

Business and Personal.

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Notes & Queries

HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication. References to former articles or answers should give date of paper and page or number of question. Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research, and, though we endeavor to reply to all either by letter or in this department, each must take his turn. Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same. Special Written Information on matters of personal rather than general interest cannot be expected without remuneration. Scientific American Supplements referred to may be had at the office. Price 10 cents each. Books referred to promptly supplied on receipt of price. Minerals sent for examination should be distinctly marked or labeled.

(7103) A. D. asks if the Edison dynamos require larger wire in armature than in field magnets. A. The armature may generally be wound with finer wire than that used on the field. The relative resistance of field and armature varies with the relative sizes of wire and is fixed by such considerations as the adoption of series, shunt, or compound winding.

(7104) J. H. W. writes: Suppose a thermometer to be frozen or embedded in a cake of ice, surrounding it say 6 inches on all sides. What temperature will it record under these circumstances, and to what extent will it subsequently be affected by exterior changes of temperature? Should the temperature fall say to 15° or 20°, will the embedded thermometer show an approximate fall? I suppose it would show no rise above 32° Fah. so long as any ice covered it. A. The ice will act as a protective covering and the thermometer will be but slowly affected by the temperature of the surrounding air. If time enough is given, the thermometer will assume such temperature if below 32° Fah. It will not rise above 32° Fah. until the ice has melted away from it and the bulb is exposed all or in part to the air. A thermometer embedded in ice may register any degree of heat below 32° Fah.

(7105) L. D. asks: 1. How many miniature lamps and of what size can be run with a storage battery 36ampere hour, 2 volts, with a discharge of 4 amperes? A. The voltage is too low for a regular type lamp; the eight watts of your battery should give about one candle power. 2. What is the largest size motor that can be used with this battery? A. A small toy motor; the simple electric motor, SUPPLEMENT, No. 641, is too large.

TO INVENTORS.

An experience of nearly fifty years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere. A synopsis of the patent laws of the United States and all foreign countries may be had on application, and persons contemplating the securing of patents, either at home or abroad, are invited to write to this office for prices, which are low in accordance with the times and our extensive facilities for conducting the business. Address MUNN & CO., office SCIENTIFIC AMERICAN, 361 Broadway, New York.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

