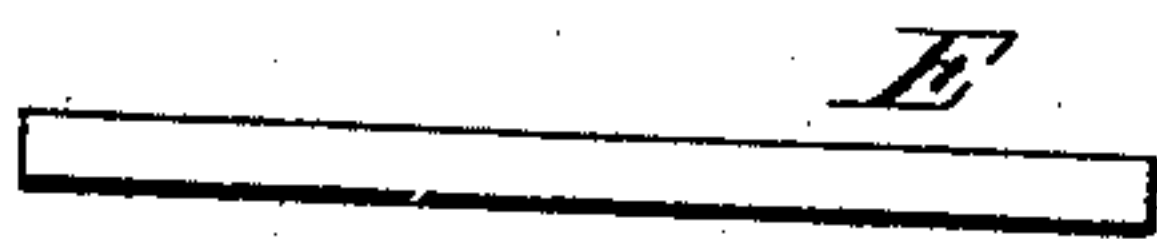
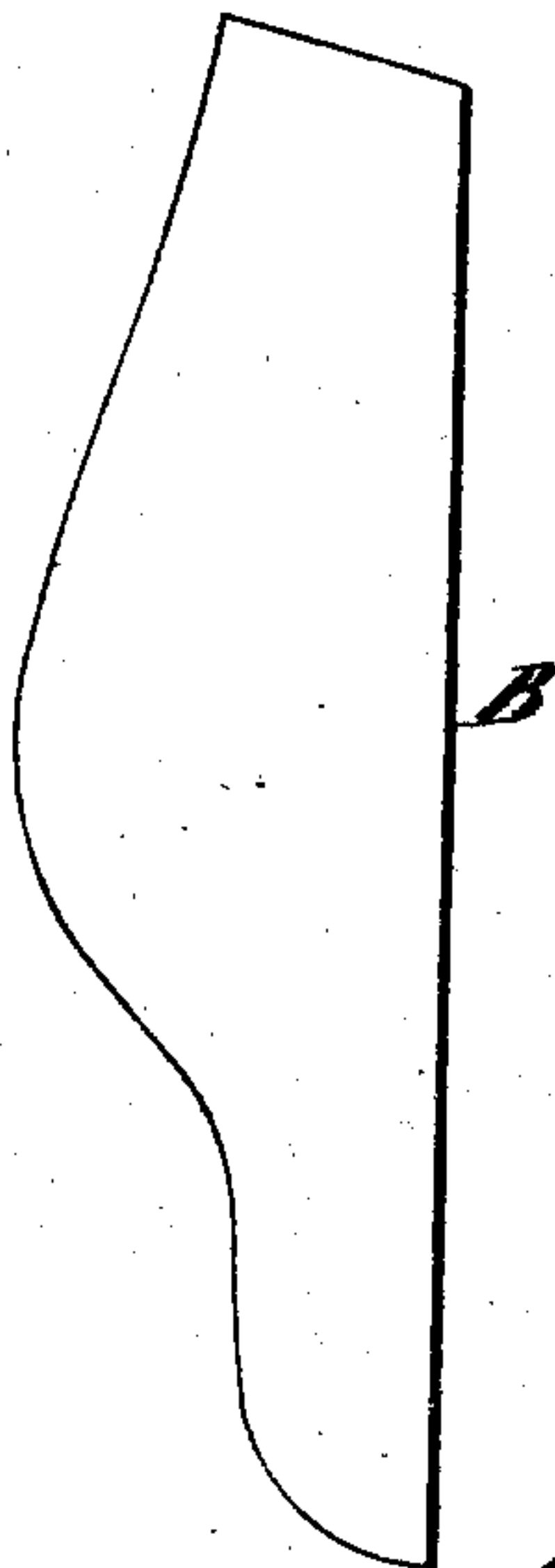
