

RECENTLY PATENTED INVENTIONS.

Railway Appliances.

SLEEPING CAR.—William Sneekner, Winthrop Hotel, 125th Street and Seventh Avenue, New York City. The upper berth, according to this invention, has a vertical movement, and the lower berth is independent of the upper one, there being locking devices to unite the two berths, and an elevating mechanism connected with one of the berths. The upper berth is virtually suspended from the car roof, and may be readily raised and concealed close to the roof when not in use, or lowered to any desired point, the lower berth being locked thereto, and both berths elevated and held near the roof, giving a maximum of head room over the seats, which need not be employed as receptacles for clothing. The seats are also foldable, to present a table surface for the lower berth, or the latter may be held in such position that the seats may be used in dressing and undressing, the sections being separated also by partitions with sliding panels.

CAR COUPLING.—William P. Clark, Elberton, Ga. A horizontally swinging hook is pivoted in and projects from the drawhead, in the side of which a spring-pressed dog swings horizontally in the side of the drawhead opposite the hook, to engage the hook of an opposing coupling, while a lever mechanism moves the dog against the spring. The device automatically couples with an opposing coupling, and it may be operated from the sides of the car or from a platform, while its construction is such that, if the coupling hook of one coupling breaks, the other coupling hook will hold the cars together.

CAR BRAKE.—James W. Fisher, Painesville, Washington. The brake shoes of this device are adapted to engage the rails instead of the car wheels, a shaft carrying arms pivotally connected with the brake shoes, while a chain is connected with the free end of an arm projecting from the shaft, the chain being connected with an arm on a second shaft, which may be turned by hand or power. The device is of strong and simple construction, and designed to facilitate the quick stoppage of trains on which it is used.

RAIL JOINT.—Richard Roxby, Dartmouth, Canada. Overlapping sheaths are by this invention adapted to be secured to the meeting ends of the rails, the sheaths being disconnected at their overlapping ends from each other to form a sliding joint, and shaped to fit the lower portions of the rails, one of the sheaths having thinned ends and the opposite sheath having an enlarged portion to fit over the adjacent sheath. The meeting ends of the rails are thus held together, so that they cannot move laterally or vertically, although having the proper play to allow for expansion and contraction, and the device may be used whether or not the joint comes above a supporting tie.

Mechanical.

CLUTCH.—John S. Adams, New Orleans, La. According to this improvement, a lever mechanism is connected with two sliding blocks and a sliding sleeve for alternately operating the blocks by a continuous movement of the sleeve, a brake-sleeve held on one of the blocks engaging the pulley to be driven. The device is so arranged as to permit of gradually applying the friction lock, and when the speed of the driving and driven parts is nearly equal, the friction lock is broken and the positive lock is actuated to connect the two parts, thus forming a direct or positive coupling.

STAPLE DRIVING MACHINE.—Gilbert Hay, Madison, Neb. This is a simple and rapid-working machine for forcing metallic staples through a seam, the invention more especially improving the feeding mechanism, so that the staples may be fed one by one and held in a suitable position for driving, the machine being also especially intended for setting staples in leather goods, for the purpose of securing seams, instead of using rivet fastenings.

NUT LOCK.—Waters B. Parrot, Elizabeth, N. J. The washer used with this improvement has one face formed as a series of inclined planes, a locking box or shell screwed on the bolt having a lug engaging the planes of the washer, while an elastic washer, carried by the bolt, engages the inner surface of the shell, and a jam nut screwed on the bolt enters the shell and engages the washer. The device is of simple, durable, and inexpensive construction.

GLASS POLISHING MACHINE.—Ferdinand K. Maximilian, New York City. This is a machine designed especially for polishing the beveled edges of plate glass, the improvement increasing the capacity of the machine and reducing the cost of labor. It has two beds, with a passageway between, longitudinal guide rods at each side of each bed, connected with a transverse rod at one end, standards on the guide rods supporting a rubber frame consisting of cross bars and adjustable longitudinal rubber-carrying bars, in combination with means for reciprocating the frame on the beds.

VENEERING MACHINE.—Charles Sprewitz, New York City. A simple and durable machine is provided by this invention, whereby veneers may be effectively and expeditiously flattened, heated, and set in large quantities. A series of tables, some of them adjustable, is located one above the other, each table having an inlet and outlet opening, and a body section with a marginal rib upon one face, and also a series of spurs, while a cover plate conceals the spurs and is attached to the ribs, weights and links being connected with the movable tables, whereby they move together, while pressure devices exert tension upon the tables.

Agricultural.

