

RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

HARROW TOOTH-BAR.—T. R. WALLIS, Dyersburg, Tenn. The tooth-bar is a composite structure comprised of a pair of gutter-shape members placed together so as to form a tube. Each of these members is provided with a row of holes into which are fitted the conical shanks of the harrow teeth. The shanks are secured at the top by threaded nuts.

Electrical Apparatus.

ELECTRIC ACCUMULATOR.—F. LOPPE, H. P. MORIN, G. J. A. GRINER and D. P. MARTIN, Paris, France. This electric accumulator comprises a plurality of perforated plates, the walls of the perforations having conical projections. An active mass is arranged between the plates and distance pieces are provided at one end to separate the plates which are connected by perforated rivets.

Hardware.

DOOR OR GATE LATCH.—C. J. MOORE, Varina, Iowa. A latch of simple construction is hereby provided that may be readily attached to a door or gate, and serves to hold the same locked in either closed or open position. The parts are so arranged that it will be practically impossible for an animal to move the latch from its locking position by rubbing against it, as sometimes happens with other locking devices.

SAIL-HANK.—J. M. INTO, Newport, R. I. The hook may be permanently fastened to the sail and will not injure the sail by unduly wearing on the bolt rope or sail cloth. It will hold the luff of the sail snug against the stay and is of such construction as to admit of quickly bending or unbending the sail.

CAN-OPENER.—T. H. C. LOFTHOUSE, Nassau, Bahama Islands. Mr. Lofthouse is the inventor of an improved can opener which is characterized by its simplicity and efficiency. The implement possesses the strength and cutting qualities which are necessary for properly cutting the can.

TWINE-HOLDER.—A. L. and O. SOVELIUS, Hancock, Mich. A simple and practical twine-holder has been designed by these inventors which will be found useful for merchants and others. After a package is tied and the twine is cut off, the twine-holder will raise the twine above the counter. Means are provided also for regulating the tension of the twine as it runs off.

Mechanical Devices.

SAW-SETTING MACHINE.—C. YOUNG, York, Me. This improved saw-setting machine is designed for accurately and quickly setting the teeth of saws, notably band saws. The arrangement of the parts is such as to permit easy and quick adjustment of the machine for readily treating all kinds of saws, whether wide, narrow, fine, or coarse.

DREDGE.—A. Z. BOUDREAUX and O. F. ESCHET, Gibson City, La. This invention, which in general relates to improvements in dredges, more specifically comprehends a novel and peculiarly constructed means for automatically opening the bucket or dipper door, and for taking up the slack of the rope that connects therewith during the different adjustments of the dredger boom and the supporting platform.

COTTON-CLEANER.—E. B. HAM and J. W. SHIPLEY, Jennings, Okla. Ty. This invention has for its object to provide means, in the well-known pneumatic tube for handling seed cotton by atmospheric suction, that will thoroughly clear the cotton before it gets to the gin stand. The invention consists in a special cleaning apparatus designed to be located at any desired point in the gin room.

CLUTCH-OPERATING MECHANISM FOR WINDING DRUMS.—S. BARTON, Stroudsburg, Pa. Improvements are provided by this invention in devices for moving the winding drum into operative connection with the driving wheel and for disengaging it therefrom. A simple mechanism is employed by which the adjustments may be quickly made while the driving shaft is moving in a winding direction.

LATHE.—O. G. EDMOND, Wausau, Wis. Mr. Edmond is the inventor of an automatic lathe for turning spindles, balusters, handles, and like articles. It comprises means for feeding the work and cutting it off at even lengths, after which the work passes from work-carriers which move arbitrarily and at the same time turn independently around a cutter of the rotary type.

COMPRESSED-AIR WATER-ELEVATOR. W. MCKEE, Charleston, W. Va. An improvement in compressed air water elevators is provided in this invention which relates particularly to the valve mechanism, whereby compressed air is admitted to the pumping chambers and permitted to exhaust therefrom in the operation of the apparatus.

POWER DEVICE FOR PUMPING WELLS. J. J. KWIS, Findlay, Ohio. The invention aims to provide simple and substantial means for holding a vertical spindle in a perfectly rigid condition in the frame work of a power device for pumping wells, thereby effectually overcoming all liability of the power wheel assuming a tilted or canted position. The invention is an improvement on a previous one patented by Mr. Kwis.