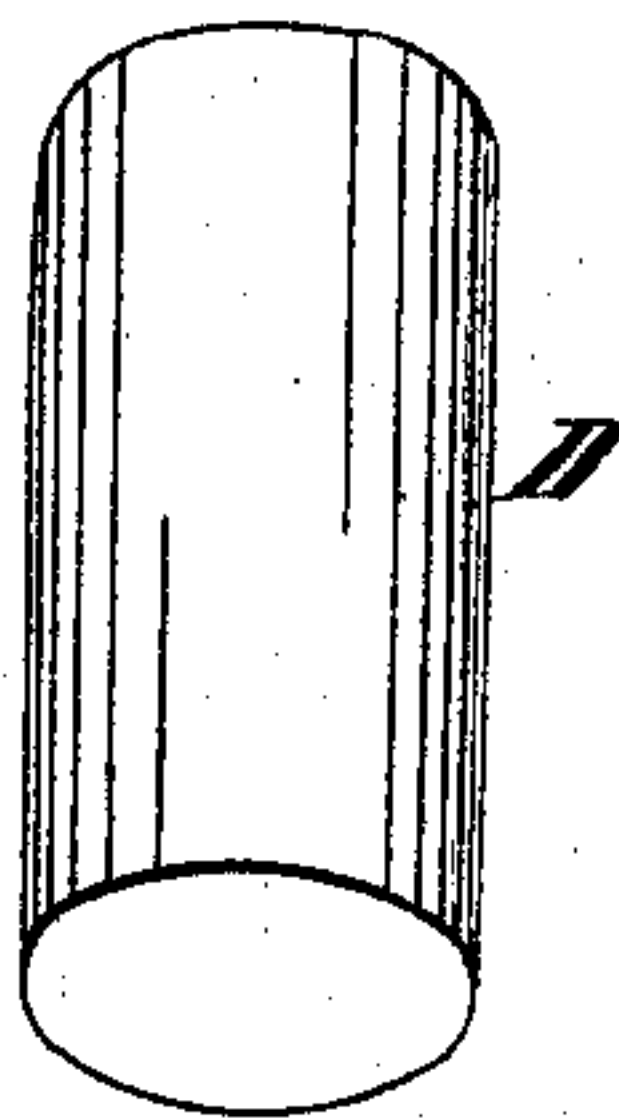
