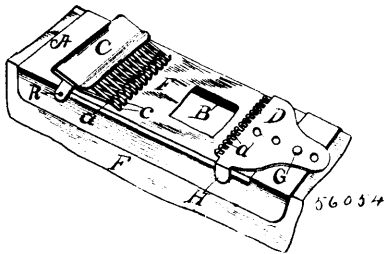


the upper series of hooks being in different vertical planes from the lower series on each bar for the purpose set forth, a driving mechanism, and connections between the driving mechanism and the bars whereby they are given simultaneous vertical and oscillatory motions, substantially as described. 2nd. The combination, with a tanning-vat, of a frame composed of side bars and cross-bars, the cross-bars being journaled in the side bars, a driving mechanism, a connection between the driving mechanism and frame whereby the frame is given a vertical motion within the vat and the cross-bars of the frame an oscillatory motion, and hooks or leather supports on the cross-bars so located that adjacent sides of leather suspended therefrom are made to move in opposite directions by the oscillations of the cross-bars. 3rd. The combination, with a tanning vat, of a rocking-frame therein composed of side bars pivoted in the vat, and cross-bars journaled in the ends of the side-bars, a connecting-rod between the cross-bars, a driving mechanism, a pitman actuated by the driving mechanism to rock the frame and oscillate the cross-bars, and hooks or leather-supports on the cross-bars so located that adjacent sides of leather suspended therefrom are made to move in opposite directions by the oscillations of the cross-bars.

No. 56,054. Darning Implement.

(Instrument à repriser.)



Andrew Edward Smythe, assignee of Mary S. Schafor, both of Chicago, Illinois, U.S.A., 1st June, 1897; 6 years. (Filed 11th March, 1897.)

Claim.—1st.—A darning implement, comprising in combination a table having an opening in its upper surface, a frame fitting over the table having an opening registering with the opening thereof, and adapted to clamp the goods upon the table, a set of stationary hooks carried by the frame at one end of the opening therein, a warp-head adjustably mounted on the frame having a set of hooks arranged at the opposite side of said opening, and a pivoted plate carrying the third set of hooks adapted to work in the interspaces between the stationary set of hooks, and to alternately raise and depress one set of the warp-threads as said plate is rocked upon its pivot, the set of stationary hooks and the set of hooks on the pivoted plate having their points laterally inclined at an angle to their bodies but in opposite directions, substantially as described. 2nd. A darning implement, comprising in combination, a table having an opening in its top, a frame adapted to embrace the sides of the table and to clamp the fabric to be mended thereon, and provided with an opening in its upper surface registering with that of the table, and adjustable warp-head carrying a set of hooks at one end of the table-opening, a set of hooks formed integrally with the frame and projecting into the opening thereof and having their points turned laterally at an angle with their bodies, and a pivoted plate mounted on the frame and having a series of hooks adapted to work in the interspaces between the said set of stationary hooks, and having their points turned laterally at an angle to their bodies but in the opposite direction to the points of the set of stationary hooks with which they co-operate, substantially as and for the purposes described. 3rd. A darning implement, comprising in combination, a table composed of sheet metal having an opening in its body, a skeleton frame also composed of sheet metal, and having flanged sides adapted to embrace the sides of the table, and having an opening adapted to register with the opening of the table, and a series of hooks formed integrally with the frame and projecting into the plane of said opening, a warp-head mounted to slide upon the frame at the opposite end of said opening, and having a series of apertures therein, a hook or lug upon said frame adapted to engage the apertures and providing a fastening for the warp-head in the adjusted position, and a plate formed of sheet metal doubled upon itself pivoted upon the frame and having integrally formed therewith a series of hooks to engage one set of the warp-threads and adapted by its oscillation to carry said set of warp-threads alternately above and below the warp-threads carried by the stationary hooks, substantially as and for the purposes described.

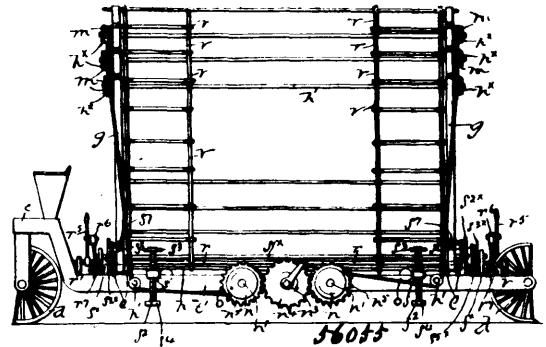
No. 56,055. Combined Fire Escape and Ladder.

