

## RECENTLY PATENTED INVENTIONS.

### Apparatus for Special Purposes.

**CONCENTRATOR.**—H. WISMAYER, Emporia, Kan. This apparatus is adapted for use with any machine in which a blast is produced capable of carrying over the fine gold and foreign substances with which it is mechanically mixed. The material thus carried is received into the distributing chamber, whence it descends into conductors permeable to air, and which permit escape of the air proper, while detaining gold and foreign substances, which are both conveyed into a separator and grader having compartments and pockets in which final concentration is effected, the products graded according to quality and value.

**COMBINED GOLD SEPARATOR AND AMALGAMATOR.**—H. WISMAYER, Emporia, Kan. Free gold is ordinarily found associated with heavy black sand or sand and iron, the greater portion of the gold being in the form of thin light scales. In treating such material by means of the ordinary processes or machines much of the flour or float gold is lost, whereas it is chiefly separated and saved by Mr. Wismayer's machine, it being carried off by a strong air-current, while heavier particles of gold are received upon and saved by amalgamating-plates.

### Electrical Devices.

**ELECTRIC BLANKET.**—F. K. SINGER, Wheeling, W. Va. Mr. Singer's invention refers to that class of blankets, towels, pads, etc., which have incorporated in their texture extended circuit-wires disposed in more or less tortuous paths and which are designed to receive a current of electricity to produce, by resistance of the wire, heating effects or to produce electro-inductive effects and to be applied to the body for therapeutic use in disease.

**PRINTING-TELEGRAPH RECEIVER.**—J. D. WHITE, 50 Clanricarde Gardens, London, England. The objects of this invention are to provide a receiver of the same general character as described in a former patent granted to this inventor, but so contrived that as compared with that other the range of characters is doubled without increasing the amount of the step-by-step movement, so that the same amount of step-by-step movement, which in that other case is utilized to give a range of characters ("letters") is in this utilized to give that same range of characters of one class ("letters") and also a range of characters of another class ("figures"). Means are provided for printing from either class continuously and for shifting from either to the other.

### Engineering Improvements.

**MIXER FOR GASOLINE-ENGINES.**—J. M. JOHANSON, Cambridge, Mass. In this case the invention relates to improvements for gasoline-engines; and one object in view is the provision of means by which a hydrocarbon fuel is atomized and ultimately mixed with air to produce a combustible mixture adapted to produce an explosive charge when admitted to the piston cylinder.

**VALVE-GEAR FOR EXPLOSIVE-ENGINES.**—J. M. JOHANSON, Cambridge, Mass. The principal object of the invention is to provide means by which the valve may be allowed to open outward as contradistinguished from inward against the cylinder-pressure and which means, while permitting this outward movement, will nevertheless hold the valve seated with absolute firmness during the expansive period of the cycle. An object is to avoid backlash on the gearing of the cam-shaft and to prevent the operation of the valve from materially loading the shaft and connected parts.

**TUNNEL CONSTRUCTION.**—J. L. HOLMES, Butte, Mont. In this patent the invention has reference to improvements in the construction of tunnels across rivers or the like, an object being to provide a novel tunnel construction by means of which the work of laying a submarine tunnel may be rapidly and safely carried on to completion.

**ROTARY VALVE.**—R. GILLETTE, Little Falls, Minn. The invention relates to rotary valves used more particularly for the steam-feeds of saw mills and analogous devices. An important feature is that live steam when fed through the live-steam ports is made to enter the revolvable plug by distinct and independent routes. Where ports are in communication with each other by a saddle-shaped channel, as is sometimes the case, the walls of the casing are liable to spring and bind upon the plug, owing to excessive pressure of steam. Valves cannot be well balanced except by feeding the steam through distinct passages to different sides of the plug.

### Household Utilities.

**TELESCOPIC COUCH-BED.**—W. THOMPSON, New York, N. Y. The bed is a composite structure and practically consists of two smaller beds, one of which may be telescoped into the other, so that the two form a composite bed which when extended is nearly double the width of the smaller beds, but which when in use is telescoped, so as to occupy practically only the space of a single small bed. The members may be readily dismantled and made into separate couches.

**SUPPORT OR HOLDER FOR NURSING-BOTTLES.**—J. D. WHITE, Philadelphia, Pa. The object in this case is to provide a device which will afford a simple, convenient, and

reliable support for a nursing-bottle that may be connected with the body of a baby-coach or other stable support or be engaged with a movable pedestal that is of sufficient weight to maintain the holder and bottle at any desired point for feeding an infant.

