

RECENTLY PATENTED INVENTIONS.

Electrical Devices.

DOUBLE JACK FOR TELEGRAPH-CIRCUITS.—O. JOHNSON, Conway Springs, Kan. The more particular object of this inventor is to provide a plurality of circuits or parts of circuits, so as to throw one set of instruments out of commission and another into commission. He so arranges the instruments and wiring that a telegraph operator by merely inserting a plug in a jack can shift parts of both the main and local circuits from sending and receiving instruments located upon one table to other sending and receiving instruments upon another, all instruments being connected by a common relay.

MAGNET-CONTROLLED THIRD-RAIL SYSTEM.—H. J. PALMER, Philadelphia, Pa. In this case the more particular object is to produce a system in which improved mechanism controllable automatically by a magnet is used for the purpose of temporarily completing the circuit. The invention also refers to certain improvements in mechanism to be mounted upon a movable vehicle for the purpose of governing the contact mechanism for supplying current to the motors of the vehicle.

Of General Interest.

LIFTING APPARATUS FOR DEEP WELLS.—F. J. MOSER, Kane, Pa. In Mr. Moser's patent the invention has reference to lifting apparatus for deep wells and the improvement admits of general use, but is of a peculiar value in such regions where it is desirable to raise oil or liquids from considerable distances below the surface.

MOTHPROOF BAG.—G. M. D. MANAHAN, New York, N. Y. The object of the present invention is to provide a bag perfectly moth-proof and air-tight and provided with garment-supporting means arranged within the bag for supporting garments therein, the means extending to the outside of the bag to permit suspending the latter and its contents from a hook or other support, thus relieving the material of the bag of all undue strain, and insuring long life to the bag. The invention relates to moth-proof bags such as shown and described in the Letters Patent of the United States formerly granted to Mr. Manahan.

BOX-LID HOLDER.—G. LOOS, Grafton, N. D. This device holds a box-lid in an open position. The invention is especially applicable to cigar-boxes. It is easily applied to boxes of various thicknesses by reason of the construction employed for grasping the box end, and the device may be applied to either end of the box with equal facility. It may be operated to hold a lid in any position desired.

MEASURING DEVICE FOR SHOE-LASTS AND FOOT-COVERINGS.—G. ENGELHARDT, Cassel, and C. F. FÖLSCH, Wernigerode-on-the-Harz, Germany. The object of this invention is the provision of a new and improved measuring device for shoe-last and foot-coverings arranged to permit of obtaining the proper position of the toe portion relative to the main or heel portion of the wearer's foot.

DRINKING-STRAW.—W. H. DEWENDER, New York, N. Y. The invention pertains particularly to improvements in straws or tubes designed for convenience in drinking liquid from a bottle, the object being to provide a straw or tube designed to extend to the bottom of the bottle and having thereon a closure for the bottle-mouth to prevent the entrance of dust or other matter floating in the air.

COMBINED CANE AND TRIPOD.—W. F. CLARK, St. Louis, Mo. One object of this improvement is to provide a construction for a tripod which enables it to be very closely folded and when folded simulates the form of a walking-cane. The tripod facilitates the use of a camera by tourists and others where the portage of the usual tripod is burdensome and otherwise objectionable, and the device may be utilized as a movable support for music-sheets or a book.

PACKING-CASE.—T. H. CLEMENT, JR., Port Lavaca, Texas. The invention refers to packing and shipping cases, and is intended especially to receive oysters. The object is to produce a case in which the oysters may be conveniently carried, so that ice may be packed around the vessel containing the oysters to preserve them while stored away or while being shipped. The receptacle will contain a large quantity of oysters without subjecting them to great pressure.

ROOF-CLIMBER.—J. S. BAKER and C. F. KETCHUM, Cornish, Ind. Ter. This device is adapted to be attached to the feet to enable the wearer to walk or otherwise support himself upon shingle or other sloping wooden roofs. By means of this device the use of wooden brackets or scaffolds may be dispensed with for the purpose of supporting the wearer on sloping roofs, and thereby a great economy of time and labor effected in the shingling or repair of roofs.

GARMENT-FASTENING.—J. BISCHOF, Boston, Mass. In the use of many of the ordinary hook-and-eye fastenings for garments and the like it frequently happens that the cloth beneath the eye becomes worn by movable contact therewith of the bill or other portion of the hook, resulting sometimes in the eye becoming detached from the cloth and in nearly all cases necessitating patching, both to repair worn spots and to provide a reinforce

by which to again secure the eye in place. One of the principal objects is to overcome in this invention the above mentioned objections.

HEATING-FURNACE.—W. N. BEST, Los Angeles, Cal. This invention relates particularly to improvements in furnaces for annealing portions of armor-plate where holes are to be drilled, for heating patches of metal, so that the same may be readily bent to form a perfect fit, and also for brazing and other purposes where intense heat is required, the object being to provide a furnace that may be conveniently handled and in which a cheap grade of fuel may be quickly volatilized—such, for instance, as water-gas tar, coke-oven tar, crude oil, or residuum oil, that are not so easily volatilized as gasoline, coal-tar, or naphtha.

