RECENTLY PATENTED INVENTIONS. Agricultural Implements.

SHOVEL-PLOW .- J. MICHALKA, Cameron, Texas. This invention relates to certain improvements in shovel-plows by means of which the stock and shoe may be securely mounted and yet adjusted from one position to another according to the work to be performed

PLANTER .- J. A. ANDERSON, Munson, 111. The seed-dropping device of the planter is so constructed that it may be reversed or set as many times as it is necessary in the field to plant from one to four kernels of corn in a hill without requiring the operator to dismount from the machine. The device is designed to cause no wear or strain upon the check-row wire, and will plant in a straight line crosswise of the field, as the check-row only operates the plunger in the shoe.

Apparatus for Special Purposes.

MEANS FOR COMPRESSING OR LIQUE FYING GASES .- B. BORLAND, Cambridge, Mass. This invention provides means for compressing and liquefying gases—such, for instance, as ammonia and carbon dioxide—for the purpose of obtaining such gases in their liquid form for any desired use. . The apparatus is so constructed that it may be easily controlled and successfully used in large bodies of water-as, for example, the ocean.

Electrical Apparatus.

LAMP-HANGER .- H. J. HARRISON, Juneau, Alaska Ty. This invention relates to a device for hanging electric lamps so that the lamps may be raised or lowered to any height desired. This end is attained by a certain arrangement of parts involving a roller or drum carrying a conductor and actuated in one direction by a spring, so as normally to wind the conductor on the drum, the drum being actuated manually in a contrary direction and being arranged with the dog which will hold it in any position desired.

ELECTRIC FLY-TRAP.—E. R. GREENE, Providence, R. I. This improved electric fly-hard rolled, one foot wide. killer is especially designed for use in stores, kitchens, dining-rooms and other places. The insects are lured to the apparatus by suitable bait, whereupon an electric current is passed through their bodies to instantly electrocute them.

PARTY-LINE TELEPHONE APPARATUS.-G. MÖLLER, Nordre Frihavnsveg, 50A, Copenhagen, Denmark. This apparatus provides a simple arrangement whereby several subscribers are enabled to employ a single line to the central office, and whereby such subscribers Novelty Works Co., 43-47 S. Canal St. Chicago. may be connected either with other subscribers on the same line or with such subscribers and oil-extracting machines. may be connected either with other subscribwhose lines lead to the same central office. The present arrangement differs from similar apparatus heretofore devised in so far as every subscriber is enabled to communicate directly with the central office and in so far as the ordinary sub-station battery of every subscriber is used for the purpose of cutting out all other

Engineering Improvements.

PUMP-OPERATING MECHANISM.—J. B. cessively depressed by wheels or rollers traveling in a circle over them. The inventor informs us that the machine has been built, and operates eight pumps 9 inches in diameter and with 12-inch stroke. Four wheels are used, giving 250 strokes per minute, while the central shaft makes 8 revolutions per minute. This is done at an expenditure of 5 horse-

Miscellaneous Inventions.

New York, N. Y. The purpose of the invention is to provide a novel construction of cap or outlet section for the bottle, whereby, after the bottle has been emptied of its contents, it cannot be refilled and again presented as an original package. The neck is formed in a series of connected members at angles to each other, the mouth or outlet member extending acros the face of one of the intermediate members, approximating in shape that of a figure 4.

NON-REFILLABLE BOTTLE.-J. Y. PAYon, Waldron, Ark. A novel construction is provided by which the contents of the bottle may be dispensed as desired, but which will prevent refilling. The bottle has its neck provided with a bottom wall having a filling-port, and is provided alongside the neck with a tubular portion communicating at its lower end with the neck and affording an outlet or discharge port. A rotatable dispensing device is situated in the neck above the bottom wall and has a slot or opening which may be adjusted to successively register with the inlet and outlet ports.

HAIR-FASTENER .- A. G. SMITH. Chevenne Wvo. The hairpin is provided with means for fastening it securely in the hair, thus preventing the loss of the pin. A bolt in the curved head of the hairpin is adapted to pass through the hair at the upper end of the prongs, thereby securing the hair-fastener in position.

