

RECENTLY PATENTED INVENTIONS.

Of Interest to Farmers.

BEEHIVE.—C. LUDLOFF, San Pedro de los Pinos, D. F., Mexico. This beehive is particularly adapted for use in places where there are sudden changes of temperature, as in the high tablelands of Mexico, where hot days are followed by cold nights. Such conditions cause the loss of bee swarms every year by spring-windling if the bees are kept in hives of the construction which allows the sudden changes of the outer temperature to influence the life of the bees in their habitations.

STACKER.—L. A. LAMBORN, Scottsville, Kan. Mr. Lamborn's invention relates to a stacking apparatus adapted more particularly for the handling of banded grain. The stacker is simple, portable and effective in operation, and may be successfully operated by one attendant at the power mechanism, this person also varying the inclination of the carrier frame, and another to manipulate the chute.

Of General Interest.

PHOTOGRAPHIC CAMERA.—M. NIÉLL, New York, N. Y. In this case the invention relates to improvements in cameras, an object being to provide a camera of novel form and construction and of a size to be readily carried in a vest-pocket. A further object is to provide a novel film-strip holder, with means for operating the same to move the strip, whereby new or unexposed surfaces are brought to exposure position.

PROCESS OF MANUFACTURING ARTIFICIAL STONE FROM MAGNESITE.—C. GROEN, Bonn, Germany. This invention has reference to a process of manufacturing artificial stone from oxychloride of magnesium, and it is distinguished from the processes heretofore in use by providing means whereby the sweating and efflorescence and the subsequent cracking of the stones as heretofore manufactured is avoided and the stones are given an increased hardness.

TOY BANK.—A. FONTS, New York, N. Y. In carrying out the present invention Mr. Founts has particularly in view the provision of an article such as toy banks, safes, or the like, the parts of which are so correlated and arranged that when once a coin has been deposited in the bank it will be impossible to remove the same without a door provided for the purpose or destroying the bank.

INDICATOR-CHART FOR BUSINESS EXCHANGES.—A. J. DELAVIGNE, New Orleans, La. The improvements in this case have reference more especially to charts or boards for use by companies or exchanges engaged in buying and selling—say grain, cotton, or oil, for instance; and the principal object is to provide means for visually indicating both buyers and sellers of goods, which particular offer for the purchase or sale may be accepted by each buyer or seller and also to provide a board whereby business may be transacted between buyers and sellers even if one of the two parties should be absent and also arranged and operated so that none but the closers will know by whom the offers are made.

ENVELOP AND LETTER-SHEET FOR SAME.—G. ARCHIBALD, New Rochelle, N. Y. The inventor's purpose is to provide a construction of an envelop and a letter or bill sheet especially adapted thereto which will admit of a folding stub forming a portion of the letter or sheet after having been addressed on one or both sides to be passed through openings in the envelop when the letter or bill is placed therein and the stub be secured at the outer face of the envelop in a manner to disclose an address, rendering it unnecessary to write or print the address on the envelop.

PUZZLE.—E. G. JACKSON, San Francisco, Cal. In this puzzle a series of slides are positioned upon a frame with their Roman numerals in irregular order, and they may then be rearranged in consecutive order by releasing, say, "V" and "X" by certain means, then releasing "VI" and "VIII" by certain means. Without disengaging more than one end of each slide at a time these may be brought into the desired order. Considerable ingenuity may be involved in accomplishing the purpose of this entertaining device.

METAL DAM.—J. L. HOLMES, Butte, Mont. The object of the improvement is to provide a dam more especially designed for use in canyons, streams, and other waterways having steep or slanting banks, which dam can be readily set up, is exceedingly strong and durable, and is arranged to dispense almost entirely with the use of masonry and to allow of building the dam without seriously interfering with the natural flow of water in the waterway.

POST-CHECK CURRENCY. I. D. WORCESTER, Pittsburg, Pa. This invention relates to that class of currency or money which is designed to be changed by the holder thereof into a check payable only to the payee named thereon. The objects of the post-check currency as now contemplated are not accomplished, and the system is without practical efficiency in its present condition. It is necessary to devise some simple means which renders the post-check note after it has been once transformed by the holder into a check payable to the payee named thereon recognizable at a glance and absolutely incapable of being again transformed into a close resemblance

of the unchanged post-check note. Mr. Worcester accomplishes this object.