**EXTENSION-TABLE.**—T. C. THOMPSON, Haley, Tenn. In carrying out the present invention Mr. Thompson has in view so constructing his table that it will be composed of few parts and will have extremely simple means for adding to the area of the table-top supporting frame for the reception of supplemental leaves. The frame which supports the table top is so constructed that the placing of a leg at each corner of the table-top frame is obviated.

### Machines and Mechanical Devices.

**MOTOR-OPERATED HAND-TOOL.**—A. W. CLARKE, New York, N. Y. The principal feature of the invention lies in the provision of a motor-fluid reservoir forming part of the tool, so that when the reservoir is charged the motor may be driven by the fluid in the reservoir for a certain length of time, depending upon the reservoir capacity, without any connection with a reservoir separate from the tool. It is particularly useful in dental work.

**VENDING-MACHINE.**—W. FORSYTHE, Tama, Iowa. An object in view in this case is the provision of a mechanism for vending lead-pencils and objects of a similar nature, the mechanism being normally and securely locked and adapted when released by the deposit of a coin to be easily operated by an exposed part so as to discharge a pencil or its equivalent. It can only be actuated by the deposit of a coin or slug of the proper weight and size.

**MECHANICAL MOVEMENT.**—J. TALLIAFERRI, New York, N. Y. The intention in this instance is to provide a movement more especially designed for converting rotary motion into rectilinear reciprocating motion, or vice versa, and in such a manner that dead-center positions are avoided, a greater movement is produced in a smaller space, a uniform speed given to the members, and the power transmitted to the fullest advantage.

**MECHANICAL MOVEMENT.**—A. LINDSAY and J. MEINERT, Davenport, Iowa. In carrying out this improvement the inventors have particularly in view as an object the provision of a mechanism designed for imparting power to the dasher-shaft of churns and to washing-machines and the like. It may be used to impart rotary reciprocating movement to a vertical shaft, the power being taken from a rotating approximately horizontal shaft.

**FLESHING AND SHAVING MACHINE.**—E. SCHROEDER, New York, N. Y. This invention relates to fleshing and shaving machines such as shown and described in a former Letters Patent granted to Mr. Schroeder. The object in the present instance is to provide a machine very effective in quickly and accurately removing the surplus flesh from the under side of raw furs or for paring or shaving the under side of dressed furs or skins to reduce the same to a uniform thickness.

**ROTARY PLEASURE-TOWER.**—W. R. SNYDER, Kimberton, Pa. While the tower rotates the carriages moving up and down the inclined parallel guideways travel a vertical spiral course, permitting passengers to view surroundings while in transit, and the revolving swings will travel a horizontal spiral course. The lookout house at the top of the tower rotates with the tower, allowing a fine view without change of position to passengers. There are four elevating-carriages, one each side of the tower, and while two ascend two will descend. They hold two or more persons. Three upright posts at each corner may be used if found strong enough for the height of tower erected; further, the iron used in upright posts and braces may be of any form, tubular or angles.

### Of Interest to Farmers.

**HARROW OR CULTIVATOR TOOTH.**—J. Y. COOPER, Nashville, Tenn. The aim of this invention is to provide a tooth of novel construction which adapts the tooth for convenient attachment upon a frame-beam of a harrow or the frame of a cultivator and prevents the tooth from moving in any direction, but permits it to be readily detached, a further aim being to provide the improved features for a double-pointed tooth, so as to allow the tooth to be reversed in position and substitute a sharp end of the tooth for one worn out.

**BAND-CUTTER AND FEEDER FOR THRESHING-MACHINES.**—C. CHRISTIANSEN, Crookston, Minn. The purpose of the invention is to provide a simple construction of band-cutter which will positively separate the bands of all bundles presented to the cutters, and, further, to provide shakers acting in conjunction with the bundle-carrier which will thoroughly shake the bundles and spread the straw before delivered to the cylinder and concave.

### Pertaining to Vehicles.

**MOTOR-WHEEL FOR VEHICLES.**—J. W. WALTERS, New York, N. Y. The object of the present invention is to supply certain improvements in motor-wheels for vehicles whereby the operating mechanism is greatly simplified to insure a quick handling of the vehicle by the operator when starting or stopping the

motor, as well as when propelling and steering the vehicle. The invention relates to motor-wheels described in two former Letters Patent granted Mr. Walters.