MECHANICAL MOVEMENT.—F. J. DONOUGHE, Gallitzin, Pa. Mr. Donoughe's invention is an improvement in that class of mechanical movements involving the principle of a cam wheel operated through the medium of reciprocating devices or agents for the production of work. The invention is applicable for operating oil, water, and air pumps and for a variety of other uses whereby reciprocating motion can be utilized.

SHOE-CLEANING MACHINE.—W. RICHARDSON, Colfax, Wash. The object of this invention is more particularly to provide means for retaining a revoluble brush in a predetermined position relative to the foot-rest, so that the operator after using the brush merely allows it to return to its normal position, where it is convenient for subsequent use.

NAILING-MACHINE.—J. W. REED, Hammond, Ind. The invention relates to nailing machines operated either by hand or power, but more particularly by hand, in which the nails are automatically formed from a wire as the machine is operated. The nails are cut by the cutting die of the hammer shearing past the stationary die in the frame and are driven by the same stroke of the hammer.

Medical Apparatus.

AUTOMATIC MEDICAL ELECTRICAL APPARATUS.—A. F. and J. C. VETTER, New York, N. Y. This apparatus is used for subjecting various parts of the human body to the action of an electrical current. The device is of simple construction and may be readily manipulated being in the form of a handle adapted to be grasped by either hand and which will control the operation of the device automatically.

RESPIRATOR.—M. JACOBS and A. P. BLACK, Brooklyn, N. Y. This respirator requires no outside attachment whatever. It is simply placed over the mouth and held by the teeth or lips and may be instantly applied or removed. It is a positive protection against inhaling microbe-laden dust in summer, and it tempers and filters the cold air in winter. As an inhaler of such medicaments as chloroform, menthol, turpentine, etc., the device will serve the same purpose as a more expensive and cumbersome device.

Railway Improvements.

EXPANSION JOINT-COUPLING FOR TRACK-RAILS.—J. W. MCBURNEY, Fort Palmer, Pa. A novel and simple coupling device has been provided by this invention, which is adapted particularly for holding railroad track-rails connected at their joints in a reliable manner, and which will afford compensation for expansion of the rails during hot weather.

AUTOMATIC PHOTOGRAPHIC DETECTOR DEVICE FOR PASSENGER CARS.—F. W. BROOKS, Brooklyn, N. Y. The invention consists in the main of the following parts: First, a device connected with and operated by the revolution of the car wheel, and an electrical connection by which the operations of the camera and registers and the distance between such operations are actuated and controlled; second, an electric current, preferably from a battery, connected with the above device by which the circuit or circuits are opened or closed to operate the camera, the registers, and the lighting of the car; third, a method for automatically lighting the car in such portions as are desired, and means for shutting off conflicting or objectionable lights.

RAIL-JOINT.—D. O. BRUNNER, Somerset, Ohio. The invention has for an object the provision of improved means for protecting the meeting or adjacent ends of two rails from the pounding or hammering action of the wheels of passing cars, thereby contributing to the easy and smooth running of trains, reducing the tendency of the parts to work loose, and minimizing abrasion and wear of the joint.

Miscellaneous.

MOTOR-VEHICLE.—A. E. OSBORN, New York, N. Y. Various improvements in the framing of motor vehicles are provided by this invention in order to effect as direct a connection as possible between the motor and driving wheel which is also arranged to steer the vehicle. The frame is approximately triangular in form and the vehicle has three wheels, one in front serving as both the driving and steering wheel. The motor is mounted on a separate frame which swings with the steering wheel.

ROPE-GUIDE.—W. G. POULSON, New York, N. Y. The purpose of this invention is to provide a new and improved rope-guide for the hoisting and lowering ropes of dumb-waiters and the like. The guide is simple and durable in construction, cheap to manufacture, easily applied, and so arranged as to prevent chafing and breaking of the ropes and abrasion of the wood adjacent to the guide. The friction between the rope and the guide is reduced to a minimum, and hence raising or lowering of the cage or box may be accomplished without much exertion to the operator.

FASTENING FOR WATCH-DIALS.—W. W. DICKENSON, Wilson, Kans. Various attempts have been made to provide a secure fastening for dial plates of watches, but the object has still not been completely attained. Mr. Dickerson is the inventor of an improvement in this line whereby the difficulties attending the usual construction and arrangement of dial plate fastenings are avoided and certain important advantages are attained.

