

## RECENTLY PATENTED INVENTIONS.

## Agricultural Improvements.

**MANURE-DISTRIBUTER.**—J. HOWELL, Schaller, Iowa. In the construction of this improved fertilizing distributor, it has been Mr. Howell's aim to provide means for breaking up clods and distributing the latter in a fine spread-out condition, to provide for positively moving the slatted bottom in either direction by the power of the moving vehicle, and to provide means for throwing the working parts out of gear in transporting the apparatus from one place to another.

**FEED-TROUGH.**—J. W. BARNES, Beaverton, Oregon. The feed-trough is designed more especially for feeding hogs. It is arranged to promote cleanliness and secure better sanitation by protecting the food from being soiled by the dirt of the hogs' feet. It is also so arranged as to enable small hogs to feed equally without being displaced by the large ones, and to protect the clothing of the person feeding from being soiled by the splashing and crowding of the animals.

## Engineering Improvements.

**SPARK ARRESTING AND DISCHARGING DEVICES.**—E. J. SMITH, High Springs, Fla. Mr. Smith has invented an improvement in spark-arresters and dischargers for use on coal or wood-burning locomotive engines. A spark-arresting wire screen or cage is located in the smoke box over the lower end of the stack-saddle and is provided at its upper end with a cylindrical cap having numerous slots for permitting an unobstructed draft. Means are provided for lifting the screen whenever the engine is working and the blower is applied, thus sliding the slotted cap into engagement with a flange which closes the slots and prevents sparks from passing therethrough.

**PADDLE-WHEEL.**—J. J. GRAHAM, Imperial, Penn. This paddle-wheel is adapted for use on steamboats, and it comprises certain novel constructions and combinations of parts whereby it may be set automatically to proper angle to operate in the water and to rise out of the water without lifting the same whether the wheel be revolved in one direction or the other.

**MOTOR.**—R. L. BARNHART, Charleroi, Pa. The invention relates to an internal combustion or explosive motor, the main feature of which lies in the provision of a receiver in which the charge is exploded, and which serves to carry a continual pressure of gas, this pressure being communicated from the receiver to the motor, which is thereby driven.

## Hardware and Tools.

**PROFILE-TOOL FOR MAKING PIPE-MOLDS.**—FRANZ BURGERS, Bulmke, Germany. The tool is intended for use in that class of molding machines in which a pressing block having a spiral compression face gives, by rotation, the molding sand which is in a flask the necessary impression, and in connection with the cylindrical molding block forms the outer mold for the pipe. A core being set in the mold, the latter is ready for casting by the usual well-known methods.

**WIRE-FENCE TOOL.**—C. WHIPPLE, Ashley, Ohio. This tool is specially designed for stapling wooden lath to the line-wires of wire fences. The construction is such as to hold a stay against the line-wire and the staple against the stay imbedded more or less therein, and the ends of the staple across the line wire, enabling the operator to use both his hands for the purpose of coiling the ends of the staple around the line wire at the side edges of the stay.

**SEPARABLE SQUARE.**—C. L. F. and M. C. HOOKER, Boca, Cal. This instrument has been invented for the use of carpenters and other mechanics and is arranged to permit of conveniently separating the members for folding the square so as to take up comparatively little space in a tool chest. When the members are fitted together and locked in place their surfaces are flush with each other, so that they may be conveniently used in the usual manner the same as any ordinary rigid square.

**SCREW-DRIVER.**—G. E. GAY, Augusta, Me. This screw-driver is of the ratchet type and is provided with a single pawl so arranged that it may be adjusted to cause the movement of the blade with the handle in either direction, the blade remaining stationary while the handle is turned in the reverse direction, or it may be adjusted to form a lock between the blade and handle, so that they will move together.

**FENCE-LOCK.**—W. B. MACLEAN, Galetta, Canada. The fence-lock is designed for securely fastening the longitudinal wires to the pickets of the fence. The lock is simple and durable in construction, very effective in operation, and may be readily applied to securely fasten or bind the parts together.

## Machines and Mechanical Devices.

**ACCOUNTING ATTACHMENT FOR TYPE-WRITING MACHINES.**—O. L. INGRAM, Walla Walla, Wash. Mr. Ingram has provided an improved attachment for typewriters which permits of convenient addition and computation. The device may be readily secured to the machine and operated by the numeral

finger-levers without in any way interfering with the ordinary work of the typewriter. By its use any number of columns of figures printed will be accurately indicated, thus making it particularly useful in tabulating, bill, and invoice work.

