RECENTLY PATENTED INVENTIONS. Engineering.

HYDRAULIC STEERING APPARATUS. Perry Small Boston, Mass. Combined with an arm pivoted on the rudder post are two plungers pivotally connected therewith and extending into pivoted cylinders alternately filled with liquid under pressure, the apparatus being simple, durable and effective, and designed to conveniently accurately and surely manipulate the rudder.

ROCK DRILL. — John J. Martin and Patrick Cunningham, Pinos Altos, New Mexico. This is a drill with a rounded serrated end forming two downwardly projecting lips, and having two oppositely projecting curved cutting edges between the lips making a drill designed to work rapidly be durable, and especially designed to work in hard rocks.

Railway Appliances.

CAR COUPLING. -- Benjamin S. Redding, Greensborough, Ala. This is a coupler in which a sliding block supports the pin, a weighted lever projecting the block under the pin when raised, there ing from the pin, the entire device being composed of strain. but few parts, so arranged that friction is reduced to a

TRAIN ORDER.—Clarence E. Biddison, quickly and conveniently inserted and easily read by day or night, the device also embracing a signal to remind the engineer or conductor that the train is not to leave until the work has been completed.

Mechanical,

WRENCH. - Walter L. Gibson, Turnbull, Fla. This is an improvement on a former patented invention of the same inventor, a movable jaw with two faces being pivoted on a fixed jaw, a block on the fixed jaw being adapted to be engaged by one of the faces, and the position of the movable block being changed by the opening of the movable jaw.

HIGH GRADE WATER POWER.-Alexander H. and Allie Quain and George P. Warner, Albany, Oregon. This invention covers the making of cuts in the bed of a river to serve as canals or flumes, in combination with walls and penstocks, to utilize the power of falls or rapids where it would be otherwise difficult or impossible.

Agricultural.

CHECK ROW CORN PLANTER. Marshall W. Hart, Yellow Bud, Ohio. This is a machine designed to plant both ways of a field and check row without a wire, while being compact, durable and economic, with the drop slides and markers being operated simultaneously from the same drive shaft.

SEED PLANTER. - Wilmer G. Burchfield, Altus, Ark. This is a hand implement for gardeners' and farmers' use, and consists of a drill rod mounted to turn and having a bit and its seed box with spout arranged at the side to drop the seed into the opening made by the bit, being especially adapted for conveniently and rapidly planting seed in hills in the

SHEARING MACHINE.—Robert L. Renz. Poplar Creek Agency, Montana. The frame of this machine has fixed and movable cutters, with a guard plate and horizontal swinging clamping arm pivoted on the frame and swinging across the guard plate to hold it in position, the knives being readily removed and replaced for sharpening or for repairs.

HAY PRESS. - Charles O. Newton, Homer, N. Y. Combined with a baling chamber with movable side and hinged door are sliding bars connected with the side and door, pivoted cam levers being engaged by the bars and adapted to bear against the movable side, with other novel features, designed to afford a simple, cheap, and durable press, generally applicable for farm use.

HAY PRESS.-John F. Smith, Brownwood, Texas. This press is made with a horizontal frame having at its open end a pivoted and weighted frame and a toggle lever connecting the plunger with the closed end of the frame, there being means provided for actuating the toggle lever, the device affording a simple construction for baling hay or other ma-

LAND ROLLER.—Daniel Kint. Alpena. rollers are journaled in chains to permit them to swing | ing up and turning the hook upward it may be tilted to up or down according to the nature of the ground over permit the removal of the trace which the rollers pass, while the driver's seat is so situated as not to be affected by the passing of the rollers over uneven ground, and the animals pulling the roller will not be struck by the tongue, the rollers being self-adjustingly mounted in the frame.

Miscellaneous,

Suspender Catch.—John O. Folsom. Canon City, Oregon. This invention relates to an improvement especially designed for the tips of suspenders, and furnishes a device capable of automatically the catch, the catch when worn not injuring the garments coming in contact with it.

CORSET CLASP. - Frank B. Converse, New York City. This invention covers a novel construction of corset clasp fastenings, designed to afford efficient clasps which may be readily fastened and will loosen or disconnect them, while allowing the corset to be easily unfastened and removed.

POCKET KNIFE. - Joshua W. Harris, Fredericksburg, Va. This is an improvement in handles for knives, screwdrivers, gimlets, small saws, etc., and has a securing bar, which may be shut up in the handle, but is adapted for engagement with the shank of a tool.

PAPER WEIGHT. - Henry P. Krell, Leadville, Col. This is a transparent block having at one of its sides or faces a receptacle for a calendar slip, which is visible but excluded from air and dust, the device being simple and ornamental.

GAME APPARATUS. — Frederick Pries. Florence, Neb. The frame of this device holds a vertical tube, and a swinging car is pivoted to the frame in line with the tube, the car having a central bottom perforation, and balls being dropped down the tube into numbered cells of the car.

BELL CORD ATTACHMENT. — This invention has been patented by Mr. Wallace Tiler, Chicago, Ill. It is designed to provide a simple and convenient means for the speedy attachment of a bell cord by its ends to coupling sections, so that the cord will be held sufficiently secure for legitimate use, but which will permit of the removal of the cord ends from being also guide pulleys and a flexible connection pass- | the coupling when the cord is subjected to an abnormal

Accordion.—In accordions, as heretofore constructed, the tremolo device was actuated by the performer, who manipulated with one or more of Goodland, Kansas. This is a train order holder in his fingers a separate mechanism, called a tremolo stop, which orders written upon manifold paper may be | connected with the fluttering valve of the air duct, and to do this during the execution of a piece of music, the playing had to be interrupted to enable the performer to set the tremolo. Mr. John F. Stratton, of Brooklyn, N. Y., has patented a device which avoids this interruption and enables the performer to keep on playing without stopping to set the tremological

> STOVE GRATE. - Charles L. Beers, Scranton, Pa. This invention provides for the ready removal of the grate sections from their bearings, with side guards on the water front and a supplemental or false back plate, whereby different kinds of grates can be used in the same bearings or supports, and whereby shape of the garment through its own weight when sus also the several parts of the grate are interchangeable.

