

with the upper one of said clips for depressing the said chambers upon the sediment contained in the cistern, and an operating rope such as 26, secured to the top or the movable chamber 5, for raising and lowering the said device upon the said pole, substantially as set forth. 13th. A device for removing debris from cisterns having suitable clips, each of which are divided into two portions, one of which is stationary, and the other movable, whereby the said device may be removed from a suitable pole without removing said pole from the cistern, substantially as set forth. 14th. A device for removing debris from cisterns, having telescoping chambers, clips secured to the same, a pole such as 45, adapted to be embraced by the said clip, and operating a rope such as 25, secured to the movable chamber for raising and lowering the said device upon the said pole, substantially as set forth. 15th. A device for removing debris from cisterns, having a sectionalized portion, rounded portions such as 49 and 50, by means of which the said pole may be turned for compressing the device upon the sediment contained in the cistern, substantially as set forth.

No. 38,621. Bridge. (Pont.)

Richard Boyle, Parker, Ontario, Canada, 4th April, 1892; 5 years.

Claim.—1st. In bridge construction, a tie-beam composed of two timbers placed side by side and a little distance apart and connected with keys *a*, and with pins, spikes or bolts *a'*, and an interlocking fish-plate *A*¹, piercing two lengths longitudinally, substantially as set forth. 2nd. In bridge construction, a butt joint consisting of a fish-plate *A*¹, connecting the butt ends of two pieces, and having square shoulders projecting in the sides of the pieces, said plate placed between the said joined piece, and another placed alongside the same, and connected by pins, spikes or bolts, substantially as set forth. 3rd. In bridge construction, trusses framed of timber placed side by side a little distance apart, and connected by keys and by pins, spikes or bolts, substantially as set forth. 4th. In a bridge truss, the combination of the tie-beam *A*, plate *A*¹¹, braces *B*, truss beam *C*, and the main braces *C*¹, substantially as set forth. 5th. The combination of a truss *A*, *A*¹¹, *B*, *C*, *C*¹, the needle beams *D* suspended thereon, bolts *D*¹ sustaining the needle beams, sheet metal covering *d* on said needle beams, and the sheeting *F*, *F*¹, and *f*¹, on said girders, substantially as set forth.

No. 38,622. Automatic Registering Photographic Apparatus. (Registre automatique pour appareil photographique.)

Ellis Elmer Moore, Syracuse, New York, U.S.A., 4th April, 1892; 5 years.

Claim.—1st. The combination, with the camera and the frame carrying the negative film, the roller in said frame, and the removable extension of the axis of said roller, of differential feed and registering gears actuated by the rotation of said roller. 2nd. Differential feed and registering gears in engagement, in combination with an idler engaging therewith and mounted upon and rotated by the rotation of the removable outer section of the axis of the film roller in a camera.

No. 38,623. Corset. (Corset.)

Reddin W. Parramore, Asbury Park, New Jersey, U.S.A., 4th April, 1892; 5 years.

Claim.—1st. The corset attachment comprising an approximately elliptical casing having substantially horizontal pockets diverging slightly at their ends, triangular webs between said ends, and a series of brace steels enclosed within said pockets, all the steels curving flatwise throughout their lengths, the whole constructed and adapted for application as and for the purpose set forth. 2nd. The herein described corset attachment comprising an approximately elliptical casing having substantially horizontal pockets diverging slightly at their ends, and a series of brace steels enclosed within said pockets, all the steels curving flatwise throughout their lengths, the whole constructed and adapted for application as and for the purpose set forth.

No. 38,624. Water Trough. (Auge à eau.)

William Fraser, Township of McGillivray, Ontario, Canada, 4th April, 1892; 5 years.

Claim.—1st. The apparatus for supplying water to any number of buckets and maintaining the same at an equal height, for the use of horses and cattle, consisting of main pipe or conduit *A*, main tank or receptacle *B*, which conveys the water by siphon *C* to bucket *D*, the water thence passing by orifice *E* into conduit *A*, and rising by similar orifices into the whole of the tanks connected to the conduit, all arranged and operating substantially as shown and specified. 2nd. In combination, with the buckets *D*, *G*, *G*¹, *G*², the stop cocks *I*, covers *J* and siphon *K*, substantially as shown and specified.

No. 38,625. Method of Preparing Medicinal Oils.

(Méthode de préparer les huiles médicinales.)