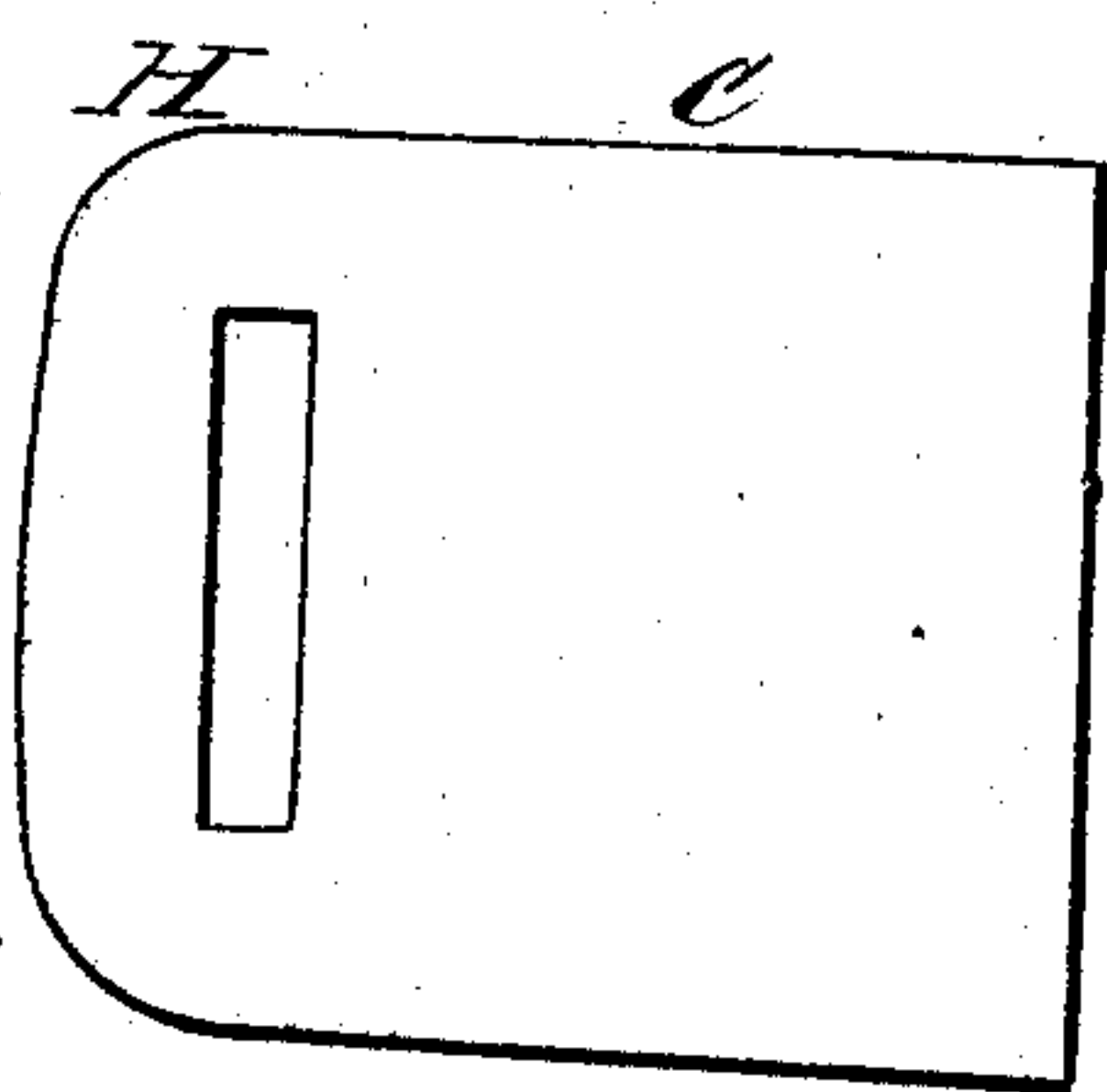
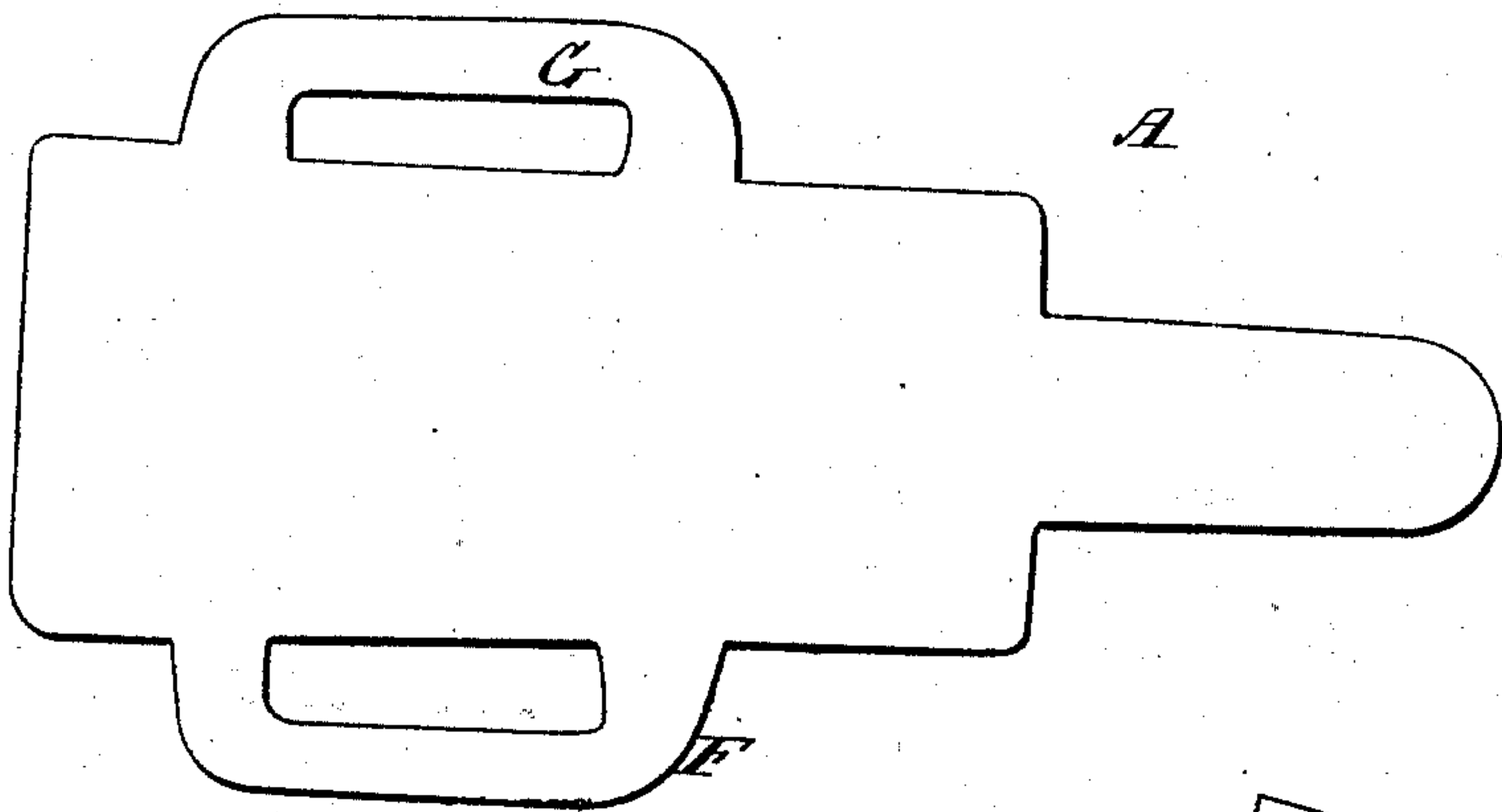
