

RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

CHURN.—JAMES M. GOSB, Pekin, Ind. The inventor has devised a simple and cleanly construction of upright churn and driving mechanism readily attachable to and detachable from the churn.

CHURN.—WICKLIFF B. MITCHELL, Owensburg, Ind. To secure a quick forward and backward turning motion of the dasher Mr. Mitchell employs a novel means of adjusting the height of the dash.

FLOW.—JOHN N. HANNA, Del Norte, Colo. The invention relates to a class of plows provided with two shares and moldboards located at opposite beams, and with means for bringing either share and its moldboard in operative connection with a common landside.

Engineering Improvements.

BOILER.—PERCY W. HANFORD, Oakesdale, Wash. This boiler includes in its construction a vessel having a burner and a regulating-valve controlled by the pressure in the vessel. A water-chamber connected with a water-supply is located over the burner and is provided with an opening at the top for the water to pass into the chamber.

Railway Appliances.

TRAIN AIR-SIGNALING APPARATUS.—JAMES M. TURBUSH, Bronx, New York city. This invention relates to air-pressure brakes of the Westinghouse type, and its object is to provide a train air-signaling apparatus, whereby the separate signal-pipe now used is dispensed with and the train-pipe and its pressure, as well as the engineer's valve, are made use of to actuate the whistle and give the desired signals to the engineer by the conductor of the train, no matter what position the engineer's valve is in.

CAR-FENDER.—JOSEPH W. MCKEAN, Charleroi, Penn. The fender is mounted to swing by means of a simple and ingenious mechanism. On the car-axle is a gear-wheel engaged by a movable tooth. The movement of the tooth imparts a positive swinging motion to the fender.

Mechanical Devices.

COFFEE MILL.—GEORGE H. DROEGE, Brooklyn, New York city. The coffee-mill is self-measuring, the construction being such that the hopper can be filled in the usual way and that cut-offs can be adjusted to pass through the slots and separate a certain quantity from the bulk of beans, which quantity alone will be ground.

ROCK-DRILL FORGING AND SHARPENING MACHINE.—WILLIAM J. EVANS, Butte, Mont. A number of dies are adapted to upset and sharpen the cutting edges of a four-winged drill. A drill-supporting device is provided comprising a horizontal guideway on which a carriage is movable. The carriage can be held at different points on the guideway. A cam-head is held to rock on a pivot-shaft between uprights on the carriage.

GRAIN-DRIER.—GEORGE WERNER, Brooklyn, and JOHN H. HILLIKER, Richmond Hill, Queens, New York city. The machine is especially designed for rapidly and thoroughly drying wet grain, such as spent brewer's malt. In the heating-chamber of a furnace drums are mounted to rotate. The drums are alternately inclined in opposite directions and geared together at their converging ends.

WASHING-MACHINE.—PESTON A. HARDWICK, Colorado City, Colo. The purpose of the invention is to improve that class of washing-machines provided with means for introducing steam into the washing-chamber, and so to construct the machine that it can be used for drying feathers or clothes or for dampening clothes for ironing. A tub is employed, provided with a double bottom and an outlet and a grating adjacent to the outlet.

DEVICE FOR FIXING SHANKS OR SCREW-STEMS IN HANDLE-KNOBS OR PICTURE HANGING NAILS.—SERAPHIN KRIBBS, Brooklyn, New York city. This device holds in proper position the shanks or screws of handle-knobs and picture-hanging nails while

in process of manufacture, the handle-bodies being formed of molten glass, clay, or any suitable plastic material. The employment of the machine facilitates the manufacture of door or drawer-knobs and insures perfect attachment of shanks or screw-stems thereto.

Miscellaneous Inventions.

CAMP COOKING-STOVE.—WILLIAM C. LANDY, Manhattan, New York city. The invention provides a combined range, cooker, and field-kitchen which simplifies out-door cooking, obviates wastefulness of food and fuel, and tends to minimize danger of scorching.

TRUCK.—JOHN MEANEY and JOHN STOEVEK, Ridgefield Park, N. J. It is a common objection that it is necessary in the use of hand-trucks first to move the truck up to the object to be carried and then to tilt the object back upon the truck, whereupon the truck itself is thrown downward so as to bear the load.

TENT.—THADDEUS D. MCCALL, Wichita, Kans. Mr. McCall has devised a convenient and easily-portable tent for campers, which requires no poles, has a canvas floor, and can be suspended and used as a hammock.

ANTISEPTIC BROOM.—OSCAR S. KULMAN, Savannah, Ga. We have frequently had occasion to notice the various inventions in antiseptic brooms which Mr. Kulman has patented. In this new improvement an antiseptic retainer is inclosed within the wisps of the broom, so that the antiseptic can be fed in sweeping.

