

RECENTLY PATENTED INVENTIONS.

Mechanical Devices.

MECHANICAL TOY.—CHARLES H. SCHOLL, Reading, Pa. The toy is a car propelled partly by gravity and partly by a motor along a continuous track having various inclines. The toy will be found very amusing, especially to children, since the cars are sufficiently large to hold dolls and the like.

BOLT.—JOHN SPEIRS, Jersey City, N. J. The bolt can be applied to a door, either right or left, and acts to lock and automatically to prevent the door from being opened beyond a certain distance until purposely unlatched from the inside. The bolt is simple and strong and can be attached to the moldings or door-jamb.

MECHANICAL GEARING.—LEONARD S. FLECKENSTEIN, Easton, Md. The inventor has devised an effective substitute for cog, friction or belt gearing for operating machinery, in which some parts have a continuous and others have an intermittent rotation. Combined with two parallel end shafts and two pairs of sprocket-wheels thereon are an intermediate shaft and two loosely-mounted sprocket-wheels. A sprocket-wheel is keyed on the intermediate shaft and is arranged between the loose wheels. A double or two-part chain runs over all the sprocket-wheels except the keyed wheel of the intermediate shaft. By this construction of sprocket chain and sprocket-wheels continuous and intermittent rotation of shafting is obtained in the most economical manner.

WINDOW-SHADE MACHINE.—FRANK L. FISHER, Cumberland, Md. By means of the novel construction forming the subject of this invention the shade can be trimmed off on its side edges to any desired width and can be cut off at any length. The ends are creased so as to form a guide for folding over the strip to bar at the free end of the curtain. The hem can therefore be produced regularly and uniformly as desired.

Railway Contrivances.

SEAL-LOCK.—HENRY A. RÖDERMUND, Montague, Cal. This lock and seal for railway-car doors is so arranged that the seal is impressed or formed on a blank during the operation of closing the car-door. Upon unlocking and opening the door the seal will fall into a receptacle and be saved for future melting and use, thus resulting in a saving of lead usually thrown away or lost.

SWITCH-SIGNAL.—BERTIS H. URSCHEL and EDMUND P. THOMAS, Sugar Bridge, O. The contrivance relates to signals for single-track electric roads, such as are used in country districts and in which turnout switches are placed at suitable distances apart. The object is to provide a signal mechanism to be operated by a moving car in such a manner as to leave a signal light at one switch and at the same time turn on a light at the next switch ahead, and upon passing the latter switch to turn out both former lamps and turn on another lamp at the second switch and one at the next or third switch. This turning on and off of lamps is effected throughout the length of the line, thus preventing possible collisions, between switches, of cars moving in a same or opposite directions.

SAFETY APPLIANCE FOR TRAINS.—JACINTO V. VELASCO, Key West, Fla. Mr. Velasco has invented a new safety appliance for trains to prevent a train from running off a track, especially when rounding turns or traversing switches. The appliance comprises a central-track guideway in which a shoe is arranged to travel. A support is mounted to slide vertically in a bearing on the car truck, the shoe being mounted to turn at the lower end of the support. The shoe cannot leave its guideway at the crossing.

CAR.—BENJAMIN BULKLEY, Marion, Iowa. The car is of the hopper bottom type. A new bottom-door is provided more especially designed for ballast-cars carrying crushed stone or other material. The door can be easily opened to drop the contents of the car in separate piles in the road-bed. The arrangement permits the quick closing of the door to stop the discharge of the material whenever desirable.

Building Appliances.

FLUSH-BOLT.—HENRY G. KARRENBERG, Manhattan, New York city. The flush-bolt is of such construction that it can be effectually locked in an open or closed position. The bolt cannot be moved from either position without opening a key-operated lid forming a part of the bolt-casing. Should the lid be unlocked the operating medium of the bolt will be protected and concealed while the lid remains closed.

CORNER-POST AND JOINT.—JAMES E. and CHAUNCEY B. BROWN, Bradford, Pa. The corner-post forms an improved joint for use in carpentry, furniture, vehicle bodies, and the like. The corner-post is provided with dovetail tongues having angular, integral feathers. The tongues and feathers extend in the longitudinal direction of the post. A number of panels engage the post, the panels having grooves to receive the tongues and feathers. The inventors state that the only way to separate the post from either of the panels is to tear asunder the parts. Mere chipping off of a small portion of wood will not effect a severance.

