

RECENTLY PATENTED INVENTIONS.

Electrical Devices.

ELECTRIC GENERATOR.—M. SCHWARTZ, New York, N. Y. This invention relates to electric generators, such as dynamos. The general object of the invention is to produce an economical conversion of energy into electricity. The inventor accomplishes his object by using inclined pole pieces and inclined or helical windings for the armature. In this way the drag on the armature is exerted in an inclined direction. One component of this inclined force is parallel to the shaft and the other at right angles to the shaft. This latter force is the only substantial resistance to the rotation and is less than that developed by an uninclined winding. The force parallel with the shaft is also taken advantage of to reduce the frictional resistance by supporting part of the weight of the armature, the dynamo being constructed with a vertical shaft.

Of General Interest.

BOTTLE-CLOSURE.—H. A. OLSSON, New York, N. Y. The principal object of this invention is to provide means for effectually closing the tops of bottles and other receptacles, and while it is capable of general use it is especially adapted for use on milk-bottles. He comprises means for effectually closing bottles and also for protecting the interiors from the entrance of dirt and the like, the whole device being formed in such a manner as to render it inexpensive and easily constructed and employed.

MINER'S LAMP.—D. E. HERRON, New Philadelphia, Ohio. The miner's safety depends always upon his lamp, and this one has several advantages. It may be removed from the support for the purpose of cleaning or filling without removing the cap, since the grooves will always guide the point of the hook into the opening. A V-shaped opening in the front of the support assists this guiding movement. When engaged in the opening, the catch by engaging the barb prevents withdrawal of the hook, and the lug engaging the apex of the V-shaped opening prevents side-wise movement of the lamp. It is impossible to lose a lamp provided with this improvement.

CALCULATING DEVICE.—C. M. YOUNG, San Francisco, Cal. The principal objects in this improvement are to provide a simple and accurate calculating device and more particularly one performing the operation of multiplication. The device may be used either to impress the values of products of factors upon the minds of pupils, facilitating their learning of multiplication-tables or for performing more complicated calculations.

Household Utilities.

SLIDING DOOR.—J. S. SCHLOSSER, Hillsdale, Mich. The inventor particularly embodies the novel construction of a track upon which the door-supporting rollers move, the object being to so arrange the parts that upon sliding the door toward opening position it will be swung outward with relation to the building, car, or other structure to which it may be attached, thus preventing the scratching or marring of the surface of the building, car, or the like, and, further, to provide for a tight or close contact of the door against the building when in closed position.

SLIDING-DOOR HANGER AND MEANS FOR MOVING THE DOOR.—H. C. PERCY, Natchitoches, La. The invention relates to an improvement in hangers for car-doors, and more particularly to the manner of hanging such doors and operating them, whereby they may be more expeditiously and easily opened and closed than is possible with the ordinary method of hanging doors in common use. The invention consists, broadly, in the combination, with a door, of a device rotatively mounted on said door and engaging with its periphery a track, whereby its revolution will cause the door to travel forwardly or backwardly on said track.

Machines and Mechanical Devices.

OIL-CLOTH-PRINTING MACHINE.—W. H. WALDRON, New Brunswick, N. J. The invention relates to machines for imprinting designs in various colors upon oil-cloth and other fabrics by the use of intermittently-reciprocating printing-blocks. The object is to provide a machine for printing oil-cloth arranged to insure a positive locking of the intermittent driving mechanism for the color-trough, to cause an easy driving and locking of the said mechanism without shock or jar, to allow convenient adjustment or detachment of the printing-blocks, and to reduce weight of color-trough to a minimum.

APRON-GUIDE FOR MANGLES.—P. E. BRADLEY, Jersey City, N. J. In this patent the invention relates to the guiding of aprons used on laundry machinery, such as mangles. The object of the invention is the provision of improved means for preventing the aprons from creeping laterally upon their rollers. The application of the invention in no way interferes with the normal operation of a mangle.

Prime Movers and Their Accessories.

AUTOMATIC CURRENT-MOTOR.—J. ROEH, Spokane, Wash. The improvement refers to automatic current-motors to be used for utilizing the power of moving currents, such as those for streams and rivers. It concerns it-

self especially with that type of current-motor which contemplates the use of a vane carried in the water and operating so as to be automatically tripped to reverse its position upon its sweep. The object is to simplify and improve construction of the tripping mechanism with a view to giving the same a desirable flexibility.

MULTIPLE-CAR LOCOMOTIVE.—J. J. TROEGER, Chicago, Ill. One object of the inventor is to overcome previous faults by connecting all wheels of the car with the locomotive in such a manner that each of the wheels is a driving-wheel. Consequently addition of more load to cars only makes the drive-wheels press upon rails with greater force, and so provides for the more ready propulsion of the train, provided there is sufficient power. Moreover, instead of making the engine sufficiently heavy to provide needed friction for the load it is going to carry it will only be necessary to make it heavy enough to provide the power, as the weight of the cars and their loads is depended upon to produce the desired friction.

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.

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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.

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Inquiry No. 7554.—For manufacturers and dealers in brass tubing and other accessories for making brass and iron beds.

