RECENTLY PATENTED INVENTIONS.

Railway Appliances.

CAR COUPLING.—Joseph Rigby and George W. Reed, Seattle, Washington. In this coupling a spring-seated block is arranged to slide in the throat of the drawbar and hold the pin up until the block is forced in by the entering link, when the pin drops to couple the cars, the device insuring greater smoothness and certainty, and its working being definitely under the control of the operator.

CAR AXLE.—Charles W. Wolfe, Albany, N. Y., and Thomas H. Campbell, Green Island, N. Y. This is a sectional axle with wheels capable of independent rotation, so that a car supported by them will round curves of shorter or longer radius to either side, materially reducing friction and wear of railway equipment, the invention covering various novel features of construction and combinations of parts.

RAIL SWEEPER.—Neil Campbell, New York City. Two sweepers are ordinarily employed upon each car, one at each end diagonally across the track, and capable of attachment to the bottom of any car, the construction being designed for convenient manipulation to engage or disengage the sweeper with or from its driving mechanism and the track, the sweeper being driven directly from the wheels of the car or axle.

GONDOLA CAR.—Thomas Watkins, Coal Bluff, Pa. This is a car primarily designed for the transportation of coal, coke, ores, etc., and for the quick and easy unloading of the contents of the car without the labor of shoveling, the invention covering various novel features of construction and combinations of parts.

ELEVATED RAILWAY.—Thomas C. Clarke, Shrewsbury, N. J. This invention consists of a longitudinally-extending triangular girder, with side brackets projecting therefrom at suitable intervals and serving to support the double tracks, the construction being designed to take up but little room in the streets, and not seriously obstruct the passage of light and air.

Electrical.

BILGE WATER ALARM.—James W. Jones, New York City. This device consists of a float having an electrical contact point, an electrical signaling apparatus, and a fixed contact point, against which the float contact point bears when the water rises above a certain predetermined height, whereby an alarm will be sounded.

TELEGRAPH KEY.—John S. Kaylor, of Bismarck, Ill. Combined with the leg and contact point of the key is a sliding bolt, spring contacts forming a positive electrical connection therewith, with a spring for moving the bolt forward into the leg and a curved switch lever for withdrawing it, whereby the switch will not be liable to be opened accidentally, and will close automatically when released.

Mechanical.

GAINING MACHINE.—Joseph W. Baker, Chatham, Pa. This is a machine especially adapted for use in the formation of the gains in the string pieces or jacks of a stairway, movable clamps providing for the adjustment of a bed plate or frame to bring the cutter head to a position to operate to form either the tread or riser gains.

SAW FILING AND SETTING MACHINE.—William H. Parry, New York City. This is an improvement in machines which have a saw that is alternately clamped and released and moved the distance of one tooth during the reciprocating movement of a file holder that slides in a guideway adapted to vibrate in a vertical plane, the invention covering various novel features and combinations of parts.

Agricultural.

PLANT PROTECTOR.—Henry T. Shepheid, Bentonsport, Iowa. This device consists of a wire screen cover adapted to wholly inclose the plant to protect it from the ravages of insects, without excluding the sun, air, and moisture, the protector being readily anchored in place, and designed more especially for use over melons, to protect them from bugs and cutworms.

Miscellaneous.

SPONGE HOLDER.—Burchard H. A. Siefken, Omaha, Neb. This is a device which will maintain an upright position, whereby the sponge will the longer retain its moisture, and be prevented from coming in contact with books, papers, or other articles, while it has a cap, so that it can be carried in the pocket without any leakage of water.

LEG FOR FOLDING BEDS.—Frederick Bennett, New York City. This is a leg so arranged that upon lowering the bed it will fall by gravity to the proper position for supporting the bed and be securely locked, and upon elevating or closing the bed will fall back to full concealment, the invention covering various novel features of construction and arrangement of parts.

HEAD AND BACK REST.—Charles Gurney, Piffard, N. Y. This is a portable device, consisting of a casing with an opening in its back, a spring-pressed plate being mounted in the casing with an arm hinged to the plate, and is designed more especially for use with a railway car seat, the parts being adapted to fold compactly and so designed that they may be brought to fit the person of almost any user.