LINTEL.—WILLIAM F. PELTON, 1125 Broadway, Manhattan, New York city. "The Pelton patent steel tension lintel" will probably receive the approval of every architect and builder; for the old-fashioned cast-iron structure is discarded. The upper member of the lintel is a compression member, the bottom member a tension member, each good for 16,000 pounds per square inch sectional area, giving a factor of safety of 1 to 5. The end skew-backs take up the strain on the arch. The invention is noticeable for the fact that it applies well-recognized engineering principles.

FOLDING BRACE.—LEWIS B. JEFFCOIT, Manhattan, New York city. The folding brace is to be used for the support of shelves and the like. It is arranged readily to lock itself in an extended position when the thing supported is swung into an active position, and automatically to unlock itself and fold up by the operator's swinging the article a little farther up and then releasing it to allow the brace to fold and the article to swing into a folded position.

Horseshoes.

HORSESHOE-PAD.—DANIEL W. MALONEY and JAMES H. WELSH, White Plains, N. Y. A rubber pad and a shoe are so combined that the shoe practically becomes a portion of the pad. The inner face of the pad conforms with the bottom of the hoof, affording an equal bearing to the foot and preventing the pad from shifting and dirt from collecting under the pad and shoe. At the heel portion on the upper face of the pad are transverse ribs arranged to enter the frog and the spaces between the side walls of the hoof and the frog. The ribs serve to brace the pad and prevent its shifting.

HORSESHOE.—JOHN L. F. C. KÖBER, Cincinnati, O. The horseshoe is provided with removable calks, by which construction the calks can be repaired frequently without necessitating the removal of the shoe from the horse's hoof.

Miscellaneous Inventions.

WRENCH.—HENRY T. NEFF, 512 North 12th Street, St. Joseph, Mo. The fixed jaw is widened so as to project beyond the opposite sides of the handle and to provide ways alongside the handle for the arms of the sliding jaw. Projecting from the rear side of the sliding jaw are parallel side arms which fit within the ways provided above the fixture and alongside the shank, the free extremities being widened to project above the handle shank. A bar connects the arms at their free ends and extends beneath the handle-shank. A pawl is supported between the widened ends of the jaw-arms and engages a ratchet on the handle-shank. Over the handle-shank and the arms of the sliding jaw a cuff fits which is secured to the fixed jaw.

CHURN.—ELI R. DEMING, Detroit, Mich. Air is constantly supplied to the cream during the churning, the dash-stem and dash-blades serving as conducting mediums for the air. Any economic form of driving mechanism is employed. The internal operative portions of the churn are of such construction that they can be readily disconnected from the body and the driving mechanism, rendering it possible to clean each part of the churn which is brought in contact with the cream.

HOLDER FOR CUPS OR PLATES.—ELEONORE K. HALLENBERG, 3 Alford Building, Louisville, Ky. The invention provides an improved holder for cups, plates, or pictures and is particularly adapted for suspension from a shelf and to assume a position in which the cup and plates are projected forward so that they are exhibited to the best advantage. The invention further includes a movable device to engage plates or pictures of different diameters and to serve as a support for cups that are to be exhibited with plates. The holder is made with a tripod, one of the legs being hinged so as to fold or lie between the others when required for use.

WIRE FENCE.—ERNEST L. EWBANK, Hendersonville, N. C. The posts used are made of metal with dovetailed notches along the edges. The wires are located in the notches and are held in place by flat wedges corresponding in shape with the notches. On its inner face each wedge has a longitudinal groove to form a wire-seat. The wedges are to be manufactured by number after the manner of ordinary nails. Wedges having a groove larger than the circumference of the wire used can be placed in alternate posts in order to permit the wires to yield if a weight, such as a tree, should fall on the fence, and in order to permit the wire to return to its position after the weight has been removed.

CLIP.—THOMAS K. DAVISON, St. Albans, W. Va. The clip is especially useful for holding curtains and portières. The construction of the device is such that it can be effectively used without in any way injuring the fabric, however delicate it may be.

