

RECENTLY PATENTED INVENTIONS.

Electrical Devices.

MAGNETIC BRAKE.—J. F. MOTZ, Phoenixville, Pa. In this patent the invention relates to magnetic brakes, and more especially to the type of magnet used therein. The more particular object is to provide a brake in which the magnet will hold the armature when the mechanism is subjected to light loads, and especially when a series-wound magnet is used.

Of Interest to Farmers.

CRATE.—J. S. HORTON, Lincoln, Del. In fruit transportation, particularly of peaches, freight-cars are fitted up with rows of shelves to contain baskets of fruit, so as to prevent the fruit from being bruised by pressure of one package against another. This practice is expensive to road and shipper, and the inventor's principal object is to provide a crate in which fruit may be packed and shipped without the above-referred-to expense. The crate is of sufficient strength to enable piling of one on the other so as to allow unrestrained circulation of air between them.

Of General Interest.

COATING EYELETS.—I. W. GILES, New Bedford, Mass. Eyelets, especially such as are applied to shoes and garments, are coated with japan or other varnish or paint. In applying the coat, which is commonly done by means of rotating rolls, the funnel-shaped throats of eyelets are apt to become filled more or less, and thus obstructed by an accumulation of coating material therein. Mr. Giles finds that this may be removed from eyelets and more evenly distributed on the enlarged ends or heads of the same by means of an air blast or current directed through the eyelets.

INDEX.—R. BOGUE, Moose Jaw, Canada. Mr. Bogue's object is to provide a means by which a bookkeeper of commercial accounts is able to systematically arrange names so that time can be saved in finding both in index and index-books. Another, is to employ the marginal index in connection with a compact form of key-index and ruled account sheets or pages numbered in consecutive order and interspersed with groups of index-sheets, the whole adapted to be bound in a way to provide for the removal of a filled sheet or completed account, so that another sheet may be placed in the book as a substitute for the completed sheet.

TEMPORARY BINDER.—A. T. BAXTER, New York, N. Y. The invention relates to improvements in devices for holding loose leaves or sheets in a secure manner, the same commonly known as "temporary" binders. The object is to provide an improved form of post capable of extension or prolongation on the gradual accumulation of the leaves, the post having its members interlocked and held in secure positive manner and always presenting the ratchet-teeth on its several members in position for engagement with bolts or dogs on the locking-slat.

SUPPORT FOR REFRIGERATING-CHAMBERS.—V. A. DE CANIO, Union Hill, N. J. The invention has for its object the provision of a movable support for use in ice-boxes and other refrigerating-chambers—such, for instance, as are used in hospitals, morgues, and the like—and arranged to permit convenient removal of the supporting-tray from the chamber or replacing it therein.

DUST-TRAP AND VENTILATOR.—F. E. DAVIS, Atchison, Kan. The inventor's object is to provide a dust-arresting trap for hot or cold air distributing pipes which will effectively coat with any heating or cooling apparatus wherein conduits for heated or cold air, or both, are employed for conveying warm or cool air to and from rooms and prevent intrusion of dust with the inducted air, a further object being to provide the dust-arresting apparatus with a foul-air conduit to remove vitiated air from rooms or inclosed spaces. It is adapted for use with the tubular conduits of hot-air distributing apparatus, and while the trap may be placed for arresting dust at each air-inlet to a room, it may be positioned at the junction of a cold-air pipe with the lower portion of a hot-air furnace.

WAIST-BELT.—T. GALLETT, New York, N. Y. The purpose of the invention is to provide a buckleless belt which will fit snugly to the waist of the wearer, the said belt comprising a body-section, a front locking-section, and a cover-flap for the locking-section so constructed that it will lie flat in the fastened or closed position of the belt, remaining in cover position thereon, imparting to the belt the appearance of continuity.

PUMP.—W. J. EN EARL, Montevista, Col. In this case the invention relates to improvements in pumps for general use, and particularly adapted for pumping water from mines or deep shafts, an object being to provide a pump of simple construction and so arranged that the packings are wholly protected from sand or grit and may be readily tightened when necessary without stopping the pump.