PICTURE NAIL.—Aloysius Hauger, New York City. This is a nail in which the head portion is hinged to the body or stem, and adapted to fold toward the stem and unfold therefrom, whereby the stem may be driven into a wall or support without danger of injuring the head.

WINDOW CLEANER.—Francis Redmond, Ranelagh, Dublin, Ireland. This an improvement in window cleaners having a rotary brush, pad, or mop, carried by a handle with mechanism for operating the rubber by hand, the improvement being designed to facilitate the work without weakening the support of the rubber.

LAMP BURNER.—Thomas Wall, Brooklyn, N. Y. This is a burner in which the parts are firmly secured together without the use of solder, and at small cost, a novel form of die and plunger being employed, and the invention covering other special details of construction and combinations of parts.

DRAWER EQUALIZER.—Joseph H. Knaus, Fayette, Mo. This invention covers a peculiar arrangement of links and levers joined together after the manner of toggle levers in the rear of the drawer, for securing its even and regular movement, and so that when pulled from one side or the other it will not be liable to become cramped or jammed.

LABYRINTH PUZZLE.—William F. Trulsen, New York City. This is a shallow rectangular box in which fits a sheet metal piece with stamped ribs forming groups of grooved passages, of which only one correct passage leads from a central recess to an exit opening near one corner of the box, a ball being adapted to traverse the passages and escape therefrom.

HYDROCARBON BURNER.—John Adams, Nashville, Tenn. Three patents in this line have been granted to this inventor, one of which more especially covers a burner designed for heating stoves, another for a burner for use in cooking stoves, and adapted to burn a mixture of petroleum or other liquid hydrocarbon and steam, these burners being designed for use in the fire-pot of an ordinary stove, while the third invention is intended to adapt the burner to a wider range of use where it is desirable to establish a forced draught by compressed air or steam.

NON-CONDUCTING COVERING.—Joseph L. Stillman, Fresno, Cal. This is a covering for pipes, to prevent freezing or loss of heat, and is composed of felt, red flannel, Osnaburg cloth, and paper, arranged in layers, with a special composition incorporated between the layers.

COAL MINING MACHINE.—William Job, Columbus, Ohio. This machine consists of a traveling adjustable frame mounted on swiveled rollers, and having a drill and cutter, adapted to drill a hole and then cut a seam laterally therefrom in such way that the blocks of coal detached from their place in the seam may be readily removed.

LOCK.—Charles E. Hennies, Atlanta, Ga. The bolt of this lock has notches in its upper and lower edges, with a spring-actuated tumbler adapted to hold the bolt in an unlocked and partially locked position, a spring-actuated stop holding the bolt in a locked position, while the tumbler, stop, and bolt are so constructed that two keys are necessary to lock and unlock them, and these keys must be manipulated in a definite manner.

WEIGHT AND PRICE SCALES.—Joseph T. Bright, Lexington, Ky. In these scales a tilting graduated beam is connected with a lever under the platform, and operates other levers on which the platform rests, the weight that slides on the beam being adjusted to indicate the value of the quantity of the article desired, while a dial pointer is adjusted by a screw to indicate the amount in pounds.

FILTER.—Charles G. Purdy, Brooklyn, N. Y. This invention covers a packing or joint for filter tubes, consisting of a central elastic apertured disk and two apertured guard plates at each side thereof, all adapted to an opening in a partition separating the unfiltered and filtered fluid chambers of a filter, and to make a joint with the filtering tube nozzle.

CARPET CLEANING MACHINE.—William Bowman, Battle Creek, Mich. This invention consists of a revolible case or carrier formed with a number of pockets and provided with retainers, to prevent the bunching of the carpets placed in the machine and provide for a proper action in connection with each carpet.

MUCILAGE DISTRIBUTER.—Magnus J. Palson, Gloucester, Mass. This is a vessel having a small eduction port, connected with which is a spring spreader, carrying a rubber packing normally closing the port, whereby mucilage, glue, or paste held in the vessel may be delivered by simple pressure and evenly spread upon the parts to be connected.

TYPEWRITER CABINET.—John E. Davis, Washington, N. J. This invention consists of a supporting shelf pivotally connected at one end to the desk, rollers or blocks on the desk supporting the shelf in a closed or extended position, whereby the machine may be conveniently supported for use and inclosed when not in use, the cabinet then forming a writing desk.