CORN HARVESTING MACHINE.—James Clements, John Clements, and Fred H. Rollins, Lake City, Iowa. This is a machine to be drawn lengthwise over a row of corn, picking the ears from the stalks, husking the corn, and delivering the husked ears into

an adjacent wagon or other receptacle. The machine comprises a portable frame, in which is a central passageway, with compressor shoes on its opposite sides, a flinged vertical beater being on one side of the passageway, and a guard board opposite the beater, while an elevator adjacent to the guard board delivers into a husker, and another elevator receives the husked corn. The machine is designed to operate rapidly, and do the work as nicely as it could be done by hand.

HAY RACK.—William T. Wallace, Beloit, Kansas. This invention is designed to simplify the construction of racks, and provides one capable of being built in a durable and economic manner. This improved rack is made in one or more adjustable sections, to readily increase or diminish its area, the sections being quickly and conveniently united, and the arrangement being such that any of the sections may be made to fold downward to expose more or less of the contents of the rack.

HARVESTER BRAKE.—Daniel E. Mentzel, Spanzle, Washington. The "steer wheels" of harvesters or headers are, by this invention, provided with a device by which the operator may quickly and conveniently apply the brake in such a way as to retard the speed of the implement or fully stop it, the brake being held without the aid of the operator, in more or less close engagement with the wheel. The handle of the brake lever is immediately back of the operator, who draws the handle toward him in applying the brake, carrying the lever outward in removing the brake.

POISON DISTRIBUTER.—Harry J. Hill, Perry's Mills, N. Y. This is a machine to be moved forward between rows of plants, in wheelbarrow style, a powder-distributing cylinder projecting from each side, so that two rows of plants will be sprinkled at the same time. The distributing cylinders are revolved by means of connections with the front wheel, as the device is moved along, the height of the cylinders being adjustable as desired, and being protected by hoods from wind and rain.

Miscellaneous.

EVAPORATING PAN.—Harrison F. Thurston, Centre Bartlett, N. H. A receptacle having depending hollow flanges rests on a flat ash box, a series of curved hollow flanges extending centrally from the receptacle to the box, and terminating adjacent to the outlet, to form flues, there being a tank on the rear end of the ash box, connected by a siphon pipe with the receptacle, while a supplemental pan within has flanges resting on the edges of the evaporating receptacle. This evaporator has very large heating surface, and is designed to rapidly reduce sap to sirup and boil the sirup to sugar.

DAM.—Otte Van Oostrum, Portland, Oregon. This dam, to be made either of cast or sheet metal, or partly of wood and partly of metal, is designed to stop the flow of water in small ditches, such as are used for purposes of irrigation. It has side wings with vertical grooves, in which slides a gate with an opening, and an auxiliary gate sliding therein. The dam is put into position by forcing the side plates down into the dirt at opposite sides of the ditch, and then introducing the central plate with its door.

WELL BORING AND PROSPECTING.—George A. Miller, Colfax, Washington. This invention provides an improved method of drilling and excavating for making a well or prospecting for minerals. A heavy drill is operated in a reciprocatory manner by mechanical means, falling by gravity; after a seat for the explosive has been formed within the earth, the explosive is dropped to position and fired by allowing the drill shaft and cap to drop on it, thus thoroughly breaking up the rock through which the well is being bored.

COFFEE POT.—William H. Wrigley, New Orleans, La. Depending from the cover opening of this coffee pot is a perforated cylindrical coffee holder, in which the coffee is placed, and within the coffee holder is placed a smaller perforated cylinder depending from the cover, through which hot water is supplied to percolate through the coffee to the main portion of the pot below.

GLOVE FASTENING.—August V. Demange and Jules M. R. Hervieu, Paris, France. This is a simple, neat, and ornamental device for affording a hooked connection between the vent edges of the glove, providing a convenient hook and loop fastening, of which the hook piece may be concealed when the glove is not in use. Each of the fasteners is composed of a hook section and a loop section that may be quickly interlocked when the glove is closed on the wrist of the wearer, any desired number of the fasteners being readily attached to the glove.

POCKET ATTACHMENT.—Sally Salinger, New York City. This is a safety attachment for use in the ordinary garment pockets, and is readily applied to or removed from the pocket. It is composed of hinged jaws, one of which has slots with perforated lugs on opposite sides of each slot, pins sliding in each pair of lugs to attach the frame to a garment pocket. In fastening a bag to a garment pocket the pins are made to pass through a portion of the bag.

