

## RECENTLY PATENTED INVENTIONS.

### Electrical Apparatus.

**ELECTRICAL IGNITION APPARATUS.**—ANSBERT E. VORREITER, Aix-la-Chapelle, Germany. The apparatus is an improvement on the igniters hitherto used by reason of its simplicity of construction and consequent certainty of action. The three principal parts of the inductor igniters hitherto used—coils, igniting-leads, and the actual igniter—are reduced to a single apparatus. Igniting-leads are dispensed with.

### Engineering Improvements.

**ENGINE.**—EDWARD E. REDFIELD, Grants Pass, Ore. This invention relates to an engine to be driven by motive fluid of any kind. The engine is especially adapted to operate drag-saws, but can be utilized for other purposes as well. The novel features of the invention are to be found in a peculiar valve mechanism controlling the steam or other motive fluid employed.

**INJECTOR.**—CARL PRÜSMANN, Magdeburg, Germany. This invention provides an injector which is constructed to facilitate the starting action thereof. Such end is attained by providing a chamber having direct atmospheric communication, through which chamber the mixing nozzle extends. The mixing nozzle has two openings into this chamber. The steam escaping through the first opening and thence to the chamber and finally into the atmosphere, induces a sucking effort at the other opening, and thus the entire mixing nozzle is subject to a steady exhausting influence which tends to start the action of the injector. After the operation of the injector has been started the normal and usual operation is brought about by the closing action of a check valve arranged to command the atmospheric communication of the chamber referred to before.

**ROTARY ENGINE.**—GEORGE W. SMITH, Petersburg, Ill. A rotary engine patented by this inventor has the valves and ports so arranged that the engine has no dead center position, and the power exerted to turn the piston is uniformly distributed. Provision is also made to insure steam-tight packing and secure an easy motion to the cut-off valves that control the admission of steam to the cylinder.

### Mechanical Devices.

**BARREL-WASHING MACHINE.**—CHARLES J. DOBLER, Manhattan, New York city. In this machine but a single tank is employed, the machine being so constructed that the barrels or kegs can be soaked and partially filled in the tank and subsequently cleaned within and without. Water is made to circulate through the tank. Means are provided for heating the water. The kegs are received by a table and delivered, partially filled, to an agitating or scrubbing mechanism for the exterior, from which mechanism they are delivered to supports. From these supports the kegs may be conveniently removed and placed upon adjacent sprinklers forming a portion of the machine.

**AUXILIARY SPACING DEVICE FOR TYPEWRITERS.**—GAY P. BLESSING, New Milford, Pa. By means of this device the direction of the carriage of a typewriter can be reversed at any time to the extent of one or more points, whereby the operator is enabled to correct a misspelled word or a letter erroneously struck. The device may be applied to any standard typewriting machine, and when not in actual operation will not interfere with the usual movement of the carriage.

**LOCK.**—OSCAR KATZENBERGER, San Antonio, Tex. The inventor has devised a combination-lock in which independent knobs, controlling the combinations, are located at the outside of the lock or outside of the door. These knobs are adapted to permit or to prevent the movement of the bolt. Numbers or characters need not be produced around the knobs or the plates through which they pass; the numbers of the combination and their arrangement are determined by sound or touch. The bolt may move independently of the knob by means located at the inner face of the door. Hence the door can be instantly opened from the inside even if the bolt is in locking position, and held in this position by the knobs.

**STONE-CARRIER.**—WILLIAM H. DEMOREST, Jr., Manhattan, New York city. The machine is a stone-carrier for stone grinding and polishing machines, on which carrier the stones are held and moved back and forth over the cutting tool. The carrier has a vertically adjustable beams on which, adjustable longitudinally, jaws are mounted. A rod extends between the jaws, and nuts work on the rod and engage the jaw. By means of the rod the jaws may be moved together and held engaged with the stone.

**SPOKE-FINISHING MACHINE.**—GEORGE A. ENSIGN, Defiance, O. To the long list of machines invented by Mr. Ensign for the Defiance Machine Works may be added an ingenious spoke-finishing machine, by means of which spokes are accurately and uniformly finished both at the throat and face without the employment of skilled labor. Among the novel features of the invention may be mentioned an intermittently revoluble spoke-holder provided with revoluble spoke-sockets for holding the revolving spokes. A sand-band

engages and finishes one of the spokes, and a revoluble sand-wheel finishes the face of another of the spokes. It is the duty of the operator merely to remove the finished spokes and place unfinished spokes in position, and at regular intervals to unlock the spoke-holder.

**PAPER-STAPLER.**—DANTON O. BRUNNER, Somerset, O. The invention provides a hand-operated machine for driving staples through two or more sheets of material. The device is so constructed that a number of staples can be placed in a suitable chamber and automatically fed, one after the other, to a plunger. By means of the plunger the staples are driven into the material and are clenched upon a table forming a part of the device. The mechanism is operated by handles.