ICE-HOOK.—R. HUGHES, Mount Vernon, N. Y. The intention in this improvement is to provide a hook for use in ice-harvesting, and other places, and arranged to permit convenient pushing and pulling of the ice blocks, to allow of readily changing and grinding the

points in case one becomes dull, and to prevent the fastening devices for the points from being injured when the hook is thrown down.

Heating and Lighting.

HEATER.—A. G. KAUFMAN, New York, N. Y. The heater is arranged to produce complete combustion and a rapid circulation and heating of the air in the room to insure quick heating thereof or to allow of heating culinary and other vessels set on the heater, the consumption of gas by the heater being very economical and the flame confined within the heater, thus preventing accidental fires. The invention relates to heaters, radiators, and stoves for heating rooms, vessels, and the like and adapted to be attached to gas-burners.

HYDROCARBON-BURNER.—R. MATHESON, San Diego, Cal. In its general arrangement this invention comprehends a novel construction of generating means, including a converter adapted to project into a stove or other casing in which the burner is held for the usual purpose, a jet-pipe forming an attached part of the converter, and a supplemental vaporizing means for initially heating the main converting or generating devices.

Household Devices.

FOLDING BEDSTEAD.—M. BENZ, Nashville, Tenn. This invention is an improvement on a previous invention made by Mr. Benz for which he received a former Letters Patent; and the object of his present improvement is to simplify and increase the effectiveness and ease of operation of folding beds of the type represented by the aforesaid patent. A further object is to provide a bedstead which is both effective and reliable in use and one which may be readily manipulated with small exertion and carried into and out of position for use without noise or friction.

SHADE-ROLLER ATTACHMENT.—E. F. BELL, Nashville, Tenn. The improvement is in the nature of an attachment for shade-rollers, preferably those of the Hartshorn type—that is to say, rollers in which a hidden spring is wound up by unrolling the shade and is retained so wound up by a pawl or detent engaging the spindle on which the roller proper is mounted.

LOCK FOR EXTENSION-TABLES.—A. L. CRANDALL, Hanover, Pa. The object in view of this inventor is to provide novel details of construction, which enable the complete closure of the joint and the positive lock of the main sections of the table in closed position, affording convenient means for effecting such a locked closure and also for releasing the sections of the table when this is desired.

FILING-CABINET.—T. P. DOLAN, Houtzdale, Pa. The purpose of Mr. Dolan's invention is to provide a cabinet for the convenient and systematic filing of letters, bills, invoices, and all kinds of documents and an accompanying index by means of which documents can be quickly and accurately located in filing, which index can be used for filing purposes if desired; but at such times a supplementary index is employed.

Machines and Mechanical Devices.

KNITTING-MACHINE.—S. A. DODGE, Millbury, Mass. The improvement relates to circular knitting machines; and its object is to provide an attachment arranged to automatically close all the needles for a number of courses to make a plain stitch and to then close alternate needles for a number of courses to form tuck-stitches, and thus produce a tubular fabric having transverse alternating bands of plain and tuck stitches which give the fabric an exceedingly fine and durable appearance and render the fabric incapable of shrinking unduly when made of pure wool or worsted.

BOTTLE-WASHING MACHINE.—T. GREBE, New York, N. Y. The invention relates to improvements in machines for soaking and washing bottles of that class wherein an endless conveyer is guided to travel through a succession of baths. In the service of ordinary machines bottles are sometimes broken, and washed bottles accumulate in the final tank too rapidly for removal. The first objection is overcome by the provision of a construction of a yieldable liquid-proof cushion in each bottle-holder of the conveyer, said cushion minimizing the shock and preventing breakage. Means are provided to permit rapid discharge of the washed bottles.

CASH-REGISTER.—E. H. CHAPMAN, Port Chester, N. Y. In this patent, the invention relates to improvements in cash-registers of a type in which checks are deposited to visibly indicate the purchase price of goods, the parts being so constructed that a plurality of deposited checks may be at all times in view. The object is to provide a very simple and inexpensive construction.

