

RECENTLY PATENTED INVENTIONS.

Mechanical Appliances.

METHOD OF KNITTING HOSE.—Fredrick W. Simons, Philadelphia, Pa. This improvement provides for knitting simultaneously upon the halves of two leg portions a single web to form a heel on each leg, the heel parts being rounded on the outer side by throwing out of action certain of the needles, afterward bringing them successively into action again, and afterward severing the parts. The toe is also peculiarly formed, there being knit continuously upon the leg and heel portions a series of feet, the toe of one foot joining on to the rear end of the sole of the next foot, and being severed therefrom by cutting.

FLUE THIMBLE.—John P. Adams, Fargo, North Dakota. This thimble is preferably designed for engineers in charge of a boiler, to readily expand a leaking flue and hold the flue in expanded position until it is convenient to take the old flue out and insert a new one. It consists of a ring having one or more lengthwise splits, into which wedges may be driven to hold the ring in place in the flue, a conical and hollow mandrel being used in inserting and fixing the ring in place in the end of the flue.

WRENCH.—John Ryan, New York City. This is a simple, durable, and inexpensive tool, in which the handle is in two pieces and practically solid, the adjusting screw being given a support at the handle, which need not be recessed to receive the screw, thus adding materially to the strength of the entire wrench. The adjusting screw is so located that the front face of the body of the wrench need not be nicked in any manner, and may be made perfectly straight if desired.

ADJUSTABLE BRUSH HANDLE.—Charles F. Myers, McKinsty's Mills, Md. This is an improvement on a formerly patented invention of the same inventor, covering a novel construction and arrangement of parts for connecting the handle to the brush, to permit the inclination of the handle to the brush to be quickly changed at the will of the user, and be firmly held to its position when adjusted. There are positive locking clutches on a stationary plate through which passes a swiveling pin, an independent clutch fitting over the locking faces, a screw stem jointed to the swiveling pin, and a handle with a screw thimble adapted to force the clutch up to locking engagement.

Agricultural.

SEED PLANTER.—Anders Matson, Moline, Ill. This is a device for planting corn or other grain, dropping the grain at regular intervals and marking the places where the next row is to be dropped. This planter has an improved delivery or feeding wheel having a thin rim which rolls upon the ground, and whose hub portion is divided into two sections connected with which is a tapering feed-chute arranged in the place of a spoke, there being a valve at the mouth of the feed-chute connected with a rock shaft engaged by a cam. The invention includes various other novel features, and a covering shovel is secured to the frame to the rear of the delivery chute for the purpose of covering the grain that has been deposited.

CHURN.—James C. George, Coffeyville, Kansas. The churn body is preferably cylindrical, and within it wings are affixed to the side wall, radiating toward the axial center. Motion is given to the churn body by a crank mechanism, and by a rapid rotary movement the cream is thrown alternately in one direction against the wings and then in an opposite direction, quickly breaking up the butter globules and separating the butyric granules from the whey.

PLOW JOINTER.—Charles A. Stringer, Munsville, N. Y. An adjusting disk has diametrical grooves in one face of different depths at its periphery, one groove crossing the other, the grooves being adapted to receive the plow standard, whereby a jointer may be given many positions and different inclinations. The jointer is an adjustable and reversible device, capable of being quickly and conveniently attached to any plow beam, whether of wood, iron or steel, and without disturbing the standard attached to the beam the jointer proper may be thrown to or from the land, simplifying the work of fitting all styles of plows. The jointer may be easily set and firmly held in place at an exact angle for sward or stubble, and the adjustments are effected with great simplicity.

CHERRY PICKER.—George Morris, Libertyville, Ill. This improvement consists in a pair of spring-pressed jaws pivoted in a ring and provided with knives for severing the cherry stems, there being rings for receiving the thumb and finger, and combined therewith is a sleeve of flexible material for receiving the cherries as they fall from the cutters and conducting them to a can or receptacle.

Miscellaneous.

