

RECENTLY PATENTED INVENTIONS.

Railway Appliances.

CAR COUPLING.—Lewis S. Riggs, Selma, Ala. This invention provides a simple and light construction to substitute for the usual drawhead, when the latter is broken or disabled. It consists of a jaw bolt having a shank adapted for insertion through openings in the frame plates, and having at its front end jaws with an intermediate slot to receive a link, the device being light and inexpensive and suitable for convenient carriage in the caboose. If two meeting drawheads become disabled, a jaw bolt can be substituted for each, the substitution being quickly effected, and the device forming an efficient temporary coupling.

CAR COUPLING.—Arthur Parkinson, Vian, Indian Territory. This coupling comprises a forked drawhead, in one member of which a toothed wheel is pivoted to project into the central opening of the drawhead, a spring-pressed pawl pivoted in the drawhead engaging the toothed wheel, while there is a lever mechanism for turning the pawl against the spring. The mechanism is extremely simple, two drawheads coming together necessarily coupling automatically, while the uncoupling is effected by simply turning a crank, without danger to the brakeman. The device may, if necessary, be used with the old fashioned coupling.

CAR COUPLING.—James R. Williamson, Fancy Bluff, Ga. A slotted pin is mounted in the drawhead of this coupling, which has a recess in its top, a lever pivoted in the drawhead extending through the pin, while a forked bar mounted on the drawhead has one end extending downward through the recess, there being a roller mounted in the bar beneath the lever, and means for lifting the bar. The common link is used, and the link-lifting and guiding attachments employed may be easily applied to a common coupling. By this coupling the cars may be automatically coupled, and may be uncoupled from any convenient point upon a car, while means are provided for guiding a link so that it will readily enter an opposing coupling.

CAR BRAKE.—John Morrow, New York City. Toothed wheels are secured on the car axles, and the brakes, between opposing toothed wheels, are provided with sliding shoes, there being a rocking mechanism connected with the brakes and a shifting mechanism with the brake shoes. The invention is an improvement on a former patented invention of the same inventor, whereby the brake may be controlled from the engine, and expeditiously applied to cause a quick and close pressure of the shoe on the wheels, the wheels also being quickly forced, after the brake is applied, to turn a limited direction the reverse of their forward movement, giving to the wheels during the act of braking a rolling motion upon the track in a direction opposite that in which the train is traveling.

CAR BRAKE.—William T. Rickman, Fern Bank, Ala. This is an automatic brake in which the brake mechanism is put in operative position by the pressure of the preceding car upon the drawbar. Certain details of mechanism are also arranged to be operated by the car axle to automatically throw the brake mechanism out of operative position when the car is backed, and which will be shifted to allow for automatic operation when the car is again moved in a forward direction. This mechanism is designed to be cheap and simple in its construction, and effective and positive in its operation.

CAR HEATING DEVICE.—Hugo Newman, New York City. This invention provides a mechanism of simple and inexpensive construction, designed to generate heat by means of friction in sufficient quantities to warm the car, the mechanism being operated from the axle. The apparatus consists of parallel plates of metal between which piston heads are held to slide in positive engagement with the plates, the piston heads being provided with cushions of rubber or like material adapted for engagement with the metal plates, there being a mechanism for reciprocating all the heads simultaneously. The rubber caps are treated with amalgam, so that they will not wear rapidly, and in street cars one of these mechanisms is designed to be placed under each line of side seats.

COMBINED FROG AND SWITCH.—David Horrie, Antigo, Wis. This is an improvement on a former patented invention of the same inventor, in that class of railroad frogs in which a swinging rail is employed adapted to align with the main track and an intersecting side track. The swing rail frog and the shifting rails of an adjacent switch are provided with operating mechanism to be actuated by a locomotive or cars moving on the main track or siding, to automatically adjust the swing rail of the frog and the laterally movable rails of the connecting switch in alignment with either a main track or a side track.

TANK FEEDER.—Merritt Burt and John W. Skilton, Jacksonville, Fla. The trains moving on a railroad are, by this improvement, utilized to directly and positively raise water and automatically discharge it into the tank. A frame over a reservoir supports a track tank and an elevated guide pulley for a hoisting rope by which the bucket is raised. The bucket is held in elevated position by a detent mechanism, and its descent is regulated by a brake, the pulling rope being connected with the cars moving in either direction to elevate the bucket. The bucket has a lateral discharge opening near its bottom, the valve controlling which is automatically opened when the bucket reaches its uppermost position.

