RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

AGRICULTURAL IMPLEMENT .- D. LUBIN New York, N. Y. Improvements are provided in this invention for implements operated by motors carried on vehicles. The mechanism is so arranged that the motor will alternately move the vehicle and operate the ground digging and pulverizing tools.

POWER-PROPELLED AGRICULTURAL IM PLEMENT.—D. Lubin, New York, N. Y. This implement is operated by a motor carried thereon; and the object is to provide a device so arranged that while the motor is in continuous operation it will serve alternately to propel the machine and to operate the digging tool, thus making it possible to employ a motor of much less power than needed to propel the machine and operate the digger at the same time.

BARRACK-JACK .- C. HAMMOND, Woodeliff, N. J. The purpose of this improvement relates to a device for raising the roof of hay-barracks, although it may be used in other connections. In the invention is embodied an arrangement by which the jack is mounted at any height on the pole as contradistinguished from on the ground. The jack is provided with a shank with two studs which may be entered into any two contiguous holes in the post. This enables a very compact jack to be used and avoids using a long connection between the ground and the elevated roof.

BROADCAST HAND SEED-SOWER.-E. C. SMITH, St. Louis, Mo. This machine is carried conveniently on the person and operated by hand. Means are provided for securely holding the handle, for covering the seed-opening, for adjusting the gate, so as to regulate the kinds of seeds to be cast over the ground, for adjusting a gage-stop to suit the fixing of the seedgate, and for arranging the gage-bar with the seed-plate to restrain accidental movement.

BEET - HARVESTER. — C. E. BARTLETT, Wayne, Neb. Of the several purposes of this contrivance, one is to adapt it for automatically removing beets from the ground, and means are provided for gradually withdrawing them from the soil and taking them to the rear of the machine by conveyers engaging with the beet tops. Another is to furnish cutters by which when the beets reach the rear of the machine the tops will be severed, the bodies will fall into receptacles, the final receptacle being capable of an automatic dumping action.

AGRICULTURAL IMPLEMENT.—P. LUBIN, New York, N. Y. Mr. Lubin provides an implement operated with little exertion and from the action of which all the molecules of the earth operated upon will be set in motion, the action causing a fine separation, as the particles move in all directions, leaving the ground light and porous, thus permitting aeration so essential to fine cultivation. It may be adjusted for different depths of work and operated close to plants safely.

Electrical Devices.

ELECTROMAGNETIC MOTOR. — ANGEL POL Y AGUIRRE, Havana, Cuba, This motor consists of permanent magnets secured in two non-magnetic frames, the magnetic poles of which are arranged alternately. Mounted to turn within the series of magnets at both ends thereof, are a double series of electro-magnets constituting a revoluble armature. The twin armatures assist each other in passing deadpoints. Each series of electro-magnets has a collector ring connected with every second electro-magnet and a distributing ring to the remainder. Commutators and brushes connect the rings with separate mains of opposite

Engineering Improvements.

PUMP.-W. H. WESTERMAN, Marietta, Ohio. The mechanism employed here relates to that class of pumps adapted to be worked by flexible power-connecting means such as is well known and commonly made use of where a series of remotely-located pumps are mechanically worked from a common source of power.

STEAM-BOILER .- E. WARD, Mayville, Wis. The part to which this improvement most particularly relates is the "arch" of a boiler. The invention provides a construction easily removed and replaced without disturbing the brick of the boiler-setting at the side or rear walls, whereby the rear end of the boiler can be whosed for cleaning and renairing The im provement prevents expansion, which would displace brickwork, and the parts are joined so as to do away with holts and other fast-

CONTROLLING DEVICE FOR HYDRAULIC CYLINDERS.—S., W., O. E., C. and II. HIB-BARD, Sandyhill, N. Y. The invention relates to hydraulic cylinders for use on wood pulp grinders, and is an improvement on an invention previously filed by Messrs, Hibbard. The inventors have perfected a controlling device or valve arranged to cause inflow and outflow of water to and from the cylinder without danger of leaking and to equalize the pressure on both sides of the cylinder-piston to stop the piston when ever desired.

DEVICE FOR RAISING LIQUIDS FROM WELLS .- T. F. MORAN, De Young, Penn. Mr. Moran provides in this invention an improved device for raising oil and water from deep wells, more particularly oil-wells. The device is so arranged as to prevent the escape of the natural gas, utilizing its pressure in raising the oil to the surface. This pressure is assisted by compressed air pumped into the well.

Mechanical Bevices.

MARKING-MACHINE .- C. S. McGirr, June tion City, Kan. In perfecting this improvement the inventor supplies a mechanism for stamping and marking in general, but particularly adapted for stamping linen or sheets of fabric or other material, these being interposed between a type-bearing wheel and an elastic pad secured upon the table.