TELEPHONOGRAPH.—James P. Magenis, North Adams, Mass. This is a combined microphone, telephone, and phonograph, by means of which, while telephoning to a distant station, a record of the words will be kept upon a phonograph cylinder at both ends of the line, a magnetic phonograph cylinder being provided by which the pressure of the stylus upon the record cylinder will be augmented by magnetic attraction instead of by gravity. Combined with a phonograph and diaphragm cell is a stylus-carrying lever with an armature and a magnetic photograph cylinder arranged to act upon the armature, while combined with the lever is an auxiliary armature arranged to be acted upon by a magnet, and a microphone connected with the mouth-piece of the phonograph and connected up in circuit with the distant stylus lever-operating electro-magnet, a telephonic magnet assisting the diaphragm in the production of the record.

CARTRIDGE LOADER.—William H. Hamner, Fort Assinaboine, Montana. This is a simple and durable device for accurately measuring the charge of powder and shot and delivering the desired wads in regular order of loading for each cartridge, and it is adapted to be worked with great ease by hand. Cylinders forming the cartridgeholders of various diameters may be readily employed in the device, corresponding to the various diameters of shells to be loaded, the change being quickly made from one to another, and as many wads as desired may be rammed into the shell between the powder and shot and on top of the shot.

RAFTING LOGS.—Abram Van Kooy, Holland, Mich. This invention relates to improved means for connecting logs or timbers, and for towing them. For this purpose main tow lines and spacing blocks are employed, with connecting ropes applied to the tow lines and supplemental lateral tow chains, loosely connected with the main tow lines and having devices for attachment to the logs, there being also a series of devices for limiting the movement of the chains on the tow lines. It is designed by this improved means to so construct rafts that they can be towed with safety on the ocean or the great lakes, each log or timber being held separate and so that the waves cannot force them upon each other, the raft also offering the least possible resistance to the water.

POSTMARKING STAMP HOLDER.—Harison T. Keith, Vincennes, Ind. Into a hollow longitudinally slitted handle extends a shank formed of a spiral spring, there being fixed to the outer end of the shank a socket for holding the stamp, the device constituting a convenient holder for supporting and manipulating the ordinary postmarking stamp used for canceling postage stamps and marking the mailing office on the envelope. The flexible shank permits the face of the stamp to adjust itself always flatly to the envelope to print evenly with all its letters, while the leverage may be changed to vary the action and relieve the monotony of the stroke, rendering the work less tiresome.

CHILD'S CHAIR.—Horace S. Carley, New York City. This is a light, durable, and slightly chair, having a swinging back which may be locked in different positions, a removable cushioned seat, and an adjustable tongue; it can be expeditiously and conveniently converted from an ordinary chair into a commode, or into a vehicle in which a child may be drawn from place to place.

METHOD OF DECORATING FABRICS.—Henry G. Bunch, New York City. A pattern plate with cut-out portion representing the design is first placed on the surface of the fabric and an adhesive substance applied through the openings in the plate to the exposed parts of the fabric, after which the pattern plate is removed and flocks are sprinkled on the fabric, the flocks being thus attached to the surface of wool, silk, or other material to form a fabric of highly ornamental appearance. The flocks, of wool, silk, or other material, are previously chopped or cut up to the proper condition for sprinkling, and the fabric may afterward be calendered or otherwise treated to press the flocks and cement tightly together on the body of the fabric.

HINGE FOR PAIL LIDS.—John W. Bowerbank, New York City. This invention provides a hinge more especially adapted for the lids of tin oyster pails, one that is cheap, durable, and inexpensive to manufacture, and will permit the lid to open for nearly the entire area of the pail top. It consists of a transverse wire rod secured in a fold along a straight edge of the lid in combination with two wire rod hook bars secured to the interior of the pail body and passed loosely through poles in the lid near its edge and near the ends of the transverse wire rod.

BICYCLE GEAR.—Frank R. Bigelow, Gloucester City, N. J. A differential gear is provided by this invention, comprising a rotatably supported sprocket wheel, a swinging drive shaft box within the wheel support, the driving shaft within the box having a pinion adapted to engage an internal gear of the sprocket wheel when the shaft box is swung. The improvement affords a convenient mechanism to quickly change the speed of the driving wheel and correspondingly alter the efficiency of applied power to propel the vehicle.

