

RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

CANE CARRIER AND FEEDER.—HARRY WICKS, Hawaii, Hawaii. The invention is especially useful for drawing the cane into the carrier, by which it is in turn delivered to the rolls of the sugar-mill. The device comprises a swiveled body portion in which a bar is mounted to reciprocate, the bar carrying a hook or hooks to engage the cane and drag it from one point to another.

SUBSOIL ATTACHMENT FOR PLOW.—BENJAMIN W. BRYANT, Boswell, Ind. The attachment is to be applied to a common breaking-plow for the purpose of plowing up the ground in the bottom of the furrow after the ordinary plow has gone throughout the furrow, leaving the loose earth in the bottom of the furrow to be covered by the earth thrown up when the ordinary plow makes the next furrow. The improved attachment is also provided with a pin arranged to break in case the attachment strikes an unyielding obstruction, thus avoiding injury.

Engineering Improvements.

BOILER.—ALBERT H. MACARTHY, Manhattan, New York city. Mr. MacCarthy has invented a water-tube boiler in which he has endeavored to secure as perfect ventilation as possible. The tubes are expanded in both sheets of the boiler-heads and are pierced with openings in the water-legs formed by the head sheets. The tubes can be conveniently closed at the outside of the heads, the closing devices being readily removable to permit convenient access to any of the tubes.

AIR-FEEDING DEVICE FOR FURNACES.—CHARLES R. LITTLER, Selkirk, Manitoba, Canada. The invention is a device for feeding air to boiler-furnaces. A construction has been devised by which the amount of air supplied is automatically regulated according to the draft. The force of the draft is adjustable through the medium of the feeding device.

Motor Vehicle Driving Apparatus.

EXPLOSION ENGINE.—ARTHUR TOURAND, 34 Rue Diquemare, Havre, France. For the purpose of avoiding the jars to which an automobile-engine is usually subjected, the inventor has devised a motor composed of two connected cylinders, within which two pistons are moved in the same direction to operate two fly-wheels geared together. Motion is transmitted to the driven part by one of the shafts upon which the fly-wheels are respectively carried.

VARIABLE-SPEED GEAR.—ARMAND WACHÉ and ALPHONSE KRIEGER, 195 Boulevard Voltaire, Paris, France. This variable-speed gear for motor-carriages includes pulleys whereby the rate of transmission between a driving and a receiving shaft can be varied at will without ever modifying the tension of the transmitting-belt. The pulleys are formed by an extensible rim, the members of which are pivoted together in parallelograms and fixed from distance to distance to supports radially movable. These supports can be displaced at will by means of two series of inclined guides, which series are capable of being brought nearer together or separated.

Mechanical Devices.

GRAIN-SEPARATOR.—WILLIAM S. CURRIER, Rosehill, Iowa. The separator is designed to separate long grain from short grain; for example, wheat from oats. The revolving cylinder, to which the grain is fed, is provided with longitudinal rows of hooks pointing in the direction of the rotation of the cylinder. The hooks are so spaced that the short grain will pass between them, and are so shaped that in ascending they will receive and retain the long grain and in descending will discharge the grain. A conveyer receives the long grain. A regulating-board at the mouth of the conveyer insures the delivery of the long grain to the conveyer.

COIN-SORTING MACHINE.—JOHN J. HOEY, Manhattan, N. Y. The object of the invention is to provide a machine which will be capable of quickly sorting coins of various denominations so as to save a large amount of the time required for the process of sorting by hand. The mere turning of a crank automatically causes a rotary drum to separate the coins so that they will drop into special compartments provided for them.

BRICK MACHINE.—DAVID A. KEIZER, Winnipeg, Manitoba, Can. In this improved brick-machine are embodied the elements of a series of molds with compressing dies linked together as an endless chain and provided with clay-mixing devices, packing devices for filling the molds, and pressing devices combined with a subjacent endless belt carrying detachable pallets or plates designed to receive the bricks from the molds and carry them away.

HAY OR COTTON PRESS.—ROBERT HAMILTON, P. O. Box 768, Pensacola, Fla. The press is a hand-operated machine for baling hay and seed cotton. The follower is provided with ratchet-bars; and the hand-levers are operatively connected therewith by means of pawls or dogs arranged to be tripped by a peculiar mechanism. To regulate the descent of the follower when the dogs are released a friction brake is employed. Automatic devices sustain the charge of compressed hay or cotton

while the follower is descending and another charge is being inserted in the press-box. The lower portion of the press-box has a hinged door for receiving a charge of hay or cotton.

