## RECENTLY PATENTED INVENTIONS. Agricultural Implements.

STRAW-STACKER.-HERMAN STEIN, Georgetown Minn. This straw-stacker can be applied to any thrashing-machine, and is so constructed that a current of air drawn from the outside of the stacker will be directed beneath the falling chaff and straw, thus facilitating the passage of the chaff and straw through the flue connected with the receiving-chamber and out through a chute connected with the flue. The chute is adjustable laterally or vertically, and is provided with a hood which directs the straw and chaff.

MACHINE FOR CLEANING GRAIN. - NORTON BROOKER, Agency, Mo. 'The machine is of the ro-tary type. and is adapted to discharge the chaff and bulky refuse from the tail end and to deliver the smaller seed and dust to a chute at the exterior of the reel into which the grain is fed. the good grain being retained in the reel and delivered automatically to outlets from whence it may be conducted to any desired point. Particular attention has been paid to the mechanical construction of the apparatus, so that its operation will be accompanied by no excessive friction.

#### Electrical Apparatus.

AUTOMATIC CODE TELEGRAPH FIRE-ALARM APPARATUS.-RICHARD PEARSON, London, England. This invention is essentially concerned with the testing of the circuits upon which automatic fire-alarm instruments are installed. the purpose being to enable the whole of the alarm mechanisms upon the same circuit to be separately tested by momentarily closing a testing-circuit at the fire-engine station, so that personal inspection of the several installations is unnecessary. The test may be repeated at such frequent intervals as to insure immediate detection of any injury to the circuits or instruments.

## Mechanical Devices.

LOG-SAWING MACHINE.-SAMUEL W. BUTTER-FIELD. Three Rivers, Canada. The machine is provided with a feeding device for the log and with a lever mounted to swing up and down under the control of the operator. In the free end of the lever a circular s journaled and adapted to pass transversely of the feeding devices. The end of the log abuts against a movable stop and is actuated from the lever. A movable block-kicker is normally held in a locked position and out of engagement with the front end of the log the kicker being automatically unlocked by the lever at about the time the saw has passed through the log and the stop has been withdrawn to allow the kicker to move the cut-off block from the feeding device.

CYCLOMETER.-JAMES E. BEAN, Fond du Lac Wis. The cyclometer is arranged to indicate simultaneously the number of miles traveled during the season and the number of miles of the individual trips made at the time. The mechanism comprises independent sets of numeral-wheels and a star-wheel adapted to be driven from the bicycle-wheel. The cyclometer is provided with a shaft carrying two pinions, each geared with a set of numeral-wheels. A worm engages one of the gear-wheels of the shaft and is driven by gearing from the star-wheel.

AUTOMATIC DEAD-LATCH LOCK .-- W.G. RAINES, 148 West 125th Street, Manhattan, New York city. In dead-latch locks it is customary to provide a detent which drops behind some portion of the bolt to prevent its withdrawal after the door is closed, except by a key. This invention provides a peculiar construction and arrangement of the parts of a lock of this kind, which may be set into operative engagement by the departing person. thus rendering the locking-detent automatic, locking the latch as each person goes out, and yet permitting the door to be opened with a latch-key.

#### Railway-Appliances.

RAIL-JOINT.-GERMAN L. BAXTER, Lexington, Ky. It is the object of this invention to provide means for supporting the joint at the ends of the rails and to bind rails together in such a manner that the joint cannot be displaced, thus preventing the shock due to dropping of the joints. The rail-joint used is of the suspension kind and is provided with a cross-har which engages the nnder sides of the rails.

## Miscellaneous Inventions.

THILL-COUPLING. - GEORGE W. DAVIS, Gilsum, N. H. The inventor has so constructed his thill-coup ling that when the draft-animal is removed, the thills will be automatically carried up to a position of rest. The coupling permits the thills or shafts to be readily removed and replaced whenever necessary, and possesses the merit of being noiseless under all conditions of travel.

ACETYLENE-GAS GENERATOR.-ARTHUR RIEF-FEL, Boulvard Exelmans 42. Paris, France. In this apparatus for the automatic production of acetylene gas, the column of feed-water for the gas-generating part of the apparatus is kept very much at the same height above the generator, and the water is fed intermittently and automatically to the gas-generator, according to the consumption, by means of a device which relieves the bell-shaped top of the gasometer when it descends and weights it when ascending, so that the top exercises on the gas a pressure which is inferior or superior to the load in the feed-water column. BOTTLE-CLOSURE. - WILLIAM D. KILBOURN, Pueblo, Colo. The closure is designed particularly for bottles containing liquid under pressure, and comprises a hollow expansible stopper in which a plunger moves. The plunger is connected with an anchoring-piece from which arms extend having teeth and engaged by a clamp. ing-ring. The closure is tightly held in place and her metically seals the neck. BLIND-FASTENER.-EDWARD HUGHES, New Bedford, Mass. This fastener is designed to be attached to a building so that the latch carried by the shutter will automatically effect a locking engagement therewith. The fastener will automatically exert tension between itself and the blind, when the blind is to be locked to a wall, thus preventing accidental closure. The fastener is provided with more than one keeper for the blind latch, thus enabling it to be used even should one keeper break.

