lock. Permutation lock.  
 Locket, J. Rothschild ..... 255,677  
 Loom temple roller, J. B. Stamour ..... 255,639  
 Lubricator, E. McCoy ..... 255,443  
 Lunch receptacle and muff, S. A. Cunningham ..... 255,420  
 Magnets, armature for electro, O. C. Woolson ..... 255,749  
 Mailing package, A. Christy ..... 255,415  
 Mailing packet, A. Christy ..... 255,414  
 Masher and strainer, vegetable, L. Becker ..... 255,570  
 Match card machine, G. Hargreaves ..... 255,621  
 Match igniter, J. R. Donnelly ..... 255,605  
 Meshed or netted fabric, A. Beals ..... 255,407  
 Metals, gilding, P. A. Dode ..... 255,421  
 Metals, hardening, C. M. Daboll ..... 255,725  
 Meter. See Foci meter.  
 Mill. See Attrition mill. Coffee and spice mill. Flour mill. Grinding mill. Pulverizing mill. Stamping mill.  
 Mill spindle bearing, G. F. Senter ..... 255,541  
 Milling tool, W. N. Buckley ..... 255,589  
 Mop holder and wringer, combined, J. H. Omo ..... 255,448  
 Motion, device for converting reciprocating into rotary, W. H. Ryther ..... 255,735  
 Motor. See Embroidering machine motor.  
 Mowing and reaping machines, sickle bar for, E. T. Spottswood ..... 255,688  
 Mowing machine, J. A. Carls ..... 255,718  
 Music holder, A. H. Merrill ..... 255,649  
 Musical instruments, key board attachment for, G. R. Elliott ..... 255,609  
 Net, gill, M. & T. Reynolds ..... 255,671  
 Net, sponge fishing, E. Arapian ..... 255,561  
 Nut lock, J. Graham ..... 255,428  
 Nut lock, A. F. MacDonald ..... 255,439  
 Nut tapping machine, W. E. Ward ..... 255,478  
 Ore roasting apparatus, H. O. Reinhardt ..... 255,537  
 Ore separator, G. A. Metcalf ..... 255,651  
 Organ, W. L. Merrin ..... 255,650  
 Organ case and pedal, S. B. J. Bryant ..... 255,410  
 Packing box, knockdown, F. C. Rockwell ..... 255,458  
 Packing for pump pistons, etc., B. Holland, Jr. .... 255,729  
 Pail, milking, A. C. Tracy ..... 255,702  
 Paint pail, J. Thomas ..... 255,696  
 Pan. See Patty pan.  
 Pantaloon, W. Hyams ..... 255,631  
 Paper hanging or wall paper, E. Leissner ..... 255,437  
 Pasteboard, etc., machine for cutting and scoring, G. L. Jaeger ..... 255,632  
 Patty pan, A. Vuillier ..... 255,706  
 Pavement, C. A. Snyder ..... 255,687  
 Permutation lock, C. Seybold ..... 255,463  
 Photographic plate holder, E. B. Barker ..... 255,596  
 Pick, E. R. Ray ..... 255,533  
 Pipe. See Drive pipe. Hose pipe.  
 Pipe coupling, S. Lightburne, Jr. .... 255,523  
 Pipe joint, W. Forman ..... 256,427  
 Pither top, strap, Tallman & Day ..... 255,693  
 Planter, corn, W. L. Hutson ..... 255,630  
 Planter, cotton seed, R. M. & J. M. Brooks ..... 255,585  
 Planters, cheek row attachment for corn, F. B. Tait ..... 255,472