BASE BALL GAME.—Morris Ullman, Washington, D. C. This is a game for use at summer resorts, excursion grounds, etc., affording amusement and serving to test the accuracy and strength of the throwing arm of the player. A pivoted pendulum at the rear of a rigid target frame is moved by the impact of the ball through different distances or arcs, making an electrical connection which moves an indicator according to the force and accuracy of the blow, the several figures representing the different players in the field, being electrically connected, if desired, with the main electrical circuit, and arranged to be moved about by the closing of the circuit.

PESSARY.—Horace H. Taylor, Fresno, Cal. This is an elastic, hollow, longitudinally extensi-

ble device, with its upper and lower extremities of greater thickness than its side walls, and with a specially constructed support for the device when in place.

TYPE-WRITING MACHINE.—William J. Borden, Hico, and Jahu W. Johnson, Houston, Texas. This is a machine especially designed for writing upon blank books, facilitating the making of official records in improved style, while it is also capable of use for the ordinary work of type-writers. Spring-pressed type are carried by the type wheel, which is supported by an oscillating frame connected with an actuating mechanism, a shifting and driving mechanism being also connected with the wheel, while a trip mechanism in the path of its rotation acts successively upon the type. The frame is journaled in a vertically movable carriage, upon which a sleeve slides laterally, arms projecting from the sleeve engaging the type wheel at opposite sides. Owing to the manner in which the line spacing and letter spacing is effected, type of different sizes may be employed.

LAND AND WATER VELOCIPED.—Theodore G. P. Vogt, Passaic, N. J. This is a light, strong vehicle, adapted for manual propulsion on land or water, without change of adjustment or parts, and carrying several persons. It has two long, end-taped, air-tight hulls, spaced apart by a yoke bar at each end, and with a water wheel between them, near the center, while upon a transverse axle are two hollow main tricycle wheels, with air chambers and radial paddles and a peripheral elastic tire. There is a forward hollow air-tight steering wheel, swiveling and rotating between the hulls; two saddles on the wheel case, with treadle gears below for each saddle, sprocket gearing and chains connecting with the axle of the main wheels, with other novel features, the principal parts being made to contain air, so that in water the vehicle becomes a floating raft, with means for propulsion and steering.

TRICYCLE.—Archie McDougall, Salt Lake City, Utah Ter. The driver may use his hands and his feet in propelling this vehicle, which is thus designed to be driven with great speed. It has parallel driving wheels connected by the driving axle, a steering wheel in advance being connected by a reach with a frame on the driving axle, while a sprocket wheel pivoted on the axle frame is connected by a chain with a sprocket wheel on the axle, and an oscillating and revolvable lever pivoted on the reach is connected by a rod and crank with the driving sprocket wheel, there being also a sprocket wheel and chain connection between the oscillating lever and the steering fork.

BLANK BOOK.—James W. Burris, Uvalde, Texas. According to this improvement, blank sheets are secured to a binding forming the back of the book, so that the attachment and detachment of the sheets may be conveniently effected, the book being thus particularly adapted for the use of typewriters and other copyists. The backing piece or binder for the sheets is flat, and has a series of parallel rows of perforations through which cord loops are drawn, the several perforations of adjacent rows being out of alignment. In securing a pack of sheets to the backing, the several loops are drawn through perforations in the sheets and also interlocked on their inner side.

LAWN SPRINKLER.—Charles H. Baker, Bay City, Mich. A rotary deflecting cone, provided with a series of distributing wings, is arranged above the discharge end of the nozzle of the sprinkler, the lower part of the nozzle having a screw-threaded inlet for connection with a hose, while below this is a downwardly projecting leg adapted to stick into the ground to hold the whole device in upright position. By the novel means of attachment of the tilting frame having the rotating cone within it, the issuing water may be sprayed through the area of an entire circle, or through only three-fourths, a half, or a quarter of a circle, as desired.

OVEN THERMOMETER.—Harvey Murdock, Brooklyn, N. Y. A simple thermostat is provided by this invention to operate by its own expansion directly upon an indicator, without the use of levers of any kind. An expansible and revolvable rod is suspended by one end in a hanger within the oven, the rod and the hanger having a screw-thread connection, and the other end of the rod having an external indicating hand passing over a dial on the outside of the oven door. As the rod expands with the rising temperature, the screw-thread of the hanger, acting on that of the rod, gives the latter a rotary motion, which is indicated by the hand on the dial, the latter being properly marked to indicate the corresponding temperature.

