

perforated top for the plant or flower stems to pass through, as herein described and for the purpose specified. 2nd. A portable holder for plants and flowers formed of flexible material impervious to water and having its top perforated with a number of openings, each opening having a flap with a wire or cord attached to it, as herein described and for the purpose specified. 3rd. A portable holder for plants and flowers formed of flexible material impervious to water and having its top perforated with a number of openings and a larger opening with a lid, or flap to close the same, integral with the material forming the top, as herein described and for the purpose specified.

No. 34,072. Marginal Index for Bibles.

(*Index marginal pour les bibles.*)

Byron Laing, Acton, Ont., 9th April, 1890; 5 years.

Claim.—1st. In a marginal index for bibles, the scallops C, having double parallel index E, stamped thereon, condensed to one-half, substantially as and for the purpose hereinbefore set forth. 2nd. In a marginal index for bibles, the scallops C, having double parallel index E, stamped thereon, condensed to one-half, in combination with a transparent facing D, placed in position and arranged substantially as and for the purpose hereinbefore set forth.

No. 34,073. Vehicle Spring. (*Ressort de voiture.*)

Hugh A. Stringer, London, Ont., 9th April, 1890; 5 years.

Claim.—1st. As a new article of manufacture, a torsional spring bar E, formed with an angular end E¹, substantially as and for the purpose set forth. 2nd. A torsional spring bar E, formed with an angular end E¹, in combination with a swinging link F, and the body C, substantially as and for the purpose set forth. 3rd. A torsional spring bar E, formed with an angular end E¹, and a returned end E², in combination with the bevelled or wedge shaped nut or washer H, and the strap brace G¹, in which a socket G, is formed, substantially as and for the purpose set forth. 4th. A torsional spring bar E, formed with an angular end E¹, and a returned end E², in combination with the swinging link F, bracket E³, body C, shaft or other suitable support A, socket bracket I, strap brace G¹, formed with a socket G, and the bevelled or wedge shaped nut or washer H, substantially as and for the purpose set forth. 5th. The body C, formed with hooked ends C¹, the strap braces G¹, formed with sockets G², the cross bar A¹, and the rubber cushion, R, substantially as and for the purpose set forth. 6th. As a new article of manufacture, a seat, or back of a seat, formed of coils of wire J, as set forth.

No. 34,074. Wheel-Barrow Wheel.

(*Roue de brouette.*)

Jean B. Sicotte, Ashland, Wis., U.S., 9th April, 1890; 5 years.

Claim.—A wheel-barrow wheel consisting of a wrought metal tire having holes drilled for the spokes, the spokes, the alternate ends of which are bent at right angles to the plane of the wheel, in opposite directions and welded together forming the axle on which are formed collars and journals, the other ends of the spokes are secured in the holes of the said tire, substantially as described.

No. 34,075. Electro-Magnetic Temperature Regulator. (*Régulateur électro-magnétique de la température.*)

John V. Stout, Easton, Penn., U.S., 9th April, 1890; 5 years.

Claim.—1st. In an apparatus for actuating valves, dampers and the like, the combination of a main lever, a locking lever arranged to move into and out of the path of the main lever to lock or release the same, armatures carried by said levers, and electro-magnets arranged within attracting distance of the armatures and serving to move the levers, substantially as set forth. 2nd. In an apparatus for actuating valves, dampers and the like, the combination of a main actuating lever provided with an armature, an electro-magnet located within attracting distance of the armature, a locking lever movable into and out of the path of the main lever and provided with an armature, a second electro-magnet located within attracting distance of said armature and serving to withdraw the locking lever from the path of the main lever, and a spring acting upon the locking lever and serving to return it to the path of the main lever. 3rd. In an apparatus for controlling valves, dampers and like devices, the combination with a main lever and an actuating electro-magnet thereof, of a locking lever, adapted to hold the main lever in a given position, an electro-magnet for withdrawing the locking lever, and releasing the main lever, and circuit closers, carried by the locking lever, whereby a short circuit is established to cut out the main lever magnets when the locking lever is withdrawn, and the main lever is released. 4th. In combination with a battery, or source of electrical energy, and with suitable conductors, a main lever B, and an electro-magnet C, for lifting the same, a locking lever G, and an electro-magnet for withdrawing said locking lever, insulated contact plates *a*, *p* and contact screw *m*, and brush or spring *q*, the former having merely a touching contact with plate *a*, and the latter having a sliding contact with plate *p*, whereby the contact is destroyed at *a*, upon a slight backward movement of lever G, while the contact continues at *q* until the lever G is moved backward a greater distance. 5th. The combination of a battery, or other source of electrical energy, and suitable conductors, a main lever, an electro-magnet for moving said lever, a locking lever to hold the main lever, an electro-magnet for moving said locking lever, a thermostat having two contact points, with which it makes electrical connection alternately, as the temperature rises above or falls below predetermined limits, and circuit closers or switches, carried by the main and locking levers, and serving to direct the current of electricity, first through the two electro-magnets, and thereby to cause the withdrawal of the locking lever, and the release of the

main lever, then to cut out the main lever magnet, thereby permitting said lever to fall, and finally breaking the circuit, thereby rendering the locking lever magnet inert, and permitting the locking lever to recede slightly from its controlling magnet, and to establish a new path, by which the current shall pass, when the thermostat again closes the circuit.

