

RECENTLY PATENTED INVENTIONS.

Engineering Improvements.

STEAM-GENERATOR.—ROGER DAMONTE, deceased, JOSEPH A. R. DAMONTE, Administrator, 7007 Magazine Street, New Orleans, La. The steam-generator is of the type having one or more coils or convolutions, through which water circulates from a standpipe. The novel feature of the present improvement is the provision of a rotary valve for controlling the escape of steam from the several pipe coils, whereby the latter can be conveniently cleaned whenever required.

Special Implements and Devices.

REIN - HOLDER.—CARL P. UHLMANN, Quincy, Ill. The rein-holder is characterized by its simplicity of structure and by the ease with which it can be attached to a dashboard or any other convenient part of a buggy. The reins are imprisoned between two cylinders which are eccentrically pivoted on a plate, one end of which is bent over to form a guard. Disposed within the guard and connecting the cylinders is a spring, which expands and permits the reins to be easily inserted between the cylinders, and the elasticity of which holds the reins clamped with slight pressure.

TURPENTINE HACK AND SHAVE.—JOHN P. COUNCIL, Jr., Waukegan, N. C. In removing the crude turpentine gum from pine trees, a peculiar tool called a "hack" is employed. The present invention provides a new form of hack which is adapted for adjustment of its cutting blade. The blade can be projected more or less from the handle and held at any desired inclination.

FORCEPS.—DAVID F. BOWERSOX, Aaronsburg, Pa. The forceps are designed especially for veterinary use in performing operations in the throat of an animal. The construction of the instrument is such that operations can be performed without in any way endangering the animal by laceration.

Mechanical Devices.

HEMMING AND HEMSTITCH ATTACHMENT.—JOSEPH W. SIMONS, Portchester, N. Y. Heretofore it has been necessary to crease and baste the hem down in order to bring the hem to a line with the drawn threads and to have the ends even, when the operation of hemming is accomplished. The improved device dispenses with the operation of creasing and basting and produces more perfect work. Any resistance or friction on the material is avoided. In circular articles (pillow-cases and skirts) the fold-gage is turned from within the fold or hem. The operator can start from any point on the garment and continue around to a point about the width of the hem from the starting point.

CURTAIN-SHUTTER.—WILLIAM F. FOLMER, Manhattan, New York city. Mr. Folmer has invented an improved curtain-shutter which can be set for time or for instantaneous work, and which is arranged to give a continuous or time-varying exposure of the plate, according to the intensity of the light. Thus for a land and sky subject the darker land foreground is subjected longer to the actinic action of the rays of light than the sky portion; and the entire exposure is continuous and uniformly graduated to insure an even or gradual exposure of the plate. The characteristic feature of the shutter is an exposure opening arranged to be gradually increased in size while moving over the field of exposure.

RAZOR-STROPPING MACHINE.—ALBERT L. SILBERSTEIN, Manhattan, New York city. The inventor has devised a razor-stropping machine which will readily accommodate handled-razors having blades of different sizes. The razor can be conveniently placed in position in the holder and securely held. The machine gives the blade the desired inclined position while drawing it over the strop in either direction, so as to present the entire cutting edge of the blade to the strop at each forward and backward movement.

SPOKE-TENONING AND CUT-OFF MACHINE.—DEFIANCE MACHINE WORKS, Defiance, Ohio. Mr. Charles Seymour has invented for the Defiance Machine Works a spoke-tenoning and cut-off machine which is designed for builders of heavy wagons. The machine is arranged to cut off the tread ends of the spokes to equal length, to reduce a wheel to the proper diameter, to cut the tenons of any desired size on the ends of the cut-off spoke and to finish the ends completely to receive the felloes.

AUTOMATIC WHEEL-RIM-FINISHING MACHINE.—DEFIANCE MACHINE WORKS, Defiance, Ohio. Like the spoke-tenoning and cut-off machine described in the foregoing notice, the present machine, which is also an invention of Mr. Seymour's, is designed to be used by builders of wagons and makers of wheels. By means of this machine the tread of the wheel is very precisely dressed, and accurately finished relatively to the hub. The sides of the rim can be planed either straight or to a bevel, leaving the rim perfectly smooth so as to require no hand labor.

