

**No. 42,544. Fastener for Hoops and Bands.**

(*Agrafe pour les cercles et bandes.*)

Charles Sparks, Sacramento, California, U.S.A., 10th April, 1893; 6 years.

*Claim.*—1st. A hoop or band fastener and tightener, consisting of a shell having a socket and guide *a*, at one end, and having its opposite end provided with an opening *a'*, and wedge shaped slot, a screw in the shell having one end mounted in the socket and the other end formed with a key-seat entering the opening *a'*, and a nut on the screw having a foot *c*, provided with a wedge-shaped slot, substantially as described. 2nd. A hoop or band fastener and tightener, consisting of the hollow shell, having at one end a hole and a wedge-shaped slot, and at the other end a socket, the screw having a key-seat end and fitted to the shell with said end in the hole thereof and the other end in the socket, and the nut on the screw having a foot with a wedge shaped slot, substantially as herein described.

**No. 42,545. Oven.** (*Fourneau.*)

Horace Thorne, assignee of Charles Frederick Hubbard, both of Toronto, Ontario, Canada, 10th April, 1893; 6 years.

*Claim.*—1st. A chamber, having its two outer sides, back and top, lined with asbestos, mineral wool, or other suitable non-conductor, and within said lined sides an air space having an aperture through its top to communicate with an arched air space extending over the crown of said chamber, a smoke pipe or flue from the arched air space, a stove or furnace contained within said chamber and having a smoke pipe to communicate with the side air space or spaces, substantially as and for the purpose specified. 2nd. A chamber, having its two outer sides, back and top, lined with asbestos, mineral wool, or other suitable non-conductor, and within said lined sides an air space having an aperture through its top to communicate with an arched air space extending over the crown of the said chamber, a smoke pipe or flue extending from the arched air space, a stove or furnace contained within said chamber and having a smoke pipe to communicate with the side air space or spaces, an aperture with suitable damper between the side air space and chamber near the bottom of the latter, and an aperture with suitable damper between the chamber and exterior thereof, substantially as and for the purpose specified. 3rd. A chamber or oven, made of plates of sheet metal arranged as described, with a lining of asbestos between them and the corners of the outer sheets having a series of hinge-shaped eye plates connected to them and arranged so that the eye plates on one sheet shall interlock with the eye plates on the adjoining sheet, so that the same may be connected together by means of a bolt, substantially as and for the purpose specified. 4th. A chamber or oven, connected together, substantially as described, and having an air space above its crown formed between the arched or curved plates K, and L, and protected by an asbestos lining between the curved plate L, and plate M, substantially as and for the purpose specified. 5th. A chamber or oven, constructed substantially as described, and having corresponding plates O, at its front and back with curved ribs formed thereon to support the ends of the plates K, and L, and N, substantially as and for the purpose specified. 6th. A chamber or oven, having its sides formed by double walls filled with asbestos, said walls having a series of narrow plates extending from the outer to the inner wall to strengthen the same and form supports for the asbestos or other non-conducting lining, substantially as and for the purpose specified. 7th. A chamber or oven, constructed substantially as described, and having a front with a sunk portion S, in which the stove and ash doors are formed in combination with an outer door designed to enclose the said stove and ash doors, substantially as and for the purpose specified.

**No. 42,546. Detachable Heel for Boots and Shoes.**

(*Talon mobile pour chaussures.*)

Morris Wise, Smith Mead Weed and Henry Davis, all of New York, State of New York, U.S.A., 10th April, 1893; 6 years.

*Claim.*—1st. The combination with a removable heel, of independent removable staples C formed of flat pieces of sheet metal and provided with eyes at one end, a plate E struck up from sheet metal with a series of loop projections F corresponding in shape to the eyes in the staples, and a key passing through the loops and eyes, substantially as described. 2nd. The combination with a sole and a removable heel each having interlocking eyes of a key for engaging said eyes said sole having an interior or concealed channel or way located within the boot or shoe for the key, substantially as described. 3rd. The combination with a sole and a removable heel each having interlocking eyes of a key for engaging said eyes, said sole having an interior or concealed channel or way located within the boot or shoe for the key and a filling piece for said channel or way, substantially as described.

**No. 42,547. Draft Equalizer.** (*Régulateur du tirage.*)

James Thornton Huber, Berlin, assignee of Jacob Surarus, Township of Waterloo, both of Ontario, Canada, 10th April, 1893; 6 years.

*Claim.*—1st. In a carriage gear the combination of cross bar F, having slot H, rods D, bars C, and clips B, substantially as and for the purpose hereinbefore set forth.