Plate, dinner, J. David ..... 255,726  
 Plow, sulky, W. B. Young ..... 255,557  
 Ploving, steam, F. B. Brutschke ..... 255,587  
 Pool rack, Henn & Jennings ..... 255,625  
 Portable furnace and boiler, combined, B. L. Ryder ..... 255,462  
 Post. See Fence post.  
 Pot. See Coffee pot.  
 Power. See Horse power.  
 Preserving room, provision, E. R. McCall ..... 255,645  
 Pressure regulator for soda water, G. S. Slocum ..... 255,467  
 Printing mechanism, web, L. C. Crowell ..... 255,733  
 Printing press, Trueman & New ..... 255,704  
 Printing-press paper cutting device, S. A. Grant ..... 255,616  
 Pulley, self-oiling, C. H. Cowdrey ..... 255,418  
 Pulley sheave, C. M. Daboll ..... 255,724  
 Pulleys, apparatus for balancing, L. Knight ..... 255,434  
 Pulverizing mill, W. C. Salmon ..... 255,678  
 Pump, barke, Cowan & Lee ..... 255,492  
 Rack. See Pool rack.  
 Railway tie and fastening, metallic, F. A. Williams ..... 255,554  
 Rake. See Harvester rake. Hay rake.  
 Reflector for electric lamps, adjustable, J. R. F. Kelly ..... 255,514  
 Refrigerator, A. D. Puffer ..... 255,455, 255,456  
 Regulator. See Pressure regulator.  
 Roasting or renovating furnace, J. Campbell ..... 255,592  
 Rock drills, core lifter for annular, G. F. Case ..... 255,719  
 Roller. See Loom temple roller.  
 Ruling machine, E. W. Blackhall ..... 255,572  
 Sad iron, Mitchell & Dame ..... 255,743  
 Sap feeding apparatus, automatic, M. C. Barden ..... 255,565  
 Sash balance, F. B. Cochran ..... 255,721  
 Scoop, grain, T. J. Blake ..... 255,483  
 Screw, C. D. Rogers ..... 255,459  
 Sculpture, statuary, etc., machine for copying, A. B. Holstein ..... 255,508  
 Seed dropper, cotton, R. Cantelon ..... 255,593  
 Separator. See Grain separator. Ore separator.  
 Sewing machine, C. H. Gifford ..... 255,500  
 Sewing machine, D. L. Keeler ..... 255,633  
 Sewing machine, F. R. Smith ..... 255,544  
 Sewing machine button hole attachment, J. K. Harris ..... 255,622  
 Sewing machine cutting and trimming attachment, S. W. Shorey (r) ..... 10,067  
 Sewing machine feed mechanism, Borton & Wilcox ..... 255,577  
 Sewing machine guide, J. F. J. Gunning ..... 255,617  
 Sewing machine take-up, J. V. D. Eldredge ..... 255,425  
 Sewing machine tension, D. L. Keeler ..... 255,634  
 Sewing machine thread controlling apparatus, Borton & Wilcox ..... 255,581  
 Sewing machine trimmer, Borton & Wilcox ..... 255,578  
 Sewing machine trimmer, A. Warren ..... 255,707  
 Sewing machine, wax thread, F. & E. E. Bean ..... 255,713  
 Sewing welts or hems on fabrics, machine for, Borton & Wilcox ..... 255,576  
 Shade holder, E. L. Bryant ..... 255,589  
 Ships, auxiliary power wheel for, K. Anunsen ..... 255,560  
 Shoe, C. B. Daniels ..... 255,495  
 Shoe, W. Linscott ..... 255,438  
 Shovel. See Snow shovel.  
 Show case, G. W. & J. F. Simons ..... 255,686  
 Signaling apparatus, W. C. Seaton ..... 255,683  
 Skake, roller, J. K. Ross ..... 255,460  
 Skate, roller, E. W. Taylor ..... 255,694  
 Skylight, F. H. Leadley ..... 255,436  
 Slate cleaner and pencil holder, combined, W. H. Metcalf ..... 255,652  
 Sleeve gripe, lady's, L. P. Webster ..... 255,582  