SAW.—J. BAUMGARTNER, Silvertown, Ore. This is an improvement in saws, being in the nature of a combination hatchet and saw. The inventor utilizes the head of the hatchet as a support for the device for securing the butt-end of the saw-blade and the butt-end of the handle as a support for the swinging carrier for the other end of the saw-blade and also constructs the handle of the saw to form a receptacle for the saw-blade and the swinging carrier when the saw is adjusted out of position for use.

HAND OIL-CAN.—G. H. THOMAS, Elmira, N. Y. More especially the invention has reference to oil-cans (commonly known as "squirr-cans") of the type ordinarily employed by mechanics and others for applying oil to the working parts of machinery to lubricate the same. Parts may be separated the one from the other either for the purposes of cleansing or repair and the device possesses many advantages in points of simplicity, convenience, and economy.

Hardware.

BUCKLE.—L. SANDERS, New York, N. Y. The purpose in this invention is to provide a simple and durable form of buckle particularly adapted for use in connection with the back straps of trousers, vests, and like garments, but which may be otherwise employed, and to so construct the buckle that it will be practically flat, comprising but two parts—a tongue and a frame—and which two parts have supporting and locking engagement when the buckle is locked upon a strap.

PIPE-WRENCH.—G. FOGGAN, Pleasantville, Pa. This invention is a pipe-wrench of that class wherein the pipe is encircled and gripped by links pivotally connected together and to a handle, by the swing of which the requisite pressure is applied to grip and turn the pipe. It is characterized by few and simple parts and quick and powerful action and freedom from some defects incident to known constructions.

Heating and Lighting.

GRATE.—J. WOOD, Noroton, Conn. This invention relates to a rotary grate adapted particularly for house heating-stoves, but useful in connection with stoves and furnaces of all types. It resides particularly in a certain peculiar arrangement of the rocker-bar on which the rotary grate is mounted and by means of which the grate is turned into dumping position, this bar coacting with the pinion for rotating or turning the grate to shake the same. It also resides in a peculiar lock device for the rocker-bar.

Household Utilities.

CHAIR SEAT OR BACK.—G. B. MULLEN and T. P. MULLEN, New York, N. Y. In this instance the improvement has reference to chairs and analogous furniture, the more particular object being the provision of a removable member which may be used either as a seat or as a back and furnishing certain constructional advantages.

COMBINED DOOR HOLDER AND BUFFER.—J. A. ROSS, Elgin, Utah. The object of the present invention is the provision of a novel simple door-holding device which may be instantly converted into a buffer adapted for contact with a wall when the door is swung open, and thus prevent injury to the door and wall.

Machines and Mechanical Devices.

MANUFACTURE OF WALL-COVERINGS.—T. CLEARY, Schuylerville, N. Y. In this patent the object of the inventor is the provision of certain new and useful improvements in the manufacture of wall-coverings, whereby a highly ornamental crushed plush or crushed velvet effect is produced in an exceedingly simple and economical manner.

MACHINE FOR PRODUCING PLUSH EFFECTS ON WALL-COVERINGS.—T. CLEARY, Schuylerville, N. Y. In this invention the aim of the inventor is to provide a new and improved machine more especially designed for producing a highly-ornamental plush effect on wall-coverings in an exceedingly simple and economical manner. This is a division of the application for improvements in the manufacture of wall-coverings formerly filed by Mr. Cleary.

LAWN-MOWER.—J. N. BRYANT, Sparta, Tenn. In this mower there is a longitudinal frame supported at about its center by an arched frame portion having running wheels. A

reciprocating cutting mechanism is provided at the front end of the frame and this may be driven either by hand through suitable driving connection through the rear end of the frame or the shaft of the cutting mechanism may be thrown into gear with toothed rims or annuli on the wheels; a novel form of gearing being provided for this purpose.

WASHING-MACHINE.—H. PLAGMANN, Davenport, Iowa. In use of the machine the tub is first fixed against movement. Raise the cover-section, and means provide for introduction of water mixed with a detergent and articles to be washed. Close the cover, connect link, throw lock off the tub and it is oscillated upon its trunnions by moving the lever. As the sector carrying the gear-teeth is attached to a relatively fixed point through the link system, the pinion upon the interior shaft is caused to travel past the gear and by its engagement rotates the shaft. This revolves attaching-pins, which moves contents about the tub, rubbing articles against a projection and tub-walls. At the same time circulation of cleaning liquid is produced by swaying motion of the tub.