**No. 42,548. Drinking Founts.** (*Fontaine.*)

Benjamin Fletcher, Toronto, Ontario, Canada, 10th April, 1893; 6 years.

*Claim.*—1st. In a drinking fount, the syrup well having a plunger or piston head adapted to reciprocate at the upper end of the well to compress the air beneath said piston and form a pneumatic cushion to expel the syrup at the bottom, substantially as shown and described. 2nd. A syrup well provided with a plunger or piston head having an air tight packing ring at its periphery and a hollow plunger or piston rod secured to its centre as an inlet for air, substantially as shown and described. 3rd. A syrup well provided with a syrup passage extending externally from the bottom to discharge downward at a distance above the top of the well, substantially as shown and described. 4th. A syrup well having an inclining bottom so that its lowest and highest edges are diametrically opposite, substantially as shown and described. 5th. In a syrup well, the combination of the external syrup passage extending from the bottom to discharge downward at a distance above the top of the well, and the outlet opening in the deepest side of said well and discharging into said syrup passage, substantially as shown and described. 6th. In a syrup well, the combination of the plunger or piston head having a packing ring as described and a hollow rod secured to its centre, and the lid fitted within the top of said well to guide said piston head and rod, substantially as shown and described. 7th. In a syrup well, the combination of the plunger or piston head having a packing ring as described, the hollow rod secured to the centre of said plunger, the lid in said well to guide the said hollow rod operating through it, and the spiral spring encircling said hollow rod, substantially as shown and described. 8th. In a syrup well, the combination of the inclined bottom, the outlet opening at the lowest side of said bottom, the external syrup passage extending from said outlet to discharge downward at a distance above the well, the plunger head having a packing ring thereon, the hollow rod secured to the centre of said plunger head the spiral spring encircling said hollow rod to reciprocate it after compression, the lid fitted within the upper end of said well, and the adjustable collar on said hollow rod, substantially as shown and described.

**No. 42,549. Valve.** (*Soupape.*)

The Consolidated Car Heating Company, assignee of James F. McElroy, all of Albany, New York, U.S.A., 10th April, 1893; 6 years.

*Claim.*—1st. A valve for a steam pipe provided with a valve chamber, a valve stem, a hollow cylinder secured to the valve stem below the disc, an opening in the valve casing to admit of the movement of the hollow cylinder therein, said opening communicating with the steam supply pipe, said hollow cylinder provided with cuneiform openings through the sides thereof, substantially as described and for the purpose set forth. 2nd. In a valve for a steam pipe, a valve stem, a valve disc secured thereto, a hollow cylinder at the end of the valve stem, a series of cuneiform openings in said hollow cylinder having their apex near the upper end thereof, substantially as described and for the purpose set forth.

**No. 42,550. Torch.** (*Torche.*)

The Bridgeport Brass Company, Bridgeport City, assignee of Frank Rhind, Meriden, Connecticut, all of U.S.A., 10th April, 1893; 6 years.

*Claim.*—1st. In a torch of the character described, a reservoir for holding the fuel in combination with an outwardly extending wick tube provided with a nipple, a wick filling said tube and extending into the reservoir, and the pressure relief tube having one end extending into the wick tube and terminating adjacent to the inner end of the nipple, and having its other end extending into the reservoir and terminating near the top of the latter. 2nd. In a torch, as described, a reservoir for holding the fuel, in combination with an outwardly extending wick tube, a nipple at the end of said tube, a wick fitting said tube closely and extending into the reservoir, and a pressure relief tube contained within the wick and extending backward into the reservoir, and then upward and terminating near the top of the reservoir, substantially as and for the purpose specified. 3rd. In a torch of the character described, the combination with the reservoir of the outwardly projecting wick tube provided with a nipple, the wick closely fitting said wick tube and terminating near the lower end of the nipple, and the tube 6 having its outer end contained within the wick, and terminating near the outer end thereof, and having its rear end opening into the reservoir near the top thereof, substantially as and for the purpose specified. 4th. In a torch as described, the combination, with the reservoir, of the outwardly extending wick tube provided with a nipple, of a wick closely fitting said tube and the tube contained within said wick, the outer end of said tube terminating in the wick near the base of the nipple, and the rear end of said tube extending downward through the wick into the reservoir, and then upward to the opening near the top of the latter, substantially as described. 5th. The combination, with the nipple, of a gas supply, a burner consisting of a body portion adapted to fit over the nipple, said burner provided with a flattened outer extremity whereby a broad flame is formed, provided also with an air entrance below the flattened portion, and with independent entrances for air in its flattened portion, substantially as described. 6th. In a burner as