BOTTLE.—R. G. DAVIS, Hot Springs, Ark. This bottle is so constructed that after discharge of its original contents it cannot be refilled. The bottle is provided with a valve which leaves its seat to allow the liquid to pass freely out. Should an attempt be made to refill the bottle by placing it in liquid or by forming a vacuum in the bottle and then inserting it in liquid, the liquid will force the valve tightly against its seat, and thus prevent refilling.

CLOSURE FOR AIR-SHAFTS.—M. SCHOLL and D. GRONFELD, New York, N. Y. The principal object of the invention is to provide an improved apparatus whereby air shafts in buildings may be automatically divided into sections corresponding to the floors of the building, whenever fire enters the airshaft to any considerable extent. The invention also provides means at each floor for automatically closing the air-shaft at that point, when desired.

GARMENT-CLASP.—J. P. WILSON, Chicago, Ill. The invention relates to clasps that afford gripping ends for garment or hose supporters and has for its object to provide novel details of construction for a garment clasp that adapt it for a very reliable engagement with the garment, avoid injury to the most delicate fabric, and permit a quick and convenient release of the material engaged by the clasp.

PERPETUAL CALENDAR.—T. O'SHAUGHNESSY, San Jose, Cal. The purpose of the invention is to provide a simple and accurate form of perpetual calendar that may be set for any month in any year, leap year included, and in any century within the scope of the calendar, and the day of week of any date may be quickly and readily ascertained without calculation on the part of the operator.

TRIGONOMETRICAL METER.—H. C. PERCY, Natchitoches, La. This meter is designed for use by surveyors in the field for finding, without calculation, the distance to any remote object, or the height of an object. It is also serviceable in schools for the clearer teaching of trigonometrical functions, since it shows for any angle the just proportions between the different lines within and without the circle to the radius.

COUPLING. F. J. CARNEY, New York, N. Y. Mr. Carney's invention relates to couplings adapted more particularly for use in connecting the piping of such receptacles as set urinals. Its principal objects are to provide a device of this class which may be readily applied and removed and which will preserve the integrity of the joint.

WHIRLING TOY.—S. BRISTOW, Topeka, Kan. The toy consists of a cone-shaped body, provided with vanes around its base edge, and attached by a cord to a rod. When the toy is held in the wind, it will be forced outward by the wind which impinges against the vanes, causing the toy to rapidly rotate.

SEPARABLE HINGE.—S. F. MEEK, New York, N. Y. The primary object of Mr. Meek's invention is the provision of a simple and cheap construction, wherein one of the two leaves of a hinge may be quickly connected to or disconnected from the other, without removing the pintle, and at the same time the two leaves remain in engagement under normal conditions in the service of the article. The hinge may be so manipulated as to overcome the practical difficulty met by experienced workmen in hanging a door by ordinary hinges, this difficulty consisting in bringing the hinge leaves on the door simultaneously into engagement with the hinge leaves on the jamb.

TOY.—S. JURADO, New York, N. Y. The purpose of this invention is to provide a toy in which a transparent cylinder is provided having means by which a ball or other rolling object passes and lodges in pockets or passes through openings in any one of a series of disks or rotating receivers mounted to revolve in the cylinder and finally passes out through the base for the cylinder, having apertures therein and a depression arranged around the apertures, which apertures lead to exposed chambers in the base, any one of which may finally receive the ball.

Household Utilities.

BED OR COUCH.—F. W. BORCKER, Oakland, Cal. The object of this invention is to provide a bed, couch, sofa, or the like which may be readily adjusted from the horizontal to any desired inclination. This end the inventor attains by certain novel devices mounted on the bed-frame and having connection with a supplemental or slat frame, which is pivoted on the main frame and which carries the mattress and bedclothes.

EGG-BEATER. W. V. PALEY and T. H. BUSSEY, Charters Towers, Queensland, Australia. In this patent the invention relates to improvements in a culinary device for beating eggs, for beating and mixing compounds for sponge and other cakes, and for beating milk or for any kind of substance. The primary object of the improvement is to produce a simple, convenient, and cheap article for rapidly and easily beating food substances.

WATER-CLOSET BOWL.—M. D. HILFRICH and F. W. KINGSBURY, Evansville, Ind. In this case an object is to provide a construction for washing down the closet without or with siphonic action, to do away with all splashing

and agitation of the contents, to avoid noise incident to flushing the ordinary closet, and to provide for flushing from the rim after the contents of the bowl or trap-seal have been discharged.