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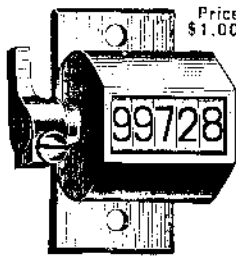
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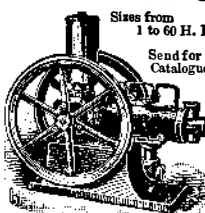
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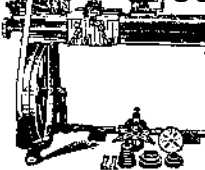
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Notes and Queries.

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.

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(9846) T. H. P. asks: Is there any magnetic rod, or anything of the kind in use, for locating gold or silver? If so, where can I get one? A. There is no possible means of locating gold or silver ore by magnetism. Magnetism has no effect whatever on either of these metals, and any claim to locate deposits in the earth by a magnetic rod has no basis.

(9847) P. G. P. asks: Please tell me what is the nature of phosphorus? Can it be kept in a sealed bottle indefinitely? Will it retain its light-giving properties indefinitely? Will heat affect it? A. Phosphorus is one of the elementary substances, just as iron and lead are elements. It does not give light when it has been shut up in a bottle for some time. It can be kept under water anywhere. So long as it is kept away from oxygen it cannot give light or take fire. If the oxygen of the air has access to it, it grows hot and takes fire. Its light is due to the slow combustion of the phosphorus by oxygen, causing it to glow in the dark.

(9848) R. T. P. says: Will you please inform me how to polish aluminium? A. We would say that it is possible to get a beautiful finish on aluminium castings if the metal is cast under just the right conditions and in just the right kind of mold, but that it is very difficult indeed to polish aluminium which has been machined. The only suggestion we have to offer is to use a buffing wheel at high speed of cloth, felt, or leather, and to polish the aluminium in the same way you would silver, using fine emery, rotten stone, pumice stone, or whiting.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending November 28, 1905

AND EACH BEARING THAT DATE

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

Acid and making same, delta-4-cyclohexanecarboxylic	805,924
Merling & Skita	805,924
Adding machine, A. M. Benesic	806,051
Advertising and display apparatus, K. Stencil	805,682
Advertising matter, device for displaying	805,786
H. W. Ewing	805,843
Air or gas compressor, H. L. Doherty	806,049
Air ship, D. C. Bassett	805,991
Amusement apparatus, L. Patterson	805,535
Anchor, F. E. Forster	805,941
Animal trap, A. Arnesen	805,982
Antirail creeper, A. Morrison	805,547
Armature for electrical machines, W. T. Hensley	805,959
Astigmatic cabinet, G. E. Holmes	805,716
Automobile axle, A. R. Demory	805,442
Automobile engine suspension, F. H. Bogart	805,567
Automobiles, driving axle structure for, T. J. Lindsay	805,681
Axle straightener, J. S. & W. H. Steadham	805,471
Bailing press, E. R. Kerr	806,050
Ballot pouch, N. Beman	805,468
Barge, steel, W. C. Jutte	805,743
Barometer, A. H. McConnell	805,839
Bearing, antifriction, G. W. Campbell	805,891
Bearing, wheelbarrow, J. Stanley	805,794
Binder clasp, loose leaf, W. F. Heffner	805,507
Binder for loose sheets, file, G. F. Watt	805,898
Bird killing device, J. A. Beierschmitt	805,760
Bit. See Bridge bit.	806,019
Block, A. B. Tarbox	805,975
Boat hook, Sullivan & Mack	805,496
Boat, life-saving, J. A. Marley	805,662
Boats, buoyancy regulating apparatus for submarine, L. Y. Spear	806,002
Bolt anchor, F. D. Ogden	805,812
Bolting machine, H. C. Robinson	805,575
Book, J. Orta	805,811
Book ring with locking sleeve, L. M. Morden	805,776
Books by machinery, making, J. Orta	805,966
Boots and shoes, holder for the files of, M. Brock	805,784
Bottle cap feeding machine, automatic, C. O. Kelling	805,877
Bottle closure, O. Eick	805,571
Bottle finishing machine, F. O'Neill	805,769
Bottle, non-refillable, J. Martin	805,810
Bottle, non-refillable, O. Yates	805,641
Bottle, non-refillable, C. S. Orr	805,917
Bottle, nursing, H. P. Gallagher	805,621
Box, W. E. Krebs	805,910
Box fastener, C. W. Beehler	805,821
Brading machine carrier, R. Hantusch	805,493
Brake beam, H. B. Robischung	805,780
Brake lever, E. L. Smith	805,702
Brick tongs, W. R. & C. R. Cary	805,606
Bricks, tiles, and other articles, apparatus for producing vitrified, R. Baggeley	805,481
Bridle bit, H. T. Werk	805,984
Brooms, brushes, and the like, means for securing handles to, P. Meyer	805,865
Brooms, dust pan attachment for, L. B. Despain	805,782
Brush, air, O. Liberman	805,693
Brush head coupling, G. P. Cobb	
Brush, scrubbing, J. Wolff	