SPEED-INDICATOR .- C. E. KELLY, Ander son, Ind. Two patents have been granted Mr. Kelly for improvements in speed indicators. One invention provides an indicator which may be conveniently applied to indicate the speed or movement of any machinery, such as the speed of a wheel in traveling over the ground.

The other invention relates more particularly to a centrifugally controlled means for transmitting movement to a speed indicator. The device comprises a casing in the form of a hub which may be fitted to any rotary part. Within this casing a number of spherical weights coacting with inclined planes serve, when actuated by centrifugal force, to transmit the movements to a ring outside of the casing.

MAIL-CATCHER ARM .- F. M. EDWARDS, New York, N. Y. When the arm of this device is not required it can be locked at the center of its supporting-bar within the plane of the outer surface of the door-joint, and the arm may be reversed to bring its receiving end facing the direction of travel of the train and then brought to a receiving position beyond the door-jamb and locked at either end of its supporting bar. An automatic locking device is provided which offers no hindrance to the reception of a bag on the arm, but which acts to prevent the bag leaving until purposely removed.

MAIL-DELIVERER .- F. M. EDWARDS, New York, N. Y. This mail-deliverer is capable of ready attachment to the door-jamb of any mail-car and will not interfere with the use of the door. It is so made that a mail-bag may be quickly attached thereto at the top and bottom of the bag, the fastening device in no way stopping the safe and quick removal of the bag from the deliverer. The deliverer is held parallel with the side of the car within the doorway or extends out from the doorway at right angles to the side of the car. A crane is used with the de-liverer, and it has supporting-arms for the bag like those of the deliverer.

MACHINE FOR CUTTING ARTICLES FROM THE INSIDE OF SHOES.—W. S. Fultz, New Orleans, La. In operating this device, the shoe is turned bottom upward and slipped over the cutting mechanism. The workman works the shoe around over the neck, so that the cutters come in contact with the nails or tacks, cutting them out completely. By manipulating the shoe the cutters can be forced into the remote parts of the toe. The hand need not enter the shoe while the cutters work. The neck protects the gearing and the shoe.

COKE-DRAWER.—W. S. Jones and J. P. Donohoe, Greensburg, Penn. The invention comprehends a carriage held to travel in front of the coke-oven and includes a platform, for sustaining the operator, reciprocal in the longitudinal plane of the oven. The carriage has a nose adapted to penetrate through the ovendoor, with means for attaching the scraper and holding it in a position under the operator's control. Thus the scraper can be set in the fiesh wound to close the same, the clip being coke at desired points and be pulled by the preferably of the construction shown and coke at desired points and be pulled by the outer movement of the platform to draw the heavy coke bunches out through the oven-door. An endless conveyer receives the coke and conveys it to any suitable receiver.

Railway Improvements.

RAIL-JOINT.—F. S. PASCOE, Allegheny, Penn. Mr. Pascoe's invention refers to railjoints and it provides a simple construction whereby the joint may be securely locked when applied and the locking key retained in position by the locking device.

AUTOMATIC TRIP-BRAKE.-E. L. CRIDGE, Passaic, N. J. In the design of this improvement on automatic trip-brakes for railway vehicles, the object is to stop such vehicles automatically in case the engineer for any reason disregards the danger-signal. The invention thus affords an efficient device for preventing railway collisions.

CAR-FENDER .- J. ROCLANDT, New York, N. Y. The object in this invention is to provide a fender that will be quickly lowered when a part comes in contact with a person or other obstruction, and thus prevent the car from running over the same. Means are furnished whereby the motorman may raise the fender to its normal position.

TRACK ATTACHMENT .- W. H. CROSSLEY, Bloomsburg, Penn. Mr. Crossley has invented an improved attachment designed to prevent fire hose run across the tracks of a street railway from being injured by the car wheels and at the same time obviate the interruption of travel. The attachment consists of a bridge which can be easily applied to a track to lead over the fire hose.

Miscellaneous.

CARBURETER-A. H. RIFE and J. R. CAR-PER, Dallas City, Ill. This carbureter belongs more particularly to the type used in so-called "vapor-stoves," which burn gasoline and simiiar hydrocarbons. Four distinct vaporizing operations of the gasoline are effected. First, by contact with the heated plate; second, through close contact with the heated gauze;

third, by a wick arrangement vaporizing by capillary attraction; fourth, where vaporiza tion is due to a cup located immediately adjacent to an auxiliary flame and which receives any liquid remaining after previous vaporiza

APPARATUS FOR FORMING BLAST-FURNACE CHARGES.—A. S. Dwight, New York, N. Y. Provision is made in this appa ratus for forming blast-furnace charges in a simple manner, the arrangement being such that the charges prepared are of a certain composition and of approximately equal weight and the ingredients thoroughly mixed. Thus much saving of time and labor is effected.

