RECENTLY PATENTED INVENTIONS. Agricultural Improvements.

MANURE-DISTRIBUTER. — J. HOWELL, Schaller, Iowa. In the construction of this improved fertilizing distributer, 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 feeding from being soiled by the splashing and crowding of the animals.

Engineering Improvements.

SPARK ARRESTING AND DISCHARGING DEVISE .- 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 sparkarresting wire screen or cage is located in the smoke box over the lower end of the stacksaddle 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

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. $\bar{\mathbf{A}}$ 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 stav.

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 little space in a tool chest. When the memsquare.

SCREW-DRIVER.—G. E. GAY, Augusta. Me. TIME-STAM SCREW-DRIVER.—G. E. GAY, Augusta. Me. TIME-STAMP.—N. COLLINS, Monument invention provides an improved method of pro-This screw-driver is of the ratchet type and Square Chambers. London, Eng. The appa-ducing figured pile fabrics in a simple and or it may be adjusted to form a lock between the blade and handle, so that they will move

FENCE-LOCK .- W. B. MACLEAN, Galetta, Canada. The fence-lock is designed for securely fastening the longitudinal wires to the pickation, and may be readily applied to securely permitting every part of the female organs to 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 permits of convenient addition and computation passenger cars. whereby perfect ventilation furnished by Munn & Co. for ter of tion. The device may be readily secured to and heating are obtained. The method of venture and operated by the numeral tilation is not only operative for winter serthe invention, and date of this paper.

finger-levers without in any way interfering vice, but is just as applicable for cooling purwith the ordinary work of the typewriter. poses in the summer. Two compartments in a 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. arranged as to enable small hogs to feed —C. R. Benefield, Dallas, Texas. This inequally without being displaced by the large vention is an improvement in that class of axles boxes and comprises a novel, simple ones, and to protect the clothing of the person pneumatic elevators in which cotton or similar construction which can be cheaply made, will substances are raised and then released and fit any ordinary car-axle box and will be 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

> 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 so that the stocking may be clamped thereon a wharf or other receiving agent.

GEARING.-W. L. Voss, Harvey, Ill. 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 $\mbox{\bf directly}$ to the element to be $\mbox{\bf driven},$ 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. WAIN-WRIGHT, 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 im- ${\bf proved} \ \ {\bf rubbing} \ \ {\bf surface} \ \ {\bf for} \ \ {\bf washing\text{-}machines}$ of the class which employs a swinging receptacle. The rubbing surface co-operates with the rubber for the easy and thorough cleansing means of an elastic device arranged to work of fabrics of different kinds and may be easily removed. The rubber operating means can be actuated with small exertion by the attendant lead very firmly against upward movement and to allow the ready introduction or removal of the clothes.

REVERSING MECHANISM.--R. R. Reck. Marienville, Pa. This reversing mechanism is Ky. Mr. West has invented an article which composed of comparatively few parts, not liable, may be attached or detached from the harness, to get out of order, and arranged to permit and will not detract from the appearance of the of conveniently and quickly driving a shaft in harness, but will serve to effectually guide the different directions from a single pulley rotat- reins and prevent them from becoming ening continuously, at the same time allowing tangled with the tail of the horse and from of using the driving pulley as a loose pulley catching in parts of the harness. when the parts are in intermediate position.

BUTTONHOLE-CUTTER.-L. F. MONCK, conveniently separating the members for fold- New York, N. Y. The machine will cut but- are adapted for burners of gas, generated from ing the square so as to take up comparatively tonholes in goods and incidentally mark on gasolene or other hydrocarbon oil. The burner the goods the places where the buttons are is of simple construction, arranged for either bers are fitted together and locked in place to be attached. The construction is such that their surfaces are flush with each other, so the work may be rapidly and accurately done, to give a strong, white light with a very that they may be conveniently used in the resulting in economy of labor and time and small consumption of oil. usual manner the same as any ordinary rigid consequently reducing the cost of production of

with a single pawl so arranged ratus will print a record of the hour and that it may be adjusted to cause the move- minute at which the time stamp is operated. ment of the blade with the handle in either 'The device is primarily intended for use in direction, the blade remaining stationary while connection with a cash register for denoting the handle is turned in the reverse direction, 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 ets of the fence. The lock is simple and its fullest extent, laying open the mouth and durable in construction, very effective in oper-entire lower parts and sides of the uterus, thus be thoroughly douched. 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 improved attachment for typewriters which have been invented by Mr. Osgood for use on

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 Mattoon, 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. 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 de-! Let me sell your patent. I bave buyers waiting. vice may also be folded back out of the way Charles A. Scott, Granite Bldg., Rochester, N. Y. and locked against operation whenever de-

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 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 aluminium, 1 part, and powdered carbonate of lime, 1 part, the silicate of aluminium 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 Hudson Street, New York. 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 demijohns is easily applied and is arranged to protect the glass vessel against tools, light machinery. Quadriga Manufacturing Compressure, to provide a firm handle, and to pany, 18 South Canal Street, Chicago. 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 in frictional contact therewith. Mr. Benitz has devised an improved means for holding the preventing it from rotation on its axis, but it may be readily drawn out when required.

REIN-GUARD.-J. T. WEST, Bowling Green,

HYDROCARBON-BURNER.-M. W. Mor-GAN. Mount Vernon, Ind. The improvements

METHOD OF PRODUCING FIGURED PILE FABRIC.-Otto Timme, New York, N. Y. The 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. VOLC-KENING, 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

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 & 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 fabries.

"U. S." Metal Polish. Indianapolis. Samples free. Inquiry No. 2991.—For makers of spinning looms for cotton cotts operated by foot power.

WATER WHEELS. Alcott & Co., Mt. Holly, N. J.

Inquiry No. 2992.—For makers of machines for pinning tapes or bobbins 36-inch or under width. Handle & Spoke Mchy. Ober Mfg. Co., 10 Bell St.,

Inquiry No. 2993.—For makers of machines for naking pearl buttons.

Chagrin Falls, O.

Sawmill machinery and outfits manufactured by the Lane Mfg. Co.. Box 13, Montpelier, Vt.

Inquiry No. 2994.—For small paper or celluloid 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.

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, Warrentown, 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, •bio.

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 eastings for small motors and dynamos.

IDEAS DEVELOPED.—Designing, draughting machine work for inventors and others. Charles E. Hadley, 584

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

Inquiry No. 3003.—For parties to manufacture nooks and eyes.

Patents developed and manufactured, dies, sp 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 ial for use on vehicles, to register time of the journey WOODWORKING MACHINERY .- The advertiser, who

bas invented and designed for others a line that has brought large returns, is looking for capital against experience and know bow. 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 Employees Registration and Bonding Company, I 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 machin-Inquiry No. 3015.—For a machine for sanding and polishing sad from bandles.

Inquiry No. 3016.-For makers of gas machines. Inquiry No. 3017.—For makers of moving picture

Inquiry No. 3018.—For makers of ice machines of small capacity.

Inquiry $N_{\rm O},~3019.-$ For a hand power ice machine for moking 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 dy-

namo.

Inquiry No. 30'25.—For small wheels for register work, to show numbers registered.

Inquiry No. 30'26.—For a rectifier for changing an alternating current to a direct current.

Inquiry No. 30'27.—For economical pumps or apparatus for lifting quantities of water for irrigation.

Inquiry No. 30'28.—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.