Adalbert Gauvreau, Montreal, Quebec, Canada, 4th April, 1892; 5 years.

Claim.—In a compound, in the preparation of which enters a sufficient quantity of oil, or oil and its admixtures with other medicaments, the following ingredients: water, sugar, gelatine, spirits of wine, bitter almond oil, or other essential oils and pure glycerine, the whole compounded substantially in the proportions and for the purposes set forth.

No. 38,626. Method of Heating and Welding by the Electric Arc. (Méthode de chauffage et soudage électrique à arc.)

Henry Howard, Halesowen, England, 4th April, 1892; 5 years.

Claim.—1st. In apparatus for heating and welding by the electric arc where the work forms one pole, and a pencil the other pole, the combination of supports for the pencil and the work with mechanism for continuously altering the positions of the pencil and the work relatively to each other, both longitudinally and transversely. 2nd. In apparatus for heating and welding by the electric arc, where the work forms one pole and a pencil the other pole, the combination of a fixed support for the work, a carriage to support the pencil, and mechanism which moves the pencil relatively to the carriage and the carriage relatively to the work. 3rd. In apparatus for heating and welding by the electric arc, where the work forms one pole and a pencil the other pole, the combination of a fixed support for the work, a carriage movable along the line to be heated or welded, a second carriage to support the pencil, and mechanism which moves the pencil relatively to the second carriage and the second carriage relatively to the first. 4th. In apparatus for heating and welding by the electric arc, where the work forms one pole and a pencil the other pole, the combination of a fixed support for the work, a carriage to support the pencil, and also a hammer press or other tool, mechanism which moves the pencil relatively to the carriage, and the carriage relatively to the work, and mechanism for actuating the hammer press or other tool. 5th. In apparatus for heating and welding by the electric arc, where the work forms one pole and a pencil the other pole, the combination of a fixed support for the work, a carriage movable along the line to be heated or welded, a hammer press or other tool upon the carriage, mechanism for actuating the same, a second carriage to support the pencil, and mechanism which moves the pencil relatively to the second carriage and the second carriage relatively to the first. 6th. In apparatus for heating and welding by the electric arc, where the work forms one pole and a pencil the other pole, placing the connection of the electric conductor to the work, or the support on which it rests as nearly as may be in a line with the pencil. 7th. In apparatus for heating and welding by the electric arc, where the work forms one pole and a pencil the other pole, the combination of a fixed support for the work, a carriage to support the pencil and also a hammer press or other tool, a block of refractory material beneath the pencil and an anvil beneath the hammer press or tool, the block and anvil being connected to and moving with the carriage. 8th. In heating and welding by the electric arc, where the work forms one pole and a pencil the other pole, interposing between the pencil and the work a thin sheet of refractory conducting material. 9th. In apparatus for welding by the electric arc, the combination of a mandril or support for the work with two bars or jaws to press the two portions of work against the mandril near the point at which the weld is to be made.

No. 38,627. Car Coupler. (Attelage de chars.)

Joseph Henry Coleman, Tottenham, Ontario, Canada, 4th April, 1892; 5 years.

Claim.—A draw head *A*, having a socket *C*, made in it, in front of which is placed a movable block *B*, with a hole *b*, made through it, in combination with a link *E*, having the head *D*, formed on it, substantially as and for the purpose specified.

No. 38,628. Machine for Cutting Veneer and Boards.

(Machine à couper le bois de placage.)

Gustav Adolph Aucken, Chicago, Illinois, U.S.A., 4th April, 1892; 5 years.

Claim.—1st. In wood working machinery for cutting veneers and boards from a block of wood, the combination, with the knife frame carrying the cutting knife and the yielding presser bar, substantially as and for the purpose set forth. 2nd. In wood working machinery for cutting veneers and boards from a block of wood, the combination, with the knife frame carrying the cutting knife and the yielding presser bar, connected to and moving with said frame, said presser bar having a uniform movement throughout its length, the edges of the said knife and presser bar being continuously parallel, substantially as and for the purpose described. 3rd. In wood working machinery for cutting boards and veneers from a block of wood, the combination, with the knife frame and cutting knife, of the yielding presser bar attached to a slide having projecting rods guided in bearings of said frame, the opposite levers engaging with said rods, and the adjustable spring pressure acting upon the inner ends of said levers, substantially as and for the pur-