HEATING-STOVE.—ATEN B. HOWER, Baker City, Ore. By means of a transverse partition the stove is divided into cold-air and hot-air compartments, the partition being formed with an opening near its lower end. In the cold-air compartment is a fuel magazine having its lower end connected with the partition at the opening therein.

CARD-GAME.—EDWARD CHRISTIE, Corning, N. Y. The inventor has devised a new card-game which consists of five suits and two extra cards, all designed after an entirely new plan. Various games can be played with these cards, the preferred rules being described in detail in the patent specification.

FIRE-PLACE.—NATHANIEL BATES, Dubbs, Miss. This invention is an improvement in fire-places which are formed in flat plates, sections, or pieces secured together. The fire-place can be quickly and economically constructed, and, if desired, may be inclosed or inclosed at its back, sides, and upper portion by masonry, brick-work, or the like.

CANVAS-STRETCHER.—ARTHUR F. TAIT, Yonkers, N. Y. The stretcher is extended and positively held in adjusted position through the medium of properly-applied keys. The corners of the stretcher are strengthened and maintained in proper shape. The central portion is braced; and the outer members can be expanded at such point in about the same ratio as the corners.

FOUNTAIN-PENHOLDER.—SENECA M. and ELMER E. SALISBURY, Aberdeen, S. D. Almost any pen can be inserted in this holder and can be used as if an ordinary holder were employed, without the annoyance of stopping to dip the pen into an ink-well or frequently to fill the reservoir as in the case of an ordinary fountain-pen.

INKS'AND.—CHARLES W. HAMSHAW, Lamar, Mo. The inkstand comprises a base and an ink-receiver provided with a dip-cup whereby the pen will receive only a proper amount of ink. Hence all the ink in the reservoir can be directed to and used up in the well forming a portion of the receiver.

BREECH-LOADING FIREARM.—FREDERICK HOCHBRUNN, Manhattan, New York city. A controlling-ring or cut-off for magazine-ridges is provided, the ring being of such construction that it can be turned by the fingers to such a position that the cartridges in the magazine will not be affected when the extractor is brought into action. By means of this arrangement the arm, while the magazine is filled, can be used as a single loader.

Designs.

BREAD-BOARD.—ISRAEL S. THOMPSON, Ashland, Wis. The board has a rim extending above its top and below its bottom, so that it can be used for making bread on both sides.

NOTE.—Copies of any of these patents can 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.

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Notes & Queries

HINTS TO CORRESPONDENTS.

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(7987) F. W. Q. writes: A few months ago, I read an account in the SCIENTIFIC AMERICAN SUPPLEMENT about renewing dry batteries by putting holes in the cell and immersing it in acidulated water. Would you please inform me the name of the acid and how proportion it with water? A. To renew a dry cell by the method referred to, pour one part of sulphuric acid into ten parts of water. Punch many holes in the outer coating of the dry cell as directed in the note referred to. When the liquid becomes cold, put it into any convenient glass or earthen jar, and place the prepared dry cell in the jar, so that the top stands out of the liquid about one inch. You now have a wet cell in place of the worn-out dry one, which will run till the acid has dissolved the zinc of the dry cell. This is the renewing of a dry cell. It changes the dry into a wet cell.

(7988) E. M. S. asks: Will you please send me the recipe for making the glue used on the backs of postage stamps. A. Gum dextrine, 2 parts; water, 5 parts; acetic acid, 1 part. Dissolve by aid of heat and add 1 part of 90 per cent alcohol.

(7989) W. G. asks: Will you please tell me if there is anything flexible that electricity will not burn? A. Asbestos.

NEW BOOKS, ETC.

MEMOIRS OF HAYWARD AUGUSTUS HARVEY. By His Sons. New York: Printed for Thomas W. Harvey, M.D., Orange, N. J. 1900. 12mo. Pp. 98.

The late Mr. Harvey was a typical inventor, and on the occasion of his death we published an elaborate biographical notice. The present memoirs compiled by his son give a thoroughly adequate idea of Mr. Harvey's epoch-making inventions. In addition to his process of treating armor plate, he also made many highly important inventions for making screws, spikes, wire nails, washers, etc. In all, Mr. Harvey had issued to him since 1859 seventy-eight patents, which is a most excellent record. The book is admirably written.

METHODS IN THE ART OF TAXIDERM. By Oliver Davie. Philadelphia: David McKay. Pp. 359, 90 full page engravings. Price \$2.50.