BOLT.—Antenor Assorati, New York City. This is a locking bolt for conveniently and firmly uniting two or more objects or parts of articles and effectually preventing them from having play in any direction. It consists of two clamping members having flat straight inner faces and heads formed at their ends upon their outer surfaces, and a locking or key section of the same thickness, with contractile and expansible sections and shoulders at both ends.

BOTTLE BASKET.—Charles A. Knight, Brooklyn, N. Y. This basket is more especially designed for carrying bottles containing milk, and has an adjustable handle, with supports of simple and inexpensive construction in the basket to act in conjunction with its sides and form independent compartments for the reception of bottles. The supports in the basket are so formed that the basket may be quickly and conveniently cleaned, and the main supports yield laterally to a limited extent under pressure; so that the bottles are not liable to breakage.

FENCE.—Julius Baker, Pittsburg, Pa. A metal fence which can be erected in an expeditious, convenient and economical manner is provided by this invention, the fence being light and durable, and the upper and lower rails being located at any desired angle to their supporting posts. Some of the pickets project far enough below the lower rail to enter the earth and assist in supporting the fence, and other intermediate pickets extend to the ground line.

AWNING WORKER.—John T. Baker, Chicago, Ill. The largest awnings over a door or window may be quickly and easily adjusted by the simple apparatus provided by this invention, which consists mainly of a spring roller to which and to the awning

frame are secured ropes, there being a loosely mounted lever and mechanism between the lever and roller for operating the latter, with a locking device for the roller adapted to be released by the lever.

LATCH.—Aaron Richardson, Uniontown, and Frederick E. Richardson, Manchester, Iowa. This is a simple and durable latch, easily attached to all kinds of doors, and by which the door may be conveniently opened from one side, or locked in open or closed position. A spring-pressed bolt slides in the casing, a handle extending through guideways to one side of the door, and there are two fixed keepers held on the door casing, one adapted to be engaged by the bolt and the other by the handle.

DOOR HANGER.—Theodore C. Prouty and Claude W. Turner, Evanston, Ill. This device comprises a supporting bar on which a pair of outside arms is pivoted and connected pivotally by a cross arm, middle arms pivoted to the outside arms having two of their ends pivoted together, and a pendulum being carried by the middle arms. The hanger may also be applied to any object besides a door which is to be held to reciprocate in a straight line, holding the door or object so that it cannot move except in the line of its reciprocation. It may be attached to the top, the bottom, or one edge of the door, and quickly and easily adjusted to level the door.

BLACKING STAND DEVICE.—Matilda A. Popoff, Brooklyn, N. Y. This is a receptacle or holder for liquid blacking, consisting of a box-like body provided with grooves one above the other in which may slide a lid or cover, the latter having an opening through which the neck of a bottle may extend. The receptacle is adapted to receive in locking engagement bottles of various heights, which may be conveniently removed and replaced as desired, the bottle being so held that the dauber may be removed from it with one hand.

STOP BLOCK FOR WAGONS.—John Pomroy, Lake Linden, Mich. A roller upon a spindle is, according to this improvement, held supported by chains in position to be readily placed behind a wagon wheel, or readily removed from such position and suspended from the axle. One of the chains is attached to the axle outside of the wheel, the other being attached to the wagon inside of the wheel, and the device is designed to be most useful when a wagon is ascending steep hills and it is desired to stop to rest the horses or for other purposes.

VEHICLE SPRING.—Thomas F. McKee, Bloomville, Ohio. This invention relates to springs for use on two-wheeled vehicles, and provides an attachment for connecting the front end of the vehicle body with the shafts, the attachment taking up the movements of the horse and running gear. The improvement comprises a fastening plate having a socket, a bolt extending through the socket and a ball working therein, a spring encircling the bolt, a second attaching plate through which the bolt passes and a second spring on the bolt between the second plate and a plate on the lower end of the bolt.

COMBINATION ICE PICK.—James F. Loftus and Eben B. Williams, Thorndike, Mass. This is a tool having a head with a handled socket on its upper side, a series of movable picks extending vertically through the head, upon which is mounted a movable plate having holes to register with the picks, the plates having also slots, and fastening bolts extending through the head and the slots in the plate. The tool may be quickly adjusted to break the ice into small pieces, split it or shave it, and will facilitate doing the work very rapidly.