Electrical.

CONTACT MAKER.—Daniel Draper, Hastings-on-Hudson, N. Y. This is a positive device for use in clocks, meteorological instruments and similar purposes in which positive electrical impulses are automatically sent at intervals. An armature is attached to the contact-making arm and a magnet arranged in such relation to the arm as to engage the armature and hold the contact arm down against the contact point with sufficient force to prevent it from vibrating, so as to produce more than one contact with the point.

Mechanical Appliances.

STOP MOTION DEVICE.—Richard Whitaker, New Brunswick, N. J. This device is designed more particularly to stop the rotative movement of a driving shaft in crank presses, etc., the construction being simple, and affording means to quickly arrest motion in a machine and start it instantly when required. The driving shaft is mounted in a frame, and there is a loose pulley on the shaft, while a longitudinally locking bolt carried by the shaft is adapted to engage the pulley, an abutment being also carried by the shaft, a spring between the bolt and abutment, and a spring-pressed wedge-shaped bar adapted to engage the locking bolt and disengage it from the pulley.

PHOSPHATE ROCK SEPARATOR.—George W. Veronee, Ten Mile Hill, S. C. This is an improvement in rock catchers to be used with the common cylinder washers employed to wash and clean phosphate rock and ores, the catcher causing the mud, fine rock and trash to be quickly separated and delivering the rock to the washer. Combined with the washer and its feed screw is the perforated cylindrical catcher, secured to the lower end of the washer, the catcher having a perforated end flange and inwardly projecting curved and perforated flanges arranged to deliver upon the feed screw.

QUILLING MACHINE.—Herbert G. Pounds, New York City. This invention provides a doubling attachment for quilling machines especially adapted for use in quilling silk. It is a simple form of quiller, doing away entirely with the ordinary doubling machine and doubling bobbins, winding and doubling the silk directly from the winding bobbins, and in a perfectly even manner, and when a bobbin is emptied or a thread broken it immediately stops the spindle. The attachment consists of a frame pivoted in supporting brackets, adjustable balance weights held on its under side, a series of tension hooks pivoted on the frame pivot and extending above the front end of the frame, an arm being secured to the rear end of the frame and adapted to connect with a spindle stop motion.

TOOL HANDLE.—Wallace L. Smith, Richburg, N. Y. The body bar of this handle has a socket at each side of which clamping jaws are held to slide on the bar, sleeves surrounding the clamping jaws and a portion of the body bar and engaging them for imparting movement to the jaws. The handle is designed for such tools as augers, bits, reamers, etc., and is capable of being readily and conveniently applied to the shank of the tool and quickly disengaged therefrom when desired.

LUBRICATOR.—Nelson Guyer, Ethel Landing, Pa. This invention provides a simple and inexpensive cup, which will not need to be filled very often, is adapted to use any kind of a lubricant, and may be instantly adjusted to feed either fast or slow, as desired. The device is especially adapted for use on engines, pumps, drilling machines, etc., a handle being turned down, if the oil is to be fed rapidly, so that a bore of the nipple and an opening in the hollow core will register, the oil flowing through the registering openings, but if the oil is to be fed slowly, another turn of the handle will cause the oil to follow a groove to the bore of the nipple.

Miscellaneous.

FANCY BOX.—Alfred G. Williams, Newark, N. J. This invention relates to an improvement in boxes to hold toilet articles, tableware, jewelry, etc., providing means whereby the body may be inexpensively and readily constructed of a thin metal, and an irregular contour given to it as readily as an angular or triangular shape.

STAMP HOLDING APPARATUS.—James Hoop, Ogden, Utah Ter. This is an apparatus adapted to hold or carry rubber hand stamps, carrying a large number of dissimilar stamps, and also holding them automatically upon an inking pad so that they will be always ready for use. The apparatus has a returning mechanism, to return a stamp to its seat upon a pad after it has been used, with a labeling system whereby any stamp desired may be found at once. The apparatus may be placed in a convenient position above a desk, table or other article of furniture, and is adapted to save time by carrying the stamps in the most convenient manner possible.