JANUARY 26, 1897,

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

- Advertising arm chair, L. T. Hagan. 576,054 Air or other gases, recovering volatile substances from. C. Heinzerling. 576,714 Alarm. See Fire alarm. Amalgamator, J. J. Tinker. 575,884 Animal trap, A. T. Sullivan. 575,792 Annealing box, J. H. Orwig. 575,976 Asphalt pavements, process of and device for repairing. J. W. Buzzard. 575,697 Autographic register, W. H. Kelly. 575,858 Autoharp, E. V. Dexter. 575,707 Bag holder, G. N. Necker. 575,975 Bag or purse frame and catch, C. Hering. 575,837 Baker's dipper, J. M. Anderson. 576,019 Baling press, W. S. Livengood. 575,843 Bearing, shaft, J. Done. 575,856 Bearings, anti-friction, V. Small. 575,868 Bearing, ball, J. B. Baker. 575,798 Bearing, ball, W. C. Quigley. 575,987 Bed bottom, spring, W. Stoffel. 575,861 Bed slat fastener, Fielding & Grogan. 575,882 Belt alarm, N. J. Smith. 575,919 Belt pin, A. C. Zaun. 575,922 Bicycle, C. S. Buell. 575,910 Bicycle, W. M. Sherman. 575,910 Bicycle, W. Todd. 575,815 Bicycle attachment, J. S. Vittek. 575,787 Bicycle brake, W. I. Stewart. 575,538 Bicycle gear, changeable, C. A. Meister. 575,725 Bicycle handle bar and brake, combined adjustable, M. A. Roso. 575,836 Bicycle lock, F. H. Larrabee. 575,719 Bicycle pedal, Hamilton & Wodiska. 575,712 Bicycle saddle, M. E. Deitzler. 576,070 Bicycle support, A. E. Holaday. 576,071 Bicycle supporting stand, T. Terrell. 576,002 Boat, submarine wrecking, W. R. Hinsdale. 575,800 Robbin, R. Blackburn. 576,022 Robbin holder, Lawrence & Rhoades. 575,929 Roller, comb, J. G. Storer. 575,948 Boiler bridge wall, G. W. Hayton. 575,990 Boiler furnace, J. J. Storer. 575,933 Bolt indicator, steam, J. Parker. 575,932 Bolting machine, H. Seck. 576,036 Bolts, means for securing and protecting stay, J. Cour. 575,809 Book and purse, combined, J. B. O'Riva. 575,811 Book, check, R. W. Morgan. 575,928 Book holder, note, W. T. Ives. 575,865 Book or pad, sales, Webber & Binger. 575,865 Book support, H. A. Cook. 575,882 Book support, W. Peard. 575,954 Bottle, O. P. M. Huffman. 575,954 Bottle, non-refillable, C. T. Driscoll. 576,042 Box. See Annealing box. Paper box. Sand box. Bracket. See Lamp bracket. Lantern bracket. Brake. See Bicycle brake. Sleigh brake. Brake handle, G. Smiley. 576,043 Brake or stop mechanism, W. A. Mack. 575,783 Brake shoe, F. E. Case. 575,783 Brush, R. R. Walker. 576,075 Burner. See Garbage burner. Lamp burner. Can opener. See Dish opener. Spouted can. Can opener, E. P. Tyrrell. 576,063 Cap, W. N. Feldman. 575,925 Car buffer platform, T. L. McKeen. 575,971 Car coupling, W. J. McKelvey. 575,972 Car coupling, S. R. Skov. 575,856 Car coupling, R. C. Turnbull. 576,008 Car motor, electric, W. J. Williams. 575,724 Car motor gearing, electric, A. C. Mather. 575,724 Car signal, automatic, E. De Haas. 575,710 Car ventilator, J. M. Daly. 575,704 Cars, mechanism for ventilating railway passenger, H. F. Caldwell. 575,823 Cars, metallic platform and buffer for railway, H. H. Sessions. 575,994 Card clothing to top flats, fastening, J. C. Potter. 575,986 Carding engine flats, machine for grinding, E. Brown. 575,689 Carding machine, W. D. Rosencrantz. 575,852 Carding condenser, take-up roller, W. D. Rosencrantz. 575,851 Carpet sweeper, C. King. 575,960 Carriage, baby, T. A. Evans. 575,904 Case or receptacle for use by tourists or others, E. E. Johnston. 575,893 Cash apparatus, J. H. Henry. 575,715 Caster and recorder and typewriting machine, combined, G. P. Gaston. 575,828 Casting metal hubs, mould for, C. Smith. 575,935 Cattle guard, C. H. Compton. 575,921 Chain, drive, R. W. Wagoner. 575,636 Chair, See Advertising arm chair. Dental chair. Punitive chair. Chair convertible attachment, A. S. Hedberg. 576,077 Chair iron and leg, M. A. Hanson. 575,713 Chair or seat, convertible, J. M. Osgood. 