

RECENTLY PATENTED INVENTIONS.

Electrical Apparatus.

ELECTRIC ARC LAMP.—PAUL MERSCH, Paris, France. Solenoid-coils are employed having cores movable therein, with which one carbon-holder is directly connected. The other carbon-holder is so connected with the first holder that it moves in a direction opposite thereto.

TELEPHONE-TRANSMITTER.—JAMES H. SPENCER, Manhattan, New York city. The transmitter comprises a disk which is slightly dished on both faces and which is of considerable thickness, so as to be but slightly flexible.

Mechanical Devices.

SUGAR-CUTTING MACHINE.—GUSTAV STOFF, Berlin, Germany. This invention provides a machine which automatically cuts rods of candied sugar into pieces of certain lengths, the rods being fed by spring-pressed rollers to a pair of rotating cutters, each having blades arranged tangentially in order to cut the rods into pieces.

SCREENING-MACHINE.—JOSEPH M. ELDER and OLIVER W. DUNLAP, Bloomington, Ill. The machine devised by these inventors is especially designed for screening the moist and sticky clay used in the manufacture of bricks.

MACHINE-DRILL SHARPENER.—JAMES J. BROSST, Butte, Mont. The sharpener comprises an anvil reciprocated by a hammer provided with swages for the flanges of the drill-shank.

Miscellaneous Inventions.

MINING-HAMMER.—FREDERICK W. WATERS, Ouray, Col. To construct the head of a hammer so that it can be used for removing as well as driving a drill is the purpose of the present invention.

TURBINE WATER-WHEEL.—JOHN SHARPE, Gravenhurst, Ontario, Canada. Leading to a tank are two flumes, each carrying and communicating with a casing.

FLOUR-BOLT.—JOHN CHARLES, Charlton, Md. This invention provides improvements whereby the gyratory movements of the superposed sieve-boxes, may be caused to compensate one for the other to avoid the jar which would otherwise result, and also to reduce to a minimum the wear on the eccentrics and shafts and their bearings.

HOT BLAST BOX.—SIDNEY E. BRETHERTON, Silver City, New Mexico. By means of this invention the waste heat of slag can be utilized for smelting purposes. The box is horizontally mounted in the upper part of inclosing walls, and has a longitudinal partition, with inlet and outlet openings.

DEVICE FOR FASTENING CURTAINS TO VEHICLE-TOPS.—NELS J. BOTTSER, Clyde, Kan. This device consists essentially of a peculiarly-formed clasp and buckle which, when locked together, cannot accidentally become disconnected, but which however, can be readily locked and unlocked.

MOLD FOR PISTON-PACKING.—FREDERICK VAN DEN BOSCH, Parker's Landing, Penn. This inventor has already received letters patent for a piston-cup or packing-ring composed in part of vulcanizable material, the cup or ring being particularly adapted for such pistons as are commonly used in deep wells, and, there-

fore, subjected to great strain or wear. The present invention comprises improvements in the mold and in the means for temporarily clamping its detachable parts together, as required for imparting the desired shape to the cup or ring and holding it duly confined while being vulcanized.

FRUIT OR VEGETABLE PRESS.—JULIA A. WARE, Salida, Col. The object of this invention is to provide a vessel or receptacle in which fruit or vegetables may be cooked, and to provide means whereby the vessel or receptacle may be utilized as a press or a strainer for potatoes or other vegetables, or for making wines or jellies.

TOY.—NAPOLÉON E. BEAUDOIN, Jersey City, N. J. This toy consists of a pan, in the center of which a post is adjustably mounted, which post is adapted to receive a base block upon which a United States flag is secured.

LOCK FOR PRINTERS' GALLEYS.—WILLIAM C. BARNES, 1733 Q Street, Washington, D. C. The lock comprises a foot and a side locking stick, or member so constructed and applied to the galley that it may be quickly adjusted to any point between the side surfaces.

BUTTER SHREDDER.—VALLIE G. TICE, Spring Creek, Penn. To mold butter which has been in cold storage requires an increase in temperature, which often injures the quality and the flavor.

PERMUTATION-LOCK FOR TOY SAFES.—CHARLES ROSSIGNOL, Paris, France. The lock consists of a bolt supported in the door and lock-casing and carrying screw-threaded knobs, which operate ratchets having screw-threaded shanks and notched bosses.

SURVEYOR'S PLUMB-BOB.—ISAAC A. MARTIN, Ouray, Col. The novel features of this invention are found in the means provided for drawing up the suspending-cord within the bob. The means in question consist of a spring-operated reel controlled by a system of gearing.

EXTENSION-TABLE.—JOHN T. LA TURNO, Grand Tower, Ill. The table comprises two separable sections. Arms are pivoted to swing in the arc of a circle at the central portion of the table and carry extension-leaves rigid with the arms so as to be capable of moving from an inclined position to a horizontal position.