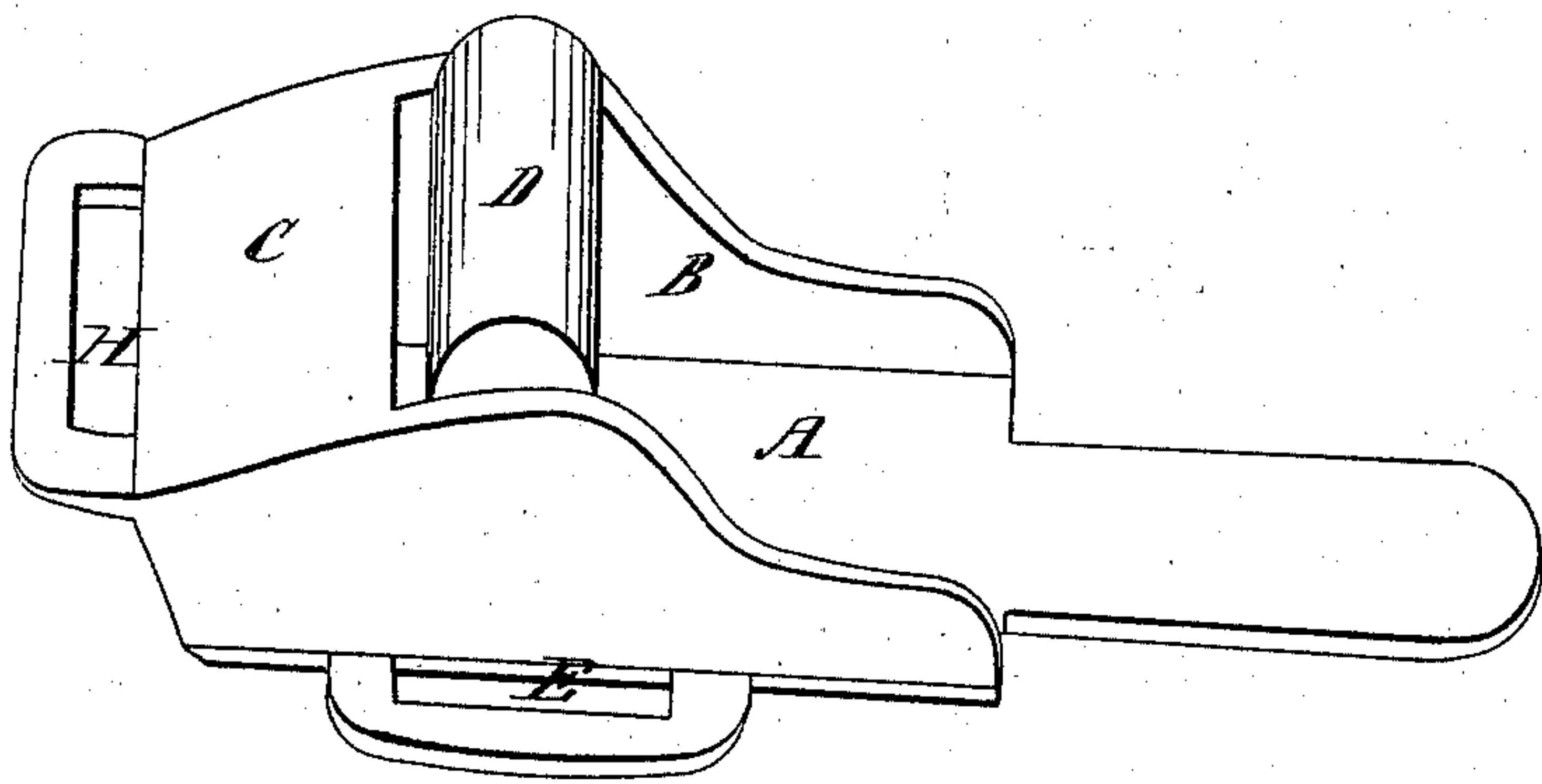