575,977 Chair drier, F. D. Handfield, Jr. 575,801 Chair, insurable property, J. F. Watts. 575,824 Check row wire anchor, W. R. Wagoner. 576,010 Chuck, drill, W. Chantaway. 575,876 Clamp. See Dental clamp. Cleaner. See Dish cleaner. Clutch, J. M. Kauboff. 575,988 Coffee separator, F. H. Hale. 575,883 Combination stand, F. H. Hale. 575,711 Confectionery coating machine, J. R. Van Der veer. 575,915 Cooler. See Water cooler. Coupling, See Car coupling. Water closet bowl repair coupler. 575,752 Crate, poultry, J. H. Antrobus. 575,802 Cuffs, etc., fastening device for, J. Cleland. 575,872 Cultivator, J. F. Bollinger. 575,872 Cultivator, C. W. & M. R. Davis. 576,039 Cultivator, E. E. Davis. 575,754 Cylindrical saw, combined, E. D. McMillan. 575,757 Cuspidor, G. Schafer. 575,906 Cutter. See Meat cutter. Pipe cutter. Thrashing machine band cutter. 575,836 Dampening machine, W. A. E. Henrich. 575,884 Dental chair, J. H. Keefe. 575,894 Dental clamp, J. H. Keefe. 575,750 Dental tool, G. H. Winkler. 575,729 Desk, extension, T. J. Palmer. 575,961 Desk lid support, B. E. Kipp. 575,887 Digger. See Potato digger. Dish cleaner, E. D. Decker. 575,869 Dish cleaner, A. Beers. 576,021 Dish lifter, J. F. Kries. 575,962 Disinfecting apparatus, J. Evetts. 576,064 Dispensing can, T. W. Alexander. 576,018 Distributing apparatus, automatic, J. Milo. 575,846 Doll, M. E. Porter. 575,749 Door adjuster, M. Ansell. 575,883 Door hanger, W. J. Sumner. 575,771 Drawing guide, T. Hanson. 575,945 Drawer table, Laughlin & Hough. 575,842 Drier. See Dish drier. Drill. See Rock drill. Drilling or similar tool, J. M. Rauboff. 575,734 Dust arrester and collector, J. M. Case. 575,824 Dust collector funnel, F. Prokupek. 575,934 Dust pan, E. O. Mason. 576,073 Eye, black, etc., C. Ris. 575,904 Egg separator, J. H. Smith. 575,826 Electric furnace, J. A. Deuther. 575,826 Electric furnace, Joyce & Deuther. 575,829 Electric machines, brush carrier for dynamo, S. S. Wheeler. 575,916 Electric meter, W. C. Fish. 575,777 Electric resistance determining electromagnetic forces, apparatus for determining, O. Frolich. 575,767 Electromechanical movement, Chaplin & Halloran. 575,629 Elevator, E. L. Parker. 575,758 Elevator gate controller, E. Carlson. 575,753 Elevator shaft door, safety devices, operating mechanism for, L. N. Reed. 575,935 Engine. See Explosive engine. Gas engine. Engine stop, C. E. Edgar. 575,827 Envelops, etc., fastener for, E. L. Calahan. 575,775 Evaporator, banking, R. W. Scott et al. 575,804 Evaporating mechanism for openers and scutchers, W. & W. Lord. 575,780 Excavating scoop, D. I. Calhoun. 575,874 Exhibiting attachment for boxes, sample, T. E. Lewis. 575,897 Explosive engine, F. C. Southwell. 575,812 Eyeglasses, S. Spenser. 575,907 Eyelets, device for making covered, A. C. Estabrook. 576,044 Eyelets, device for making covered, F. N. Look. 575,983 Fanning mill sieve, C. Hintz. 575,716 Fastening attachment, J. Hobbs. 576,066 Faucet, J. Kenly. 575,840 Faucet, P. K. O'Leary. 576,087 Faucet, self closing basin, W. G. Cornell. 576,045 Fence machine, H. H. Feldman. 576,045 Fence machine, hand, M. F. Connett, Jr. 576,033 Fence, wire, M. E. Kershner. 575,869 Fence, wire, J. C. Perry. 576,063 Ferrule slot, C. T. Pratt. 575,732 Fertilizer distributor and seed planter, L. M. Crissey. 576,076 Filter press plate, H. P. Chamberlain. 575,875 Fire alarm and extinguisher, Bunker & Kenney. 576,026 Fire hose support, J. O. Charbonneau. 575,700 Fireplace furnace, J. McDonald. 575,847 Fir shield, P. L. Holcomb. 575,851 Fish plate, sliding, J. E. Brooks. 576,024 Fishing reel, C. F. Wilson. 575,820 Flough mill purifier, grader and dust collector, G. W. T. Seiffert. 575,993 Fluid meter, W. G. Schroyder. 575,891 Fluid pressure machine, automatic, A. W. Cole. 575,702 Fluid pressure machine, automatic, R. Lo Forte. 575,722 Fly wheel, S. N. Stewart. 