LOOSE-LEAF LEDGER.-F. B. TOWNE Holyoke, Mass. This is an improvement on a patent previously issued to Mr. Towne. The ledger or book is doubly locked owing to means for confining the leaves, few or many, securely in place and to the use of locking devices which hold the covers and back rigidly together, while the covers may open freely and the back lie flat on a desk. A stay bar connects the post against spreading under the leaves. Means are provided for obtaining access to the lock-ing-slat and leaves on the post and also for enabling the leaves to be put in or withdrawn easily without tearing.

INDICATOR FOR TOILET-ROOMS.—E. D. ALLEN and W. A. McElney, Meriden, Conn. This device is easily applied to existing struc-It is so arranged that it will automatically indicate whether a tollet room is occupied or vacant. It is adapted especially for railway-cars, and advantageously for rooms of hotels, houses and other places. It may be applied to a sidewall of a toilet-room or to the door and used on doors swinging in or out and also in connection with full or with half doors. The same effect may be had from the door bolt as from the floor.

HASP-FASTENER.-A. KELLER, Paris, Ill. This efficient device cannot be readily tampered with or unfastened. As the hinge is set down within the woodwork and has no pintle it offers no projections on which a chisel could be used. If a pintle were employed and the hinge projected, the pintle could be cut and 1emoved, rendering the device useless. a superior fastener for boxes, trunks, car-doors, cell-doors, etc.

 $\begin{array}{ll} \textbf{TRANSFERABLE} & \textbf{JOB-BANK.} \leftarrow \textbf{G}. & \textbf{M}. \\ \textbf{GREEN, O'Neill, Neb.} & \textbf{This transferable job-} \end{array}$ bank consists of a flat slab provided with a rib at the lower end and a number of compartments sunk flush with the surface at the upper end. The bank is supported at an inclined position by angle braces. The many uses to which the device and particularly the compartments can be applied will be obvious to printers.

PURSING-SEINE .- W. F. HARRIS, Gloucester, Mass. With seines as heretofore used considerable difficulty has been experienced when circling around a shoal of fish by reason of the heavy metal rings attached to the foot of the seine which tend to drag the small fixed boat toward the fish, frightening them off before they are completely surrounded. This difficulty is obviated by the present invention.

CLIP-APPLIER .- G. J. VAN SCHOTT, Passaic, N. J. The efficiency of surgical appliances is advanced by this implement, which engages and presses a clip in position on a superficial described in a previous patent granted to Mr. Van Schott.

HAT-PIN AND FASTENER.—C. B. GARRIson, Cincinnati, Ohio. Means are here provided for mounting hat-pins in a hat so that the pins may be moved freely into and out of operative position without actually detaching them from the hat, while the devices employed permit the removal of the pin when desired. The formation of holes is avoided and the pin is firmly held.

NON-REFILLABLE BOTTLE.—P. J. ATZ-BERGER and F. W. PETERS, Cleveland, Ohio. The main purpose of the inventors is to furnish a bottle so constructed that after it has been emptied of its contents it cannot be refilled and again presented as an original package. They have provided one of this character con veniently made and substantially of the same shape as an ordinary bottle.

ANIMAL-TRAP .- V. WEILER, Lincoln, Neb. This structure is capable of trapping small animals, the size of rats and mice. It is a sensitive tripping mechanism. The slightest weight compels the quickness and certainty of operation, and the tripping part is so related to the bait-holder that the animal in its efforts to reach the bait must engage with the movable member, which springs the trap and drops the captive into the cage. The tripping devices form a runway and serve to close the subjacent cage, and they include automatic locking and setting parts.

CALENDAR.—A. F. HOFFMAN, New York, N The invention provides a simple and neat calendar which will indicate comparative dates for different years and their subdivisions. It comprises a board or base on which are secured twelve pads, one for each month. Each pad contains detachable leaves for the days of the month. Beneath these is a leaf containing the table for the entire month, while under this leaf is printed a table for the corresponding month of the previous year.

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 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. 3917.—For makers of machines for cutting railway ties.

AUTOS.-Duryea Power Co., Reading, Pa.

Inquiry No. 3918.-For dealers in coal oil.

"U.S." Metal Polish. Indianapolis. Samples free. Inquiry No. 3919.—For dealers in telegraph in-truments of all kinds.

For bridge erecting engines. J. S. Mundy, Newark, N.J. Inquiry No. 3920.-For manufacturers of toys. Coin-operated machines, Willard, 284 Clarkson St.,

Inquiry No. 3921.—For makers of small metal boxes, iron, brass or aluminium, in the line of match safes.