J. W. Hatch,
Clamp Buckle,
No. 3,440, Patented Feb. 20, 1844.



Witnesses
Attest Morden
Arad Evans.

Inventor
Julius W. Hatch.

UNITED STATES PATENT OFFICE.

JULIUS W. HATCH, OF MANLIUS, NEW YORK.

BUCKLE.

Specification of Letters Patent No. 3,440, dated February 20, 1844.

To all whom it may concern:

Be it known that I, JULIUS W. HATCH, of the village of Fayetteville, in the town of Manlius, county of Onondaga, and State of New York, have invented a new and improved eccentric roller-buckle or clamp-buckle for holding or confining tugs, straps, braces, or belts to be used in all cases where buckles are used on harnesses and on straps and belts which are used for propelling machinery; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in making a new eccentric roller buckle or clamp buckle with an eccentric cylindrical roller or roller revolving upon an axis a little one side of the center of the roller or cylinder, which roller is to supply the place of or perform the office of the common buckle tongue, which said new eccentric roller buckle or clamp buckle is constructed as follows: Said roller buckle or clamp buckle consists of a back plate, side plates or flanges, top plate, and an eccentric cylindrical roller with an axle on which it revolves.

The back plate is constructed of any metallic substance of the proper strength, tenacity and durability and consists of a flat plate of such metallic substance of from three inches to eight inches in length—from one inch to three inches in width and from one sixteenth to one fourth of an inch in thickness according to the size of the buckle intended as represented in the drawing, marked "back plate A." On each side of the plate is constructed a loop forming part of the plate of sufficient size to accommodate the straps or belts to be attached to the back plate in a harness—as represented in the drawing of said back plate,—said loops being marked "loop for girt G" and "loop for back strap F." The end of the back plate intended for the forward end may be lengthened and narrowed for more easily and securely fastening the same to the harness—as represented in the plate.

The side plates or flanges consist of small plates of metal of like substance to be affixed perpendicularly upon the sides of the back plate of the proper length, width and thickness according to the size of the buckle for keeping securely in its place the tug or strap to be held by the buckle and so as to accommodate the axle of the roller and hold the same securely and firmly as represented in the drawing marked "side plate B" with a

hole through which the axle is inserted marked thus "o."

The top plate consists of a plate of metal of like substance to be of the same width as the back plate and to be securely and firmly fastened upon the top of the side plates or flanges at the hinder part or hinder end of the buckle so as to serve to support and hold securely in their places the upper edges of the side plates or flanges and to extend about one third of the length of the buckle to the roller as represented in the drawing marked "top plate C." At the hinder or back end of this plate may be made the loop marked in the drawing "loop for side strap H," intended to accommodate the attaching to the buckle the breeching of the harness.

The eccentric cylindrical roller consists of a cylinder or roller of like substance to be made in length equal to the width of the buckle inside of the side plates or flanges as represented in the drawing marked "roller D." This roller is to revolve upon an axle passing through the same a little one side of the true center or true axis of said cylindrical roller with the side of the roller most eccentric situated forward of the axle, the axle to be inserted through the side plates or flanges at the points marked thus "o" in the drawing of the side plate a little forward of the top plate so as to admit the said roller to perform about half a revolution on this axle and so near to the said top plate that the said top plate will prevent the said roller from making an entire revolution or rolling around in consequence of bringing the side of the roller most eccentric against the said top plate in rolling backward or outwardly—and against the strap or tug to be held by the buckle in rolling forward or inwardly.

The axle is to be constructed of like substance and to be made of sufficient size to insure the proper strength. It consists of a straight piece of metal of equal size from end to end, perfectly round and of a length equal to the width of the buckle as seen in the drawing marked "axle or pin E," the ends of the axle to be firmly secured in the sides or flanges as indicated in the drawing.

The strap or tug on passing through the buckle passes over the back plate and under the roller when the side of the roller least eccentric or nearest the axle is presented to the tug or strap. On forcing back the strap or tug the roller turns on the axle and brings

that part of its surface which is most distant from the axis upon the tug or strap which thereby becomes firmly held to its place.

- 5 In the drawing hereto annexed A represents the back plate over which the strap or tug passes; B B the side plates between which the eccentric roller is hung; C the top plate; D the eccentric roller under which the strap
10 or tug passes; E the axle on which the cylindrical roller revolves; F loop for backstrap in a common harness; H loop for side strap. The axle E on which the roller revolves
15 ter of the roller. The back plate may be

made concave under the roller, which roller is also to be fluted or ribbed.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of the eccentric cylindrical roller, with the buckle case consisting of back, top and side plates; the whole being constructed and operating in the manner above described, or any other substantially the same.

JULIUS W. HATCH.

Witnesses present:

HICKS WORDEN,

ARAD EVANS.