

RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

CULTIVATOR.—JOHN McL. WRIGHT, Oberlin, Kan. This cultivator is so constructed that the weight of the driver will act to hold the shares out of contact with the ground.

Electrical Apparatus.

ELECTRIC SWITCH.—MAX H. CASPARI, Manhattan, New York city. The switch consists essentially of a mercury-containing chamber having attached thereto the two poles or binding posts for the circuit-wires.

Bicycle Appliances.

BICYCLE-FRAME.—JEREMIAH C. PARKER, Red Bank, N. J. This bicycle-frame belongs to that class in which the frame is so constructed that it may be adjusted for regulating the tension of the driving-chain.

BICYCLE-GEAR.—CEPHAS WHITNEY and ALFRED C. LAZARUS, Kingston, Jamaica. The crank-shaft in this bicycle-gear is provided with the usual cranks, in the free end of each crank a shaft being journaled.

Mechanical Devices.

FRICITION DRIVING DEVICE FOR SHAPING-MACHINES.—WENDELL P. NORTON, Torrington, Conn. The friction driving device patented by this inventor comprises two driving-pulleys loosely mounted to rotate in opposite directions.

FIRE-ESCAPE.—JAMES O. MILLER, Coolgardie, Western Australia. In the fire-escape provided by the present invention there is mounted within a casing a cord-carrying drum having toothed wheels connected therewith.

PAPER-CUTTING ATTACHMENT FOR BOX-COVERING MACHINES.—ISIDOR DREYFUSS, Manhattan, New York city. The invention provides improvements in machines for automatically cutting off strips of paper or like material, which are being glued on pasteboard or other boxes.

INTEREST-INDICATOR.—CHARLES C. ADAMS, Charlotte, N. C. The interest-indicator is so constructed that by depressing a key corresponding with the principal, mechanism will be operated to bring into proper adjustment figures representing the interest upon that principal for a series of periods.

Miscellaneous Inventions.

KNOCKDOWN BARREL.—PHILIS MAYOTTE, Es canaba, Mich. In certain industries, especially in that of beer brewing, it is a matter of considerable expense to return the empty kegs—an expense which might be greatly reduced by employing collapsible barrels.

LINE-GUARD FOR VEHICLE-POLES.—FLETCHER M. BIRD, Wenatchee, Wash. The object of the invention is to provide a line or rein-guard for the tongue or pole of a vehicle, which will effectually prevent the inside check-lines of a double harness from becoming entangled with or lodging upon the end of the pole or tongue of the vehicle in front of the neck-yoke ring.

PHOTOGRAPHIC DEVELOPING APPARATUS.—

ALBERT GOODER, Brookville, Pa. This film-developing device consists essentially of a tray containing the developer, in which tray, frames are mounted adjustable relative to each other and relative to the tray.

PIANO-HAMMER.—JOHN OSTER, Jr., Newport, Ky. This piano-hammer comprises a rotatable elastic disk clamped peripherally by spring clamping-jaws received and embraced by a socket-holder.

HACK-CLAMP.—JAMES G. B. ROUSE, Way Cross, Ga. The invention is in the nature of an improved clamp for holding turpentine producing and gathering tools—such as hacks, pullers, or scrapers—when it is desired to cut out the tool.

MONEY-ORDER-BLANK PROTECTOR, CUTTER, AND HAND-REST.—GEORGE JOHNSON, Jersey City, N. J. By providing a device comprising a base, supporting-posts carried on the base, and a hand-rest having transverse arms for extending over the face of a block of money-order-blanks and engaging the posts, this inventor enables a postmaster conveniently to fill out a money-order-blank and to separate the several parts from one another and the filled coupon from the block.

LANTERN-HOLDER.—GEORGE A. CORNISH, Gillette, N. J. This invention is a device for holding lanterns so that the rays of light will be effectively shed therefrom. The means by which this end is attained consist primarily of a wire structure forming arms and hooks by which the lantern is held in place.

TILTING-CHAIR.—ALFRED E. QUINLAN, Sheboygan Falls, Wis. This tilting-chair is provided with a post on which a yoke and a vertically-disposed bearing are mounted to turn. The bearing is formed with longitudinal flanges terminating in lateral arms arranged to support the pivot for the yoke at one side of the bearing and below the upper end thereof.