MUSIC BOX.—Alfred Wolff, Rutherford, N. J. This is a box of simple and durable construction, arranged to open and close the bearings for the pin cylinder for conveniently changing the cylinders without danger of injury to the pins. The invention consists of a pin cylinder secured on a shaft, a spring-pressed lever pressing on one end of the shaft, and a sliding pin against which the cylinder is pressed by the lever, there being a mechanism for simultaneously opening the bearings for the pin cylinder shaft and a spring for pressing the cylinder.

DOOR CATCH.—John J. Martz, Big Rapids, Mich. A retaining and impinging bar or staple is fixed on the interior of the framework of the door inside the plane of the closed door, to act as a stop to the door, in combination with a bent spring catch attached to the door and adapted to project beyond and lock inside of the retaining bar. It is an inexpensive, simple, and almost universally applicable device, which may be located at the top, bottom or side of the door.

CHIMNEY CAP.—Joseph A. Hodel, Cumberland, Md. This improvement relates to that class of chimney caps in which a vibrating valve is employed, which is automatically adjusted by the wind pressure to prevent a downward draught, and to increase the up or suction draught. The base plate has an upwardly and outwardly flared flue opening, oppositely projecting hood portions formed with inwardly and downwardly extended flue members communicating with the central flue opening, while valves are mounted in the hood portions, to be closed over the flue members by the wind pressure, with means for normally holding the valves open.

WASH BOARD.—James Pittigan, Goodland, Ind. The rubbing face of this wash board is made by two series of cross-hatched wires, the inner series being vertical, and forming unobstructed channels under the rubbing surface, while the outer series is horizontal and made of somewhat larger wire than the inner series. At the points where the horizontal wires cross the vertical ones the wires are soldered together, to prevent rust. The wires are preferably spaced about five-eighths of an inch apart.

BALING PRESS.—Andreas Mattijetz, Giddings, Texas. This invention covers an improvement on a former patented invention of the same inventor, the press being simple and durable in construction and more especially designed for rapidly and conveniently baling hay and like material into large or small bales. The follower is provided with uprights extending through the top of the follower chamber, friction rollers on the outer ends of the uprights traveling on the top of the follower chamber, set screws on a cross bar of the uprights being adapted to engage the friction rollers to brake them. The press is preferably made of channel iron, that it may be very light and strong.

FIRE BOX AND GRATE.—James A. Jamison, Russellville, Ark. This fire box has a back piece with a supporting bar on its front side, side pieces having their rear ends secured to the back piece, a removable supporting bar connecting the front portions of the side pieces, and removable grate bars extending between the front and rear supporting bars. The bolts which hold the parts of the box together are arranged so that they will not be exposed to any great amount of heat, and the parts are put together in such a manner that if any portion of it breaks, the broken part may be easily and cheaply renewed. This fire box and grate is especially adapted for use in fireplaces or open stoves.

VEHICLE.—Jacob Ruch and Emanuel Star, Mount Eaton, Ohio. According to this invention the vehicle body is freely suspended on its springs, its front end being suspended from the cross bar of the shafts, whereby the body will have a swinging movement designed to render it very easy to a person riding in it. Bars secured to the axle have upwardly projecting posts to which the thills are connected, the body having its front end supported from the thills and its rear end supported from the axle, to have a yielding and a lateral swinging motion.

VEHICLE RUNNING GEAR.—John R. Kunzelman, Stillwater, Minn. This is an improvement on a former patented invention of the same inventor, relating to running gear for wagons, bob sleds, etc., in which the reach is adapted to rotate, being connected with the axles by universal joints. According to this improvement racks and pinions are employed as the means of connection between the reach and axle hounds, there being stops to arrest the rotation of the reach to limit the angle which the rear axle may assume to the reach, while permitting the front axle to assume a greater one, as required to facilitate the turning of short corners.

SNAP HOOK.—Horace N. Bull, David Dickey, and Homer F. Hutton, Ennis, Montana. This is an improvement in that class of snap hooks which are provided with a pivoted device for locking a trace loop or chain link and in the hook proper. The hook has a lengthwise mortise in its body and a notch on its end, a latch pivoted in the mortise having a lug in its rear side, while a disk pivoted in the rear of the latch has a slot to receive its lug, a spring bearing on the disk.