LOCKING DEVICE .- HOSEA M. GODFREY, Lovell, Wyo. The present invention provides a locking device for use on singletrees, doubletrees, cockeyes, cranks and the like. The locking device has two parts, one of which is provided with a shank having an inner and outer lug, and the other of which is provided with a bore grooved to permit the passage of the shank. One face of the bored part has a shoulder for the inner lug to rest against in order to limit the turning of the shank in the bore.

HAND-SHIELD .- MELVILLE F. BARTH, Indianapolis, Ind. This hand-shield is designed to protect the wearer's hauds while engaged in outdoor work or amu ments, particularly in riding the bicycle. The shield may be manufactured of thin leather, silk fabric, canvas, or any other suitable material, and to suit the demands of the trade graded sizes are to be furnished to fit upon the hands of men, youths, or women

GARMENT-SUPPORTER.-WILLIAM W. CARDER, Oldtown, Md. The supporter is especially adapted for hanging trousers and may be applied with equally good results to thick and to thin garments. The device is light and strong, is so constructed that the weight of the garment when the supporter is hung up will tend to increase the clamping action of the jaws of the device. The hauger will remain in a fully open position until intentionally closed.

UMBRELLA.-ELISA A. and EDWARD DE BIAGGI, Manhattan, New York city. The invention provides a means for preventing umbrellas from turning inside out in high winds and from being injured by contact with other objects while in use. The umbrella has a handle or stem on which a crown is rotatable provided with longitudinal slots in its upper portion. A cover is fastened to the crown; and upon the fastening means a washer rests having inward projections engaging the slots of the crown. A bell surrounds the slotted upper portion of the crown, engages the washer, and is prevented from moving longitudinally.

AMUSEMENT DEVICE.-GEORGE C. TILYOU and JEAN M. A. LACOMME, Coney Island, Brooklyn, New York city. The object of the invention is to attract and amuse people by the novelty of the sensations produced by the use of the device. The apparatus consists essentially of two concentric cylinders, the inner one being provided with seats and pivotally supported upon a shaft, so that it will remain in approximately the same position at all times, the center of gravity being below the shaft and the outer cylinder being mounted to turn about the inner cylinder. The device is provided with mechanism by which the seats within the inner cylinder are given vertical reciprocations.

MANUFACTURE OF MANTLES OR INCANDES-CING ELEMENTS FOR GAS-BURNERS. - OTTO B. HEINZE, Baltimore, Md. The inventor has devised a process whereby incandescent martles are practically rendered indestructible without impairing their illumi. nating quality, are rendered flexible and firm after ignition, and are prevented from shrinking when in use. The inventor thinly coats the surface of the refractory material of which the mantle or element is composed with a vitreous body and heats the mantle or element to fuse the coating with the refractory porous mass of the mantle or element.

RETOUCHING-FRAME. - JOHN N. CHOATE, Carlisle, Pa. A novel effect can be produced in retouching negatives by means of vibrations imparted to the negative itself instead of to the retouching-pencil or the hand of the retoucher. The present invention provides an apparatus for this purpose, comprising a frame and a clamp adapted to support the negative out of contact with the adjacent portions of the frame. A hammer is made to strike the clamp and thus impart vibration thereto and to the negative, independently of the frame.

HUNTING-KNIFE.-WILLIAM J. SHELTON, Columbia, Tex. It is the object of this invention to provide a knife with which a wire-cutter is connected, so as to render the knife useful in cutting through wire fences. The blade is formed with a recess in which a lever is pivoted formed with corresponding recesses. To the lever and blade, cutting-disks are secured having cuttingrecesses. In cutting wire, the knife is placed with the cutting-edges of the disks embracing the wire; and the lever is pressed toward the handle of the knife to cut the wire. When one set of cutting edges becomes dull, another set may he brought into register with the prope recesses.

#### Designs.

DRAINER .- COURTLAND HAYNES, Hawesville, Ky. The leading feature of the design is found in the espe cial shape of the drainer, in which the bottom is in the same horizontal plane throughout and the back is a straight line from side to side. The sides are parallel and straight from the back to a point near the front, from which point the sides gradually converge and meet a straight line defining the front of the drainer.

PLATE.-AUGUST A. GRAMETBAUR, Manhattan, New

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price. Minerals sent for examination should be distinctly marked or labeled.

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York city. The plate has a central panel containing picture of Admiral Dewey. Surrounding the central panel are portraits of the commanders of the Manila squadron. The outer border of the plate contains pictures of the various vessels of Dewey's squadron.

LAP-ROBE. - MAGGIE B. SHOWEN, Macon, Mo. The principal characteristic of this design is found in widened portions flaring outwardly.

SPOON. - WILLIAM A. RAYMENT, Taunton, Mass Two designs for a spoon have been issued to this inventor. In the onc design the handle is bent or bowed back and under and has its extremity lapped against the inner side of the handle. near the juncture of the latter with the bowl. In the other design the handle is curved to return upon itself, with its free end lying below the upper portion of the handle and detached therefrom and from the bowl of the spoon.

SPOON. - WILLIAM MCAUSLAND, Taunton, Mass. The spoon is characterized by a handle returned or bent down, the portion below the bend being curved reversely.

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