FIRE-ESCAPE.—HENRY O. CEASE, Louisa, Ky. A novel construction of car, together with guiding, supporting and operating devices therefore, is provided, whereby the car can be readily raised to any suitable height and can be lowered under the control of the occupants of the car or of persons on the ground.

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 them. In every case it is necessary to give the number of the inquiry. MUNN & CO.

Marine Iron Works. Chicago. Catalogue free. Inquiry No. 1758.—For manufacturers of nut-cracking machinery.

Metal substitute. Crane Bros., Westfield, Mass. Inquiry No. 1759.—For manufacturers of lathes for drilling small holes in shells, etc. "U. S." Metal Polish. Indianapolis. Samples free.

Inquiry No. 1760.—For dealers in jewelers' findings.

WATER WHEELS. Alcott & Co., Mt. Holly, N. J. Inquiry No. 1761.—For manufacturers of electric motor models.

Stencil Machines.—A. J. Bradley, 101 Beekman St., N. Y. Inquiry No. 1762.—For a machine for taking up the lost motion on buggy axles, etc., cutting off the point and rethreading as it cuts.

Gasoline Lamps and Systems. Turner Brass Works, Chicago. Inquiry No. 1763.—For firms in Illinois in the re-rolling rail business.

Handle & Spoke Mch. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O. Inquiry No. 1764.—For manufacturers of compressed air carpet-cleaning machinery.

Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt. Inquiry No. 1765.—For manufacturers of imitation leather.

Rigs that Run. Hydrocarbon system. Write St. Louis Motor Carriage Co., St. Louis, Mo. Inquiry No. 1766.—For dealers in belting of various kinds.

Sheet metal, any kind, cut, formed, any shape. Prompt work. Metal Stamping Co. Niagara Falls, N. Y. Inquiry No. 1767.—For machinery for the manufacture of wood alcohol.

Ten days' trial given on Dans' Tip Top Duplicator. Felix Daus Duplicator Co., 5 Hanover St., N. Y. city. Inquiry No. 1768.—For a good patent for steel baskets.

CANS.—½ pint and ¼ pint tin cans are manufactured by National Cement Co., Toledo, O. Write for prices. Inquiry No. 1769.—For a 6-inch oil separator and contrivance for condensing exhaust steam by cooling with mine water, or otherwise.

Machine Work of every description. Jobbing and repairing. The Garvin Machine Co., 149 Varick, cor. Spring Sts., N. Y. Inquiry No. 1770.—For an evaporator and condenser to convert mine water to boiler use.

Manufacturers of patent articles, dies, stamping, tools, light machinery. Quadriga Manufacturing Company, 18 South Canal Street, Chicago. Inquiry No. 1771.—For a separator for preventing the passing of dirt through a 64 inch steam pipe.

Constructor and operator of wood chemical plants, including refineries and by-product apparatus. O. A. Myers, 626 West Fourth Street, Cincinnati, Ohio. Inquiry No. 1772.—For manufacturers of acetylene lamps.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York. Inquiry No. 1773.—For an ice manufacturing plant with a capacity of 25 tons per day.

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. Inquiry No. 1774.—For manufacturers of a hydraulic wheel for rivers with a slow current to produce sufficient force to operate a pump giving 3 to 6 gallons of water per minute.

FOR SALE AT A BARGAIN.—100 tons 6 lb. steel girder relaying rails 30 feet lengths. Wheelock twin high-pressure engines, 24 x 48 cylinders, A1 condition. M. Braudy & Sons, Grand Rapids, Mich. Inquiry No. 1775.—For a centrifugal extractor of gold ores.

WANTED.—Experienced draughtsman on mill machinery and machine tools. Permanent employment assured to rapid and accurate draughtsman. Bethlehem Steel Company, South Bethlehem, Pa. Inquiry No. 1776.—For dealers in spring steel 3 x 7 and 1-16 thick.

Partner with capital to manufacture latest improved motor cycle. Explosive motor with minimum vibration and weight. No muffler required and no noise, giving increased economy. E. S. Strickland, South Bound Brook, N. J. Inquiry No. 1777.—For revolving magnets for separating iron from other metals.

The Excelsior Machinery Co., of 25 Whitecross Street, London, England, proprietors of inventions in special machinery, are prepared to develop, exploit and negotiate the sale of patented inventions, protected in Great Britain and Europe, also open to undertake the exhibit and sale of any class of machinery; having spacious warehouse and showroom accommodation with power, etc. Inquiry No. 1778.—For revolving barrels for washing metal with water.