PIANO.—Arthur W. Davidson and Charles Sigmund, Philadelphia, Pa. This is an improvement in the construction of upright pianos, providing means whereby the pin block will be securely attached to the back timbers or bracings of the instrument, and also to utilize the attaching mediums as conductors and transmitters of sound, tubular or trumpet-shaped bolts being used.

CLOTHES HANGING APPARATUS.—James A. McMahon, Brooklyn, N. Y. This invention relates to apparatus on the inside of the window, and used with a movable endless line running over pulleys and extending to a point outside of the house, the garments being hung on the line inside of the window and prevented from being soiled in passing over the window sill, while danger from leaning out of the window to handle the line is avoided.

DUMPING CART.—Charles Gibbs, New York City. This cart has a bottom pivoted to it at its rear end and is provided with a hoisting mechanism at its front end, with other novel features, whereby the load may be dumped quickly and conveniently while the body of the cart remains in its horizontal position, the end gate not being opened and the operator remaining at the front of the cart.

NEW BOOKS AND PUBLICATIONS.

CYCLOPÆDIA OF THE MANUFACTURES AND PRODUCTS OF THE UNITED STATES. New York: The Seeger & Guernsey Company.

This is a very large classified trade directory, designed to afford the address of a manufacturer, and in most cases a long list of manufacturers, of almost any article a customer might be looking for. The index to articles fills 173 closely printed pages, and the directory proper 855 pages, the classification being so thoroughly carried out that it is easy to find any general description of goods or any special and limited subdivision thereof.

THE AMERICAN NEWSPAPER DIRECTORY. New York: George P. Rowell & Co. Pp. 1452.

This is the twenty-second year of publication, by a leading firm of advertising agents, of an annual volume giving location, size of sheet, and subscription price of all the newspapers in the country. Great care has been taken to make the work as complete as possible, and to give the best information obtainable relative to the circulation of each publication.

L'ANNEE ELECTRIQUE. Paris: Baudry et Cie. 1890. Pp. viii, 381.

Under eleven different headings forming the titles of as many chapters the history of electrical work for the year 1889 is given in this work. The electrical world is in a state so typically one of transition and development that these annual records of invention and discovery, embodying a summary of the world's progress in the science, are of the greatest utility, and should be studied by all. The last chapter on necrology brings to us the recollection of the losses of the year: Gaston Plante, the inventor of the storage battery; L. Gaulard, celebrated as one of the originators of the distribution of electricity by the converter system; J. P. Joule, the great physicist and investigator of the thermo-mechanical laws and relations, being among the most eminent.

THE PASTOR'S DAUGHTER. By W. Heimburg. Translated by Mrs. W. J. Davis. New York: Worthington & Co.

THE FEET OF LOVE. By Anne Reeve Aldrich. New York: Worthington & Co.

These are beautifully printed and bound novels with which to while away a summer hour agreeably. They are each embellished with good specimens of photogravure illustrations.

Business and Personal.

The charge for Insertion under this head is One Dollar a line for each insertion; about eight words to a line. Advertisements must be received at publication office as early as Thursday morning to appear in next issue.

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.
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.

(2235) C. W. asks: 1. Can blue ferroprussic prints be tinted gray or green, or can prints be made in any tinton the same principles by simple water manipulations? A. See SCIENTIFIC AMERICAN SUPPLEMENT, No. 584. 2. How can I varnish or give a glazy look to engravings, cardboard, etc., which will be pliable and elastic? A. Spread over the prints with a brush a collodion varnish. To 32 parts of collodion add 1 part of castor oil. 3. Is there any cheap, easy, and quick method of making ink prints direct from negatives or from films? A. No. See book, "Practical Guide to Photographic and Photomechanical Printing," by W. K. Burton, price $1.50.

(2236) A. H. asks: 1. Can you give me the process by which the wax upon the Edison phonograph cylinder is hardened? A. The composition is a secret. 2. Is there any known solvent for carbon? A. Melted iron and some other metals. 3. Is it possible to conceive an indivisible particle of matter? A. This probably passes comprehension, and can only be affirmed as a definition. 4. What works do you consider the most complete upon physics? A. We recommend and can supply Hopkins' "Experimental Science," price $4. Ganot's "Physics," $5. Ganot's "Natural Philosophy," $3.