**VEHICLE-BRAKE.**—J. FERREL, Dec'd, J. F. REYNOLDS, administrator, Zanesville, Ohio. In some of its features this invention is specially adapted for use on spring-vehicles, one of its objects being to hold the brake-shoes in invariable radial distances from the centers or axles of the wheels with which they co-operate irrespective of the position the body of the vehicle may occupy in relation to the axles by reason of the yielding of the springs due to variations in load, to jolts, etc.

### Railways and Their Accessories.

**PIPE-JOINT.**—D. P. FAHRNEY, G. A. NEWTON, and F. F. SIMMONS, Springfield, Mo. This invention relates to improvements in joints for air or steam pipes of car-brake systems or other train-pipes, an object being to provide a joint of simple construction for connecting pipes between cars, doing away with the usual hose-couplings and overcoming the objectionable slack and vibration of such couplings. As to leakage, the joint is absolutely air or steam tight.

**FUSEE.**—E. KERN, Stuttgart, Kan. In this patent the invention refers to an improvement in a fusee in which three wires, fine but strong, extend vertically the whole length of the fusee, the object being to prevent the fusee from breaking when thrown from a moving train for the purpose of sticking in the ties or roadbed. The object is attained by means of the three wires attached to and made a part of the fusee.

**RAILWAY-SWITCH.**—W. L. WILLIAMS, Jeffersonville, Ga. In this instance the invention has reference to improvements in railway-switches, Mr. Williams having for his object the provision of a switch mechanism of simple and durable construction having no parts in any way liable to get out of order and that may be operated from a moving train.

**CAR-BUFFER.**—G. F. STARBUCK, Waltham, Mass. In carrying out this improvement the inventor has especially in contemplation as objects, first, the decrease in wear; second, prevention of change of form due to wear, and, third, consequent to the preceding, the avoidance of unnecessary stresses due to the improper forms of the rubbing-surfaces. It has particular application to a buffer-attachment for use between the locomotives and tenders of trains.

### Miscellaneous.

**IDENTIFICATION-CARD.**—B. L. BEHRENDT, New York, N. Y. The invention pertains to cards provided with the portrait and autograph of the owner for identifying purposes; and its object is to provide an identification-card arranged to enable postal authorities, bankers, and others to immediately and correctly identify the holder of the card and to prevent fraudulent alteration of the card.

**COAT.**—C. AUSTERN, New York, N. Y. The principal object here is to provide a coat the main portion of which may be cut in one piece from a bolt of cloth material, the front edges of the garment being formed integral with the main body of the coat, thus obviating the necessity of cutting additional strips and sewing them to the coat, and also possessing the advantage that such integral front edges will not offer a chance for dust or the like to accumulate in the garment by ripping of stitches.

**METHOD OF ELEVATING LIQUIDS FROM WELLS.**—T. F. MORAN, DeYoung, Pa., and F. J. MESER, Kane, Pa. The improvement of these inventors relates to the elevating of liquids from deep wells, and especially to such as are used in the oil regions. In certain oil fields where the wells have been drilled—say fifteen years—many become exhausted of their gas pressure, and the liquid has not the tendency to rise to a height to enable it to be readily elevated. The method involved in their present application constitutes a remedy for the shallowness of the liquid in the wells referred to in order that the liquid may be readily raised by air.

**LIFTING-JACK.**—L. O. LANDER, Lisabuela, Wash. One of the principal objects in the present invention is to provide means for overcoming disadvantages found to exist in jacks of this kind, and also to provide a jack simple in construction, not liable to get out of order, and which is inexpensive to manufacture. It has a capacity of long and continued service. The improvement has reference more especially to the type of lifting jacks of which the one shown and described in a former Letters Patent granted to Mr. Lander is an example.

**LOGGING DEVICE.**—G. MOORE, Monroe, Wash. The object of the invention is to provide a new and improved logging device more especially designed for running logs down steep grades such as the steepest parts of a chute or skid-road under perfect control of the operator and without danger of injuring the logs while dashing with great velocity.

**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. 5117.**—For catalogues and quotations on all sorts of agricultural machinery.

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

**Inquiry No. 5118.**—For manufacturers of gasoline engines and pumps.

AUTOS.—Duryea Power Co., Reading, Pa.

**Inquiry No. 5119.**—For manufacturers of steam toys and novelties.

For mining engines. J. S. Mundy, Newark, N. J.

**Inquiry No. 5120.**—For dealers in the West, of new and second-hand machine shop tools.

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

**Inquiry No. 5121.**—For makers of clock time recorders.

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

**Inquiry No. 5122.**—For machines for grinding scissors.

American inventions negotiated in Europe, Felix Hamburger, Equitable Building, Berlin, Germany.