Blowers and exhausters. Exeter Machine Works,

Inquiry No. 2922.—For makers of windmill pump cylinders in which plungers on pistons are used that work without leathers.

Handle & Spoke Mchy. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.

luquiry No. 3923.—For a self-acting dividing engine for dividing 3 to 6 inch theodolites.

Dies, stampings and armature discs. Advance Manufacturing Co., Racine, Wis.

Inquiry No. 3924.—For wholesale dealers in mail order goods and rubber suitable for making rubber stamps.

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

luquiry No. 3925.- For the manufacturers of the Edison storage batteries.

FOR SALE.—60 h. p. Otto gas engine, the latest type, practically new. Colborne Mfg. Co., Chicago.

Inquiry No. 3926.—For manufacturers of brass numbering tacks for fly screens. Let me sell your patent. I have buyers waiting. Charles A. Scott, Granite Building, Rochester, N. Y.

Inquiry No. 3927.—For manufacturers of sugar machinery and driers.

Machine Work of every description. Jobbing and re-

pairing. The Garvin Machine Co., 149 Varick, cor. Spring Sts., N. Y.

Inquiry No. 3928.—For a 21-foot gasoline river launch fitted with good 2 to 4 h. p. engine.

Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Com-pany, 18 South Canal Street, Chicago.

Inquiry No. 3929.—For makers of suspender buckles, etc.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$5. Munn & Co., publishers. 361 Broadway, N.Y. Inquiry No. 3930.—For makers of pyrometers for bake o vens.

The largest manufacturer in the world of merry-gorounds, shooting galleries and hand organs. For prices and terms write to C. W. Parker. Abilene. Kan.

Inquiry No. 3931 .- For makers of sheet metal spinning and polishing lathes, also makers of novelties such as can-openers, cork screws, etc.

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. 3932.—For information about a cre-matory for disposing of refuse and garbage of a large

FOR SALE.-United States patent right of feed trough for poultry or swine. Price moderate. Copy of patent free. Jno. Abrends,

Sunman, Ind.

lnquiry No. 3933.—For a strong horseshoe permanent magnet capable of lifting 15 or 20 times its own weight. Wanted-Revolutionary Documents, Autograph Let-

ters, Journals. Prints, Washington Portraits, Early American Illustrated Magazines, Early Patents signed by Presidents of the United States. Valentine's Manuals of the early 40's. Correspondence solicited. Address C. A. M., Box 773, New York.

Inquiry No. 3934.—For manufacturers or business concerns that will have an exhibit at the St. Louis Exhibition.

Patent No. 701.951 for sale or royalty. The strongest and most rigid adjustable alligator wrench invented.

Wm. Shirk. Panama, Iowa

Inquiry No. 3935.—For parties to make odd-chaped bottles reasonably.

FOR SALE. Thornycroft steam wagon, good condition, 23 h. p., speed 8 miles, capacity 5 tons. Add W. I. M., 82 Cotton Exchange Building, N. Y. City. Inquiry No. 3936.—For machines for embossing eather and fiber chair seats.

Inquiry No. 3937.—For parties handling the Edison" Loud Speaking Telephone" and the Hewitt mercurial vapor lamps.

Inquiry No. 3938.—For automatic weighing machines for sacking and weighing grain.

Inquiry No. 3939.—For makers of electric blue print machines.

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Inquiry No. 3942.—For a machine for winding tine wire. inquiry No. 3943.—For a steel hull 30 feet long, fit tottom, todraw not over 10 inches loaded, propelled by stern wheel driven by gasoline engines.

inquiry No. 3944.—For makers of kerosene oil pressure lamps on the Kitson principle.

Inquiry No. 3945.—For makers of wooden novelies, such as spoons, forks, bowls, plates, etc. Inquiry No. 3946.—For makers of polished hard-rood bases suitable for telegraph instruments.

Inquiry No. 3947.—For information as to machines for making pyroligneous acid. chines for makin's pyroligneous acid.

Inquiry No. 2948.—For makers of hard rubber mods, such as telephone receivers, hard rubber tubing.

Inquiry No. 3949.—For a second-hand gasoline enrine between 3 and 5 h. p.
Inquiry No. 3950.—For address of parties making small was engine castings with drawings.

Inquiry No. 3951.—For castings and connections for a small electric motor. Inquiry No. 3952.—For a machine for manufacturing wooden ours

Inquiry No. 3953. For the manufacturer of the collapsible lifeboat which was recently tested at the Brooklyn Navy Yard.

Inquiry No. 3954.-For crude rubber and asphaltum used in the manufacture of roofing paints.