The work is very fully illustrated by engravings which vary a good deal in quality. There is hardly a branch of natural history which is more interesting than taxidermy and the excellent works on the subject have done much to aid taxidermists. Mr. Davie's book is a good one and shows an extensive practical acquaintance with the subject. The methods are modern and American.

STEAM ENGINE INDICATOR. By Cecil H. Peabody. New York: John Wiley & Sons, 1900. 12mo. Pp. 153. Price \$1.50.

The number of books upon the indicator is already very large, but there always seems to be room for a new treatise on this subject. The author is admirably fitted for his task, as he has the professorship of marine engineering and naval architecture at the Massachusetts Institute of Technology. The book is an excellent one.

MOULDERS' TEXT BOOK. Being Part II. of American Foundry Practice. By Thomas D. West. Eighth Edition. New York: John Wiley & Sons, 1900. 12mo. Pp. 461. Price \$2.50.

The true test of the value of a technical book is to see whether it can run through a number of editions. The volume before us is certainly a most valuable contribution to technical literature. It is well illustrated by comprehensive engravings. The entire subject is well treated.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending OCTOBER 30, 1900, AND EACH BEARING THAT DATE.

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

Table listing various inventions and their patent numbers, including items like Air brake, Amalgamator, Ambulance bicycle, Anchor setting tool, Ankle brace, Armatures, Atmospheric engine, Automatic gate, Axle box and axle connection, Balancing engine, Baling press, Baling press band tying mechanism, Ball, See Tennis ball, Band cutter and feeder, Bandage, Banjo bridge, Battery, Bearing, adjustable, Bed bottom, Beehive bar frame, Belt, diagnosing, Belt retainer, Belt shifter and tightener, Belt shifter, automatic, Bicycle, N. M. Barnes, Bicycle, J. E. Riddle, Bicycle brake, H. E. Ringle, Bicycle guard, J. G. Wambach, Bicycle handle bar, J. M. Justen, Bicycle tender, C. H. Stonebridge, Bicycles, etc., luggage carrier for, M. Bauer, Binding, brush skirt, A. W. Stoekley, Bit, See Bridle bit, Boiler, See Locomotive boiler, Steam boiler, Boiler, P. Cunningham, Boiler attachment, C. Phillips, Boiler flue, E. Seyfarth, Boiler furnace, J. Stevens, Bolt, See Expansion bolt, Book, account, A. L. Bastress, Book signatures, device for marking, C. T. Herrmann, Box, See File box, Letter box, Match box, Musical box, Salvo box, Box cover, clear out other, H. M. Kreh, Box lid support and tag holder, combined, J. H. Knowles, Brace, See Ankle brace, Brake, See Air brake, Bicycle brake, Car track brake, Vehicle brake, Brake, C. W. Martin, Brake operating mechanism, J. E. Normand, Brick kiln, E. Aber, Bridge, M. Waddell, Bridle bit, J. Purcell, Brush blank holding device, W. C. Read, Brush, comb, A. E. Durgin, Brush, tooth, D. J. Archer, Bung, barrel, F. W. Pingel, Buoying means for water craft, J. M. Richens, Burial apparatus, J. Carhart, Burial case machine, M. L. Keyes, Butter, See Butter churn, Butter, etc., apparatus for making molds of, R. E. Webb, Button, D. A. Carpenter, Cake making machine, striped, Barber & Furner, Caloric engine, J. T. Nicolson, Can, See Sheet metal can, Candle holder, M. Hager, Candlestick and combination implement, miner's, F. Herbst, Candy machine, T. J. Jenkins, Car body bolster, railway, E. W. Palmquist, Car buffer, street, P. M. Kling, Car coupling, J. Kelso, Car coupling, J. McCowan, Car coupling, W. S. Owen, Car coupling, C. Schiared, Car door fastener, Pries & Meyer, Car door, grain, J. Clarke, Car fender, street, H. Furstenau, Car fender, L. Madat, Car loader, H. P. Harpstrite, Car seat, P. M. Kling, Car seat foot rest, W. M. Norcross, Car track brake, railway, Lowe & Meighan, Car wheel, L. Horeland, Cars, etc., supporting strap for, T. Yoder, Carbon, manufacturing, H. Wartenberg, Carbonating apparatus, liquid, A. Wall, Carpet stretcher, L. M. Lowmes, Case, See Sterilizing case, Case and chair, combined, H. Flanders, Chain and wheel together, drive, J. C. Pratt, Chain, sheet metal, F. E. Wanderscock, Chain tightener, H. Green, Chair, See Infant's chair, Chair, E. E. Koken, Chalk line holder, J. A. Vernon, Chimney cowl, J. Clarkson, Cigarette machine, E. J. 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