(Sauveteur d'incendie et échelle combinés.)

Michael Moss, Montreal, Quebec, Canada, 1st June, 1897; 6 years. (Filed 27th March, 1897.)

Claim.—1st. A fire apparatus consisting of a carrier frame or vehicle, a series of oblong sections carried by said carrier frames and set one within the other, a series of sheaves mounted at the top and

bottom of the ends of both sides of all of said sections excepting the inner section, one or more drums carried by said carrier frame at



each side thereof, ropes connected to the bottom of said inner section and taken over and under the sheaves mounted respectively at the top and bottom of said sections, the free ends of said ropes being connected to said drum, and means for simultaneously rotating said drums, for the purpose set forth. 2nd. A fire apparatus consisting of a carrier frame or vehicle, a series of oblong sections carried by said carrier frame and set one within the other, a series of sheaves mounted at the top and bottom of the ends of both sides of all of said sections excepting the inner section, one or more drums carried by said carrier frame at each side thereof, ropes connected to the bottom of said inner section and taken over and under the sheaves mounted respectively at the top and bottom of said sections, the free ends of said ropes being connected to said drums, means for simultaneously rotating said drums and a series of draw-bridges carried by said sections and adapted to be extended laterally therefrom, for the purpose set forth. 3rd. A fire apparatus consisting of a carrier frame or vehicle, a series of oblong sections carried by said carrier frames and set one within the other, a series of sheaves mounted at the top and bottom of the ends of both sides of all of said sections excepting the inner section one or more drums carried by said carrier frame at each side thereof, ropes connected to the bottom of said inner section and taken over and under the sheaves mounted respectively at the top and bottom of said sections, the free ends of said ropes being connected to said drums, means for simultaneously rotating said drums, and means for locking said sections, excepting the inner section against vertical movement, for the purpose set forth. 4th. A fire apparatus consisting of a carrier frame or vehicle, a series of oblong sections carried by said carrier frame and set one within the other, a series of sheaves mounted at the top and bottom of the ends of both sides of all of said sections excepting the inner section, one or more drums carried by said carrier frame at each side thereof, ropes connected to the bottom of said inner section and taken over and under the sheaves mounted respectively at the top and bottom of the sections, the free ends of said ropes being connected to said drums and means for simultaneously rotating said drums, a series of ladders carried on each side of said sections and adjacent to each end thereof, for the purpose set forth. 5th. A fire apparatus consisting of a carrier frame or vehicle, a series of oblong sections carried by said carrier frame and set one within the other, a series of sheaves mounted at the top and bottom of the ends of both sides of all of said sections excepting the inner section one or more drums carried by said carrier frame at each side thereof, ropes connected to the bottom of said inner section and taken over and under the sheaves mounted respectively at the top and bottom of said sections, the free ends of said ropes being connected to said drums, means for simultaneously rotating said drums and means for tilting said sections, means for retaining said apparatus against overbalancing when said sections are tilted, for the purpose set forth. 6th. In combination with a vehicle having an extensible structure pivotally mounted thereon, a shaft located at one side of said vehicle and extending longitudinally thereof, a pair of pinions mounted upon said shaft near the ends thereof, a pair of rods pivotally connected at one end to said extensible structure at the opposite side thereof to that at which said shaft is mounted, the lower ends of said rods being made in the form of racks and said racks being adapted to engage said pinions, and ratchet and pawl mechanism for rotating said shaft for the purpose of tilting said extensible structure to one side or the other, a pair of extensible rods carried by said vehicle and adapted to be extended laterally thereof said extensible rods having vertical screw-threaded openings in the ends thereof and vertical screw-threaded rods adapted to take through said openings and bear upon the ground for the purpose of retaining said structure against overbalancing, as set forth. 7th. In combination with a carrier frame, an extensible structure consisting of a series of sections adapted to inclose one another, one, the inner, of said sections being composed of two oblong frames having a platform extending between and connected to their top and bottom sides, respectively, the outer section being composed of two oblong frames pivotally connected at their bottom sides to said carrier frame, and the sections intermediate of said inner and outer sec-