(2237) H. G. L. writes: Please give me a simple test for phosphate of lime. A. Dissolve the mineral in nitric acid and add a drop to several cubic centimeters of a nitric acid solution of ammonium molybdate. A yellow precipitate indicates phosphoric acid. The test is interfered with by the presence of silicic or arsenic acid. These will not be apt to trouble you. Natural phosphates generally are accompanied by calcium carbonate.

(2238) W. V. B. asks how dextrine should be treated to eliminate the disagreeable odor it always has. A. Dissolve 10 parts dextrine in 18 parts water. When it has become clear, decant or siphon off, and mix the clear solution with 1½ to 2 per cent of 95 per cent alcohol. Decant the liquid from the precipitated dextrine, which will be dissolved in water and evaporated to dryness. Or dissolve in water and filter through animal charcoal.

(2239) C. E. B. asks how to make soap from the soap tree bark. A. Use the powdered bark infused in water. No preparation is needed.

(2240) J. D. J. writes: 1. I have made some ink for reinking typewriter ribbons, as per receipt taken from SCIENTIFIC AMERICAN, and while it works all right apparently at first, it gets too dry in a few days for use; when I put in more castor oil, then it makes it too greasy. The receipt read to take any aniline dye and dissolve it in alcohol, and thicken with castor oil. Can you give me the proper proportions of each? I find my ribbons dry out too soon, and when I add more castor oil, I get it too greasy. A. Try the addition of a little vaseline to your ink. We cannot give absolute proportions. In many cases vaseline is recommended as the body. 2. Will you please tell me what to add that will make it copy in the press? A. For such a copying ink dissolve an aniline color in a little alcohol, and mix with glycerine. 3. Will you give receipt for making first-class writing and copying fluid—black and blue black? A. In general, three volumes of a good ink of desired quality may be mixed with one volume of glycerine. An aniline color may be used as the basis, but will be liable to fade. For a black gall ink macerate 1 pound crushed galls in ¾ gallon of water poured on while boiling. Strain, and add a solution of 5½ ounces of copperas and 3 ounces of gum arabic dissolved in ¼ gallon of water. Add a little oil of cloves as an antiseptic. This gives a plain black ink. To make it blue black, add a strong solution of soluble Prussian blue. Mix either of these with glycerine as described above.

(2241) E. H. S. asks (1) of what and how is plaster of Paris made? A. It is made from gypsum, a natural mineral, a hydrated calcium sulphate ($CaSO_4.2H_2O$). The mineral is ground and heated until part of the water is expelled. 2. Has it any relation to alabaster? A. Alabaster is a variety of gypsum.

(2242) J. C. B. asks: 1. Please inform me of the best way of converting sulphite of lead combined with linseed oil into metallic lead? A. Heat in a crucible with a few iron nails or wire scrap, powdered charcoal and carbonate of soda. 2. And also any book which will treat on this subject. A. Books on assaying, such as Keil's "Assayer's Manual," $3, or on metallurgy, such as Overman's "Metallurgy," $5. 3. Also how to test white lead for the amount of oil contained in it? A. Treat with bisulphide of carbon until oil is all dissolved out, and weigh the residue.

(2243) P. H. G. writes: What is the best known mixture of minerals which, when in a hard form, will ignite when exposed to the air, and burn for any length of time? A. Lead pyrophorus, made by heating tartrate of lead in a glass tube, ignites when exposed to the air. Iodine and phosphorus placed in contact ignite in a few minutes. Finely divided iron mixed with sulphur and moistened may inflame spontaneously. In the first and last of these cases the combustion is flameless.

(2244) A. J. G. asks (1) if there is anything better than shellac for covering the metallic part of a static battery to prevent loss of electricity. A. No. A good quality of shellac is the best substance known for this purpose. 2. Which kind of glass, plate or common, is preferable for making wheels for a static battery? A. For small machines common sheet glass, for large machines plate glass. 3. Would like to know what is meant by burnt plaster, also what sort of material is meant by Greek pitch? A. Calcined plaster of Paris and mineral pitch. 4. Is the static battery known as the Wimshurst machine patented? A. We think not. 5. Of what advantage are the equalizing rods on the Holtz-Toepler battery? A. They neutralize the charge on the plate at the points of contact.