**FRictionAL GEARING.**—W. D. DAILEY, Polendale, West Va. In sawmills and other machine plants it is sometimes desirable to employ one motor having power sufficient to work various separate and distinct machines, and in such a plant it is sometimes necessary to stop one machine without interfering with the operations of another. For the purpose of meeting these conditions Mr. Dailey has invented an improved frictional gearing which is designed to obviate objections heretofore existing in connection with similar gearing.

**COTTON ELEVATOR AND SEPARATOR.**—C. R. BENEFIELD, Dallas, Texas. This invention is an improvement in that class of pneumatic elevators in which cotton or similar substances are raised and then released and deposited at a selecting point by variation of air pressure. In operation the cotton is drawn into a cotton-pipe past toothed bars and against a screen by which the dust and sand are extracted and the cotton given a downward impulse, which, being resisted by gravity, dislodges the cotton from the screen and causes it to drop into a chute. When a sufficient quantity has here accumulated, it overcomes the suction and drops downward through a valve.

**LOG-RELEASING DEVICE FOR SCOWS.**—E. W. SPENCER, Portland, Oregon. This invention has for its object to release chock-blocks or timbers slidably mounted on the outer ends of the inclined trusses, secured to the deck of a scow, whereby the logs held on these trusses by the chock-block or timbers are permitted to roll down the trusses and off the scow onto a wharf or other receiving agent.

**GEARING.**—W. L. VOSS, Harvey, Ill. This gearing is designed to be driven at different speeds and is particularly adapted for use in connection with hoisting apparatus. The mechanism comprises a driving-shaft geared directly to the element to be driven, and a second driving shaft independent of the first but connected thereto by gearing embodying a clutch automatically operative upon the movement of the second shaft, whereby the two shafts are connected and disconnected.

**CHECKING-MACHINE.**—F. R. WAINWRIGHT, Jersey City, N. J. Mr. Wainwright has invented an improved checking-machine designed more especially for use in restaurants and like places. The machine is arranged to print the number of each check, the amount of each check, the amount of each item on the check, the number of guests enumerated in the check, the number of the waiter, and the amount of money collected by the waiter, also a correct record of all transactions upon a continuous duplicate slip.

**WASHING-MACHINE.**—G. THOMAS, Gothenburg, Neb. Mr. Thomas has invented an improved rubbing surface for washing-machines of the class which employs a swinging receptacle. The rubbing surface co-operates with the rubber for the easy and thorough cleansing of fabrics of different kinds and may be easily removed. The rubber operating means can be actuated with small exertion by the attendant to allow the ready introduction or removal of the clothes.

**REVERSING MECHANISM.**—R. R. RECK, Marienville, Pa. This reversing mechanism is composed of comparatively few parts, not liable to get out of order, and arranged to permit of conveniently and quickly driving a shaft in different directions from a single pulley rotating continuously, at the same time allowing of using the driving pulley as a loose pulley when the parts are in intermediate position.

**BUTTONHOLE-CUTTER.**—L. F. MONCK, New York, N. Y. The machine will cut buttonholes in goods and incidentally mark on the goods the places where the buttons are to be attached. The construction is such that the work may be rapidly and accurately done, resulting in economy of labor and time and consequently reducing the cost of production of the garments.

**TIME-STAMP.**—N. COLLINS, Monument Square Chambers, London, Eng. The apparatus will print a record of the hour and minute at which the time stamp is operated. The device is primarily intended for use in connection with a cash register for denoting the time in which each transaction is recorded.

## Medical Apparatus.

**VAGINAL INJECTOR.**—A. ANDERSON and M. B. S. B. PACKNESS, Denver, Col. This injector is capable of expanding the vagina to its fullest extent, laying open the mouth and entire lower parts and sides of the uterus, thus permitting every part of the female organs to be thoroughly douché. By reason of its perfect shape the apparatus can be safely and easily introduced and as easily withdrawn.

## Railway Improvements.

**PASSENGER-CAR.**—J. M. OSGOOD, Boston, Mass. Certain new and useful improvements have been invented by Mr. Osgood for use on passenger cars, whereby perfect ventilation and heating are obtained. The method of ventilation is not only operative for winter ser-

vice, but is just as applicable for cooling purposes in the summer. Two compartments in a section of a car when made up for night use are separate and distinct from each other, each having its own ventilator. The occupant of a berth can open a corresponding register and receive a cooling breeze from below, if desired, and the arrangement is such that no cold draft will fall upon him.

**TRACK-INDICATOR.**—S. A. STAEGE, Hutchins, near Mattson, Wis. The device is adapted to indicate the variation in the distance of railway rails from each other, so as to enable persons to detect any spreading of the rails. The appliance is intended especially for use on hand-cars, so that the trackmen in going over the road need only to run the car over the rails to detect any spreading thereof.