CARTON MAKING AND SEALING MACHINE.—R. SUNDERMAN, Buffalo, N. Y. This invention relates to machines for making and sealing cartons, and has special reference to a machine provided with instrumentalities by which flattened carton shells or tubes may be expanded or opened, then formed into a carton by folding and securing flaps at the bottom of the shell or tube, and the cartons finally closed and sealed after they have been filled.

PULVERIZER.—N. SPURGIN, Ottawa, Ill. In use a beater-shaft is rotated and material introduced through a feed-chute. Beaters hurl it against rings, which present a large pulverizing-surface, toothed faces of upper ring-sections furnishing a reducing-surface. As particles fall they will be again and again struck by the beaters, dividing them until of such size as will pass through spaces between the rings, when they are received by the casing and directed by the hopper to a receptacle. This reduction progresses as material is advanced by the inclined blades, and before it reaches a discharge chute it will be in such a state of division that all will have passed into the casing except pieces of stone or iron, which will be delivered separately.

BUTTER-CUTTER.—W. H. ROUSSEL, San Francisco, Cal. Mr. Roussel's invention pertains to apparatus for cutting such substances as butter, it being especially adapted for the division of large masses of material into cubes of a generally marketable size. Its principal objects are to provide a simple, durable, and effective cutting apparatus. It is entirely free from gearing and elements liable to get out of order, the cord being durable and if broken cheaply replaced.

Pertaining to Recreation.

GUN.—I. A. TOMASINI, Guadaloupe, Cal. In operation when the rear trigger is pulled the plunger is withdrawn from the notch in the lug, allowing the gun to break. The breaking turns the rocking lever and pulls the sliding plate forward, thus cocking the hammer. The gun-barrels are then returned to their proper position with respect to the frame and the gun is ready for action. It may be fired much quicker than the ordinary two-triggered gun and the trigger forms a simple yet efficient locking means for holding the barrels and frame in alignment.

Pertaining to Vehicles.

CART.—A. W. RANSOME, New York, N. Y. This improvement relates particularly to a cart intended to be manually propelled and useful for carrying plastic concrete and other materials. Its principles may, however, be embodied in a horse-drawn cart. It is particularly intended for concrete work where materials have to be dumped from the cart on both horizontal surfaces and over the brink of scaffolds or pits and excavations. The inventor's object is to provide a cart which may be readily converted from one intended for use in dumping on horizontal surfaces to a cart well suited for dumping into excavations.

SANDING DEVICE FOR AUTOMOBILES.—A. L. MOSS, Sandusky, Ohio. In the present patent the object of the inventor is the provision of a new and improved sanding device more especially designed for automobiles and similar vehicles to prevent the same from slipping while traveling over wet or slippery streets or roadways.

STEERING MECHANISM.—W. K. CLEVELAND, St. Petersburg, Fla. In this steering mechanism the drive shaft of the vehicle consists of a central section and two end sections coupled thereto by means of a universal joint. A sleeve is carried on each end section and these sleeves are connected to the steering gear. The wheels which are also carried on the end sections can thus be moved to steer the vehicle.

Railways and Their Accessories.

RAILROAD-TIE.—E. S. BEGLER and H. WITTMANN, Cincinnati, Ohio. In constructing a road the ties are placed in position on the roadbed, the rails laid thereon, and the securing-plates are inserted into the ties, after which the keys driven into the plates through the outermost openings. The tie may be then filled

with concrete through the central openings and the imbedding-concrete placed in position around the same. The large extent of supporting-surface provided by the extensions reduces to a considerable extent the number of ties required for supporting the rail. Approximately sixteen wooden ties are used on a thirty-foot rail; on this only twelve are needed to furnish a like support.

SAFETY-BRIDGE FOR CARS.—H. ALSOP, Chicago, Ill. The invention has reference to an improvement in safety bridges and guards for cars, more particularly stock-cars, and has for its object to provide a simple, cheap, and efficient service for loading and unloading stock and other cars and one which can be readily applied to cars now in use, as well as to new cars.

SWITCH-OPERATING DEVICE.—W. E. HUBBARD, Dennis, Texas. Mr. Hubbard's invention relates to the automatic operation of switches by moving trains, and comprises means for accomplishing this purpose in an efficient and thoroughly reliable manner without resorting to such expensive and complicated devices as have usually been proposed for this purpose.

Designs.

DESIGN FOR A HAND-MIRROR OR SIMILAR ARTICLE.—S. A. KELLER, New York, N. Y. The front face of the hand-mirror in this design shows a frame of circular form gracefully terminating in a handle in length about the diameter of the circle. The frame front and back is made beautifully ornamental by arrangements of flowers and leaves.

DESIGN FOR A FOUNTAIN-PEN HOLDER AND TRAY.—M. A. BENZIGER, New York, N. Y. Mr. Benziger has invented a new, original, and ornamental design for a fountain-pen holder and tray. The tray is oblong with rounded ends from each of which a foot extends. Four holders of different sizes are inserted in the tray in a slanting position to receive fountain-pens.

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