575,741 Folding table, R. Kaiser. 575,967 Forming machine, E. D. Rice. 575,730 Fruit jar and fastening therefor, J. Miracle. 575,887 Fruit pitting and spreading machine, J. Harrison. 575,886 Furnace. See Boiler furnace. Electric furnace. Fireplace furnace. Hot air furnace. Furnace blast apparatus, J. W. NeSmith. 575,974 Furnaces, apparatus for controlling admission of air to, C. C. Parker. 575,849 Furniture attachment, E. A. Garvey. 575,806 Fuse holder, W. W. Dean. 576,040 Gage, saw, work, setting race. 575,884 Gage apparatus, Hess. 575,950 Game counter, R. G. Zierfuss. 576,017 Garbage burner, W. G. Parr. 575,981 Garment hook, C. C. Blossom. 575,822 Gas apparatus for producing acetylene, M. C. A. G. 575,884 Gas consumer, C. C. Brucker. 575,885 Gas engine, F. W. Coen. 575,878 Gas engine, J. Ledent. 575,720 Gas machine, gasolene, W. McKnight. 575,901 Gas manufacturing apparatus, J. L. Janeway. 575,955 Gas apparatus for treating blast furnace, B. H. Gate. See Water gate. Gate, A. W. Chilcott. 575,942 Gate, W. L. Throckmorton. 575,004 Gear, differential, R. Eickemeyer. 575,880 Generator. See Power and heat generator. German engine, cuttings, H. S. Whitton. 575,940 Glass blowing machine, Owens & Colburn. 576,074 Gluing ledges or mouldings to cupboards or wardrobe, arrangement for, Schuler & Wuzel. 575,900 Gold ores, apparatus for simultaneously concentrating, classifying, and amalgamating, J. Garnier. 575,756 Grinding cutter bar knives, machine for, A. S. Robinson. 575,737 Grinding machine, D. A. Danforth. 575,706 Gun carriage, E. W. Very. 575,773 Gunpowder, manufacture of, G. G. Andre. 575,765 Gutta serena, extracting and purifying, Serullas & Hourat. 575,739 Halter, rope, T. Doble (reissue). 575,888 Hammer, power, F. Raymond. 575,784 Hammock support, A. Hoffman. 575,838 Handle bar, adjustable, F. K. Dunn. 575,879 Hand jar, adjustable, O. A. Wheeler. 575,746 Harrow, rotary, Spangler. 576,061 Harvester and husker, corn, W. H. Smith. 575,880 Harvester, corn, H. Boese. 575,871 Heater. See Water heater. Heel lift cutting apparatus, W. P. Bosworth. 576,023 Hook, See Gate, cuttings. Hoses, electric appliance for, L. A. Gray. 576,053 Horseshoe, T. H. Parker. 575,980 Hose reel, R. Voelker. 576,009 Hot air furnace, G. O. Bergstrom. 575,796 Hub drilling device, wheel, H. Gruner. 575,835 Hub wheel, Strauss & Kuhn. 576,000 Indicator. See Boiler indicator. Inhaler, C. Denison. 576,041 Ink fountain and ink distribution, H. Johnson. 575,892 Ink, etc., fountain for, S. E. Wharton. 576,014 Ink well, dust proof, R. G. Dorrance. 575,708 Insulator, F. H. Boyer. 575,862 Ironing board, E. G. Smith. 575,850 Jar. See Fruit jar. Jars, cans, etc., holder for, O. A. Burnes. 575,694 Keyboard, movable, J. E. Pitrat. 575,985 Knitted garment, F. H. Moon. 575,726 Knitting machine, J. Schmitt. 575,703 Lacing machine, J. Adams. 575,882 Lacing, E. Kempshall, J. Adams. 576,056 Lacing hooks with plastic material, device for covering, A. C. Estabrook. 576,045 Ladder, A. G. Perkins. 575,759 Ladder, W. H. Wilpelt. 575,866 Ladder, M. P. Stevens. 575,813 Lamp attachment, C. B. Webster. 575,717 Lamp bracket, W. C. Homan. 575,717 Lamp burner, G. T. Brown. 576,025 Lamp burner, F. Dietz. 575,776 Lamp burner and clock, T. McGowan. 575,914 Lamp guard, wire, P. R. Wagoner. 575,794 Lamp hanging, B. Porter. 575,768 Lamp miner's safety, W. Patterson. 575,903 Lantern bracket, S. L. Sly. 575,857 Lantern sprinker, J. F. Main. 575,966 Leaf, etc., producing white, A. MacDonald. 575,844 Lifter. See Dish lifter. Transom lifter. Lifting machinery, hydraulic, R. Carey. 575,698 Lifting, process of and apparatus for purifying and filtering, S. Geston. 575,778 Lock. See Bicycle lock. Mortise lock. Screw lock. Lock, T. Churchill. 576,028 Locomotive, D. W. McCallum. 575,969 Loom multiplier mechanism, W. Wattie. 575,833 Loom, pile fabric, A. Weber. 