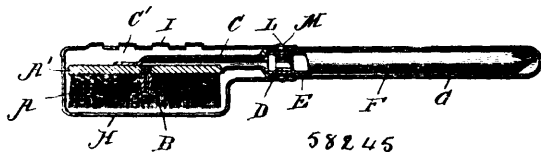


electro magnet, substantially as specified. 4th. In an electric brake, an electro magnet rigidly mounted on the car axle, an armature loosely mounted on the same axle contiguous to the electromagnet, a grooved hub for the armature, the brake beams with their brake shoes, a pivoted lever, connections between the lever and brake beams, a flexible connection between the grooved hub of the armature and the lever adapted to be wound on the hub when the armature has been attracted by the energized electro magnet, substantially as specified. 5th. In an electric brake for cars, an electric magnet consisting of a magnet frame, having a hub fitted to receive the car axle, a plurality of independent magnet spools in circuit with each other, arranged about the hub, an insulated core for each magnet spool mounted in the magnet frame, an insulated polar plate connected to the ends of the cores of the magnet spools on the outer side of the magnet frame, and an armature adapted to be attracted by the electro magnet when energized, substantially as specified. 6th. In an electric brake for cars, an electric magnet consisting of a magnet frame, having a hub fitted to receive the car axle, a plurality of independent magnet spools in circuit with each other, arranged about the hub, an insulated core for each magnet spool mounted in the magnet frame, an insulated polar plate, connected to the ends of the cores of the magnet spools on the outer side of the magnet frame, an armature adapted to be attracted by the electro magnet when energized, commutator mounted on the hub of the magnet frame opposite the polar plate, a series of terminals connected to the commutator, circuit wires, for each terminal connected to the positive and negative poles of two adjacent magnet spools, a brush holder, and brushes carried by the brush holder, substantially as specified.

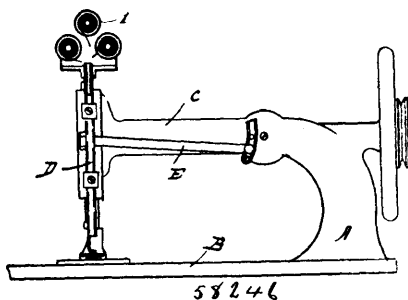
No. 58,245. Tooth Brush. (*Brosse à dents.*)



Daniel W. Tower, Grand Rapids, Michigan, U.S.A., 2nd December, 1897; 6 years. (Filed 3rd November, 1897.)

Claim.—1st. A casing for tooth-brushes, consisting of a part to inclose the stem; and a separate part to inclose the brush proper, said latter part being formed of hinged sections, whereby the brush proper may be uncovered without uncovering the stem, as specified. 2nd. A casing for tooth-brushes, consisting of a part to inclose the stem and a separate part to inclose the brush proper, said latter part being constructed of hinged sections having perforations. 3rd. In a tooth-brush, the combination with the tubular stem having a brush at one end, and a collapsible tube attached to the other end of said stem, of a sleeve encircling the latter end of the stem, and a casing inclosing said tube and detachably secured to said sleeve, substantially as described. 4th. The combination with a fountain tooth-brush, having a tube to contain the dentifrice and provided with a sleeve, of a detachable casing for said tube, engaging said sleeve and provided with a bead, and a detachable casing for the brush proper, said latter casing having a groove to receive said bead and being formed of sections hinged together at one side and provided with a catch at the other side of the casing.

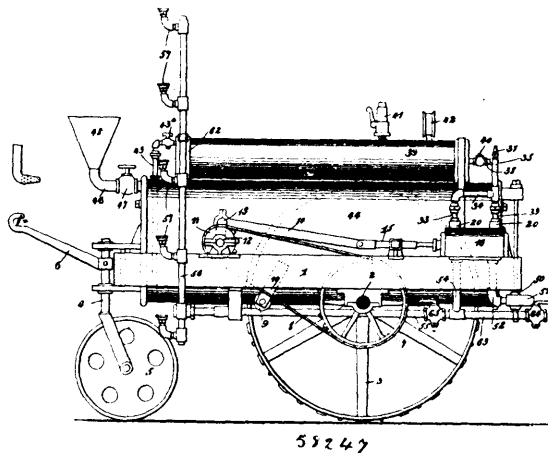
No. 58,246. Sewing Machine. (*Machine à coudre.*)



August Raussen, Covington, Kentucky, U.S.A., 2nd December, 1897; 6 years. (Filed 3rd November, 1897.)