(2245) A. T. O. asks how to prepare Javelle's water. A. Mix 80 parts chloride of lime with 400 parts of water in a covered vessel. Dissolve 100 parts carbonate of potash in 400 parts water (boiling). Pour last solution into first as quickly as possible, and cover. When cold, dilute to 1,000 parts.

(2246) J. J. F. says: There is a diversity of opinion between our engineers in regard to method of holding a high steady pressure with a hot fire. One holds that if any door should be open, it should be the furnace door, as it causes less contraction, and therefore causes least injury. The other, that the flue doors in brickwork should be opened and furnace doors closed, thereby causing less contraction. A. It is the practice among our best engineers to use the chimney damper, the fire door and the ash pit door, with discrimination as to economy and the best regulation of steam. When the engine is running regularly, the damper should do the whole work of regulation for steam pressure. The fire door should only be used for feeding fuel and the sudden necessity of checking steam generating, when engines are suddenly stopped. The ash pit door is not needed when there is a good damper regulator. If there is no damper, the flue door may be used as a regulator, but is not recommended.

(2247) W. S. H. asks if there is any way to varnish or coat a copper boiler in the kitchen, connected with a range, so as to keep it bright and avoid the weekly scouring and the use of so much "elbow grease"? A. Shellacking or the application of gum sandarac varnish might answer. For all these applications the surface must be absolutely clean.

(2248) J. W. E. asks a cheap preparation for deodcrizing coal oil, that could be mixed with turpentine and paint. A. An attempt at deodorizing coal oil may be made by agitating it with concentrated sulphuric acid, leaving bichromate of potash in solution, allowing it to settle and decanting. This mixture cannot be mixed with vegetable or animal oils, and the coal oil must be carefully freed from it, as by washing with water or weak soda solution, before use.

(2249) M. H. asks how lead pipe is run when run in long lengths of say one mile? It is the core which bothers us. A. Lead pipe is made by forcing the lead through a die in the axis of which is supported a mandrel, leaving an annular space through which the lead passes while still hot but congealed. The different charges of lead weld together under the heat and pressure, making the issue of pipe in a continuous length as long as the machine can be run, many miles if necessary.

(2250) C. H. asks: What kind of metal is best to use for a mercury trough, to be used for electrical connections? A. Use iron or copper if you desire to make connections through the containing vessel. Vulcanite answers well where the connections are made through the mercury alone.

(2251) O. F. N. asks: What foreign substance is dissolved in the water or oil into which the heated steel is immersed, in order to prevent said steel from drawing out of shape and breaking? A. There is nothing that can be put in the water that will prevent warping in hardening. The whole secret is in the manner of dipping, which should be such that the cooling should take place all around, or in a plane at right angles to its longer axis. A spindle or long top should be dipped in a vertical position. Cracking is often a mystery, but is more often the result of inattention to the quality of the steel and overheating. No steel should be heated too fast, nor any hotter than is absolutely necessary to harden it. This is a good workman's experience, and his secret, *i. e.*, to know just how hot and how fast to heat every grade of steel and every form of tool.

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May 13, 1890.

AND EACH BEARING THAT DATE.