BAKE PAN.—C. E. and G. M. AUSTIN, Rollinsford, N. H. The pan is designed especially for use in the baking trade for biscuits, cakes and like articles. It comprises a certain novel structure preferably struck up from a single sheet of metal and having a bottom flanged at each side so as to make the pan reversible, and also so as to leave a space beneath the bottom at all times through which hot air may circulate freely.

REVOLVING TURRET.—PHILIP HICHBORN and AUGUST O. BOSTROM, Washington, D. C. This revolving turret is adapted for large and small caliber guns and is of a double or superposed type. In carrying out the invention the turret is designed in two partly elliptical parts differing in size and arrangement, the smaller part or gun chamber being superposed on the other or base part and also placed back from the front of the ladder, and both having sloping fronts.

LIMEKILN.—A. P. BROOMELL, York, Pa. Mr. Broomell's invention relates to improvements in kilns of the class used for roasting lime-rock. It primarily seeks to provide a kiln especially designed for burning lime by producer gas in a convenient and effective manner. The invention comprehends a novel construction including a steel shell having a base portion for firmly resting on the ground and having a special bottom constructed for supporting the upper portions of the kiln, including its brick and the rock in the course of burning.

SELF-CHALKING HOLDER FOR CHALK LINES.—W. C. FILSON, Point Pleasant, W. Va. A simple, durable and economic form of device has been invented by Mr. Filson, which device is adapted to contain a reel and chalk line, and a cake of chalk, all of which are easily placed in or removed from a receptacle. When the line is unreel, the cake of chalk will rotate with the reel and the line will engage the chalk, but when the line is being wound up, the chalk is arranged to remain stationary and out of engagement with the line, thus preventing undue waste of chalk.

GAME APPARATUS.—A. S. ALEXANDER, New York, N. Y. The invention relates to a modification of table tennis or ping pong, the chief variation being the provision of two nets spaced apart vertically. By this arrangement the game is rendered more difficult to play as the players must propel the ball either through the opening between the nets or over the upper net.

COW-MILKER.—E. A. NUGENT, Unionville, N. Y. Mr. Nugent is the inventor of an improved device by means of which milk may be delivered directly from the cow into receptacles held in an air-tight tray from which the air is exhausted. Means are provided for sealing the bottles before removal from the tray, thus preventing the entrance of impurities from the air in a stable, and preserving the milk for a greater length of time than is possible when air is contained in the bottles with the milk.

REDUCER FOR OVEREXPOSED PHOTOGRAPHIC PLATES.—H. G. KRIEGER, Chicago, Ill. Mr. Krieger's improved reducer consists of a mixture of a saturated solution of copper sulphate four parts, and ordinary hydrochloric acid, one part. This solution may be diluted to any desired extent, it being found that even if mixed with ten times its weight in water, it is still effective, but acts very slowly. Its principal advantages are its simplicity, quickness, cheapness, and reliability.

SCALE.—J. A. HEYDRICK, Butler, Pa. Mr. Heydrick's invention provides an improved scale more especially designed for the use of surveyors, engineers, draftsmen, and other persons, and arranged to permit of conveniently and accurately finding the scale on which a plot, for instance, is drawn, for reducing or enlarging drawings on any scale, for registering units of linear measure and decimal parts thereof, for giving the angle from a line drawn on a map at any point of the line, and for other similar purposes too numerous to mention.

PIN-KEEPER.—C. G. PINGEL, Butte, Mont. The keeper is designed for use in connection with pins, brooches, and the like. The construction is such that the keeper will be moved to locked position by the insertion of a pin, covering the pin point and thus preventing any possibility of the point scratching a person or becoming caught in a dress, or the like.

Designs.

DESIGN FOR A COVER-DISH.—R. L. JOHNSON, Hanley, county of Stafford, England. The cover of the dish is provided with a scalloped edge and decorated border. At the center of the cover ovi-formed projections are grouped at intervals and a floral handle appears in their midst. The body of the dish is ornamented at its upper edge with a border corresponding to that of the cover. The base has a scalloped lower edge and is decorated with a scroll border adjacent to the edge.

DESIGN FOR WALL BRACKET.—F. C. POTTER, New York, N. Y. The leading feature of the design consists in the representations of

the insignia emblematic of the Masonic order and the representation being arranged and united to form the back and brace of the bracket.

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 & CO.