**Inquiry No. 5123.**—For nib and steel pen-making machines.

Non-refillable bottle. Simple, practical and non-refillable. Address R. T. McKenzie, Spring Hill, Miss.

**Inquiry No. 5124.**—For a dynamo and engine complete for a small plant, for furnishing current for private residence.

Gear Cutting of every description accurately done. The Garvin Machine Co., 149 Varick cor. Spring Sts., N. Y.

**Inquiry No. 5125.**—For manufacturers of corn huskers.

Edmonds-Metzel Mfg. Co., Chicago. Contract manufacturers of hardware specialties, dies, stampings, etc.

**Inquiry No. 5126.**—For manufacturers of fire extinguishers.

Empire Brass Works, 106 E. 129th Street, New York, N. Y., have exceptional facilities for manufacturing any article requiring machine shop and plating room.

**Inquiry No. 5127.**—For small steam engine for operating a dynamo giving 8 to 12 volts and 1 to 2 amperes, for experimental purposes.

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. 5128.**—For dealers in loom supplies, such as reeds, shuttles, etc.

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

**Inquiry No. 5129.**—For dealers in shoddy mill, excelsior machine, wire mattress machine and mattress wire.

Manufacturers of patent articles, dies, metal stamping, screw machine work, hardware specialties, machinery and tools. Quadriga Manufacturing Company, 18 South Canal Street, Chicago.

**Inquiry No. 5130.**—For manufacturers of tin shingles.

Non-union millwright, competent to do drafting, laying out work and installing machinery, wishes position with parties about to build. Country job preferred. Address Box 32, Ludlow, Vt.

**Inquiry No. 5131.**—For machinery or complete installations for producing iron from the ore.

Wanted—Revolutionary Documents, Autograph Letters, 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. 5132.**—For manufacturers of all kinds of brushes.

WANTED.—Manufacturers to negotiate for manufacturing King's Steel Wire Spring Draft Tug. See illustration and description in this number of the SCIENTIFIC AMERICAN. Geo. W. King, 1225 32d St., N. W., Washington, D. C.

**Inquiry No. 5133.**—For makers of steel books and eyes for clothing.

An estate, holding a controlling interest in a corporation manufacturing patent devices for use in the equipment of power plants, will sell its entire holdings to enable it to adjust estate matters. An excellent opportunity for any one who can take an active part in the management of the company. Not over \$15,000 necessary. Full particulars furnished and no names of inquirers disclosed. Elliott, Box 773, New York.

**Inquiry No. 5134.**—For makers of sheet metal novelties, also rule made of celluloid, aluminium or other suitable material.

**Inquiry No. 5135.**—For lace and net-making making machines for making torchou insertions, crochet laces and mosquito netting.

**Inquiry No. 5136.**—Wanted, to purchase patents on articles suitable for general consumption, such as novelties, etc.

**Inquiry No. 5137.**—For manufacturers of concaving machines.

**Inquiry No. 5138.**—For catalogues and prices of novelties.

**Inquiry No. 5139.**—For makers of hot air engines for running light machinery.

**Inquiry No. 5140.**—For a small dynamo that can be attached to faucet and give current enough for a tank that holds about 20 gallons.

**Inquiry No. 5141.**—For machinery for making paper plates, butter dishes, oyster pails, etc.

**Inquiry No. 5142.**—For manufacturers of stove polishing mitten and duster.

**Inquiry No. 5143.**—For Spanish and English catalogues of furniture.

**Inquiry No. 5144.**—For makers of cabinet boxes of fancy hardwoods, size about 6 x 6 x 9 inches, by the thousand.

**Inquiry No. 5145.**—For printers, or knowledge of how to print views or pictures on fancy wooden boxes.

**Inquiry No. 5146.**—For catalogues of auctioneer goods, as a specialty.

**Inquiry No. 5147.**—For manufacturers of oscillating engines ranging from 3/4 h. p.

**Inquiry No. 5148.**—For makers of 3/4-inch 22 gun brass tubing.

**Inquiry No. 5149.**—For addresses of pipe organ builders, organ pipe makers and makers of organ action, tracker, pneumatic bellows, etc.

**Inquiry No. 5150.**—For Canadian manufacturers of power transmitting machinery.

**Inquiry No. 5151.**—For makers of Baxter lamps, such as wind like clocks.

**Inquiry No. 5152.**—For castings for a motor cycle.