WASHING MACHINE.—Frederick M. Webster, Somerville, Mass. This device is designed to be conveniently applied to either a set or a portable washtub, and operates to keep the clothes well covered with suds while rapidly washing them. In a frame designed to set well down in the tub are journaled three spring-pressed, corrugated rollers, two below and one immediately above a crank arm extending from the latter, by revolving which the clothing is drawn between the rollers. By oscillating the crank the rollers are worked backward and forward to give the clothing the necessary amount of rubbing and squeezing.

BALL BEARING.—Friedrich A. Grunenberg, New York City. This improvement is especially applicable to the fifth wheels of vehicles, providing therefor ball or roller bearings in a simple and economic manner, the attachment being readily made to any fifth wheel. A pocket plate is located between the upper and lower fifth wheel sections, and held to operate jointly with them by the king bolt, the pocket plate holding the balls in position while leaving them free to turn in their pockets.

MUSICAL INSTRUMENT.—William Carter, Albion, N. Y. A "nasalette" is the name given this instrument, which has a nose cap, or hood, forming a receiver for air blown from the nostrils, a duct directing the air downward from the receiver, and a tubular mouth-piece connected with the duct below,

and provided with a sounding strip, for the air expelled from the hood-shaped receiver and through the mouth-piece. By the player working or changing the position of his tongue it is designed to vary the sound and obtain any desired tone.

PANTALOONS HANGER.—Charles T. N. Engels, Middlesborough, Ky. This device consists of parallel connected rocking strands or wires, each having an outward projecting arm, or jaw, movable toward and from each other, according to the direction in which the wires are rocked, the latter being bowed or bent outward to form means for rocking them. The improvement forms a ready attachment to opposite sides of a waistband, to be suspended from a convenient support, whereby both legs and both sides of the body will receive equal tension.

TOWEL BRACKET.—Wm. A. Neidhardt, New York City. Supplemental end brackets are secured to the wall plate, one of the brackets having an outer shell and a removable inner portion, and one of them having its shell slotted at the top, and a lock to hold the two parts of the slotted bracket together. The device holds the towel upon a roller in convenient position for use, but so that it may be locked in place and cannot be removed without unlocking it.

ANIMAL TRAP.—Joseph Klar and Frank H. Hall, Anna, Ill. This is a trap for catching rats and mice, in which, as the animal enters and takes the bait, a pivoted chute or runway is carried down to close the inlet opening. When the animal seeks to escape, in traveling over this runway it sets the trap for another victim. There is in conjunction with the trap a cell, into which the animal is likely to enter to escape from the trap, but from which it is impossible for the animal to return to the trap.

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TABLE OF CONTENTS.

1. Handsome plate in colors of a residence recently erected at Yonkers, N. Y. Perspective view, floor plans, etc. Messrs. Roseiter & Wright, architects, New York. An excellent design.
2. Plate in colors of a residence erected at Marina Heights, Black Rock, Conn. Perspective elevations and floor plans. Cost \$7,000 complete. Henry Lambert, architect, Bridgeport, Conn.
3. Perspective view and floor plans of a brick house at Chambersburg Pa., recently designed and built at a cost of \$2,500.
4. A cottage near Orange, N. J., from plans prepared by Munn & Co., architects, New York. Cost \$7,000 complete. Perspective view and floor plans.
5. A residence at Portland, Me., erected at a cost of \$5,575 complete. Floor plans and perspective elevation.
6. A residence at Bensonhurst, Long Island. Cost \$9,800 complete. Messrs. Parfitt Bros., architects, Brooklyn, N. Y. Two perspective elevations and floor plans.
7. Perspective elevations and interior views of the American Yacht Club House, at Milton Point near Rye, N. Y. A handsome building of the Queen Anne style. Messrs. E. A. Sargent & Co., architects, New York.
8. A dwelling at Upper Montclair, N. J., erected at a cost of \$7,000 complete. Messrs. Munn & Co., architects, New York. Perspective and floor plans.
9. A cottage at Babylon, Long Island, N. Y., erected at a cost of \$3,700 complete. Plans and perspective elevation.
10. Sketch of an Australian bush home. Cost from \$1,200 to \$1,500. A simple and economical design for a summer house.
11. Miscellaneous contents: Electrical cotton gin.—Aluminum.—The efflorescence on brickwork.—Leaf photography.—Car roofing.—Superior steel furnaces, illustrated.—How to stain wood yellow and gray.—Ink for writing on glass or porcelain.—An improved wood-working machine, illustrated.—An improved revolving chimney top, illustrated.—Elevators in the amphitheater of Rome.—An improved hot water heater, illustrated.—Natural wood grille and screen work, illustrated.—Galvanized eaves troughs and conductors, illustrated.—Sliding blind patents.

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