**PRINTING MECHANISM FOR LABELS OR TICKETS.**—JOSEPH LEAVY, New Brighton, and ISAAC ROGGEN, Manhattan, New York city. By means of this machine the individual tickets and labels of a strip are automatically held one after the other in position to be printed upon. After the impression has been made the labels or tickets are fed forward. Suitable operating mechanism is provided to withdraw the tickets just before their forward feed. The inking-roller is concentrically mounted on a stationary support. The printing-head is mounted eccentrically on a shaft which also carries a feed-cam. This cam acts upon the labels or tickets just before the act of impression, holding the label stationary, and further acts to feed the printed label forward or from the printing-head after the impression has been made. The printing-head is mounted eccentrically and the printing-roller concentrically to prevent any portion of the printing-head from touching the inking-roller, except that surface which is farthest from the axis of the head.

**CURRENT MOTOR.**—ROBERT S. THEALL, Fort Pierre, So. Dak. The inventor has devised a simple and ingenious motor for utilizing the power of a flowing stream, ocean tides, and the like. Mechanically considered, the invention comprises a float having at one edge a post on which a mast is mounted to turn. Over the float and water a series of sweeps or rotating arms extend from the mast. Levers are pivoted upon the sweeps and carry buckets or vanes which drop into the water, the levers extending above the sweeps to engage the mast-stays as stops. The upper ends of the levers have boxes which receive counter-balance weights whereby the vanes may be balanced or permanently raised. An incline extends downward from the float into the water and engages the vanes to raise them out of the water. The device is simple in construction and efficient in its operation.

**TENSION FOR BRAIDING-CARRIERS.**—JULIUS A. TURNER, Southfield, Mass. The invention provides a simple tension for the racers of braiding-machines, particularly whip-lash-braiding machines, comprising a fixed guide-block, a pivoted pressure-block, and a convenient means for moving the pressure-block and regulating the pressure against the thread or strand.

**SIFTING-SCREEN.**—ALBERT E. THORNTON, Atlanta, Ga. The sifting-screen is to be used primarily as a separator to take the meal from the ground-up cotton seed immediately after leaving the huller. The machine is designed to secure a better adjustability of the screens of a larger amount of shaker surface in proportion to the floor space occupied and to facilitate the substitution of different sizes of screens.

**DAMPENING-MACHINE.**—HERMAN WEBER, Lincoln, Neb. The machine is to be used for dampening clothes in laundries before ironing. Aprons are used which move through water-pans and become saturated with water. The clothes are placed upon the upper stretch of the lower endless apron and are carried along between wringer-rollers, which squeeze the moisture from the apron and distribute it evenly upon the clothes.

### Vehicle Accessories.

**SIDE APRON FOR VEHICLES.**—THOMAS H. JOYCE, Brooklyn, New York city. This new and improved side apron for vehicles is arranged to permit convenient egress from the vehicle body and to protect the occupants from side drafts, rain or snow, and at the same time allow independent use of the lap robe and free handling of the reins.

### Railway Appliances.

**CAR-FENDER.**—FRANK WARGA and L. P. PLATT, Hastings, Pa. In a car fender patented by these inventors a truck is provided beneath the fender, the wheels of the truck running on the car track, and in front of the truck a diagonally disposed horizontal cushion roller is mounted. To guard against the rising of the fender and its cushion roller a device is arranged on the dash-board of the car which can be pressed down against the fender and maintain the latter close to the track so that when the fender strikes a person the latter cannot be forced beneath the fender.

**CAR-COUPLING.**—WATSON S. LENNON, Tucson, Ariz. The invention relates to a class of couplings having a laterally swinging jaw or knuckle adapted to couple with a like knuckle on another car and by manual adjustment to be released therefrom. The object of this invention is to provide novel simple details of construction for a car-coupler of this kind,

which adapts the coupler for very efficient service and avoids the danger of breakage of the drawhead.

### Miscellaneous Inventions.

**LOOM TEMPLE-ROLL.**—FRANK O. DUFFY, New Bedford, Mass. As almost all kinds of cloth tend to shrink while the web is being beaten in by the reed, it is almost impossible to keep the cloth sufficiently extended without danger of tearing or marking it up. This is especially the case with temple-rolls having teeth projecting from the peripheral surface of the solid body. With such temple-rolls only a few of the innermost teeth really hold the cloth, and in case of a heavy lateral strain the cloth is torn or injured. Mr. Duffy overcomes these difficulties by constructing the roll so that it will yield laterally in proportion to and in the direction of the strain, and with an equal strain on all the projecting teeth engaging the cloth.

**CENTER-LINE LEVEL.**—BARTLETT B. CHANDLER, Jr., Nevada City, Cal. The center-line level comprises a glass tube closed at its ends and filled with liquid. The tube is cast to form a central passage for the line. A level thus constructed can be readily slid along the line. The bulb can always be seen at the top should the tube be rotated, since glass is the material used.

**MANUFACTURE OF ETCHED METAL RULES.**—JOHN CAMPBELL, Matteawan, N. Y. It has heretofore been the practice to use separate transfer strips for the several sides of the ruled blank; and as the final graduations to be produced on the sides of the rule required accurate register it was necessary to exercise considerable skill to place the transfer-strips in proper position on the blank to insure the registering of the graduations on the several sides. The inventor overcomes these objections by preparing a single transfer strip with the graduation marks in perfect alignment with each other, so that the graduation marks, when transferred upon the metal blank, must necessarily register.