 Snow shovel, C. Ames ..... 255,406  
 Soap from fats, making, H. Heckel ..... 255,505  
 Spark arrester, J. D. Akley ..... 255,558  
 Spark extinguishing and discharging device, W. K. Schermerhorn ..... 255,679  
 Spectacle frame, W. H. Peckham ..... 255,530  
 Spinning and twisting machine spindles, bearing for, T. Mayor ..... 255,644  
 Spinning, doubling, and twisting machine, Conlon & King ..... 255,417  
 Spinning frames, spindle step rail for, P. Leclere ..... 255,518  
 Spring. See Vehicle spring.  
 Stamping mill, H. O. Reinhardt ..... 255,536  
 Stand. See Croquet stand.  
 Stave dressing machine, W. C. McCormack ..... 255,647  
 Steam boiler, J. L. Bogert ..... 255,484  
 Steam boilers, apparatus for feeding scaling compounds to, Pindar & Clark ..... 255,532  
 Steam generator, W. D. Hooker ..... 255,509  
 Stopper. See Bottle stopper.  
 Store service appliance, H. H. Hayden ..... 255,624  
 Stove, lamp, D. F. Trefry ..... 255,703  
 Stove pipe shelf and stove lid holder, G. McAdams ..... 255,441  
 Strap. See Hitching strap. Suspender strap.  
 Suspender strap, A. Netzer ..... 255,654  
 Suspender trimming, M. Altmann ..... 255,404  
 Table. See Extension table. Tobacco booking table.  
 Telegraph, multiple, Thompson & Seiden ..... 255,638  
 Tellurian, T. H. Costello ..... 255,491  
 Thrashing machine band cutting and feeding attachment, G. W. Sharp ..... 255,464  
 Thread holder and cutter, F. S. Williams ..... 255,745  
 Tobacco booking table, C. Seel ..... 255,540  
 Tobacco, machine for opening and feeding, Curtis & Adrance ..... 255,494  
 Tobacco scrap cutter, A. Ingram ..... 255,512  
 Tool, combined, T. D. Isbell ..... 255,513  
 Toy, acrobatic, J. M. Holmes ..... 255,636  
 Toy gun, McCord & Churchill ..... 255,528  
 Trace carrier, A. B. Wilhelm ..... 255,744  
 Treadle, G. W. Ziegler ..... 255,751  
 Treadle mechanism, E. S. Mann ..... 255,732  
 Trimmer. See Sewing machine trimmer.  
 Truck, stair, J. O. Tauber ..... 255,693  
 Type setting machine, T. J. Porter ..... 255,667  
 Valve. See Fire extinguisher valve. Water closet valve.  
 Valve, J. P. Pfau ..... 255,666  
 Valve for oil and water wells, A. J. Lewis ..... 255,522  
 Valve, straightway, D. R. Burns ..... 255,717  
 Valves, balancing slide, J. James ..... 255,691  
 Vapor burner, Whittingham & Lyman ..... 255,531  
 Vehicle bolster, D. Shelton ..... 255,736  
 Vehicle spring, A. A. Abbott ..... 255,403  
 Vehicle spring, W. D. Ramsey ..... 255,461  
 Vehicle top prop, W. Lepper ..... 255,520  
 Ventilating apparatus, S. W. Hudson ..... 255,628  
 Vessels, construction of, W. Coppin ..... 255,599  
 Vise, bench, J. Thomson ..... 255,700  
 Wagon jack, J. Clark ..... 255,490  
 Wash board, C. H. Williams ..... 255,555  
 Washing machine, J. H. Atwater ..... 255,512  
 Washing machine, B. F. Cokely ..... 255,598  
 Washing machine, N. W. Murphy ..... 255,446  
 Washing machine, E. J. Whitlow ..... 255,742  
 Washing machine reversing mechanism, A. M. Dolph ..... 255,422  
 Water closet, J. E. Boyle ..... 255,485  
 Water closet valve, W. Scott ..... 255,682  
 Water wheel, Christy & Sheridan ..... 255,726