LACE-FASTENER.—ANNA HANSON, Jackson, Mich. To provide a fastening device especially adapted for use in connection with shoe-laces, which device will be independent of the lace and the shoe to which it is applied, is the purpose of the present invention.

BEDSTEAD-FASTENING.—FRANK A. HALL, Montclair, N. J., and EDWARD F. TILLEY, Brooklyn, New York city. This invention relates to bedstead-fasteners in which the side rails of the frame are joined to the posts by means of coacting hooks and pins, and in which the fastening is made rigid and unbreakable by constructing the two parts so that there is produced between them a binding action in addition to the connection of the hooks and pins.

LOTION.—CHARLES E. GRAPEWINE, San Diego, Cal. This lotion, for use upon the skin, is of a semifluid or cream-like consistency, and consists of cooked and de-aerated lemon and salt, the proportions used being one-half pound of salt to one gallon of the lemon ingredient.

Designs.

PLOW-UPRIGHT.—HENRY H. STRAUGHAN, Dillon, S. C. The upright has a base from the rear end of which rises vertically a wing, the upper end of which terminates in a threaded tenon.

TOOL.—WILLIAM W. BROWNELL, Lake Placid, N. Y. This tool is a hammer having two sets of claws, one in front of the other. The claws are adapted successively to engage the nail to be drawn, thus giving two degrees of leverage.

CLOTHES-FORK.—JOHN A. OLSON, La Grange, Ill. The fork consists of two pieces of spring wood fastened together at one end. The fork prevents the scalding of the hands in removing clothes from wash-bollers.

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Patent for Sale—Combined Thimble, Thread Cutter, Needle Holder. Hirschfeld, care Occidental Hotel, 148 Bowery, New York.



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.

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(7670) H. H. G. writes: I wish to show the number of people in a room. This room is only lit up by gas light. It is not necessary to show the features or other portions of their anatomy. A dark spot on the picture will suffice. Can this be done by photography, and how long an exposure is necessary? Can it be done by gas light? A. Of course a photograph can be taken which will show the number of people in a room unless some are behind others. An exposure of 4 to 10 minutes by gas light will probably be necessary to do this. The time necessary depends on the brightness of the gas. Why not try a flash light?

(7671) H. K. says: Will you kindly give us through your columns the formula of a solution for coloring steel both brown and blue, to give it the same appearance as is given to gun barrels? A. We recommend you to purchase a copy of the SCIENTIFIC AMERICAN SUPPLEMENT, No. 830, which contains an article entitled “Gun Wrinkles,” which deals with the blacking, browning and bluing of gun barrels.

(7672) H. S. asks: Will you kindly answer in Notes and Queries the following questions concerning the high frequency coil described in SUPPLEMENT, No. 1087? 1. Approximate amount of No. 31 wire needed. A. About 1 pound of No. 31 wire is required for secondary of high frequency coil. 2. Meaning of the words “Between wires of different polarity” at the top of page 17378. I do not see how two such wires can be close enough to need extra insulation. A. Potential would be better than polarity in this phrase. 3. Number of amperes such a transformer will consume. A. A No. 8 wire will carry 30 to 40 amperes. Hence the primary will stand 100 amperes without overheating.

(7673) P. P. Company ask: Does an electrical meter register a greater number of watts when a motor is pulling a two horse load with 90 volt current than it does when pulling the same load with 110 volts, the motor being wound for 110 volts? A. Yes; the motor works at best efficiency only when fully loaded and fully supplied with current.

NEW BOOKS ETC.

REPORT OF UNITED STATES COMMISSIONERS OF FISH AND FISHERIES. 1898. Washington. 1899. Pp. 350.

This volume contains photographic illustrations of the exhibits at the Tennessee and Omaha Expositions, illustrations of the hatcheries at various points, a report of mackerel investigations, statistics regarding the yield of the numerous localities, pictures of peculiar fishes on the coast of Southern California, an extensive report on the oyster beds of Louisiana by H. F. Moore, another report on “The Shell Fisheries” of the Atlantic coast of the United States by Charles H. Stevenson, and a report of the investigations in Mississippi, Louisiana, and Texas. There are also numerous engravings of new fishes.

The Photo-Miniature, a magazine of photographic information, has just begun publication in New York city, Messrs. Tennant & Ward, 289 Fourth Avenue, being the publishers and Mr. Tennant the editor. Periodical photographic literature is already so enormous that it is very hard to welcome even the little stranger to which we have referred. While we do not see the need for the publication of another photographic journal in America, we have no hesitation in saying that “Photo-Miniature” is a very handsome publication. The number is given up to an excellent treatise on lenses and is well illustrated, and the idea is, we believe, to devote an entire number to a single subject, as in the present case, where lenses are treated. The subscription price is \$2.50 per annum.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending

MAY 30, 1899,

AND EACH BEARING THAT DATE.

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

Table listing inventions such as Accumulator plate, Advertising or display card, Air conveying conduit, Alkaloid casein compounds, etc., with corresponding patent numbers and names of inventors.

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