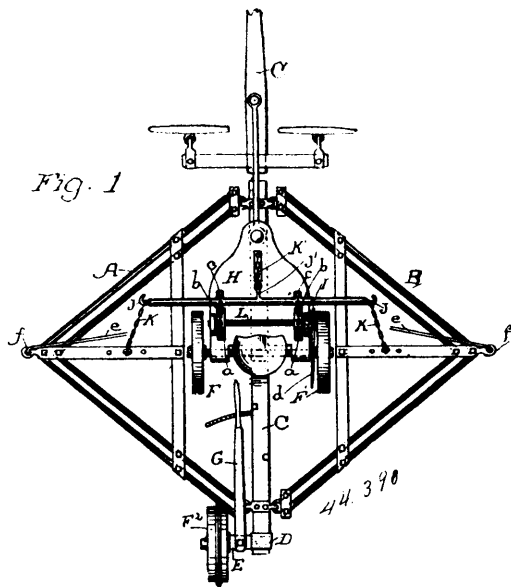


bells arranged in proximity to said hamer, contact springs resting against opposite sides of the short arm of said lever and tending to normally centre the same between the magnets, and electric circuit connections normally closed through said armature lever and both of said magnets and contact springs, whereby a rapid vibratory movement of the lever may be produced by the reciprocal action of the magnets and springs, thus causing the hammer to strike opposite sides of the bell or bells alternately in quick succession, substantially as described. 3rd. In combination with the electro-magnets, the rocking armature lever pivotally supported intermediate the ends thereof between said magnets, a suitable hammer secured to the longer arm of said lever, the guide plate having the elongated slot in which the short arm or extension of said lever works, the spring plates secured in frictional contact with opposite sides of said extension, and suitable circuit connections through said magnets, armature lever and springs, whereby said springs will be automatically polished, so as to ensure perfect electrical contact between the same and said armature lever, substantially as described.

No. 44,390. Cultivator. (Cultivateur.)



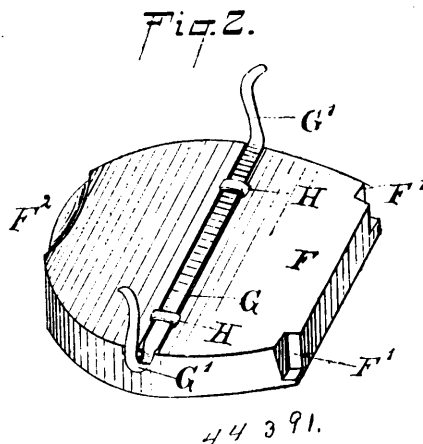
Thomas J. Hubbell, Santa Cruz, California, U.S.A., 4th October, 1893; 6 years.

Claim.—1st. A cultivator consisting of a triangular frame, a draft pole attached thereto in line with one of the sides, supplemental tooth carrying bars hinged to the other sides of the triangle, a lever and connection by which they may be turned about their hinges, and swivel and steering wheels upon which the angles of the frame are supported, substantially as herein described. 2nd. A cultivator consisting of a triangular tooth carrying frame, a draft pole attached thereto in line with the longer side of the triangle, an axle having a flanged bearing wheel at one end, and the opposite end adapted to swivel about a vertical axis and support at the rear of the frame, a lever connected with the axle, whereby it may be turned, and rack which is engaged by the lever to hold it at any desired angle, substantially as herein described. 3rd. A cultivator consisting of the central draft bar, triangular frames hinged upon either side of the bar and adapted either to carry cultivator teeth or cutters, a shaft journaled across the seat platform having projecting arms at the ends connecting with the triangular frames, and a central arm connecting with the central draft bar, a second shaft journaled upon the platform having an operating lever connected with it, a segment *a*, and chain *b*, connecting with the lever arm upon the first named shaft, whereby the latter may be rotated and the frame timbers raised or depressed, substantially as herein described. 4th. A cultivator consisting of the triangular frames connected together upon a central line, a short axle detachably connected with the central frame timber, a vertical swivelled post attached to the rear end of said timber, having the upper end adapted to receive one end of the axle from which the wheel has been removed, a lever arm projecting from said axle, and a rack extending outwardly from the side of the seat and engaged by the lever arm, whereby the wheel may be turned to travel more or less parallel with the line of travel of the machine, and act as a rudder wheel therefor, substantially as herein described. 5th. A harrow consisting of the sections arranged longitudinally in line of travel with the draft and draft tongue, a short axle connected with the longitudinal central timber, and wheels mounted upon the ends of said axle within the exterior projecting frames of the harrow, a lever fulcrumed upon the axle and connected with the central frame timber, whereby the latter may be raised or depressed, cultivator

teeth fixed to the triangular frames, levers fulcrumed upon the seat platform, and rods connecting said levers with the hinged bars, whereby the latter may be turned up or down about their hinges to throw the cultivator teeth in or out of the ground, substantially as herein described. 6th. A harrow and cultivator consisting of the triangular frames connected together upon a central line, with a draft tongue secured to the front end of the frame, an axle removably attached to the central timber, and a lever fulcrumed upon said axle and connected with the central timber of the harrow, substantially as herein described.

No. 44,391. Moccasin Attachment.

(Attache pour mocassins.)

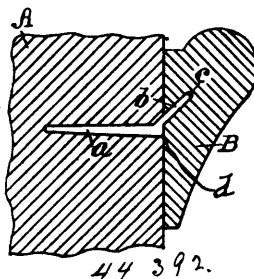


James R. Russell, Hopewell Hill, New Brunswick, Canada, 4th October, 1893; 6 years.

Claim.—1st. A moccasin attachment comprising a flat iron plate bent in U-form, and having calks at the ends and middle and means, substantially as described, for removably attaching the said plate on the rear or heel end of the moccasin, substantially as shown and described. 2nd. A moccasin attachment comprising a flat iron plate bent in U-form, and having calks at the ends and middle, the said plate being also provided with tapped screen holes, and flat headed screws passing through the soles of the moccasin, to engage the said tapped holes to fasten the plate to the moccasin, substantially as shown and described. 3rd. A moccasin attachment comprising a flat iron plate bent in U-form and having calks at the ends and middle, means, substantially as described, for removably attaching the said plate on the rear or heel end of the moccasin, and a heel block provided with recesses for the said calks, and adapted to engage the under side of the said plate, substantially as shown and described. 4th. A moccasin attachment comprising a flat iron plate bent in U-form, and having calks at the ends and middle means, substantially as described, for removably attaching the said plate on the rear or heel end of the moccasin, and a bar secured on the said heel block, and having bent ends forming spring clamps for engagement with the moccasin to hold the block in place, substantially as shown and described.

No. 44,392. Means for Hanging Mouldings.

(Moyen de suspendre des moulures.)



Nickolaus Hoffend, Rochester, New York, U.S.A., 4th October, 1893; 6 years.

Claim.—A moulding having a continuous longitudinal kerf or channel formed in its rear surface, in combination with nails, each having its head formed with a surface at right angles with the shaft or body of the nail to receive the stroke of the hammer in driving, and an inclined extended part at one side of the head, the latter,