DRIER.—FRANK I. POST, HENRY BRIDGE, HARRY A. CUMPER, and HERMAN E. BROWN, Coldwater, Mich. The invention is an improvement in driers for slurry cement, clay, or other material designed to be calcined in a kiln. Mechanically considered, the device comprises a cylinder having vertically arranged extensions forming flues at opposite sides. In the cylinder a series of platforms are arranged, extending alternately from opposite sides at the extensions, and terminating alternately at opposite sides at the flues, forming openings for the passage of heat. Each of the platforms has an opening for the discharge of the material. A shaft is extended upwardly through the partitions and carries scrapers over the platforms. The device uses waste gases or heat from the kiln, and should therefore prove economical in operation.

SHARPENING-MACHINE FOR DRILL-BITS.—THEODORE H. PROSKE, Victor, Colo. This improved sharpening-machine quickly and accurately fashions and sharpens the bits of machine-drills. The construction comprises a frame which carries dies to hold the bit. A mechanism strikes blows upon the bit while held in the dies. The shank of the bit is held by a longitudinally-movable slide. A longitudinal screw journaled in stationary bearings engages the slide. The arrangement is simple and little liable to get out of order.

APPARATUS FOR THE MANUFACTURE OF GLASS BOTTLES, ETC.—WILLIAM DRAKE, 34 Eagle Street, Red Lion Street, London, England. Although the operation of forming the bottle comprises two stages, the neck portion being molded by positive mechanical pressure, and the body afterward blown in the mold, the successive movements of the parts are automatically coordinated in such a manner that the formation of the bottle is greatly accelerated. The outer blowing mold is made in two parts; and the blowing-tube is formed as a reciprocating plunger arranged to work through the neck of the mold and to act as a displacer, whereby to apply mechanical pressure to the glass for the purpose of molding the neck. The glass is contained in an inner temporary "parison" mold arranged to contain the glass during the first stage of the operation and to enable it to resist the pressure of the plunger, so that by the displacement of the latter the glass will, on the descent of the plunger, be forced up into the neck portion of the outer mold. Thus the perfect molding of the neck and mouth of the bottle before the blowing of the body will be insured.

BORING AND DRILLING MACHINE.—BENJAMIN E. HERVEY, Ritzville, Wash. The inventor has sought to provide a simple, cheap and practical form of boring and drilling machine designed for light work. Power is supplied by a treadle, and the boring-bit works in a horizontal plane. The boring-shaft is provided with a screw-threaded feed-shaft arranged behind the boring-shaft in alignment, and having a slower rotation to feed the boring shaft.

Miscellaneous Inventions.

BIB.—FANNIE MCCATHIE, Port Jervis, N. Y. The invention provides a bib of the usual material with an inner lining of waterproof fabric to prevent the passage of liquid through the bib. This lining is removable so that the bib can be readily washed.

STALL-FLOOR.—WILLIAM F. L. SPENGLER, Vailsburg, N. J. This improved stall-floor is of simple construction and is arranged to insure a perfect drainage as well as to permit the convenient removal of any one or all of the slats whenever necessary for cleaning the stall, for repairs, or for any other purpose.

ACETYLENE-GAS GENERATOR.—LUCIEN A. BOYER, Paris, France. The generator is designed to do away almost completely with over-production and is distinguished by the fact that it has no movable part. Such a generator is particularly adapted to be applied to lamps for carriages. The apparatus consists essentially of a tube projecting from the top of a fixed bell, and extending down along the walls thereof and ending in a bend leading into an internal vessel slightly above the bottom of the fixed bell. The tube acts first to control the excess of gas in case of over-production, while maintaining a sufficient regularity of pressure to give steadiness to the flame. Furthermore, when over-generation occurs, the same tube serves to allow the water level to be lowered sufficiently as required by the escape of the excess of gas, while maintaining in the fixed bell the oil which the inventor spreads on the surface of the water.

SCREEN-PLATE HOLDER.—FRED W. BROWN and FRANK L. FITZGERALD, Waterville, Me. The invention relates to improvements in the holders for screens in paper and pulp mills. The object is to provide a holder so constructed that the plates will be held solid, with perfectly tight joints, without the use of a great number of screws and bolts, as is ordinarily the case, and further so to arrange parts that the several plates can be removed or inserted in much less time than is required when screws or bolts are to be manipulated.

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Marine Iron Works. Chicago. Catalogue free.

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TURBINES.—Lefell & Co. Springfield, Ohio, U. S. A.

Inquiry No. 1663.—For a small stationary engine not more than from 1 to 2½ horse power.

"U. S." Metal Polish. Indianapolis. Samples free.

Inquiry No. 1664.—For manufacturers of copper and aluminum fishing boats.