575,818 Loom, power, C. H. Heindel. 575,927 Mast arm and attachment thereto, O. P. Philbrick. 576,068 Match safe, H. H. Brown. 575,690 Meat cutter, W. Koenen. 575,825 Metal planing or cutting machine, J. A. Costello. 575,708 Meter. See Electric meter. Fluid meter. Water meter. Microphone, P. Hardegen. 575,887 Mining caisson, J. M. Thorp. 576,003 Mixer. See Paint mixer. Moulding apparatus, portable, W. H. Hooper. 575,891 Mortise and tenon machine, A. P. & C. P. Sundberg. 576,022 Mortise lock, A. Wildern. 575,632 Musical instrument, pneumatic, M. Clark. 575,632 Musical instrument, pneumatically operated, M. Clark. 576,030 Needle knitting machine, P. M. Beers. 575,870 Nut lock, P. Burns. 575,635 Nut lock, C. C. Cuyler. 575,827 Nut, wagon, G. Zellstra. 575,751 Oils, refining vegetable, G. Mitchell. 575,736 Organ, pneumatic, M. Clark. 576,023 Oven, baker's, G. F. Smith. 575,811 Paddle wheel, R. Mitchell. 575,845 Paint for ships' bottoms, G. L. Burnham. 575,900 Paint mixer, J. P. J. Saxe. 575,906 Paper box, A. D. Stern. 575,913 Paper feeding machine, W. G. Trevetie. 576,031 Pencil sharpener, G. D. Hart. 575,947 Pencil sharpener and eraser, combined, P. L. Lord. 575,964 Penholder, G. C. Ward. 576,012 Perforating machine, E. H. Ruffner. 575,853 Photoheliograph, H. B. Bostwick. 576,047 Photographs in relief, producing, H. C. Fairchild. 576,047 Photographic mounts, die for manufacturing cards for, P. J. Stuparich. 575,814 Pictures, means for exhibiting consecutive, H. W. Short. 575,761 Pin. See Nail pin. Pinking machine, H. F. Blake. 575,821 Pipe cutter, A. E. Brockett. 575,888 Pipe tool, combination, A. E. Brockett. 575,685 Placket fastener, F. A. Jaberg. 575,933 Planetarium, L. Reese. 575,738 Pneumatic dispatch tubes, electric controlling apparatus for, E. A. Fordyce. 575,883 Post setter, G. W. Swiger. 575,733 Potato digger, P. Brown. 575,691 Power and heat generator, G. White. 575,819 Preserving machine, H. L. Ostermann. 575,978 Press. See Baling press. Printing apparatus, Mockridge & Hecke. 575,968 Projectile, high explosive, H. J. W. Dam. 576,038 Pump, air, R. H. Harris. 575,946 Puncturing chair, S. J. Baker. 575,941 Race track, starting gate for, P. McGinnis. 575,782 Rail support, W. B. Porter. 575,782 Railway, closed conduit electric, E. W. Rice, Jr. 575,785 Railway switch, H. P. Spain. 575,740 Raisin seeding machine, C. L. Spencer. 575,762 Recorder. See Sales recorder. Reel. See Fishing reel. Hose reel. Reeling and severing device, H. A. Perant. 575,730 Register. See Autographic register. Time register. Revolvers, cutting attachment for muzzles of, J. Hernandez. 575,949 Roaster. See Coffee roaster. Rock drill, J. McCulloch. 575,970 Roentgen ray tube, E. Nomolm. 575,902 Sack support, A. R. Nicholas. 575,902 Safe or vault closure, G. L. Damon. 575,705 Sales recorder, C. T. Sleeper. 576,079 Sash balance, R. A. Grant. 575,824 Sash fastener, Smith & Isgrig. 575,793 Sash, window, A. D. Nelson. 575,806 Saw gage, G. W. Drew. 575,709 Sawing machine feeding attachment, D. J. Taft. 575,939 Scissors or shears, B. F. Ford. 576,030 Screen. See Window dust screen. Screw lock, P. W. Kammerer. 575,818 Seeder, J. F. Studebaker. 575,783 Separating machine, centrifugal, O. Ohlsson. 575,727 Separator. See Egg separator. Sewing gage, belt, J. Gregory. 575,943 Sewing machine feeding device, R. Pierpont. 575,984 Sewing machine cutting attachment, E. Wilson. 575,764 Sewing machine thread cutting mechanism, A. H. Kinder. 575,841 Shade adjuster, window, H. M. Sturgis. 576,001 Shade roller window, H. M. Sturgis. 576,080 Sheet metal bending and forming machine, Cobern & Sumner. 575,701 Sheet metal tubing, making, D. C. Stover. 575,882 Shelving, adjustable, W. O. Whitney. 575,747 Single sawing machine, W. H. Myers. 575,839 Shutters, etc., means for operating, L. F. Rice. 575,736 Signal. See Car signal.