CUTTER-HEAD.—DEFIANCE MACHINE WORKS, Defiance, Ohio. In connection with the previously-mentioned spoke-tenoning machine, Mr. Seymour found it necessary to invent a novel cutter-head for the par-

ticular work which was to be performed by that machine. The body of the cutter-head for the particular work which was to be performed by the machine. The body of the cutter-head has radial guideways in which the cutter-carriers slide. On the body a cam is mounted to turn, having on its face a spiral cam engaging teeth on the carriers. Bolts are passed through the body to hold the cutter-carriers rigidly together. The operator can move the carriers and consequently the cutters outward or inward to cut miters of the desired thickness.

APPARATUS FOR FLOATING VESSELS.—ALBERT S. DEBOSE, Cuero, Tex. The invention relates to a means for assisting in floating vessels that have run aground; and it consists in certain novel mechanism for raising or partly raising the vessel, combined with means for hauling the vessel aft when it has been so raised. Beams provided with racks are adapted to work vertically on the side of a vessel, which beams can be raised and lowered as well as guided vertically. A hauling rope is connected with the foot of each beam. A pulley is attached to the vessel's hull at one end, the rope extending back over the deck. By adjusting the various beams and forcing them downward the vessel will be wholly or partly raised; and when this has been done, by hauling on the ropes the beams will be tilted and the vessel moved astern or forward, as the case may be.

Miscellaneous Inventions.

SURVEYOR'S SOLAR COMPASS.—JOSEPH B. PORTER, Berryville, Ark. The inventor has sought to devise a surveyor's compass which will not be subject to the defects of the magnetic needle. Two regular and systematic changes (secular and diurnal) must always be calculated and allowed for in the use of the magnetic needle. These separate each survey from its predecessor over the same lines, necessitating a random or trial line to re-establish the variation of the needle. By reason of local magnetic ore and electrical disturbances, the magnetic needle is apt to be erratic, and, therefore, untrustworthy at times. The present invention is designed to overcome these difficulties and to that end provides a compass without a magnetic needle. The north and south positions are established through observations taken from the sun in its relation to the earth.

HAND-TRUCK.—HENRY DEERING, Minnesota City, Minn. The hand-truck is of the kind used for the transfer of goods and bagged material from point to point. Novel features of construction are provided by which the truck is adapted for the reception and movement of large loads and their discharge in a proper manner. An adjustment of the parts is permitted to adapt the truck for ordinary use.

CARBONATING APPARATUS.—EDWIN C. WORNIS, Manhattan, New York city. The invention relates to an apparatus for carbonating or aerating water in which a container is provided for the water. In this container a chamber is situated through which the water and gas are successively passed, the chamber containing pebbles or some finely-divided substance to facilitate the aeration of the water.

FIRE-EXTINGUISHER.—FERNANDO YOST, Rutherford, N. J. A reservoir or tank is provided of sufficient size to enable it to be conveniently carried to a fire. The reservoir is filled with a liquid, which may be either plain water or a chemical solution. The device is provided with a pump and short hose by which the liquid is thrown to the point desired.

FILE-CLEANER.—GEORGE W. SCHELLENBACH, Joplin, Mo. The invention relates to a structure for cleaning files—that is to say, for removing from between the ridges of the file such matter as may accumulate therein. Mr. Schellenbach has devised an arrangement of alternating layers of open-work metal material and cloth, such parts being secured together and worked edgewise against the file.

FILE-HANDLE AND GUIDE.—TIMOTHY W. MILLER, Phoenix, Ariz. This file-handle has a novel device which guides the reciprocating movement of an attached file used to sharpen the teeth of saws, whereby any desired degree of bevel can be given to the cutting edges of the saw-teeth, and a suitable rake or forward pitch to the teeth.

NIPPLE.—FERDINAND MUELHENS, Cologne, Germany. Ordinary rubber nipples for milk bottles are in a very short time squeezed flat, and must be released by the child to permit the rubber to re-expand and the milk to flow. This operation tires the infant and chills the milk by reason of the entrance of atmospheric air. Solid rubber nipples would not be so objectionable, but cannot, on the other hand, be readily or thoroughly cleaned. The present invention relates to an insertion-piece for the usual rubber nipple which has for its object to obviate all drawbacks. Only upon the sucking power of the child is no longer sufficient to take up the liquid contained in the bottle, is the taking of food interrupted.