Waterproofing compound, J. E. Gillespie ..... 255,615  
 Well, cement pipe, G. D. Pettigill ..... 255,664  
 Well curb and water drawer, L. M. Doudna ..... 255,606  
 Wells, temper screw box for oil, J. D. Cameron ..... 255,591  
 Wheel. See Water wheel. Wind wheel.  
 Wheel scraper, vehicle, F. C. Mercer ..... 255,444  
 Wheelbarrow, A. D. Peck ..... 255,682  
 Whiffletree iron, O. Vanorman ..... 255,705  
 Wind wheel, B. H. Klein ..... 255,432  
 Winding and twisting machines, stop motion for, J. S. Utley ..... 255,739  
 Wrench. See Carriage wrench.

**DESIGNS.**  
 Bracket, G. S. Barkentin ..... 12,834  
 Carpet, H. Horan ..... 12,833  
 Corset, M. P. Bray ..... 12,837  
 Drilling machine, upright, V. F. Prentice ..... 12,839  
 Spoon or fork handle, F. Waterhouse ..... 12,840, 12,841  
 Stove, G. O. Bergstrom ..... 12,835, 12,836

**TRADE MARKS.**  
 Braid, alpaca, E. W. Bedell ..... 9,234  
 Canned corn, J. P. Baxter ..... 9,248  
 Canned provisions, Portland Packing Company ..... 9,251  
 Corsets, Crotty & Lindauer ..... 9,237  
 Inks, writing, Brentano's Literary Emporium ..... 9,235  
 Inks, writing, Fountain Ink Company ..... 9,238  
 Leather dressing, J. H. Dwyer ..... 9,243  
 Liniment, R. English ..... 9,249  
 Meats, bacon, and lard, J. C. Ferguson & Co. .... 9,244  
 Medicinal preparation, A. L. Clum ..... 9,236  
 Medicine for the cure of neuralgia, G. R. Traver ..... 9,246  
 Plumbago crucibles and other plumbago chemical ware, Patent Plumbago Crucible Company ..... 9,245  
 Rubber bands, Parker, Jones & Co. .... 9,250  
 Soda, carbonate of, Gaskell, Deacon & Co. .... 9,239  
 Tobacco, leaf, Sartorius & Co. .... 9,252  
 Whiskies, H. Rosenheim ..... 9,241  
 Whisky, Adams Taylor & Co. .... 9,242  
 Whisky, A. W. Balch ..... 9,247  
 Wine, champagne, L. H. L. R. Olry ..... 9,240

**English Patents Issued to Americans.**  
 From March 21 to March 28, 1882, inclusive.  
 Boot heel trimming machine, Tyler Manufacturing Company, Portland, Me.  
 Chucks for lathes, etc., A. Y. Alling, Rochester, N. Y.  
 Coffins, manufacture of, H. R. Allen, Indianapolis Ind.  
 Dress patterns, apparatus for draughting, J. A. Wilson, San Jose, Cal.  
 Dust collector for flour mills, S. L. Bean, Washington, D. C.  
 Electric cables, A. E. Dolbear, Somerville, Mass.  
 Electrical circuit, ground connection for, A. E. Dolbear, Somerville, Mass.  
 Harvesting machine, C. W. Marsh, Sycamore, Ill.  
 Looms, A. Rollason, Lowell, Mass.  
 Motive power, pneumatic, G. V. Sheffield, New York city.  
 Power, apparatus for obtaining on ships, K. Anunsen, Winchester, Wis.  
 Springs for railroad vehicles, J. D. Thomas et al., New York city.  
 Telephonic and telegraphic apparatus, A. E. Dolbear, Somerville, Mass.  
 Wall paper, manufacture of, E. Leissner, New York city.  
 Wire, insulated, manufacture of, J. D. Thomas et al., New York city.  
 Woven fabric, manufacture of, A. Urbahn et al., Paterson, N. J.