- Signal system, electrical, Freeman & Slater. 575,806 Signaling system, electric, W. M. Ramsey. 575,733 Siphon receptacle, J. Nagelinger. 575,832 Siphon tank, G. T. Tilden. 576,006 Skirt, bicycle, W. E. Smith. 575,912 Sleigh brake, Jensen & Hansen. 575,966 Smelting, electric, L. Wilson. 575,788 Smoke consumer, C. C. Brucker. 575,885 Smoke consumer, Schmal & Westphal. 575,930 Smoke or gas purifying apparatus, H. R. Chubb. 575,877 Soldering machine, can, A. Johnson. 575,807 Sole channeling and trimming machine, H. H. Arnold. 575,867 Spectacle temples, machine for turning, A. E. Johnson. 576,077 Spindle, A. Scheid. 576,059 Spouted can, R. W. Gillespie. 576,051 Sprinkler. See Lawn sprinkler. S and. See Combination stand. Starting and stopping mechanism, C. D. Rice. 575,810 Steam boiler, D. P. F. Cardozo. 575,811 Steam boiler, J. R. Vance. 575,786 Steam conduit, flexible, M. P. McLaughlin. 575,831 Steam trap, expansion, J. E. Chafer. 575,920 Stone borer, H. Schwarzenhauser. 575,738 Stool, canker, A. A. Lind. 575,721 Stove, O. H. Van Gilder. 576,016 Stove, double drum sectional heating, J. Fleming. 576,049 Stove, heating, G. W. Cope. 576,024 Stove, petroleum, Ostlund & Malmstrom. 575,979 Switching machine feeding mechanism, A. J. Langlois. 576,067 Switch and signal apparatus, J. G. Schreuder. 575,908 Table. See Drawing table. Folding table. Tank. See Siphon tank. Telegraph, printing, O. L. Kleber. 575,830 Telephone transmitter, R. S. Barnum. 575,869 Telephonic transmitter, M. Kotrya. 575,896 Thrashing machine band cutter and feeder, H. Wappalhorst. 576,011 Time register, watchman's, S. Bower. 575,739 Tire, elastic, C. K. Welch. 575,797 Tire valve, vulcanized, F. V. Bell. 575,817 Tire, vehicle wheel, E. Humbrecht. 576,072 Tire, wheel, E. E. Quimby. 575,783 Tires, apparatus for repairing pneumatic, Hines & Willard. 575,889 Tobacco cutting or slicing machine, J. H. Hubbell. 575,963 Tobacco, method of and apparatus for disentangling cut, O. W. & C. Allison. 575,774 Track sanding apparatus for locomotives, T. J. Hennessey. 576,055 Transom lifter, S. N. Peck. 575,982 Trap. See Animal trap. Steam trap. Trolley track frog, W. J. Sumner. 575,770 Truck, railway, A. C. Mather. 575,723 Trunk fastener or lock, R. Cloughton. 575,922 Trunk handle, G. Crouch. 575,922 Tube. See Roentgen ray tube. Tubing machine head, W. Himm. 575,888 Tuning pin socket, C. W. Peck. 575,850 Type, machine for removing fin from, W. C. Chase. 576,027 Typewriting machine, G. B. Webb. 575,916 Vane, J. N. Murphy. 575,768 Valve, straight, F. W. O'Brien. 575,702 Vehicle runner, O. O. Storie. 575,825 Ventilator. See Car ventilator. Vessel, submarine, J. Scheubeck. 575,907 Vessels, raising sunken, J. R. Grant. 576,052 Violin players, device for regulating position of arms of, G. Wells. 575,798 Vison, portable, A. E. Brockett. 575,686, 575,687 Wagon seat, C. E. Weedin. 576,013 Washbowl fixture, T. E. Doyle. 575,924 Washing machine, D. F. Whiteman. 576,015 Watches, winding bar for stem winding, O. Ohlsson. 575,728 Water closet, M. Morell. 575,930 Water closet bowl repair coupling, P. W. Doyle. 575,923 Water cooler, J. Meltser. 575,888 Water gate for fumes, cisterns, etc., A. H. Stoes. 575,998 Water heater for bath tubs, W. Gunn. 575,944 Water meter, J. A. Tilden. 575,743 Web associating and folding apparatus, G. B. Titworth. 576,007 Well drilling machine, Bunnell & Chapman. 575,688 Wheel. See Fly wheel. Wheel and axle. Wheel rim, machine for boring, D. H. Welliver. 575,745 Windmill regulator, S. A. Rouse. 576,078 Window dressing device, E. P. Wood. 576,016 Window dust screen, H. B. Shotts. 575,937 Wood, solidifying, J. McLachlan. 575,973 Wrench, J. J. Reinhart. 575,989