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Curling iron, S. Reid 427,907
Current apparatus, alternating, E. & F. W. Heymann 427,571
Current motor, alternating, M. Von Dolivo-Dobrowolsky 427,978
Cutter. See Buttonhole cutter. Fodder cutter.
Darkroom, portable, G. Bausch 428,036
Dental disk mandrel, J. Pugh 428,019
Dental engine hand piece, W. R. Marsh 427,780
Detector. See Ground detector.
Disintegrating machine, J. W. Hyatt 427,687
Displaying receptacle, F. S. Gifford 427,982
Doll, R. Steiner 427,927
Door, J. H. Murray 427,599
Door closer, thermal, W. R. Patterson 427,899
Door hanger, W. Cronk 427,838
Dress form, T. W. Hobday 427,991
Dress shield, P. P. Guillaume 427,985
Drill. See Grain drill.
Drills, apparatus for testing and straightening, O. Smalley, Jr 427,805
Drums, oven attachment for, W. H. Ryer 427,799
Drums, water heating attachment for, W. H. Ryer 427,798
Dyeing hides, apparatus for, J. Kristen 427,697
Dynamite, P. Germain 427,679
Electric cable terminal, J. A. Hanagin 428,046
Electric currents, producing alternating, M. S. Conly 428,042
Electric cut-out, automatic, E. M. Bentley 427,724
Electric generator, pyromagneto, N. Tesla 428,057
Electric heater, B. C. Howard 427,574
Electric indicator, F. A. Lane 427,879
Electric light bulb, incandescent, T. B. Atterbury 427,951
Electric meter, S. C. C. Currie 427,748
Electric prod pole, J. M. Burton 427,549
Electric signal, J. Haas, Jr 427,762
Electrical converter, S. Z. De Ferranti 427,751
Electrical distribution, system of, L. Bell 427,541
Electro matrix machine, G. A. Goodson 427,681
Electrode, secondary battery, J. F. McLaughlin 427,785
Electrodes, composition for supports for secondary battery, W. F. Smith 427,710
Elevator. See Water elevator.
Engine. See Rotary engine. Wind engine.
Explosive mixer, W. R. Quinan 427,707
Extractor. See Cartridge extractor. Stump extractor.
Fasteners, making corrugated, F. W. Starr 427,632
Felley polishing machine, P. Kettenring 427,695
Felt by electricity, shrinking and fulling, Taylor & Hard 428,026
Fence, P. Lightner 427,773
Fence post bottom, I. V. Wolf 427,815
Filing cabinet, paper, M. R. Jewell 427,998
Filter, C. G. Purdy 427,906
Filter press, B. Remmers 427,794
Fire alarm regulator, Spike & McLeod 427,711
Firearm, H. M. Caldwell 427,833
Fireplace heater, T. B. Jackson 427,767
Fish line float, G. T. Bond 427,730
Fodder cutter, R. B. Killin 427,769
Folding chair, A. B. Albert 428,032
Folding chair, W. B. Botsford 427,964
Folding table and step ladder, combined, L. Tobey 427,935
Food compound or condiment, M. B. Manwaring 427,779
Frogs, guard rails, and switches, foot guard for, E. S. Mahoney 427,884
Fruit grader, W. C. Hamilton 427,687
Funnel, adjustable, J. Jones 427,874
Furnace. See Glass furnace.
Fuse block, C. F. Brush 427,518
Fuse plug, W. A. Anthony 427,823
Gaining machine, J. W. Baker 428,044
Gas, apparatus for the manufacture of, W. M. Cosh 427,747
Gas burner for heating or cooking, G. E. Wright 427,651
Gas regulator, C. G. Dyott 427,979
Gate, A. M. Spaulding 427,926
Gate, L. W. Webb 427,647
Generator. See Electric generator.
Glass furnace, J. B. Archer 427,654
Glass leer, window, J. H. Lubbers 427,882
Governor, steam engine, C. J. Rinderknecht 427,615
Grain binder twine holder, D. Gabel 427,844
Grain drill, G. W. Kirkpatrick 428,002
Grinding machine, W. Porteous 427,904
Ground detector, C. H. Macloskie 428,050
Guard. See Railway cattle guard.
Gun and operating mechanism, pneumatic, R. J. Gatling 427,848
Gun and torpedo boat, pneumatic, R. J. Gatling 427,847
Gun sight, aligned circular, P. Kottlors 428,004
Hame, M. V. Nichols 427,891
Hame fastener, E. Morgenroth 427,596
Hammer, E. Gartze 427,678
Hammock chair, L. L. Pearson 427,900
Hanger. See Paper bag hanger.
Harness, A. J. Smith 427,630
Harrow and cultivator, double side, M. B. Gooing 428,045
Harrow, disk, A. J. Glass 427,854
Harrow, disk, S. J. Glass 427,855