Send for new and complete catalogue of Scientific and other Books for sale by Munn & Co., 361 Broadway, New York. Free on application. Inquiry No. 1779.—For machines for knitting hosiery and underwear.

Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W. A. Wilson Machine Company, Rochester, N. Y. Inquiry No. 1780.—For manufacturers of motor buses for carrying 12 passengers.

Parties to manufacture and place on the market a Grain Drill specially adapted to the great wheat belt of the North and West: has been tried for two seasons in the sticky soil of the valley of the Red River of the North, and pronounced by the farmers of that country to be the best Grain Drill they have ever seen. Patents have just been issued for United States and Canada. New model just completed has never been offered for manufacture. THOMAS CARNEY, 411 Brown St., Dayton, Ohio. Inquiry No. 1781.—For manufacturers of steel balls.

Inquiry No. 1782.—For wholesale dealers in large quantities of ½ or ¾ inch lead tubing.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending December 10, 1901, AND EACH BEARING THAT DATE.

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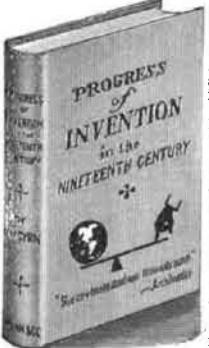


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### NEW BOOKS, ETC.

**THE STARS.** A Study of the Universe. By Simon Newcomb. Illustrated. New York: G. P. Putnam's Sons. 1901. Octavo. Pp 333. Price \$2.

The name of the author of this latest addition to the "Science Series" is in itself a sufficient guarantee of scholarly and accurate work. In his preface Prof. Newcomb assures us that the problem of presenting a scientific explanation of stellar phenomena to the lay reader without unduly confusing him by the use of technical terms offered difficulties almost insuperable. Although technical phrases must, of necessity, be employed in a work of this character, Prof. Newcomb has endeavored to define them as he proceeds, wherever it may be necessary. The work as a whole is a popular and thoroughly scientific treatise on stars. The Appendix contains a list of the names of certain stars, of parallaxes and large proper motions, and of spectroscopic binary systems, all of which should prove of assistance to the student.

**THE TECHNOLOGY OF PETROLEUM.** The Oil Fields of the World. By Henry Neuberger and Henri Noalhat. Translated by J. Geddes McIntosh. London: Scott, Greenwood & Co. 1901. 8vo. Pp. 634. Price \$10.

This portly volume with its many illustrations and plates is a remarkable addition to technical literature, dealing as it does with the oil fields of the world, their history, geography, geology, annual production, and development, oil-well drilling, explosives and the use of the torpedo, transport of petroleum by sea and by land, storage of petroleum, various problems, etc. The illustrated plates are numerous and excellent, and give a good idea of the interesting features of the industry. It is an eminently practical book for all who are in any way interested in oil. It is the most comprehensive treatise on the subject which we have seen, and it is very gratifying to know such an excellent addition to the literature of petroleum is now made available to English-speaking readers.

**LESSONS IN PRACTICAL ELECTRICITY.** Principles, Experiments, and Arithmetical Problems. An Elementary Textbook. By C. Walton Swoope. New York: D. Van Nostrand Company. 1901. 12mo. Pp. 462. Price \$2.

The demand for the book arose from two facts: First, the classes at Spring Garden Institute being composed of young men engaged in various occupations who desired to obtain a beginner's knowledge of the principles and arithmetic of applied electricity were very large; second, an unsuccessful attempt was made to obtain a book thoroughly supplementing a combined course of lectures and individual laboratory work prepared from necessity rather than from any desire to increase the already large number of books on the subject. The volume will not fail to assist other collaborators in the same field. The diagrams are numerous and there are a number of tables and a large number of plainly stated rules.

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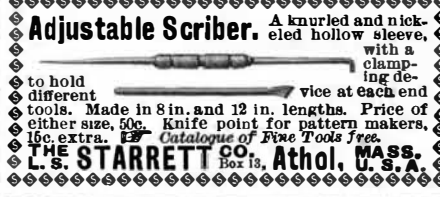
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