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

Marine Iron Works. Chicago. Catalogue free. Inquiry No. 2513.—For parties to manufacture ubber rings.

Motor Vebicles. Duryea Power Co., Reading, Pa. Inquiry No. 2514.—For manufacturers of spring

"U.S." Metal Polish. Indianapolis. Samples free. Inquiry No. 2515.—For parties to make a 6 h. p.

WATER WHEELS. Alcott & Co., Mt. Holly, N. J. Inquiry No. 2516.—For makers of worm well augers which bore by hand or machinery.

Manufacturers' agent; accounts wanted. S. Duncan, AND EACH BEARING THAT DATE.

Inquiry No. 2517.-For makers of razor and spec-

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

Inquiry No. 2518.—For the makers of a machine for twisting wire around paper twine.

Sheet metal, any kind, cut, formed, any shape. Prompt work. Metal Stamping Co. Niagara Falls, N. Y.

Inquiry No. 2519.—For the makers of the Chalefow's condensed milk can opener.

Are you looking for anything in bent woodwork? Write Tucker Bicycle Woodwork Co., Urbana, Chio,

Inquiry No. 2520.--For makers of small acetylene lamps.

For inventors and patentees soft, smooth iron cast-

ings. Address Atlantic Foundry, Phillipsburg, N. J. Inquiry No. 2521.—For dealers in pointed steel wire $\frac{1}{2}$ inch diameter and 6 inches long.

Gear Cutting of every description accurately done. The Garvin Machine Co., 149 Varick, cor. Spring Sts., N.Y. Inquiry No. 2522.-For makers of small draw fans.

For SALE.-U. S. 1902 latest beautiful patent on bicycle. For particulars address Tarzian Brothers, Paterson. N. J.

We design and build special and automatic machinery

for all purposes. The Amstutz-Osborn Company, Cleveland, Ohio.

Inquiry No. 2524.—For an oil burner for stationary boilers or furnaces.

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

Inquiry No. 2525.—For the address of the Avery Thrashing Machine Manufacturing Company.

Patents developed and manufactured, dies, special tools, metal stamping and screw machine work. Metal

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foct of East 138th Street, New York. Inquiry No. 2527.—For a small dynamo for exerimental work.

IDEAS DEVELOPED.-Designing, draughting machine

work for inventors and others. Charles E. Hadley, 584 Hudson Street, New York.

Inquiry No. 2528.—For machinery for making all kinds of wire goods.

High-class machinist and toolmaker desires model or experimental work, or will invent anything for you. W. Gustafson, 226 Atlantic Ave.. Brooklyn, New York. Inquiry No. 2529.-For makers of bali-bearing

WANTED .- A thorough, reliable and practical automobile man, one that understands the manufacture of automobiles in every detail. State age and experience 'Red Cross," Box 773, New York.

Inquiry No. 2530.—For makers of pearl button-making machinery.

Manufacturers of slot machines, vending of every description, bar supplies and novelties. Send illustration with lowest cash price, f. o. b. New York. Large quantities. J. Landes, 108 Pitt Str., Sydney, Australia. Inquiry No. 2531. For a mechanical device for generating power by a weight, like that of a clock.

Any one interested in locating advantageous manu-NON-REFILLABLE BOTTLE.—F. KLEIN, | facturing plants address L. C. Root, Stamford, Conn.

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Inquiry No. 2547.-For the address of the Marilla Incubator Company.

Inquiry No. 2548 .- For twine-making machinery. Inquiry No. 2549.—For a machine for affixing tamps on letters and circulars.

Inquiry No. 2550.—For a spring motor for running shelves in ide a showcase.

Inquiry No. 2551.—For a kerosene oil burner to generate 400 deg of heat within four hours from time of lighting.

Inquiry No. 2556.—For the makers of a machine for separating mineral substances, acting upon the principle of the "Cyclone."

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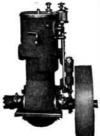
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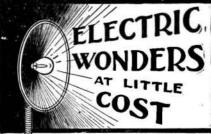
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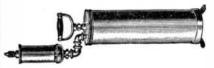


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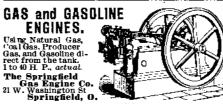
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