**Advertisements.**  
 Inside Page, each insertion --- 25 cents a line.  
 Back Page, each insertion --- \$1.00 a line.  
 (About eight words to a line.)  
 Engravings may head advertisements at the same rate per line, by measurement, as the letter press. Advertisements must be received at publication office as early as Thursday morning to appear in next issue.

**SUPERIORITY PROVED**  
 THE SIMPLEST & BEST SEWING MACHINE IS THE  
**NEW HOME**  
 Perfect in every particular. 200,000 sold yearly.  
**NEW HOME SEWING MACHINE CO.,**  
 30 Union Square, N. Y.  
 Chicago, Ill., Orange, Mass., or Atlanta, Ga.

**Combined Step Ladder and Window Scaffold.**  
 Entire Patent for Sale. Something new and what every one wants. Address  
 M. S. KJELLSTROM, 323 East 39th St., New York.

**\$72 A WEEK.** \$12 a day at home easily made. Costly outfit free. Address TRUE & Co., Augusta, Me.

**THE FAR-FAMED AMERICAN LUBRICATOR.**

The accompanying engraving represents the improved form of Lubricator now being manufactured by the American Lubricator Co. of Detroit, Mich., which bears the palm for a steam engine adjunct. Since the departure of this Lubricator, in 1874, over 14,000 have been sold throughout the U. S. and Canada, and the popularity they have attained, as well as the verdict of those who are using them, go to make up the great foundation which enable them to make for it the claims they print. They claim this Lubricator to be cheaper, more reliable, and economical than any other lubricator in the world, and to save 40 per cent. over any other service. Considering the terms upon which they offer the American you will be enabled to try it for 20 days, and at the expiration of that time, if not satisfactory, it is to be returned. They guarantee this Lubricator to do all they claim for it. Correspondence solicited.

**DROP FORGINGS OF IRON OR STEEL**  
 BEECHER & PECK, NEW HAVEN CONN.

**THE STORAGE OF ELECTRICITY.**—A paper, by J. W. Swan, discussing the utility of the Faure and Planté cells, and describing some recent improvements of his own in the construction of cells for the storage of electricity for electric lighting. Contained in SCIENTIFIC AMERICAN SUPPLEMENT, No. 322. Price 10 cents. To be had at this office and from all newsdealers.

**GET THE BEST AND CHEAPEST.**  
 TRADE MARK.  
**Silver Finish.**  
 J. A. FAY & CO.,  
 (Cincinnati, Ohio, U. S. A.)  
 Exclusive Agents and Importers for the United States, of the  
**PERIN BAND SAW BLADES,**  
 Guaranteed superior to all others in quality, strength, uniformity of temper, and general durability. The Perin Saw outwears three ordinary saws.

**VARIABLE CUT OFF ENGINE, 25 TO 50 %**  
 SAVES IN FUEL SIMPLE IN DEVICE  
 ECONOMICAL DURABLE MANUFACTURED BY  
**BALL ENGINE CO. ERIE PA.**

**THE HIBERNATION OF ANIMALS.**—By C. F. Holder. An interesting study of the habits of animals that sleep through the winter. Contained in SCIENTIFIC AMERICAN SUPPLEMENT, No. 322. Price 10 cents. To be had at this office and from all newsdealers.

**MUNSON BROTHERS.**  
 PATENT HOLLOW NECKED SPINDLES AND OIL TIGHT BUS  
 PATENT EYE AND SPINDLE  
 PATENT HOLLOW NECKED SPINDLES AND OIL TIGHT BUS  
 MANUFACTURED BY  
 MUNSON BROTHERS,  
 245 MANHATTAN ST. N. Y.  
 BIRMINGHAM, ENGLAND  
 U. S. A.