Harrow, listing, Boyer & Bentley 427,731
Hat bodies, machine for pinning out, A. T. Clason 427,554
Hat sweats, attaching reed lining to, J. S. Hosmer 427,995
Hats, machine for rounding and planing the curled edges of, C. H. Reid 427,793
Hatchway gates, device for operating elevator, F. O. Kittredge 427,770
Heater. See Electric heater. Fireplace heater.
Heating buildings, device for, J. E. Stuart 427,634
Heel nailing machine, W. J. Fahnley 428,044
Hemp brake, J. J. Hawkins 427,764
Hemp cleaner, J. J. Hawkins 427,763
Hoisting and conveying machines, automatic dumping bucket for, A. E. Brown 427,830
Holdback, vehicle, J. H. Ormsby 427,894
Holder. See Book holder. Grain binder twine holder. Paper bag holder. Reel holder. Rein holder. Whetstone holder.
Hominy mill, J. Warrington 427,644
Horseshoe, J. Curtin 427,976
Hose band clamp, H. B. Sherman 427,709
Hose, etc., compound fabric for, B. L. Stowe 427,929
Hydrocarbon burner, J. Adams 427,819, 427,820, 427,946
Hydrocarbon burner, More & Rogers 427,595
Hydrocarbon burner, A. Noteman 427,893
Hydroquinone, obtaining permanent, K. Scholz 427,620
Ice cream freezer, A. L. Platt 427,901
Ice machine and method of operating same, Hildrup, Jr., & Butler 427,765
Incrustation preventive, J. W. Mitchell 428,015
Indicator. See Electric indicator. Speed indicator. Station indicator.
Ink well bracket, W. Lumley 427,883
Iron. See Curling iron.
Ironing board and support, A. M. Bennett 427,542
Jack. See Boot jack. Lifting jack.
Jar. See Slop jar.
Jeweler's case, C. F. D. Springfels 427,631
Jeweler's use, making ingots for, H. T. Smith 427,924
Journal, anti-friction bearing roller, B. Beaupre 427,539
Kiln. See Brick kiln. China firing kiln.
Knitting machine, circular, Martin & Gee 428,052
Knitting machine stopping mechanism, J. T. Ashworth 427,534
Lacing hooks with pyroxyline material, die for covering shoe, T. B. Benwell 427,958
Ladder and fire escape, extension, L. D. Knowles 427,771
Ladder, extension, V. Holmqvist 427,992
Lamp, G. Rose 427,912
Lamp, arc, P. Lange 428,008
Lamp, central draught, J. Jauch 427,870
Lamp shade, extensible, W. S. Berg 427,861
Lantern, G. P. Hobbs 428,047
Lantern for electric arc lights, G. W. Gwynn 427,986
Latch, door, D. S. Swarbrig 427,808
Lathe attachment, R. H. Hurlbut 427,869
Lathe for turning buttons, D. B. Shantz 427,919, 427,920
Lathe tool, W. Parteous 427,902
Lathing, metallic, G. Hayes 427,988, 427,989
Lead, making white, A. Orr 428,017
Leather skiving machine, F. L. Kuhn 427,579
Ledger, check, H. T. Leslie 428,009
Lever, reversing, F. M. Dwelley 427,560
Lifting, jack, F. D. Wallace 428,027
Lightning arrester, L. Bell 427,540
Lightning arrester, automatic, C. M. Griffin 427,984
Liquid holding vessel, S. R. Mace 428,013
Liquid releaser, automatic, K. F. Peterson 427,607, 427,608
Lock. See Combination lock. Pocketbook snap lock.
Lock, C. E. Hennies 427,865
Locomotive smoke and steam discharge, Cram & Roberts 427,673
Lubricator, E. Huber 427,575
Magnet, electro, F. J. Patten 427,606
Mail bag staple, F. W. Smith 427,923
Mail pouch, B. Edgar 427,676
Match safe, G. W. Baker 427,824
Matrix machine, C. L. Travis 427,717
Measuring and registering electric energy, S. C. C. Currie 427,749
Medicine, antiseptic lotion, J. Alson 428,033
Metal can, box, or other receptacle, G. A. Waeber (r) 11,07
Metals, treating, H. K. Jones 427,709
Metallurgical apparatus, W. H. Masser 427,701
Meter. See Electric meter.
Mill. See Crushing mill. Hominy mill. Windmill.
Mining machine, coal, W. Job 427,871
Moulding machinery, B. F. Rittenhouse 427,708
Monkey wrench, H. B. Cary 427,672
Mop wringer, F. J. Wood 427,817
Motion, apparatus for the transmission of rotary, A. H. Hamon 427,987
Motor. See Current motor.
Mowing and reaping machines, pitman holder for, G. H. Bartlett 427,536
Mowing machine, Gray & Estep 427,857
Mowing machine, J. A. Peer 428,018
Mowing machine frame, G. H. Bartlett 427,537