WATER-CLOSET BOWL.—R. SCHMALMACK, Evansville, Ind. This invention relates to an improvement in wash-down water-closet bowls, its object being to produce a device wherein the flushing-water is divided into two parts, one going to the rim outlet and the other to the bottom outlet. It may be used equally well on wash-down bowls employing siphonic action, as well as those without such action, and materially increases the efficiency of both types of bowls.

FOOT-TUB.—J. A. CALDWELL, Rochester, N. Y. The object in this instance is to provide a tub that may be readily placed in an ordinary or large bath-tub and having a drain-nipple adapted to engage in the bath-tub drain-pipe, thus permitting the running off of water from the foot-tub without danger of any other water passing into the large bath-tub and possibly spoiling the same.

Machines and Mechanical Devices.

DRILLING-MACHINE.—F. F. HEPLER, Crescent City, Cal. Mr. Hepler's invention is in the nature of an improved rock-drilling machine of that type in which a set of rotating hammers are made to act upon the end of the drill-bit and the latter is turned and also in which means are provided for forcing a continuous stream of water into the drill-hole beside the drill-bit to soften the rock and to clear out the cuttings, so that the operation may be continuous.

BRICK-PRESSING MACHINE.—C. W. PUGH, Veedersburg, Ind. It is the object of this improvement to provide a machine which is adapted for automatically repressing bricks with great rapidity and economy of time and labor. The bricks are received upon a traveling feed-belt and carried forward to dies by which they are repressed and then automatically discharged and deposited upon a conveyor by which they are removed from the repressing machine.

APPARATUS FOR FORMING THREADS ON GLASS.—F. WACKENHETH, New York, N. Y. This apparatus is intended for forming screw-threads of any desired pitch and form on glass cylinders, rods, and other round objects. The inventor has discovered that by providing a tool in the form of a disk composed of a homogeneous substance sufficiently hard to cut or grind into the glass, by driving this tool revolutely at a high rate of speed, and by feeding the work against the periphery of the tool he is enabled to form a thread of any desired sort around the surface of the work.

CLOTH-CLEANING BRUSH FOR FLOUR-BOLTING MACHINES.—L. JONES, Columbus, Ohio. One purpose of the invention is to supply each sieve having a cloth with an independent cleaner. Another is to provide each sieve with an automatically-operating brush which derives its impetus from the motions of the sieve-box, the same being propelled backward and forward by the arrangement of its mechanism so as to subject the entire surface of the bolting-silk to the continual action of a brush or brushes, which brushes may be sustained in position by bolts and springs or other suitable devices.

BASKET-MACHINE.—C. ENBERG, St. Joseph, Mich. The invention relates to basket-machines, the object of Mr. Enberg's several improvements being to render the machine, as far as practicable, automatic and to present certain points of advantage. This machine has been tried in actual practice, and it is found that the two hand-levers are quite adequate to handle it, thereby making its action to a great extent automatic.

SLACK-THREAD CONTROLLER FOR SEWING-MACHINES.—H. MANNING, 1a Foster Lane, London, England. This invention relates to the lock-stitch sewing-machine described in an application for a prior United States patent, in which all the movements are derived from only three cams and practically the entire operative mechanism is situated beneath the work-plate. The present invention relates to an improved take-up device for the thread.

BARREL SOAKING AND RINSING MACHINE.—H. REININGER, New Orleans, La. In this case the invention refers to washing apparatus; and its object is to provide a machine arranged to subject the exterior and the interior of a barrel or like package to the action of hot or cold water for soaking the package and thoroughly cleansing and rinsing the same in a comparatively short time and without the aid of skilled labor.

STONE-SAWING MACHINE. J. E. HANLEY, New York, N. Y. In this patent the object of the invention is the provision of a new and improved stone-sawing machine arranged for making straight or curved cuts in the stone block to cut the latter to any desired shape. The invention consists of novel features and is intended to efficiently serve the purpose for which it is designed.

TUBE-WELDING MACHINE.—W. BYRD, Winnipeg, Canada. Mr. Byrd's improvement has reference to a machine which upon changing the tools thereof may be employed either for cutting tubing or for welding together two sections of the same. It belongs to that class in which the tube to be welded is placed over a

mandrel and welding tools are driven around the outer surface of the tube at the point of the weld.