**THE UNIT OF WEIGHT AND MODE OF**  
 Constitution of Compounds.—A paper, by Dr. Oiling, in which is examined the question whether two classes of compounds really exist—one in which there is interatomic connection alone, and another in which the connection is molecular. Contained in SCIENTIFIC AMERICAN SUPPLEMENT, No. 324. Price 10 cents. To be had at this office and from all newsdealers.

**CARY & MOEN**  
 STEEL WIRE OF EVERY DESCRIPTION  
 234 W. 29 ST. EVERY & STEEL SPRINGS, NEW YORK CITY

**MINERAL WOOL.**  
 This fireproof and indestructible material successfully prevents loss of heat by radiation, keeps frost from water pipes, deadens sound, checks spread of fire in walls, partitions, floors of dwellings. 25 cts. per cubic foot. U. S. MINERAL WOOL CO., 16 Cortlandt St., N. Y.

**Tuberous-Rooted Plants.**  
 Many of the most beautiful flowering and ornamental-leaved plants are grown from these bulbs, the finest are:  
 Achimenes mixed, 30c. \$3.00  
 Begonias, (tub) named, 50c. 5.00  
 " " mixed, 35c. 3.50  
 Caladium, fancy leaved, 25c. 2.50  
 Gesneria of sorts, 75c. 6.00  
 Gloxinia, (Crown), 30c. 3.00  
 Mixed sorts as above in quantity. Use good bulb of each for \$1.00.  
 Send for circular to  
 HENRY A. DREAR, 714 Chestnut St., Philadelphia.

**A NEW ELECTRICAL STORAGE BATTERY.**—Description, by Henry Sutton, of a new form of cell for conserving energy which promises to have an important practical bearing on the future of electric work. Contained in SCIENTIFIC AMERICAN SUPPLEMENT, No. 322. Price 10 cents. To be had at this office and from all newsdealers. The same number contains a description and illustration of Faure's Secondary Pile, as modified by Reynier, for the storage of electricity.

**INVALID RECLINING WHEEL CHAIR.**  
 Key, Leonard Bacon, D. D.  
 Hon. A. H. Stephens,  
 and others  
 recommend them.  
 ADJUSTABLE TO  
 any position  
 Send for circular to  
**NEW HAVEN CHAIR Co., New Haven, Ct.**

**PURCHASERS OF PATENTS—NOTICE.**  
 For Sale—a much needed and useful improvement in an article of every day use. One or more used in every family on the civilized globe. A registered sample, by mail, for 50 cts. Address CHARLES F. FELLOWS, Box 65, West Chelmsford, Mass.

**FIRE BRICK** TILE AND CLAY RETORTS ALL SHAPES.  
 BORGNER & O'BRIEN  
 23 LE ST. ABOVE RACE, PHILADELPHIA.

**PATENTS.**  
 MESSRS. MUNN & CO., in connection with the publication of the SCIENTIFIC AMERICAN, continue to examine improvements, and to act as Solicitors of Patents for Inventors.  
 In this line of business they have had thirty-five years' experience, and now have unequalled facilities for the preparation of Patent Drawings, Specifications, and the prosecution of Applications for Patents in the United States, Canada, and Foreign Countries. Messrs. Munn & Co. also attend to the preparation of Caveats, Copyrights for Books, Labels, Reissues, Assignments, and Reports on Infringements of Patents. All business intrusted to them is done with special care and promptness, on very reasonable terms.  
 A pamphlet sent free of charge, on application, containing full information about Patents and how to procure them; directions concerning Labels, Copyrights, Designs, Patents, Appeals, Reissues, Infringements, Assignments, Rejected Cases, Hints on the Sale of Patents, etc.  
 We also send free of charge, a Synopsis of Foreign Patent Laws, showing the cost and method of securing patents in all the principal countries of the world.  
**MUNN & CO., Solicitors of Patents,**  
 261 Broadway, New York.  
 BRANCH OFFICE—Corner of F and 7th Streets, Washington, D. C.