No. 34,076. Fifth-Wheel for Buggies.

(*Rond d'avant-train de voiture.*)

David G. Wyeth, Newark, N.J., U.S., 9th April, 1890; 5 years.

Claim.—1st. In a buggy, wherein lateral buggy springs are arranged triangularly with the rear axle, and come together at the middle of the front axle, the combination of the clip *b* having the eye *d*, the clip bar *e* having the eye *f*, and the bolt formation *g*, the spring bed *j* having the perforated part *i*, with the axle A having the perforated ear *a*, combined and arranged as substantially set forth and for the purpose specified. 2nd. In a buggy, wherein lateral buggy springs are arranged triangularly with the rear axle, and come together at the middle of the front axle, a fifth-wheel consisting of the clip *b* having the eye *d*, the clip bar *e* having the eye *f* and bolt formation *g*, the spring bed *j* having the perforated part *i*, the axle A having the perforated ear *a*, the vehicle shaft V, the shaft irons *s*, and clip bars *t*, all formed, arranged and combined as and for the purpose hereinbefore set forth. 3rd. In a buggy, wherein lateral buggy springs are arranged triangularly with the rear axle, and come together at the middle of the front axle, a fifth-wheel consisting of the combination of the clip bar *e*, having the bolt formation *g*, the spring bed *j* having the perforated part *i*, with the axle B having the perforated ears *v*, and *w* combined, and arranged as and for the purpose specified. 4th. In a buggy, wherein lateral buggy springs are arranged triangularly with the rear axle, and come together at the middle of the front axle, the fifth-wheel consisting of the clip bar *e* having the bolt formation *g*, the spring bed *j* having the perforated part *i*, the axle B having the perforated ears *v* and the perforated part *i*, the axle B having the lugs *e*, *f*, arranged and combined as and for the purpose specified. 5th. In a buggy, wherein lateral buggy springs are arranged triangularly with the rear axle, and come together at the middle of the front axle, the fifth-wheel consisting of the combination of the clip *a*, clip bar *e* having the bolt formation *g*, spring bed *j* having the perforated part *i*, and the axle B having the lugs *e*, *f*, arranged and combined as and for the purpose specified. 6th. In a buggy, wherein lateral buggy springs are arranged triangularly with the rear axle, and come together at the middle of the front axle, a fifth-wheel consisting of the clip *a*, clip bar *e* having the bolt formation *g*, the spring bed *j* having the perforated part *i*, the axle B having lugs *e*, *f*, the vehicle pole or shafts V, the shaft irons *s*, and clip bars *t*, all arranged, combined and formed as and for the purpose hereinbefore set forth.

No. 34,077. Milk Aerator. (*Aérateur du lait.*)

Goodson J. Alford, Bastard, Ont., 9th April, 1890; 5 years.

Claim.—The placing of the weight M on the side of the aerator H, for the purpose of overturning and filling the same, when dropped into the can of milk R.

No. 34,078. Hot Water Boiler.

(*Chaudière de calorifère à eau.*)

David L. Dwinell, George A. Miller and Charles H. Miller, Montreal, Que., 9th April, 1890; 5 years.

Claim.—1st. In a hot water boiler or furnace, the combination with the fire chamber, and a water jacket surrounding same and communicating with the supply or return pipes, of a series of cast sections superimposed one upon the other, and located immediately above the fire chamber and communicating with a water back in connection with said water jacket, horizontal diaphragms extending into each of said cast chambers from the rear wall of said water back, and a top chamber communicating with the water back, and with the flow pipes, the whole being arranged so that there will be zig-zag passages for the products of combustion between the different water chambers through which such products of combustion may pass from the fire chamber to the smoke chamber and thence to the flue, substantially as and for the purpose described. 2nd. In a hot water boiler or furnace, the combination with a suitable base including the ash pit and fire chamber, a water jacket A³, surrounding said fire chamber, and a casing B¹, enclosing the heating chamber of a series of cast water chambers B², B³, B⁴, mounted one upon the other within the casing B¹, and in connection with a common water back divided by the diaphragms H¹, which water back in turn connects with a common top chamber C, and the whole fastened together by rods or bolts A⁴, substantially as described.

No. 34,079. Link or Lap Ring. (*Chânon bristol.*)

William H. Baker, Samuel W. Smith and Salmon S. Matthews, Pontiac, Mich., U.S., 9th April, 1890; 5 years.

Claim.—As an improved article of manufacture, a lap ring consisting of the two sections A, A', these sections being pivoted together and constructed, each of a disk *a*, and the oppositely projecting hook portions *b* having their adjacent faces flattened, and their exposed surfaces rounded, each of the said hook portions having projecting from its outer edge an integral lug *d*, these lugs fitting in recesses formed in the outer edges of the adjacent hook portions, and having their outer or exposed portions rounded, to conform to the contour of the rings formed by the said hook portions, substantially as herein described.

No. 34,080. Book Binding. (*Reliure de livre.*)

Rudolph E. Frey, John Buscher and Gustave Frey, St. Louis, Mo., U.S., 9th April, 1890; 5 years.

Claim.—A sewing band for books, having strips secured thereto at suitable intervals, forming folding spaces, substantially as described.