WISE.—C. H. RITTS, Wausa, Neb. In this patent the improvement relates to a class wherein the jaws of the vise are closed by foot-pressure, and has for its object to provide novel details of construction for a vise of the character indicated which adapt it to grip and hold articles very firmly and permit their release by slight manual effort.

Prime Movers and Their Accessories.

STEAM-TRAP.—R. D. TACKABERRY, Lewiston, Me. The invention provides a novel manner of mounting one element of the means for transmitting movement of the float so that this element may be readily and fully adjusted from the exterior of the trap, thus regulating the level to which the water is allowed to rise. A novel diaphragm is also provided for operating the outlet valve, this arrangement avoiding the use of the stuffing box and the friction incident thereto.

COOLING AND LUBRICATING CRANK-CASE ENGINES.—R. L. BOWMAN, Pineville, Ky. In crank-case steam engines of the usual type great difficulty has been experienced in keeping the bearings cool and properly lubricated. The present invention provides a novel process and apparatus for cooling and lubricating the bearings, in which the crank-case is never allowed to reach a high temperature and the oil is neither emulsified nor cooked, but is constantly removed in normal condition from the crank-case as it accumulates, and is separated by gravity and used over and over again.

LUBRICATOR.—E. CLARK, Winslow, Arizona. Mr. Clark's invention is an improvement in lubricators especially designed for use in connection with the relief valve of a locomotive steam chest for the purpose of feeding graphite or other lubricant into the valves or cylinders of the locomotive, while the latter is drifting with the steam shut off.

COOLING MECHANISM FOR EXPLOSIVE-ENGINES.—F. REAGH, Oak Cliff, Texas. This invention relates to a means for air-cooling cylinders of internal-combustion engines and other machinery. The leading feature is the formation in or on the cylinder walls of an air passage or passages and in so arranging parts that movement of piston brings a circulation of air through this passage, such circulation extending into interior of cylinder to cool piston as well. Preferably, and especially in case of adaptation to internal-combustion engines, the engine balance-wheel is formed with fan-blades. These act at mouth of air-passage to accelerate air current and assist action of piston with respect to such contents. Compared with other systems now used, this mechanism, owing to positiveness and thoroughness of air circulation, must give much greater efficiency.

Railways and Their Accessories.

METAL CROSS-TIE AND RAIL-FASTENER. B. S. SAWYER, El Paso, Texas, and C. C. BULL, Albuquerque, New Mex. The object in this case is to provide details of construction for a plate-metal cross-tie and track-rail-fastening means that engage the tie, whereby the cross-tie is afforded means that adapt it for the support of a heavy weight, although a limited area and weight of plate metal is used in its construction; and the track-rails are held secured on said cross-tie in a reliable manner, which permits removal of the track-rails as occasion requires. A further object is to so construct the fastening means that rails of different weights and thickness of rail-bases may be clamped upon the improved cross-tie.

COMBINED CHECK-HOLDER AND MATCH PLATE.—M. J. EVANS, New York, N. Y. The invention of Mr. Evans relates to a combination device capable of use both as a check-holder and as a match-plate. His invention also consists of certain improvements in the device considered as a "check-holder." The device enables a passenger to remain undisturbed in regard to care of check and free to read or conduct himself in any way desired. The match-plate is mounted very conveniently for his purposes.

Pertaining to Vehicles.

COMPOUND VEHICLE-WHEEL.—F. M. OLIVER, Oswego, N. Y. The object of the inventor is to provide details of construction for a wheel for use on railroad-cars, traction-engines, automobiles, road-wagons, or vehicles designed to travel over uneven roads or be moved over soft ground on a road or in a field and which in service will minimize the power required to propel or draw the vehicle, and furthermore, to render the movement smooth and adapt it to maintain an upright position traveling over a rough or inclined road-bed.

PROTECTOR FOR PNEUMATIC TIRES.—J. F. BURNAM, Madison Station, Ala. Dr. Burnam's invention belongs to the class of protectors for elastic wheel tires of automobiles, bicycles, and other vehicles, which are adapted for application to the tread of such tires without inclosing the body of the same, and whose purpose is to prolong the life of the tire by taking most of the friction and wear incident to use.

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 the paper.