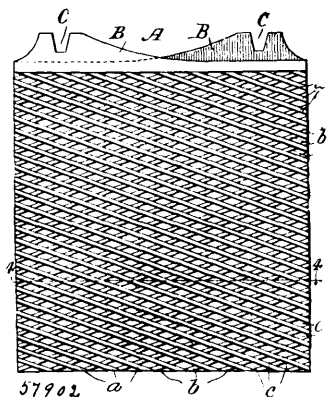


work or skeleton plate composed of oppositely inclined intersecting or crossing ribs and grooves on its opposite sides, said ribs being of



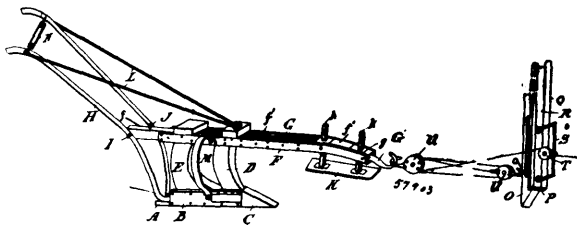
rectangular or quadrilateral form in cross-section and the said grooves on one side of the plate extending to the grooves on the opposite side thereof, and all of said grooves being open at the side and bottom edges of the plate to make the latter borderless except at its top where it is provided with a lug, as B, substantially as set forth. 2nd. The herein described process of forming electrodes for secondary or storage batteries, consisting in subjecting lead plates to the action of an electric current in an electrolyte or bath composed of two acids, one of which acids is a solvent, and the other of which is a non-solvent, or a poor solvent, of lead, together with one or more salts of each of said acids, and afterwards subjecting the partly-formed electrodes to the action of an electric current in another electrolyte or bath composed of dilute sulphuric acid and an acid sulphate, substantially as described. 3rd. The herein described process of forming electrodes for use in secondary or storage batteries, consisting in subjecting lead plates to the action of an electric current in an electrolyte or bath composed of magnesium sulphate, sulphuric acid, acetic acid and magnesium acetate, and afterwards subjecting the thus partly-formed electrode to the action of an electric current in another electrolyte composed of dilute sulphuric acid and an acid sulphate, substantially as described. 4th. The herein described process of forming electrodes for secondary or storage batteries, consisting in subjecting lead plates to the action of an electric current in an electrolyte or bath composed of a solution of magnesium sulphate and two acids, one of which acids is a solvent and the other of which is a non-solvent, or a poor solvent, of lead, together with a suitable metallic salt of the solvent acid, and afterwards subjecting the partly-formed electrode to the action of an electric current in another electrolyte or bath composed of dilute sulphuric acid and an acid sulphate, substantially as described. 5th. The herein described process of forming electrodes for secondary or storage batteries, consisting in first subjecting the lead plates to an acid bath which will react thereon to form a thin coating of lead sulphate, next subjecting the lead plates to the action of an electric current, in an electrolyte or bath composed of a solution of magnesium sulphate and two acids, one of which is a solvent and the other of which acids is a non-solvent, or a poor solvent, of lead, together with a suitable metallic salt of the solvent acid, and afterwards subjecting the partly-formed electrode to the action of an electric current in another electrolyte or bath composed of dilute sulphuric acid and an acid sulphate, substantially as described. 6th. The herein described process of forming electrodes for secondary or storage batteries, consisting in subjecting the lead plates to the action of an electric current in an electrolyte or bath composed of a solution of magnesium sulphate and two acids, one of which acids is a solvent, and the other of which acids is a non-solvent, or a poor solvent, of lead, together with a suitable metallic salt of the solvent lead, and afterwards subjecting the partly-formed electrode to the action of an electric current in another electrolyte or bath composed of dilute sulphuric acid and an acid sulphate and finally reducing positive electrodes to form negatives, by subjecting said positives to the action of an electric current, from a negative terminal, in the last-mentioned electrolyte or bath, substantially as described.