ORE-WASHER.—F. H. FRANKENBERG, Pueblo, Col. In this instance the invention refers to improvements in machines for washing ores and similar substances, an object being to provide a washer of simple construction so arranged as to be operated with comparatively little power. A further object is to so construct the device that it may be placed and operated at the bottom of a dump, where there is no natural flow or pressure of water.

SHINGLE-SAWING MACHINE.—A. L. SHAW, Whitecastle, La. In this patent the invention has reference to improvements in shingle-sawing machines, in which the inventor aims to saw shingles rapidly and economically to the proper tapering shape and complete them in a smooth condition, so that they have the appearance of being planed, this end being obtained by cutting the bolt or billet of wood lengthwise of the grain.

CHANGEABLE-SPEED GEAR.—R. C. KILLAM, Fanst, N. Y. The intention of Mr. Killam in this improvement is to provide a simple, compact, and durable form of changeable-speed gear wherein the desired change from high speed to low speed, and vice versa, may be easily and quickly effected by the adjustment of a single lever, which is placed within convenient reach of the operator.

Prime Movers and Their Accessories.

AUTOMATICALLY-REGULATED FEEDER FOR STEAM-BOILERS.—E. L. DEL CASTILLO, Havana, Cuba. In this patent the invention has for its object the provision of novel features of construction and combination of parts for a water-feeding apparatus that positively and exactly controls the introduction of water into a steam-boiler so as to maintain the level of water therein at a predetermined height automatically.

ELECTRIC IGNITER FOR GAS-ENGINES.—E. FORD, Wilmington, Del. In this patent the improvement is in the nature of an electric igniter for gas and gasoline engines. It belongs to the class known as the "jump-spark" igniter and is automatic in its action. It consists in means whereby the electrodes are held in contact by a spring and are separated by the direct pneumatic pressure of the gases when they reach a certain degree of compression preparatory to explosion.

ROTARY EXPLOSIVE-ENGINE.—C. E. SHUMWAY, Albion, Mich. In this case the invention bears relation to improvements in rotary engines operated by an explosive gas; and the aim is to provide an engine of this character of simple construction and of small dimensions, so that it may be conveniently used for the propulsion of vehicles.

PENDULUM-POWER.—A. T. PRATNER, Douglas, Arizona Ter. The aim of this inventor is to provide a new and improved pendulum-power more especially designed for use on marine vessels, land-vehicles, and the like, and arranged to utilize the swaying motion of the vehicle for actuating an air-pump or like motor.

Railways and Their Accessories.

DUMPING-CAR.—V. KOUNS, Mokane, Mo. In this patent the invention relates to improvements in side-dumping cars, the purpose being to provide a means whereby all of the cars in a train may be simultaneously dumped, the dumping mechanism being operated from the locomotive, thus resulting in a saving of time in discharging train-loads.

AUTOMATIC RAILWAY-CAR OR WAGON COUPLING AND LOCKER.—W. SKERMAN, Brisbane, Queensland, Australia. The invention refers to car-couplings of the link-and-hook type, and aims to provide details of construction for the type indicated which adapt the coupling for an automatic coupled engagement with a similar coupling on a car moving on the same track toward the same, and which permit two couplings of the improved kind to be coupled together if positioned on cars at different heights from the track whereon the cars move. Furthermore, to afford convenient means for the manual detachment of standing or moving coupled cars.

AUTOMATIC CAR-STEP.—J. L. HINES, Dunn, N. C. In the present patent the inventor has reference to improvements in foldable steps for vehicles, the same being especially useful on railway passenger-cars in order that the adjustable step may be lowered for passengers to mount and dismount with ease and safety when the car is at rest.

DUMPING-CAR.—MCKINLEY BOYLE, New York, N. Y. An object in this case is to provide a two-way car in which continuous horse-arms are used in lieu of horse-chains, whereby there is no variation in the holding-points when the car-body is in normal position or at rest, thus making the arms superior to chains, because any shortening of one chain caused by kinking or otherwise will throw the whole upward tension of the body on the companion chain.