**DUST-GUARD.**—J. S. PATTEN, Baltimore, Md. The dust-guard is adapted for use in car-axles boxes and comprises a novel, simple construction which can be cheaply made, will fit any ordinary car-axle box and will be durable and efficient in use to prevent the entrance of dust in the bearings.

## Miscellaneous Inventions.

**FAN ATTACHMENT FOR ROCKING-CHAIRS.**—E. O. M. HABERACKER, Altoona, Pa. This device can be readily attached to a chair so that as the chair is rocked to and fro the fan will be operated. The improvement lies in the simplicity and ease with which the attachment may be affixed to the chair. The device may also be folded back out of the way and locked against operation whenever desired.

**DARNING-LAST.**—MARY G. TILNEY, Orange, N. J. The darning-last is made cup-shaped and has a substantially ovate contour. It is provided at the upper edge with a shoulder so that the stocking may be clamped thereon by means of a wire frame designed to engage this reduced portion. The material is thus properly held for darning.

**PLASTER COMPOSITION.**—M. T. J. OCHS, Allentown, Pa. This plaster comprises powdered hydraulic cement, 2 parts; powdered silicate of aluminum, 1 part, and powdered carbonate of lime, 1 part, the silicate of aluminum and carbonate of lime being in a raw state saturated with water, and all the powdered substances being admixed together.

**TABLE.**—G. H. BULLOCK, Wakefield, R. I. This table is particularly designed as a dining table and is provided with a stationary outer section of sufficient width to accommodate the covers for the guests and a center revolving section upon which food is to be placed, whereby each guest by revolving the center section can gain convenient access to any dish thereon.

**COVERING FOR DEMIJOHNS.**—J. G. BAHR, Brooklyn, N. Y. This improved covering for demi-johns is easily applied and is arranged to protect the glass vessel against pressure, to provide a firm handle, and to retain the contents of the glass vessel in case the sides thereof become cracked.

**LEAD PENCIL.**—L. C. BENITZ, Philadelphia, Pa. The invention belongs to that class of pencils whose leads are adapted to slide freely and are secured in any position by means of an elastic device arranged to work in frictional contact therewith. Mr. Benitz has devised an improved means for holding the lead very firmly against upward movement and preventing it from rotation on its axis, but it may be readily drawn out when required.

**REIN-GUARD.**—J. T. WEST, Bowling Green, Ky. Mr. West has invented an article which may be attached or detached from the harness, and will not detract from the appearance of the harness, but will serve to effectually guide the reins and prevent them from becoming entangled with the tail of the horse and from catching in parts of the harness.

**HYDROCARBON-BURNER.**—M. W. MORGAN, Mount Vernon, Ind. The improvements are adapted for burners of gas, generated from gasoline or other hydrocarbon oil. The burner is of simple construction, arranged for either house or street lighting purposes and designed to give a strong, white light with a very small consumption of oil.

**METHOD OF PRODUCING FIGURED PILE FABRIC.**—OTTO TIMME, New York, N. Y. The invention provides an improved method of producing figured pile fabrics in a simple and economical manner, and forming, without the use of a jacquard, the desired pattern in relief, and for closely imitating in color a jacquard-produced pile fabric.

**BOTTLE-WASHING BRUSH.**—C. K. VOLCKENING, Brooklyn, N. Y. This brush is designed for use in connection with bottle washing machines and it embodies a novel means for preventing the rubber brush from slipping off the expanding fingers. Another improvement lies in the construction of the brush, which permits of thoroughly cleaning all parts of the bottle bottom.

**MOLD FOR ARTIFICIAL TEETH.**—THOMAS STEELE, Red Bank, N. J. Improved means have been provided by Mr. Steele for forming artificial teeth which permits individual adjustment of the core pins and permit of accurately setting the core pins relative to the tooth forms to ensure proper formation of the teeth.

**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 the information. In every case it is necessary to give the number of the inquiry.

MUNN &amp; CO.