No. 57,903. Ditching Plough. (*Charrue à forsoyer.*)

Andrew Estey and George Downes, both of Calais, Maine, U.S.A., 26th October, 1897; 6 years. (Filed 24th September, 1897.)

Claim.—1st. In a ditching plough, the combination of a slotted beam, posts held in said beam, side-plates secured to the lower ends of said posts, a centre or sole-piece secured between said side-plates and forming with said plates and lower ends of said posts a socket, a plough-point with pin inserted in said socket, side-knives secured to said side-plates and beam, stilts secured pivotally to the tail end of the sole-piece and adjustably connected at the upper end, an adjustable connection with the beam consisting of a perforated

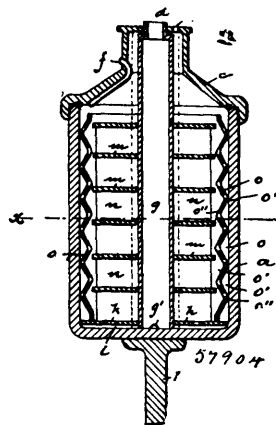
bolt passing through said beam and stilts, and a pin passing through said beam and bolt, braces connecting said stilts and beam, and an



adjustable gauge-shoe at the forward end of said beam, substantially as set forth. 2nd. In a ditching plough, the combination of a plough-share with movable point rigidly secured to a plough-beam by posts, side-knives secured to the beam, and share-stilts pivotally secured to the tail of the share, and adjustably connected at the upper end, and adjustably connected with the beam by a perforated cross-bolt and set-pin, an adjustable gauge-shoe at the forward end of the beam, a draft clevis or hook at the forward end of the beam, an anchor or station-board placed transversely across the line of the ditch provided with hook adjustable in a slot, a sliding V-bed on said board, a carriage or slide in said V-bed, a bail on said carriage, a tail-block on said bail, and tackle connected to the draft-hook of the beam and the hook in the station-board, and having the running end of its fall passing through said tail-block, substantially as set forth. 3rd. In an anchor or station for a ditching plough, a slotted transverse board adapted to be placed across the line of the ditch, a V-bed secured to the upper edge of said board, a carriage in said V-bed, a bail on said carriage, a tail-block on said bail, and a hook held adjustably in the slot of said station-board adapted to be connected to the plough by tackle having the running end of its face passing through the tail block. 4th. In a ditching plough, the combination of a plough-beam having vertical slots, posts secured in one slot, side-plates secured to the lower ends of said posts, a centre or sole-piece secured between said plate and forming a socket, and a removable plough-point with pin adapted to be inserted in said socket and form a plough-share with the forward post, side-plates and sole-piece, substantially as set forth. 5th. In a ditching plough, the combination of a plough-beam, posts secured in said beam, side-plates secured to the lower ends of said posts, a centre or sole-piece secured between said side-plates and forming with said posts and side-plates a socket for the pin of the point, and having a rearwardly-projecting end, stilts having their lower ends bent forward and pivoted to the tail end of said sole-piece, a turnbuckle connecting the upper ends of said stilts, and a transversely adjustable connection with the beam consisting of cross-bolt and set-pin, substantially as set forth.

No. 57,904. Centrifugal Creamer.

(*Crèmeuse centrifuge.*)



Oscar Anderson, Newark, New Jersey, U.S.A., 26th October, 1897; 6 years. (Filed 8th April, 1897.)

Claim.—1st. The combination with a rotary bowl, and means for rotating the same, of a milk supply tube arranged at the centre of the bowl and imperforate to deliver all the milk at the bottom thereof, a series of horizontal or outwardly-extending partitions arranged within the bowl and fixed to said milk supply tube and removable therewith, and the perforated and irregular cylindrical partitions arranged outside of said horizontal partitions, all substantially as set forth. 2nd. The combination with the rotary bowl, having opening therein for the new milk, cream and blue milk, and means for rotating said bowl, of a series of partitions arranged