SHUTTER WORKER.—Sarah M. Fisher, Spencer, N. Y. This is a device of simple and economic construction capable of being manipulated from the inside of a room to open or close the blinds, or to hold the blinds locked either in an open or closed position. A sliding and rotating draw rod extending through the window frame outwardly is coupled to a connecting rod, the latter being connected with a block sliding in a bracket attached to the blind, one of the devices being employed in connection with each blind.

WATER SUPPLY SYSTEM.—James W. Fisher, Palouse, Washington. This invention relates to systems in which the water is drawn from the fountain head and supplied to a reservoir through a siphon pipe, and provides a convenient means of closing either or both ends of the siphon pipe, and of filling the pipe. There is a swinging cap on one end of the pipe, with which is connected a lever for opening and closing the cap, there being a pivoted cap on the other end of the pipe and a screw connected therewith for opening and closing it.

POCKET LAMP.—Jacob H. Fawkes, New York City. This device consists of two nearly parallel cylinders, one of which contains lighting caps and the other oil and a wick. By pulling the cylinders apart one of the caps is ignited and lights the wick, which will burn until the cover is put on or the oil exhausted. The lamp may be conveniently carried in the pocket, and may be lighted a great many times without reloading.

ELEVATED CARRIER.—James J. Robinson, River View, West Virginia. This improvement is designed to facilitate logging and the conveying of heavy bodies from point to point at an elevation from the ground. The track may be quickly and inexpensively erected upon ground of any character and the carriage is provided with a brake and mechanism whereby the load may be lifted bodily from the ground and carried as high up as desired with a minimum of labor.

WICK TRIMMER.—Daniel L. Andrews, Denison, Texas. A pair of blades is pivoted upon a flat plate having a guide slot to receive the wick, the cutting edges registering with the slot to cut off the wick that projects through, there being a depending guide tube on each limb of the guide plate. The blades shear the wick from each side edge toward the center simultaneously, and the guides afford means to retain

the implement in correct position for use on lamp wick tubes of different sizes.

COCK OR TAP.—Ulysse André and Olivier Durand, Barcelona, Spain. A plate is connected with a nut screwed to the cock casing to encircle the plug, a nut being also secured to the plug stem and springs encircling the plug stem between its nut and the casing and between its nut and the plate. The improvement is designed to obviate the gripping of the plug from its entering too far into the casing, the extent of entry of the plug being maintained constant by the use of springs.

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TABLE OF CONTENTS.

1. Handsome plate in colors of a residence recently erected at Plainfield, N. J. Perspective views, floor plans, etc. Oscar S. Teale, architect. Cost about \$12,000. An excellent design.
2. Plate in colors of a cottage erected at Bensonhurst, Long Island, N. Y. Perspective elevations and floor plans. Cost \$3,450 complete. P. F. Higgs, architect, New York.
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5. A school house at Upper Montclair, N. J. Perspective view and ground plans. Cost \$12,200 complete, including heating and ventilating apparatus. Geo. W. Da Cunha, architect, New York.
6. Perspective views of several very attractive dwellings located near New York.
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8. The St. James' Episcopal Church at Upper Montclair, N. J. A picturesque design. Cost \$8,000 complete. Messrs. Lamb & Rich, architects, New York. Perspective view and ground plan.
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11. Proposed railway tower for the Columbian Exposition at Chicago.
12. Sketch of the new City Hall, Philadelphia. — A magnificent structure.
13. Miscellaneous contents: Cork pavement. — Best treatment of hardwood floors. — The twin staircase, illustrated. — The electric stair climber, illustrated. — The sick room temperature. — Stair builder's goods, illustrated. — Ornamental hardwood floors. — Large winding partition doors. — The "Alberene" laundry tub. — House heating and ventilation. — Nolan's hot water and steam heater, illustrated. — The crushing resistance of bricks. — An excellent motor, illustrated. — A successful hot water heater, illustrated. — The lacquer tree. — A self-retaining dumb waiter, illustrated. — Architectural wood turning, illustrated.

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