SAD-IRONS.—MICHAEL JOYCE, Salt Lake City, Utah. The handle can be attached to or detached from the iron at will, so that one handle can serve for a number of irons. Two of these sad-irons have been invented by Mr. Joyce. In the first the base has a longitudinal groove, at each side of which a recess is formed having an undercut por-

tion. The groove has a cavity in its bottom. The handle has a bar capable of lying in the groove of the body; and the bar has transverse projections adapted to enter the undercut portions of the recesses. A spring-pressed dog is mounted on the bar and has its nose adapted to project through the bar to engage in the cavity in the base. In the second sad-iron the handle has two parallel bars arranged one above the other; the lower bar has projections lying in the undercut walls in the groove in the body and has also a T-shaped groove at one end of which an opening is located. The dog is set in the groove and conforms with the shape, the transverse part or T-shaped head of the dog forming a pivot and the bill of the dog at the opposite end extending through the opening in the lower bar, whereby to engage the body.

RAILROAD OR STEAMBOAT TICKET.—GEORGE B. EDGAR, Jr., and BENJAMIN F. DAVIS, Winfield, Kans. With this ticket an agent's stub contract and coupons are combined, forming a portion of the ticket, the ticket being in the form of a double sheet. This ticket when sold cannot be resold through a "scalper," or transferred to another person without the conductor or person collecting the tickets being enabled to detect the transfer.

CARD-HOLDER AND MEMORANDUM-BOOK.—DAVID T. HELPRIN, Manhattan, New York city. The object of the invention is to provide a card-holder and memorandum-book arranged conveniently to hold visiting cards, business cards, and the like, and to provide detachable leaves for noting memoranda. When the memorandum-book has been used up, a new one can be substituted, and the old leaves torn out.

BAND AND SHOE FOR TANKS.—JAMES HATTELY, Seattle, Wash. Mr. Hately has devised a contractible band or hoop to hold the staves of a tank together. The band is strengthened where one of its ends engages with the abutting shoe therefor, so as to render the band very strong and durable at a point which is weak in bands of ordinary construction.

DISPLAY-RACK.—GUIDO HECKER, Manhattan, New York city. The rack is to be used for display-bottles containing extracts, medicines or the like, candies, wax, etc. The rack is light, yet strong and serviceable, comparatively cheap to manufacture and can be used as an advertising medium so as both to display and advertise the goods, thereby obviating the use of extra banners and signs.

EXHIBITOR FOR PICTURE-FRAME MOLDINGS.—CARL A. ANDERSON and GEORGE D. PALM, Worthington, Minn. By means of this improved apparatus one or more picture-frame moldings can be conveniently examined and the effective frames made of different moldings when seen with the same picture can be quickly determined. A distinguishing feature of the apparatus is an arrangement of mirrors vertically at a horizontal angle to one another and the provision of supports on the mirrors for the frame moldings to be exhibited. The mirrors revolve horizontally and receive or admit a picture beneath them so that the picture is reflected in the mirror with a particular molding.

SHADE-BRACKET.—WILBERT O. PERSON, Marinette, Wis. The opening for the roller-stud is so constructed as to permit the ready insertion and removal of the roller-stud when the bracket is tilted or slightly turned on its pivot. The bracket is pivotally mounted and has its opening for the roller-stud formed on the face next to the roller with an inclined surface leading to the stud opening, and arranged to guide the stud into the opening and to furnish a path through which the stud may be removed when the bracket is tilted.

Designs.

DISPLAY-BOX.—TERENCE F. CURLEY, 12 and 14 Warren Street, Manhattan, New York City. The display-box has as its essential feature a concave top which is inclined. In this concave top a pen-knife or similar article is to be laid for the purpose of advantageous display.

HAMMER.—HARRY McDERMOTT, Chicago, Ill. The outline of the body and the claw is continuous and unbroken. This is secured by extending the front edge of the body in an unbroken line straight for a portion of its length from the lower end of the head to a point where it crosses the line of the head-shank, and then curving rearwardly. The claw is a distinctly novel formation, having a greater length and sharper inclination than the ordinary hammer. By means of this novel claw nails can be readily removed.

NOTE.—Copies of any of these patents will be furnished by Munn & Co. for ten cents each. Please state the name of the patentee, title of the invention, and date of this paper.

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