CRATE. - Charles P. Ward, Guilford, Ind. A sectional crate, to be utilized for packing berries and other small fruits, is provided by this in vention, which covers a simple, durable and economical device for locking the sections of the crate to place, while utilizing portions of the locking device as handles for the sections.

MEAT TENDERER. - Edson J. Severance, Morrison, 111. This is a device for numerously puncturing the meat without bruising it, being a comnact and neat implement designed to cut the substance and intimately subdivide its fiber with teeth which may be readily taken apart for cleaning and quickly restored to a working condition.

REMEDY FOR ASTHMA. - Charles Iselin and Daniel Callahan, Riverside, Cal. This is a composition of matter to be used as a medicine before breakfast and before going to bed, and includes brandy honey, olive oil, and other ingredients, united and taken

ATOMIZER. - Robert W. Coffee, Bedford City, Va. This is a device designed to thoroughly atomize water by the use of steam, and adapted for use as an ordinary hand hose, whereby the vapor may be directed to any suitable point in a compartment in which it is used, being particularly adapted for use with tobacco, where heavy steam is to be discharged, freed as much as possible from its heating quality.

BASE BALL SCORE. - Warren A Browne, Hempstead, N. Y. Combined with a pole is a series of variously colored sectional score blocks capable of surrounding and sliding on the pole, a sliding sleeve supporting the blocks, with mechanism for raising and lowering the sleeve, whereby the score may be kept and announced to all witnessing the game, while the device is so simple as to be understood by all.

SHUTTER WORKER. — Edwin T. Keener, Moberly, Mo. This is a device for opening and closing window shutters or blinds from within the building without raising the windows, and is designed to be simple and economical, opening the shutters abutment, a plunger being adapted to reciprocate in the partly or entirely as may be desired, and holding them at any wished-for point of adjustment.

WHIFFLETREE HOOK. - Charles W. Blackburn, Tombstone, Arizona. This is a device comprising a frame with a hook at one end, in which a keeper plate is pivoted, having at one end a tongue to close the hook of the frame, the draught holding the South Dakota. This is a device in which the sets of hook and tongue with the latter closed, while by slack-

> FOUR-WHEELED VEHICLE.—Alfred W. Johnson, New Brunswick, N. J. This invention covers the attachment of the body to the running gear in a way designed to avoid side lurch, thus improving the vehicle in point of steadiness and making it easier of draught, a horizontal rocker being employed combined with bolts attached to the running gear at each side of the center line of the vehicle.

BANJO.—Charles J. Kelly, Providence, R. I. In this instrument the tail piece has a front cross bar provided with knobs, whereby the ends of the locking itself when the suspender tip is applied and strings may be secured and held by friction without ejecting the tip on the movement of the lock lever of tying knots, making a simple and positive means of attaching the head, strings and tail piece, in a manner designed to produce a better tone than when the parts are attached in the usual way.

JAIL BUCKET. - Donald McDonald, Louisville, Ky. This is a device designed to present a cleanly and sanitary arrangement, the bucket having a safely withstand diagonal or vertical strains tending to tight cover with a hollow arm or spout which enters a ventilating pipe which at the same time affords a strong support for the bucket.

LANTERN. — Samuel B. Field, Plainfield, N. J. This is a lantern especially adapted for signaling purposes, and is so made that the bearer may easily and at will display a white or green or other colored light, the lantern having slideways with different telescopic transparent colored shades surrounding the burner, and means for conveniently moving the

FOUNTAIN PAINT CARRIER.—William C. Shaw, White Plains, Md. The fountain or reservoir of this device is adapted to be worn on the body of the aser, and connected therewith is a dip can or cup in which a brush may be freely inserted, the paint being supplied as desired, and the whole device being designed to facilitate any kind of painting in exposed situations.

VENDING APPARATUS.—A dolphus Mayer, Brooklyn, N. Y., and Max Mueller, New York City. This is a coin-operated machine to deliver tickets or stamps, and is designed to provide a positive uniform feed, and for the printing of the time of delivery upon the ticket, with better safeguards against fraud than have heretofore been possible.

MEASURING GAUGE. - Edward G. Angell and Lorenzo F. Picard, Juniata, Neb. Com bined with a plate adapted to be secured to a faucet and a tube pendent therefrom is a sliding tube carrying a valve, levers acting on the tube, and means for locking them in position to hold the valve closed, the device being especially designed to facilitate the drawing off and measuring of thick liquids, as varnish, oils, etc.

SAFETY FASTENER FOR WATCH CHAINS, ETC.-James A. Armentrout, Staunton, Va. In this device a ring or eye is provided in connection with a pivoted plate having prongs movable through the back plate of a case and adapted to engage the fabric or material of which the pocket is composed, the whole device being readily attached or detached.

TROUSERS STRETCHER. - Arnold Wyman, Brooklyn, N. Y. This device consists of two pivotally connected members having shoes at the outer ends and a stop on the lower edge of one member in the path of the lower edge of the opposite member, in connection with a suspension device, to preserve the pended by the device, either with or without an attached weight.

NECKSCARF. — George L. Dale, New York City. Combined with a corrugated scarf tip is a stop on the shield through which the tip is to pass, the members of the tip being compressed in passing through the stop and then expanding and locking the tip in

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BUILDING EDITION

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AND EACH BEARING THAT DATE.

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