Claim.—1st. The combination with a bifurcated presser-foot of a centrally supported tubular guide, and a secondary tubular guide located at the side of the central tubular guide, both of said guides being rigidly secured to and arranged between the members of the bifurcated foot, substantially as described. 2nd. The combination with a bifurcated presser-foot of a central tubular guide, and a curved horn, both rigidly secured to and arranged between the members of the bifurcated foot, substantially as described.

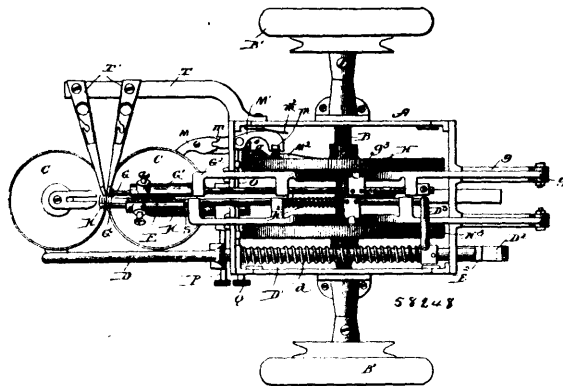
No. 58,247. Spraying Apparatus. (*Appareil pulvérisateur.*)



James Cameron Ollard, Tacoma, Washington, U.S.A., 2nd December, 1897; 6 years. (Filed 19th October, 1897.)

Claim.—1st. In a spraying apparatus, the combination of a frame a liquid-tank extending longitudinally along the central part thereof, discharge-pipes extending longitudinally of the frame on opposite sides of the liquid-tank, and connected thereto, means for forcing the liquid from the liquid-tank through the discharge-pipes, spraying-pipes swivelled on said discharge-pipes and arranged to swing laterally of the frame toward and from each other, a bracket mounted on the liquid-tank with its ends extending in opposite directions from the sides thereof, and notched arms pivotally connected to the spraying-pipes and having their notches arranged to engage the projecting ends of said bracket, substantially as set forth. 2nd. In a spraying apparatus, the combination of a frame, a liquid-tank extending longitudinally along the central part thereof, discharge-pipes extending on the frame at opposite sides of said liquid-tank and connected thereto, a bracket held on the upper part of the liquid-tank, an air-tank supported by said bracket and also extending longitudinally of the frame above the liquid-tank arms on said bracket projecting on opposite sides of the air-tank, a connection between the air and liquid tanks, spraying-pipes swivelled on the discharge-pipes and arranged to swing laterally of the frame, and arms pivotally connected at their outer ends to the spraying-pipes and having their inner ends adapted for adjustable connection to the projecting arms of the bracket on the liquid-tank, substantially as described.

No. 58,248. Sewing Machine. (*Machine à coudre.*)



David H. Agan and Jennie Agan, New York, State of New York, U.S.A., 2nd December, 1897; 6 years. (Filed 29th October, 1897.)

Claim.—1st. In a sewing machine, the combination with the work holding and feeding mechanism, driving mechanism and reciprocatory needle bar, of two independently supported and guided loopers co-operating with the loop cast off by the needle, and spreading the same to encircle the path of the needle on both sides of the fabric, whereby the needle is caused to pass through the loop on both sides of the fabric and independent operating mechanism interposed between said loopers and the driving mechanism, substantially as described. 2nd. In a sewing machine, the combination with the work holding and feeding mechanism, the reciprocatory needle bar and the driving mechanism, of co-operating independently supported and guided loopers engaging the same loop cast off by the needle and spreading the same to encircle the path of the needle on both sides of the fabric, of independent looper carriers for