- Marine Iron Works, Chicago. Catalogue free.
- Inquiry No. 2989.**—For manufacturers or dealers in collapsible tubes suitable for paint, ointment, etc.
- AUTOS.**—Duryea Power Co., Reading, Pa.
- Inquiry No. 2990.**—For ozonin for bleaching fabrics.
- "U. S." Metal Polish, Indianapolis. Samples free.
- Inquiry No. 2991.**—For makers of spinning looms for cotton combs operated by foot power.
- WATER WHEELS.** Alcott & Co., Mt. Holly, N. J.
- Inquiry No. 2992.**—For makers of machines for spinning tapes or bobbins 3/8-inch or under width.
- Handle & Spoke Mch. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.
- Inquiry No. 2993.**—For makers of machines for making pearl buttons.
- Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.
- Inquiry No. 2994.**—For small paper or cellulose capsules, for keeping powder air tight, or nearly so.
- Metal Stamping Co., Niagara Falls, N. Y., cuts and forms sheet, bar, rod, or wire any shape.
- Inquiry No. 2995.**—For machinery for making cotton batting and felted cotton for making mattresses.
- Let me sell your patent. I have buyers waiting. Charles A. Scott, Granite Bldg., Rochester, N. Y.
- Inquiry No. 2996.**—For a machine for separating fiber from the pulp.
- Die work, experimental work and novelties manufactured. American Hardware Mfg. Co., Ottawa, Ill.
- Inquiry No. 2997.**—For manufacturers of talcum powder boxes.
- Partner wanted to exploit invention. Butter show-case and keeper, all glass. M. J. Goldsmith, Warren-town, Pa.
- Inquiry No. 2998.**—For makers of spring motor ceiling fans.
- We design and build special and automatic machinery for all purposes. The Amstutz-Osborn Company, Cleveland, Ohio.
- Inquiry No. 2999.**—For manufacturers of scrubbing, blacking and clothes brushes.
- Special and Automatic Machines built to drawings on contract. The Garvin Machine Co., 149 Varick, cor. Spring Streets, N. Y.
- Inquiry No. 3000.**—For castings for small motors and dynamos.
- IDEAS DEVELOPED.**—Designing, draughting machine work for inventors and others. Charles E. Hadley, 584 Hudson Street, New York.
- Inquiry No. 3001.**—For dealers in second-hand gasoline engines and launches.
- WANTED.**—A partner in competing for the bonus offered by New Zealand for a new gold-saving device. P. McEntee, Montgomery, Minn.
- Inquiry No. 3002.**—For a hand illuminating gas igniter (not to be attached to burner).
- Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.
- Inquiry No. 3003.**—For parties to manufacture books and eyes.
- Patents developed and manufactured, dies, special tools, metal stamping and screw machine work. Metal Novelty Works Co., 43-47 S. Canal St., Chicago.
- Inquiry No. 3004.**—For makers of machines for grinding leather.
- 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. 3005.**—For a clock with a registering dial for use on vehicles, to register time of the journey and stops.
- WOODWORKING MACHINERY.**—The advertiser, who has invented and designed for others a line that has brought large returns, is looking for capital against experience and know how. None but mutually satisfactory arrangements desired or expected. Address Experience, Box 773, New York.
- Inquiry No. 3006.**—For parties to do twisted wire work in large quantities.
- WANTED.**—Several experienced mechanical and structural draughtsmen. Call Williams Registration and Bonding Company, 61 and 63 William Street, New York.
- Inquiry No. 3007.**—For power machines for perforating sheet metal.
- Inquiry No. 3008.**—For coffee mills run by hand or foot power.
- Inquiry No. 3009.**—For makers of block tin flasks.
- Inquiry No. 3010.**—For makers of furniture hardware.
- Inquiry No. 3011.**—For the address of the United States Machine Co.
- Inquiry No. 3012.**—For manufacturers of interior woodwork.
- Inquiry No. 3013.**—For makers of amusement devices, merry-go rounds, etc.
- Inquiry No. 3014.**—For makers of handle machinery.
- Inquiry No. 3015.**—For a machine for sanding and polishing sad iron handles.
- Inquiry No. 3016.**—For makers of gas machines.
- Inquiry No. 3017.**—For makers of moving picture machines.
- Inquiry No. 3018.**—For makers of ice machines of small capacity.
- Inquiry No. 3019.**—For a hand power ice machine for making 20 to 30 pounds of ice in one operation.
- Inquiry No. 3020.**—For machinery and information for the manufacture of brooms.
- Inquiry No. 3021.**—For pneumatic motors and appliances for furnishing the air.
- Inquiry No. 3022.**—For rough castings of the Fleming & Morgan motor.
- Inquiry No. 3023.**—For makers of lightning rods.
- Inquiry No. 3024.**—For a five hundred-light dynamo.
- Inquiry No. 3025.**—For small wheels for register work, to show numbers registered.
- Inquiry No. 3026.**—For a rectifier for changing an alternating current to a direct current.
- Inquiry No. 3027.**—For economical pumps or apparatus for lifting quantities of water for irrigation.
- Inquiry No. 3028.**—For machinery for canning fruit on a small scale.
- Inquiry No. 3029.**—For machinery for a tannic acid plant.
- Inquiry No. 3030.**—For oil burners for boilers.