TROLLEY-FORK.—C. G. HARTMAN, Glens Falls, N. Y. The objects of the invention are to so construct the forks or harps as to prevent the working loose or falling out of the pin and doing away with the trouble and loss of time in changing and resetting trolley-wheels. Pins now in use are fastened with set-screws which require the use of tools in resetting them. Mr. Hartman avoids these objections, and sets and adjusts the pin without use of tools, set-screws, cotter pins, etc., in fifteen or twenty seconds.

DEVICE FOR AUTOMATICALLY OPERATING AIR-BRAKES.—T. H. HILLMAN, Spooner, Wis. This is an improvement in that class of automatic devices in which an adjustable contact-piece is arranged along the road-bed and is so adjusted as to be struck by a coating member carried by the train, which member by coming in contact with the contact-

piece in the road-bed is deflected and is made to open a valve in the train-pipe and release the air therein, so as to apply the brakes.

RAIL-TIE.—F. GOWEN, Peabody, Kan. This device can be applied at any place along a track, can be used in soft or sandy road-beds without sinking, will not require the use of many small articles to keep the track and rails in place, has no right or left hand parts, has no set-gear feature, requires only one tool to apply or remove it, can be removed and replaced without disturbing other ties or the rails, is adjustable to all sizes and kinds of rails and widths of tracks, does away with the use of fish-plates, and will be of even strength throughout its entire length.

PORTABLE WAITING-STATION.—C. U. KRIEG, Sr., Nashville, Tenn. The object in this case is to provide a portable knockdown waiting-station for use of passengers on steam or electric railroads and which may also be used as a summer-house, telephone-station, or photograph-booth, the inventor's idea being to utilize it at the same time for purposes of advertisement by making the walls to subserve the double purposes of a protective inclosure and bulletin-boards.

Designs.

DESIGN FOR A TRIMMING.—S. ISAAC, New York, N. Y. The design in this instance is a strip of material composed of figured bands five in number. The bands are spaced slightly apart and joined by corded loops, the open-work giving a pleasing ornamental effect.

NOTE.—Copies of any of these patents will be furnished by Munn & Co. for ten cents each. Please state the name of the patentee, title of the invention, and date of this paper.

Business and Personal Wants.

READ THIS COLUMN CAREFULLY.—You will find inquiries for certain classes of articles numbered in consecutive order. If you manufacture these goods write us at once and we will send you the name and address of the party desiring the information. In every case it is necessary to give the number of the inquiry.

MUNN & CO.

- Marne Iron Works, Chicago. Catalogue free.
Inquiry No. 5804.—For makers of spring motor fans.
 AUTOS.—Duryea Power Co., Reading, Pa.
Inquiry No. 5805.—For makers of machines for cleaning carpets of all kinds, dry and steam cleaning.
 "U. S." Metal Polish, Indianapolis. Samples free.
Inquiry No. 5806.—For machinery for making rugs from old carpets.
 Perforated Metals, Harrington & King Perforating Co., Chicago.
Inquiry No. 5807.—For a self-heating smoothing iron.
 Handle & Spoke Mch. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.
Inquiry No. 5808.—For makers of cyanide plants.
 If it is a paper tube we can supply it. Textile Tube Company, Fall River, Mass.
Inquiry No. 5809.—For makers of fans run by clockwork.
 Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.
Inquiry No. 5810.—For machinery for making potato flour or starch.
 WANTED.—Exclusive sale improved automobile specialties. Specialties, Box 773, New York.
Inquiry No. 5811.—For parties to make tool or crucible steel tubing 4 inches in diameter.
 In buying or selling patents money may be saved and time gained by writing Chas. A. Scott, 340 Cutler Building, Rochester, New York.
Inquiry No. 5812.—For machinery for cleaning currants.
 The celebrated "Hornsey-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Machine Company, Foot of East 138th Street, New York.
Inquiry No. 5813.—For makers of machinery for making and marking tin cans.
 We manufacture anything in metal. Patented articles, metal stamping, dies, screw mach. work, etc., Metal Novelty Works, 43 Canal Street, Chicago.
Inquiry No. 5814.—For makers of novelties.
 Manufacturers of patent articles, dies, metal stamping, screw machine work, hardware specialties, machinery and tools. Quadriga Manufacturing Company, 13 South Canal Street, Chicago.
Inquiry No. 5815.—For makers of artificial ice machines, also for plant erectors.
 Patented inventions of brass, bronze, composition or aluminum construction placed on market. Write to American Brass Foundry Co., Hyde Park, Mass.
Inquiry No. 5816.—For the makers of the stamping machine, for stamping on aluminium, called the "Simplex."
Inquiry No. 5817.—For makers of an ice cream freezer consisting of 6 or 8 individual cylinders.
Inquiry No. 5818.—For makers of tattooing machines, also supplies for tattooing.
Inquiry No. 5819.—For hand pumps capable of use to 40 pounds pressure, for air receiver.
Inquiry No. 5820.—For a good, serviceable, light-draft boat about 24 feet long, for use on the Mississippi River.
Inquiry No. 5821.—Wanted, a practical garbage crematory.
Inquiry No. 5822.—For manufacturers of the Haunted Swing.
Inquiry No. 5823.—For manufacturers of sad-irons or flat-irons which are heated by gasoline.
Inquiry No. 5824.—Wanted, a 3 h. p. marine boiler.
Inquiry No. 5825.—For manufacturers of pile drivers.
Inquiry No. 5826.—For makers of creosote shingles for roofing purposes.
Inquiry No. 5827.—For small fancy tassels made of paper, card, etc.
Inquiry No. 5828.—For parties to make to order stampings of wrought iron or soft steel plate, 3/8 inch thick.