DESIGNS.

- Battery element, W. Mills. 26,567 Bolt washer, W. Heiser. 26,563 Book, J. Bristol. 26,565 Clock case, G. D. Golden. 26,566 Engine casing, J. W. Raymond. 26,566 Gas fixture, E. Lindner. 26,569 Hall rack, C. D. Golden. 26,572 Lamp attachment, F. Poy. 26,568 Radiator, A. W. Foots, Jr. 26,569 Shade roller, T. W. B. Shaw. 26,566 Switch contact member, M. Guett. 26,564 Switch handle, G. W. Hart. 26,566 Towel rack, C. D. Golden. 26,573 Toy chair, P. F. Pia. 26,571 Tray, C. F. A. Hofer. 26,570 Tube, C. F. Pike. 26,542 Underwaist, F. Kern. 26,574 Water wheel bucket, E. P. Jones. 26,568

TRADE MARKS.

- Beeswax, W. H. Bowdler. 29,519 Boots and shoes, having cushions upon their insoles, A. Reed. 29,498 Brandy, Pector & Ducout, Jeanne. 29,525 Brooms, J. W. Willard. 29,503 Canned salmon, Seufert Brothers Company. 29,520 Carpets, tapestry Brussels and tapestry velvet, Roxbury Carpet Company. 29,501 Crutch and hand therapy, J. Munn & Co. 29,506 Earthworking tools certain named, Collins Company. 29,534 to 29,536 Edge tools, certain named, Collins Company. 29,532 Envelopes, Thompson & Norris Company. 29,583 Eyeglasses and spectacles and parts thereof, Short, Nerney & Company. 29,504 Fishing rods, Montague City Rod Company. 29,504 Guns and pistols, I. Johnson. 29,531 Heaters, ranges and stoves, Majestic Manufacturing Company. 29,529 Hoes, D. & H. Scovill. 29,529 Leather dressing and polish, Goodrich Polish Manufacturing Company. 29,514 Liniment, Brandreth Company. 29,507 Liniment, C. Hillig. 29,586 Malt extract, W. E. & Thomas Brewing Company. Medicine, certain named, B. Latier. 29,510 Metal polishes, A. A. Fowler. 29,513 Ointments, creams, powders and soaps, preparations for skin diseases, including, Zomela Company. 29,511 Peptone of meat, Lieb's Extract of Meat Company. 29,522 Pills and pellets, Brown Manufacturing Company. 29,522 Remedy for women's diseases, G. G. Powning. 29,509 Rubber belting, hose, packing and utensils made of rubber, Peerless Rubber Manufacturing Company. 29,502 Saleratus, soda and salt, Church & Dwight Company. 29,515 Sewing machines, Wheeler & Wilson Manufacturing Company. 29,526 Shirts, Corlies, Coon & Company. 29,496 Shoes, boot hats, coats, caps, pants, vests, gloves and similar articles of apparel, T. P. Byrnes. 29,497 Shoes, men's and boys', Tootle, Wheeler & Motter. 29,499 Shoes, women's, misses' and children's, Tootle, Wheeler & Motter. 29,500 Sledges, hammers, wrenches, shoes, dies and saws, Collins Company. 29,537 to 29,539 Soap, M. Werk Company. 29,516 Soap for cleansing and dyeing purposes, Maypole Soap Syndicate. 29,517 Stoves and soldering apparatus, petroleum, B. A. Horth & Company. 29,527 Whisky, Alexr. Young Company. 29,524

A printed copy of the specification and drawing of any patent in the foregoing list, or any patent in print issued since 1883, will be furnished from this office for 10 cents. In ordering please state the name and number of the patent desired, and remit to Munn & Co., 361 Broadway, New York. Special rates will be given where a large number of copies are desired at one time. Canadian patents may now be obtained by the inventors for any of the inventions named in the foregoing list, provided they are simple, at a cost of \$40 each. If complicated the cost will be a little more. For full instructions address Munn & Co., 361 Broadway, New York. Other foreign patents may also be obtained.