- Marine Iron Works. Chicago. Catalogue free.
- Inquiry No. 3434.**—For a nickel-in-the-slot machine for an artesian well to deliver water by the barrel.
- AUTOS.—Duryea Power Co., Reading, Pa.
- Inquiry No. 3435.**—For machinery for making fish hooks.
- Small Steam Motors. F. G. Grove, Luray, Va.
- Inquiry No. 3436.**—For a speed indicator for attachment to an ice yacht.
- "U. S." Metal Polish. Indianapolis. Samples free.
- Inquiry No. 3437.**—For manufacturers of needle kerosene valves for kerosene burners.
- Dies, tools, models. Am. Hardware Co., Ottawa, Ill.
- Inquiry No. 3438.**—For makers of articles of hard, compressed paper pulp.
- For bridge erecting engines. J. S. Mundy, Newark, N. J.
- Inquiry No. 3439.**—For an electric machine for cutting down trees.
- Coin operated machines. Willard, 284 Clarkson Street, Brooklyn.
- Inquiry No. 3440.**—For manufacturers of spoke and handle machinery.
- Dies, stampings, specialties. L. B. Baker Mfg. Co., Racine, Wis.
- Inquiry No. 3441.**—For the recent inventors of illuminating paint.
- Handle & Spoke Mch. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.
- Inquiry No. 3442.**—For repair parts for Phoenix Telephone Co.'s apparatus.
- Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.
- Inquiry No. 3443.**—For machines for braiding straw for making hats.
- Let me sell your patent. I have buyers waiting. Charles A. Scott, Granite Building, Rochester, N. Y.
- Inquiry No. 3444.**—For mechanical massage machines.
- Special and Automatic Machines built to drawings on contract. The Garvin Machine Co., 149 Varick, cor. Spring Streets., N. Y.
- Inquiry No. 3445.**—For makers of astronomical telescopes.
- Manufacturers of patent articles, dies, stamping tools, light machinery. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.
- Inquiry No. 3446.**—For the makers of the "100 Oil Gas Burner."
- FOR SALE.—Patent on cheap contrivance that is indispensable in every store. Certain to sell quickly. A. L. & O. Sovelius, Hancock, Mich.
- Inquiry No. 3447.**—For manufacturers of glass pens.
- The largest manufacturer in the world of merry-go-rounds, shooting galleries and hand organs. For prices and terms write to C. W. Parker, Abilene, Kan.
- Inquiry No. 3448.**—For dealers in second-hand transit and surveying instruments.
- 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. 3449.**—For manufacturers of clock dials.
- 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. 3450.**—For makers of cast iron pipe.
- A manufacturing corporation desires to secure two or three really good inventions in the stationary or office supply line. Royalty basis only. Send full particulars and copy of patent. Address P., Box 773, New York.
- Inquiry No. 3451.**—For makers of automatic packing machines.
- Send for new and complete catalogue of Scientific and other Books for sale by Munn & Co., 361 Broadway, New York. Free on application.
- Inquiry No. 3452.**—For makers of labor-saving bricklaying machines.
- Inquiry No. 3453.**—For manufacturers of bag-making machinery.
- Inquiry No. 3454.**—For information as to the Poulsen's telegraph.
- Inquiry No. 3455.**—For parties to manufacture twisted wire goods.
- Inquiry No. 3456.**—For a small engine for a light, open boat.
- Inquiry No. 3457.**—For makers of gasoline motors for bicycles.
- Inquiry No. 3458.**—For manufacturers of kerosene marine engines.
- Inquiry No. 3459.**—For makers of mail order novelties, such as fountain pens, rubber balls, etc.
- Inquiry No. 3460.**—For makers of drawing presses.
- Inquiry No. 3461.**—For manufacturers of fruit basket machines, also machines for rolling sheet metal.
- Inquiry No. 3462.**—For makers of hard rubber goods.
- Inquiry No. 3463.**—For machines for making waste, such as are used by engineers, machinists, etc.
- Inquiry No. 3464.**—For a power plant including 4 boilers of 150 h. p. each, 2 engines 250 h. p. each, 2 dynamos same capacity, pumps, heaters, etc.
- Inquiry No. 3465.**—For kerosene burners for steam heating plants in schools.
- Inquiry No. 3466.**—For makers of smoke consumers.
- Inquiry No. 3467.**—For fire alarms for large buildings.
- Inquiry No. 3468.**—For makers of spring motors.
- Inquiry No. 3469.**—For makers of automobile and gasoline engine castings.
- Inquiry No. 3470.**—For a machine for embossing photograph mountings.