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.

NEW BOOKS, ETC.

POOR'S READY REFERENCE BOND LIST. Containing All Important Facts Required by Investors, Bond Experts, Bankers, and Others Relative to the Bonded Indebtedness, Interest Charges, etc., of the Leading Railroad Systems in the United States.

This is a supplement to Poor's Manual of Railroads. As the above descriptive title indicates, the pamphlet contains information of great value to the investor—information compiled directly from the official returns.

THE LIGHTNING CONDUCTOR. THE STRANGE ADVENTURES OF A MOTOR-CAR. Edited by C. N. and A. M. Williamson. New York: Henry Holt & Co., 1903.

While far from being a technically perfect novel, "The Lightning Conductor" more than makes up, in brightness, breeziness, and originality, for any defects in form. It is a capital story of romantic love pursued amid the ups and downs of an automobile trip through sunny France.

HOW TO LIVE FOREVER. THE SCIENCE AND PRACTICE. By Harry Gaze. Chicago: Stockman Publishing Company. 12mo.; pp. 205. Price \$1.25.

While our inventors are experimenting with aeroplanes and motors, Mr. Gaze would solve the problem of aerial navigation simply by evolving wings from human shoulder-blades by auto-suggestion.

(9436) A. P. G. asks: Several cells of dry battery were attached to a common electric bell, such as is used for door bells; the wire was then cut and the ends immersed in a dish of water, and the bell refused to work.

(9437) E. B. asks: Will you please inform me whether the south magnetic pole is of the same strength as the north magnetic pole? That is, is the earth the same as a bar magnet, having its two poles at the north and south magnetic? Also, when a ship is sailing south, before it crosses the magnetic equator is the compass affected by the north magnetic pole, and after crossing the magnetic equator is the compass then affected by the south magnetic pole?

Nothing escapes the attacks of this Mower and Scythe. The snob, the hypocrite, the oppressor, have the feet cut from under them at every revolution of the wheels. The follies of our public school system, the dishonesty of our political system, and the injustice of our industrial system, all turn their worst sides for our inspection as the Mower lays them low.

INDEX OF INVENTIONS For which Letters Patent of the United States were Issued for the Week Ending July 19, 1904

AND EACH BEARING THAT DATE (See note at end of list about copies of these patents.)

Table listing inventions such as Acid ester and making same, Sulfo, Sapper & Reubold, Acid, making omega cyanomethyl anthranilic, O. J. Graul, 765,576.

Main table of inventions with columns for inventor names and patent numbers. Includes items like Bed, W. E. Collier, 765,272; Bed rail fastener, W. Storch, 765,402; Bench block, T. G. Lewis, 765,344.