**GAS-VENTILATOR FOR MAINS.**—MILTON C. HENLEY, Manhattan, New York city. It is the purpose of this invention to provide a device whereby the gases which escape from defective mains are prevented from entering cellar and basement doors. The device which Mr. Henley has invented fully meets all requirements. His ventilator comprises a casing designed to be seated in the ground and having a grating top extending above the ground. Open pipes lead from opposite sides of the casing within the ground. Open ended branch-pipes extend from the opposite sides from the first-named pipe. The escaping gas finds its way into the open ends of the several pipes and then passes into a suitable casing. Thus the device acts as a barrier to prevent the discharge of gas into a house or cellar.

**SMOKE-PREVENTING ATTACHMENT FOR LAMP-BURNERS.**—EDWARD L. GOBTSCH, Jersey City, N. J. The purpose of this invention is to provide an attachment for lamp-burners so constructed that the flame will be of full volume and smokeless. The wick can be quickly and evenly cleaned without the use of scissors. The device is attachable to any lamp-burner or oil-stove.

**SAW-TOOTH GAGE.**—WILLIAM MCKNIGHT, Ebsenburg, Pa. The invention is an improvement in circular saw-tooth gages, and provides a simple device designed to be engaged with the saw-teeth, whereby the teeth may be filed perfectly square or flat on the back, front and point, and whereby the length of the teeth may be equalized and the saw kept round.

### Designs.

**MANTLE-HOLDER.**—RALPH COHEN, Bayonne, N. J. The holder has a segmental body and an axial or transverse member extending inwardly from a terminal of the body and terminating in a hook wherefrom the mantle is suspended.

**BADGE.**—LENA BENNETT, Manhattan, New York city. The leading feature of the design consists of a buffalo rampant holding a pan with the dexter foot. The purpose of the design is to provide a Pan-American Exposition souvenir.

**CANDY-MOLD SECTION.**—BENJAMIN F. DEKLYN, Manhattan, New York city. The candy-mold section has an elongated concave body of the general outline of a peanut and has a number of raised portions of irregular outline to produce the pitted portions of the peanut shell.

**PICTURE-HANGER.**—JOHN A. CHRISTMANN, Mount Pulaski, Ill. The picture-hanger consists of a flat plate, from the front face of which a series of buttons project. A loop extends from the front face, next to the last button. By means of this plate a picture can be hung at any desired height.

**BOTTLE.**—JOHN SCHIES, Anderson, Ind. The bottle body is formed with a series of chambers or protuberances which extend longitudinally in the direction of length of the bottle and are rounded at their upper ends, the adjacent protuberances being connected by curved portions in such manner that the bottle presents in cross section an appearance simulating that of the shamrock.

**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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- Inquiry No. 1180.**—For manufacturers of a packing that will stand in hot and cold water.
- Ten days' trial given on Daus' Tip Top Duplicator. Felix Daus Duplicator Co., 5 Hanover St., N. Y. city.
- Inquiry No. 1181.**—For manufacturers of useful and attractive novelties.
- SAWMILLS.**—With variable friction feed. Send for Catalogue B. Geo. S. Comstock, Mechanicsburg, Pa.
- Inquiry No. 1182.**—For the manufacturer of the Eureka egg keeper.
- WANTED.**—Punch and die work, press work and light manufg. Daugherty Novelty Works, Kittanning, Pa.
- Inquiry No. 1183.**—For manufacturers of bakery machinery.
- Metal cut, bent, crimped, embossed, corrugated; any size or shape, Metal Stamping Co., Niagara Falls, N. Y.
- Inquiry No. 1184.**—For manufacturers of tin-smiths' machinery.
- Kester Electric Mfg Co's, Self-fluxing solder saves labor, strong non-corrosive joints, without acid, Chicago, Ill.
- Inquiry No. 1185.**—For manufacturers of hand and treadle power woodworking machinery.
- Inventions developed and perfected. Designing and machine work. Garvin Machine Co., 149 Varick, cor. Spring Sts., N. Y.
- Inquiry No. 1186.**—For manufacturers of small ironworking machines.
- See our Collective Exhibit—Section "S," Electricity Building, Pan-American Exposition. Standard Welding Company, Cleveland, Ohio.
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- Inquiry No. 1190.**—For manufacturers of planer and paper knives.
- McGILL UNIVERSITY, MONTREAL.—*Chair of Metallurgy.* The Governors of McGill University, invite applications for the Professorship of Metallurgy. Candidates for the appointment are requested to send their testimonials, with a statement of age, qualifications, etc., to the Secretary of the University, before September 1. The duties of the post will commence on October 1. Full particulars of the work, salary, etc., may be obtained from the Secretary.
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- Inquiry No. 1202.**—For dealers in the Victor collar hook and tie holder (patented).
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- Inquiry No. 1204.**—For manufacturers of papier mache candy boxes.
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- Inquiry No. 1206.**—For manufacturers of yeast cake machinery.
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