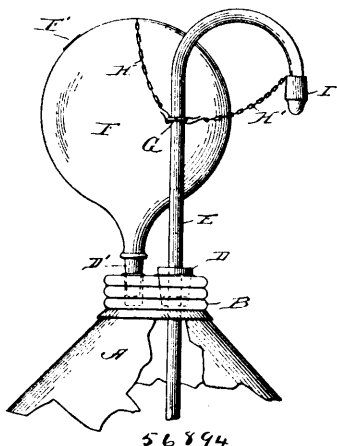


drawing the soluble chlorides and treating them with copper and then scrap iron to precipitate the metals of the chlorides, substantially as and for the purpose specified. 4th. The process of treating bluestone or other sulphurized ores, which consists in subjecting it to the action of perchloride of iron, whereby soluble chlorides of copper, lead and antimony are produced, then in settling the solutions in suitable tanks, withdrawing the soluble chlorides and treating them with scrap iron to precipitate the metals of the chlorides, then in blowing heated air through the ferrous chloride formed in the solution, resulting in the formation of perchloride of iron in solution and the precipitation of hydrated ferric oxide, substantially as and for the purpose specified. 5th. The process of treating bluestone or other sulphurized ores, which consists in subjecting it to the action of perchloride of iron, whereby soluble chlorides of copper, lead and antimony are produced, then in settling the solutions in suitable tanks to precipitate the chloride of lead and the insoluble gold, silver, sulphur and mineral gauze, then in drying the residues and heating them with a flux composed of suitable compounds of lead and calcium and with fluor-spar, whereby the latter unites with the silica and the lead forms a regulus of lead, gold, silver and antimony, substantially as and for the purpose specified.

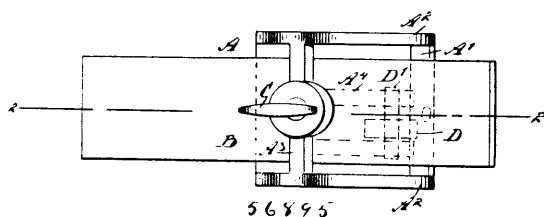
No. 56,894. Apparatus for Transferring Liquids.
(Appareil pour transférer les liquides.)



Thomas M. Richardson, Oklahoma, Territory of Oklahoma, U.S.A.,
4th August, 1897; 6 years. (Filed 8th May, 1897.)

Claim.—1st. The combination with a closure, of an air forcing device mounted thereon and arranged to force air into a channel leading through the closure to the interior of the vessel to which it may be applied, a tube bent to U-shape, having one arm passed through the closure into said interior, and arranged for longitudinal adjustment in the closure, a cap for closing the outer end of said tube, a ring sliding upon said arm above the closure, and flexible connections attaching both said air forcing device and the cap to said ring. 2nd. The combination with a vessel having a screw threaded neck of a threaded cap for closing said neck, provided with two conical openings leading to the interior of the vessel, two perforated stoppers removably fitted in said openings respectively, a tube bent to U-shape and having an arm sliding in the perforation in one of the stoppers, a ring sliding upon said arm above the stopper, an air forcing device mounted upon the cap and having a delivery tube fitting the perforation in the other stopper, a cap for closing the other arm of the U-shaped tube, and flexible connections attaching both said air forcing device and said cap to the ring, substantially as and for the purpose set forth.

No. 56,895. Tool-Holder. (Porte-outil.)

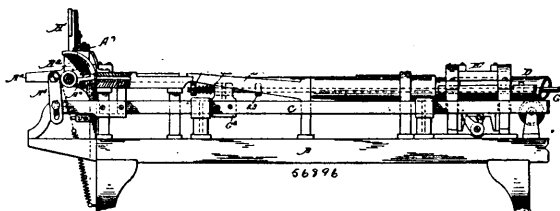


George Salot, Dubuque, Iowa, U.S.A., 4th August, 1897; 6 years.
(Filed 10th May, 1897.)