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

Inquiry No. 1665.—For manufacturers of or dealers in French counter outfits, complete, such as counters, stools, ranges, china, etc.

Stencil Machines.—A. J. Bradley, 101 Beekman St. N. Y.

Inquiry No. 1666.—For manufacturers of the Gorin multigraph.

Gasoline Lamps and Systems.—Turner Brass Works, Chicago.

Inquiry No. 1667.—For manufacturers of glass lenses 1 inch round and ¼ inch thick.

Foot presses and dies.—Amer. Hdw. Mfg. Co., Ottawa, Ill.

Inquiry No. 1668.—For an alcohol burner for use in automobiles.

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

Inquiry No. 1669.—For firms handling small T's or I's in the new alloy nickel steel.

Rigs that Run.—Hydrocarbon system. Write St. Louis Motor Carriage Co., St. Louis, Mo.

Inquiry No. 1670.—For parties engaged in steel casting for models.

Our specialty is cutting and forming metal parts any shape. Metal Stamping Co., Niagara Falls, N. Y.

Inquiry No. 1671.—For manufacturers of coffee roasters.

Ten days' trial given on Daus' Tip Top Duplicator. Felix Daus Duplicator Co., 5 Hanover St., N. Y. city.

Inquiry No. 1672.—For a successful oil burner for use under stationary boilers or locomotives.

Kester Electric Mfg. Co's. Self-fluxing solder saves labor, strong non-corrosive joints, without acid, Chicago, Ill.

Inquiry No. 1673.—For manufacturers of centrifugal machines as used in large sugar refineries.

Special and Automatic Machines built to drawings on contract. The Garvin Machine Co., 149 Varick, cor. Spring Streets, N. Y.

Inquiry No. 1674.—For manufacturers of machinery and materials for brush making.

New Book, Electric Gas Lighting, 50c. Send for full descriptive circulars, free. Spon & Chamberlain, 12 Cortlandt Street, New York, U. S. A.

Inquiry No. 1675.—For parties to manufacture a twin-cutting machine.

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

Inquiry No. 1676.—For manufacturers of steam and hot-water heating apparatus.

Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W. A. Wilson Machine Company, Rochester, N. Y.

Inquiry No. 1677.—For a second-hand engine 125 to 150 h. p. slow-speed side valve or Corliss.

Wanted to manufacture machinery or anything for the southern trade. Correspondence solicited. Stevenson Machine and Repair Company, Bryan, Texas.

Inquiry No. 1678.—For manufacturers of gasoline forges.

The celebrated "Hornby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York.

Inquiry No. 1679.—For address of makers or dealers in 24-inch mill rocks.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4. Munn & Co., publishers, 361 Broadway, N. Y.

Inquiry No. 1680.—For address of emery and carborundum mills.

See exhibit in our building at the South Carolina Interstate and West Indian Exposition, Charleston, S. C., December 1, 1901-1902. Lane Manufacturing Company, Box 13, Montpelier, Vt.

Inquiry No. 1681.—For the present address of the makers of the "Cushman Chuck," formerly at Bridgeport, Conn.

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. 1682.—For machinery for making matting and chair seats and bulrushes.

STATE OF ILLINOIS, } ss.
COUNTY OF COOK, }

O. M. Clement on oath says that in six days he made eighty dollars selling The Turner Little Wonder Lamps. Sworn to and subscribed this O. M. CLEMENT.
29th day of October, 1901.

ROBERT F. STOCKDALE, Notary Public.

We Want More Agents of this kind. Address The Turner Brass Works, 102 E. Kinzie St., Chicago.

Inquiry No. 1683.—For parties to make swaged brass or iron wirehandles, round or hexagonal, 3 inches long, to taper from 5 to 6 inches to 1-10 of an inch.

Inquiry No. 1684.—For manufacturers of stone crushers suitable for country roads.

Inquiry No. 1685.—For manufacturers of gas balloons.

Inquiry No. 1686.—For the manufacturer of the automatic kneading trough invented in Boston.

Inquiry No. 1687.—For manufacturers of shooting gallery supplies.

Inquiry No. 1688.—For the address of the Eureka Doorholder Company.

Inquiry No. 1689.—For manufacturers of horse-shoe machinery.

Inquiry No. 1690.—For manufacturers or patentees of sewing machine motors, spring motors preferred.

Inquiry No. 1691.—For manufacturer of cooking kettles, with water jacket or steam-heating device, for cooking food for cattle.

Inquiry No. 1692.—For manufacturers of stills for burning charcoal and making wood charcoal.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending

November 26, 1901,

AND EACH BEARING THAT DATE.

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