INKSTAND FOUNTAIN ATTACHMENT.—Joseph H. Hamill, Globe, Arizona Ter. A sack of rubber or other elastic material is adapted for attachment to the neck of the inkstand or well, a funnel of hard material having its lower end attached within the sack, while an apertured mouthpiece is connected with the upper end of the funnel and covers it. The attachment may be quickly and readily applied to any inkstand, and the receptacle or mouthpiece from which the ink is taken by the pen serves also as a cap to prevent the entry of dust.

VIOLIN BOW.—Frank Searle, Virginia City, Montana. This invention provides an improved means for securing the hairs of the bow to the handle or staff. It consists of a clamp with two plates between which the hair is placed, one of the plates being rounded off at one end for bending the hair over it, there being set screws for fastening the plates together, the set screws being oppositely arranged to pass the hair between the two set screws and between the two plates. The hair can be readily spread to the desired width and thickness by adjusting the screws, and is tightened by adjusting the handle piece in the usual manner.

WHISTLE HARP.—John P. Nettle, Newark, N. J. This is a simple instrument to be played by blowing into it. It has a tubular body, with a mouth opening at one end, and longitudinal slots on opposite sides to permit the escape of air. There are also other aligning slots or openings over which extend metallic tongues, which vibrate to produce musical sounds as the air passes outward through the openings, the tone being varied to produce a tune by working the tongue in the same manner as if whistling without the use of an instrument.

SPOON.—Austin F. Jackson, Taunton, Mass. This spoon has the forward end of its bowl centrally divided with a short slot or incision, and a middle ridge extends therefrom down into the bottom of the spoon, thus making an improved form of spoon for eating oranges out of the rind after having been divided into hemispheres.

CLOTHES PIN.—William J. Blakey, Auckland, New Zealand. This pin is made of two sections of spring wire united at their upper ends by a common shank and separated at their lower ends, the lower ends being contracted to form tapering openings, and the shank having a hook at its upper end and a spring below the hook. This pin is adapted to clamp two adjacent articles, and permit one article to be removed from the line without disturbing the other, the

pin being also capable of movement upon the line while attached to it.

CLOTHES POUNDER.—Alphonse Rousseau, Fall River, Mass. This is an improved device to facilitate the washing of clothes without the use of a rubbing board. The shell of the washer is bell shape, with a socket at the top in which the handle is secured, and within the shell is held a transverse partition with a central valve connected by a spiral spring with the handlesocket. There are openings in the upper portion of the shell, and the up and down movement of the washer, forming a partial vacuum, forces the water through the clothes in opposite directions.

PEANUT WARMER.—Charles E. Raper, Big Rapids, Mich. This is a simple and inexpensive device, light and durable and occupying but little space, and easily managed, to readily warm nuts without danger of burning them. It has a hollow base having a door and a perforated floor, a removable drum mounted upon the base, an oven suspended within the drum, and a dome mounted on the drum to cover the oven, the dome terminating in a chimney. The smoke and gases pass upward through the perforations of the oven and escape through the chimney without in any way affecting the nuts. The warmer may be readily taken apart for cleaning or shipment.

GAME APPARATUS.—Alexander W. McArthur, San Francisco, Cal. The game board provided by this invention has, between inner and outer circles, a series of small circles to be filled by portraits of prominent authors. On the spinning of a centrally pivoted hand the player is required to name the author whose portrait appears in the circle where the hand stops, and to give a quotation from some of his writings, the game admitting of the introduction of many variations.

HEAD REST.—John H. Barth, Batesville, Ind. This is a removable, readily attachable, and otherwise convenient and desirable head rest for chairs or seats, designed more especially for use by railway passengers, permitting each person to carry his own head rest. It is made of spring wire with a cloth or other soft covering, and consists mainly of two spring wire frames or side pieces, detached from each other, but adapted to be connected by an engaging and disengaging wire stretcher at or near their tops, the covering constituting an easy cushion for the head.

COFFIN HANDLE.—Lyman E. Woodward, Owosso, Mich. This invention relates to coffin handles having a drop handle bar, and provides an improved folding bracket arm for the support of the drop handle bar. The invention is an improvement on a former patented invention of the same inventor.

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3. A summer cottage on the Maine coast, near Portland. Floor plans and perspective elevation. Cost \$1,470 complete.
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