CHART FOR DRAFTING GARMENT-PATTERNS.—MARIE TUCEK, Manhattan, New York city. The purpose of this invention is to provide a garment-drafting pattern designed accurately to draft the outlines of ladies' waists and skirts and arranged to permit an easy and convenient adjustment of the various parts.

Designs.

MINERS' CANDLESTICK.—WILLIAM H. PLEASANTS, Victor, Col. The essential features of this design consist of a candlestick having a shank, and spiral convolutions at one side of the shank, which embrace the candle.

DISPLAY-BOX.—MAX W. BERTON, Manhattan, New York city. The box is designed to display fountain-pens or similar articles, and is, therefore, longitudinally divided into compartments for the reception of the articles to be displayed.

LOCK-BAR FOR COVERS.—HERMAN KAHN, Troy, N. Y. The principal feature of this design is found in a body, having at its ends lips decreasing in thickness in opposite directions, and projections rising from the upper face of the body.

BOX.—RICHARD M. COLGATE, West Orange, N. J. The box is rectangular in shape and is ornamented by decorative panels. At one surface circular intaglio figures triangularly disposed are arranged.

ERRATUM.—In our issue of March 25, 1899, we described in these columns a new surgical splint invented by Robert W. Barton, whose address was given as Marion, Kansas. The address should have read Marion, Arkansas.

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

NEW BOOKS, ETC.

A SELECT BIBLIOGRAPHY OF CHEMISTRY, 1492-1897. By H. Carrington Bolton. First Supplement. Washington: Smithsonian Institution. 1899. 8vo. Pp. 489.

A few years ago we received the first section of this work, and now we have a Supplement half as big as the parent volume. At the time we noted the original work we congratulated Prof. Bolton upon his wonderful achievement, and also complimented the Smithsonian Institution for the remarkable services which they have done to scientific literature in publishing such a notable volume, which could never be issued by any private publisher.

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 the following week's issue.

Marine Iron Works. Chicago. Catalogue free. "U. S." Metal Polish. Indianapolis. Samples free. Gasoline Brazing Forge, Turner Brass Works, Chicago. Yankee Notions. Waterbury Button Co., Waterbury, Ct.

Order White Metal & Brass Pattern Letters & Figures of H. W. Knight & Son, Seneca Falls, N. Y. Drawer 1113.

Patent for Sale.—Book-rest and ball and socket joint. (Entirely new idea.) Geo. W. Morrison, 8014 Frankford Ave., Phila.

For Sale or on Royalty.—Patents Nos. 435,805 and 584,219—game apparatus. R. F. de Grain, 643 G St., S. E., Washington, D. C.

The celebrated "Hornby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4. Munn & Co., publishers, 361 Broadway, N. Y.

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.

(7638) A. L. N. asks: 1. Should the condenser for an induction coil be in the primary or in the secondary circuit? If in the primary, should the condenser be between the coil and the zinc or between the coil and carbon of the battery? A. The condenser of an induction coil is not to be put in either the primary or the secondary circuit.

(7639) E. J. W. asks: 1. What is the compound that is used in dry batteries? A. There are many formulae for the paste used in dry cells. The active material is usually ammonium chloride dissolved in water and mixed with an inert substance to hold it in place between the zinc and carbon plates.

1 1 1 / D + d = F

in which D is distance of lens from screen, d is distance of lens from slide, and F the focal length of the lens. 4. Can one large magnifying glass lens be used in place of a pair of plano-convex lenses for a lantern?

(7640) Reader asks: Is the line current, i. e., the current induced in the secondary of the induction coil, in a telephone circuit an alternating current or only a pulsating current? A. An alternating current.

(7641) G. W. D. writes: I am desirous of procuring the best formula for making or casting phonograph cylinders for making records. Also instructions for casting same and any other information necessary for their successful manufacture and manipulation for my own personal use.

TO INVENTORS

An experience of fifty years, and the preparation of more than one hundred thousand applications for patents at home and abroad, enable us to understand the laws and practice on both continents, and to possess unequalled facilities for procuring patents everywhere.

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

APRIL 4, 1899, AND EACH BEARING THAT DATE. (See note at end of list about copies of these patents.)

Table listing inventions and their patent numbers, including items like 'Adding and recording machine, H. Hollerith', 'Advertising device, E. Cherry', 'Advertising machine, electrical, H. W. Cox', etc.

(Continued on page 239)