Claim.—A tool-holder comprising a casing adapted to receive the tool to be sharpened, means for securing the tool in place in the casing, a wheel journaled in depending lugs on said casing, and a

gauge for predetermining the bevel to be formed on the tool, the said gauge being provided with a rear arm having a forked end adapted to be hooked on the shaft of said wheel, substantially as shown and described.

No. 56,896. Machine for Making Cans of Angular form. (*Machine pour la fabrication de boîtes de ferblanc.*)



Robert Deniston Hume, Gold Beach, Oregon, U.S.A., 5th August, 1897; 6 years. (Filed 13th May, 1897.)

Claim.—1st. In a can making machine, the combination with a former or horn of angular cross-section of carriers for propelling can-bodies successively along said horn, and a movable shaping ring surrounding the horn, and of a cross-section corresponding to that of the horn, substantially as described. 2nd. In a can making machine, the combination, a blank feeding mechanism, a tapering former, for bending blanks into can-bodies of tubular form, a prolongation of the former of angular cross-section for shaping such can-bodies into angular cross-section, and carriers for propelling the can-bodies successively along the said former, substantially as set forth. 3rd. In a can making machine, and in combination, a blank feeding mechanism, a tapering former or horn, and a surrounding sheath for bending the blanks into a tubular form, mechanism for side seaming the can-body, a prolongation of the horn of angular cross-section, a movable shaping ring surrounding said angular part of the horn, and carriers for moving the cans in succession upon the horn, substantially as set forth. 4th. In a can making machine and in combination, a stationary horn of angular cross-section, a blank feeding mechanism, reciprocating carriers for moving said blanks along said horn successively and intermittently, a shaping ring fitting upon and around the horn, and a reciprocating side bar connected to said shaping ring, substantially as described. 5th. In a can making machine, the combination with the horn or former of the reciprocating side bar, the movable shaping ring surrounding said former and connected to the side bar, and carriers secured to and moving with said shaping ring, substantially as described. 6th. In a can making machine, the combination with a stationary and tapering horn or former, having spiral grooves, of carriers reciprocating in such grooves, such carriers being composed of two or more sections swivelled together, substantially as and for the purpose set forth. 7th. In a can making machine, the combination with a stationary and tapering horn or former, having spiral grooves, of recessed carrier blocks, spring latches in said recesses, and rods or links swivelled to said blocks, whereby said blocks and latches are self adjusting in said grooves, substantially as and for the purpose set forth. 8th. In a can making machine, the combination with a former or horn having its top, bottom and sides formed on inwardly curved lines in cross-section, of a tapering ring having an inner edge of corresponding cross-sectional curvature, substantially as and for the purpose set forth. 9th. In a can making machine, the combination with a former or horn having its top, bottom and sides formed on inwardly curved lines in cross section, of a shaping ring surrounding said horn and having an inner edge of corresponding curvature, and a reciprocating side bar connected to said shaping ring, substantially as described. 10th. In a can making machine, a former or horn having a flat rear upper surface merging first into a tapered portion, thence into cylindrical cross section and thence into an angular cross section, in combination with a sheath inclosing the tapered portion, a separate shaping ring surrounding the angular portion and carriers for impelling flat blanks and can-bodies along such horn or former, substantially as set forth. 11th. In combination with the former or horn having at one end a sliding extension, a reciprocating side bar, rod connected loosely to said side bar, and an adjustable stop on said rod for regulating the length of the stroke derived from said side bar, substantially as described. 12th. A mechanism for heading cans comprising an open ended heading tube adapted to receive and hold a can-body, and can-heads in line, in combination with reciprocating heading rams and connections for operating such rams successively, whereby the can-heads are placed successively upon the ends of the can-body, substantially as set forth. 13th. In combination with a heading tube, having means for holding a can-body and two can-heads or covers in line, two heading rams, adapted to act independently and successively upon the respective heads or covers, substantially as described. 14th. In a can making machine, and in combination, a heading chamber or tube, a reciprocating plunger for placing can-bodies within such tube and for heading one end of such can-bodies, can-head feeding passages into said heading chamber for placing can-heads in position in line with said can-bodies, a heading ram for heading the other end of said can-bodies,