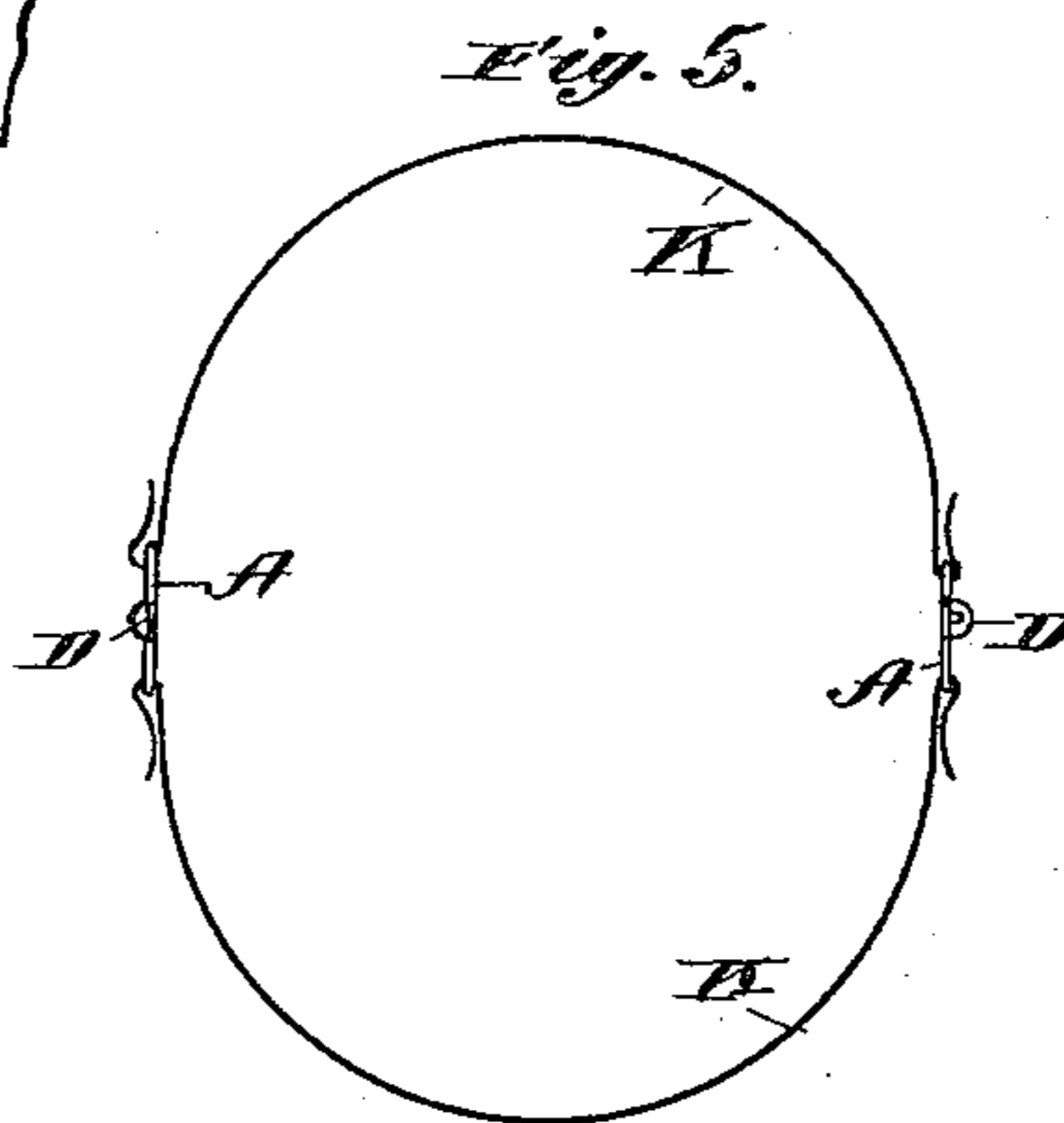
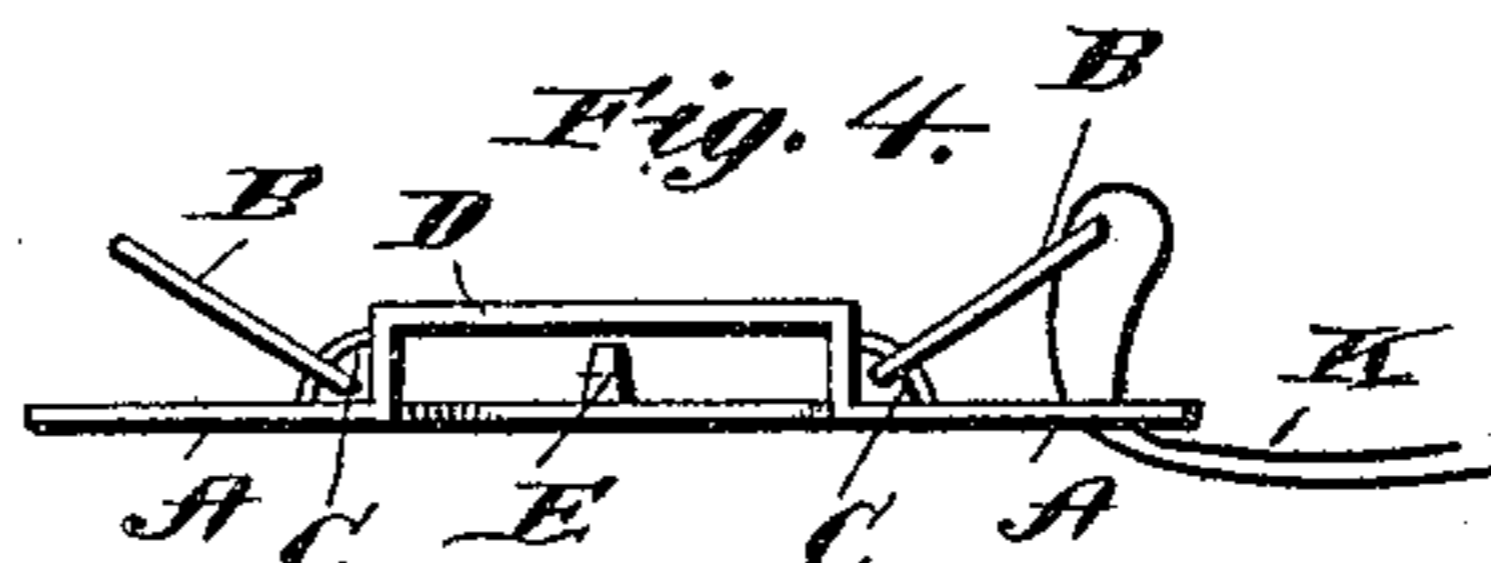
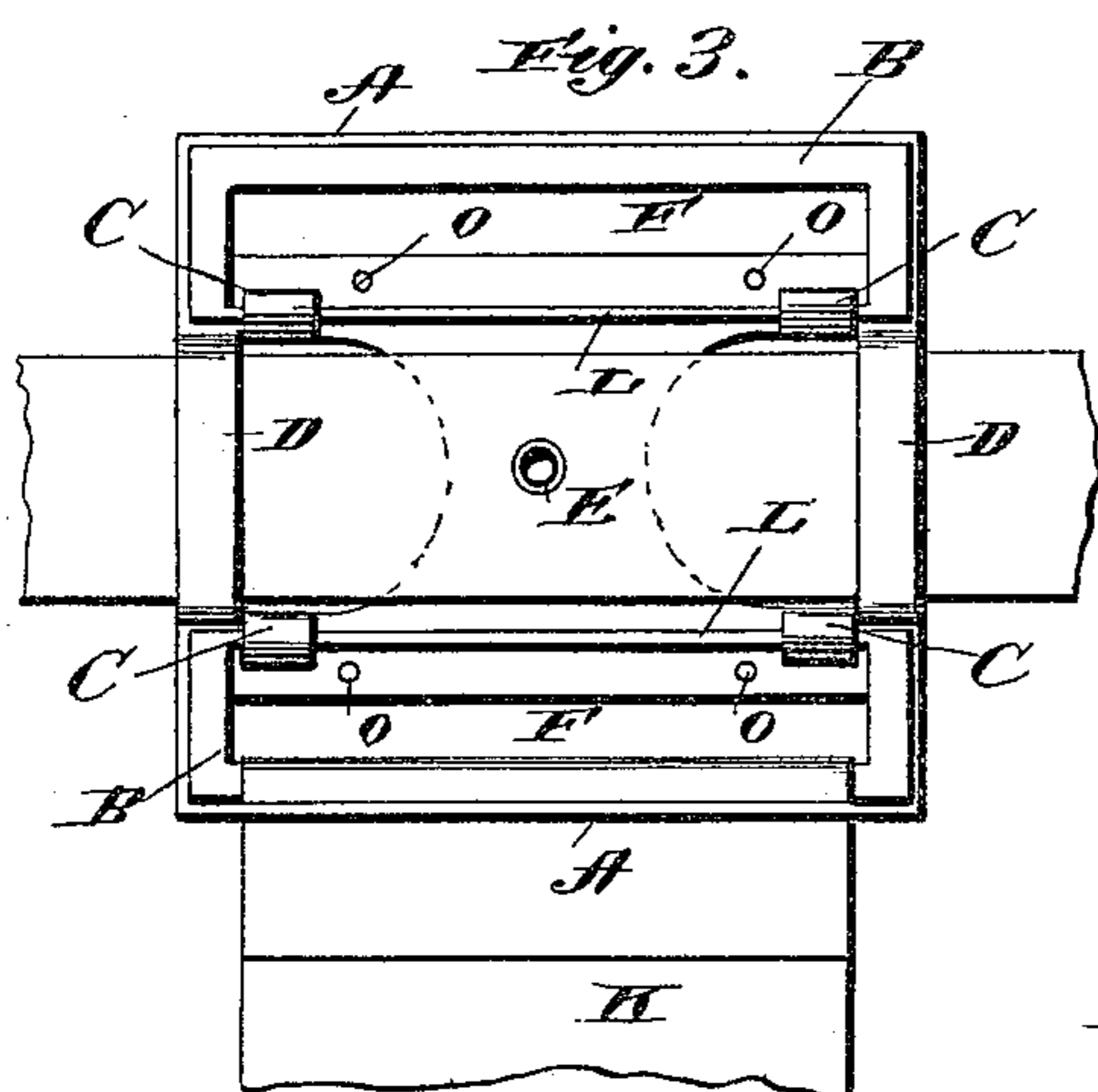
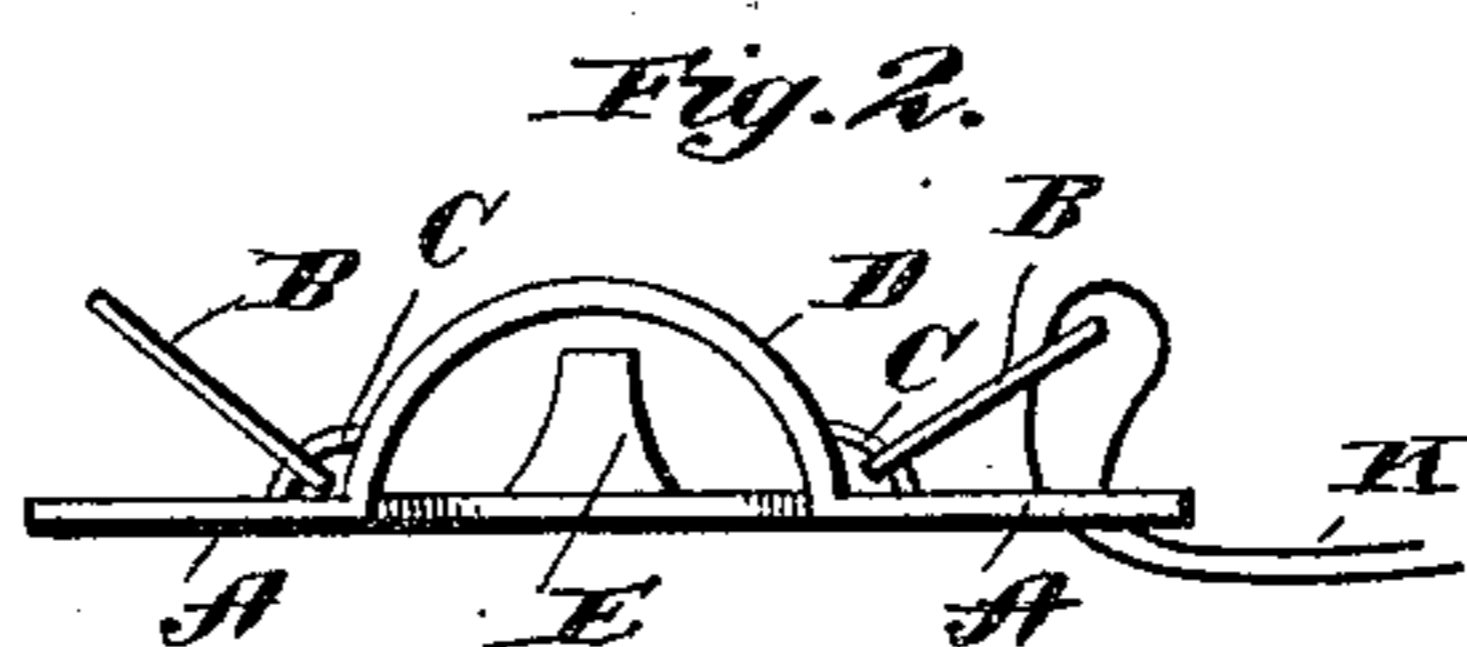
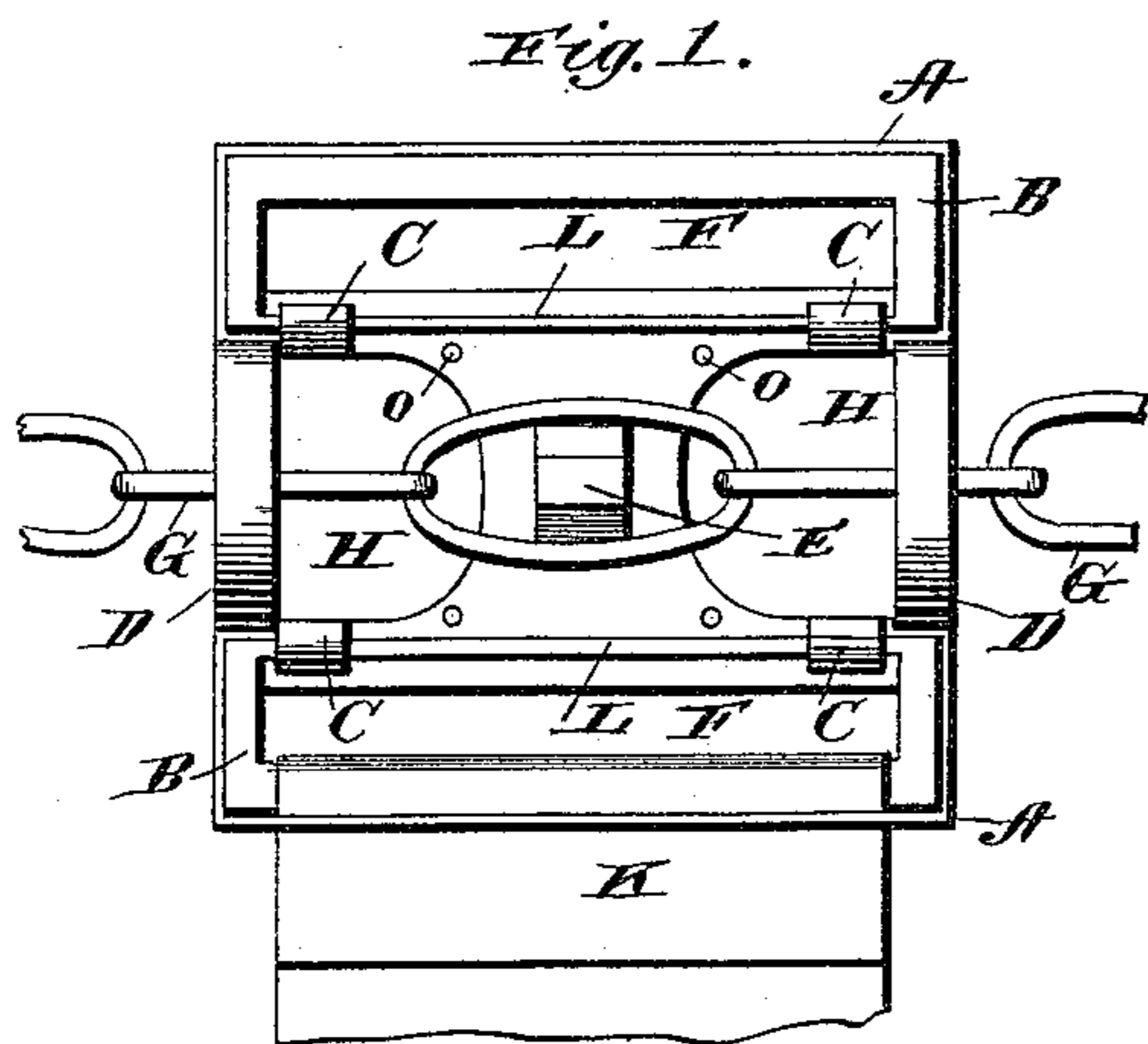


(No Model.)

W. A. MARSH.
TRACE CARRIER.

No. 438,418.

Patented Oct. 14, 1890.



Witnesses:

C. H. Paeder
James J. Shuhz

Inventor

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By
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UNITED STATES PATENT OFFICE.

WILLIAM A. MARSH, OF FOSTER, LOUISIANA.

TRACE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 438,418, dated October 14, 1890.

Application filed March 10, 1890. Serial No. 343,440. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ALSTON MARSH, a citizen of the United States, residing at Foster, in the parish of St. Mary and State of Louisiana, have invented certain new and useful Improvements in Back-Band Buckles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to buckles for harness, &c.; and it consists in certain improvements on the buckle shown and described in Letters Patent granted to me on the 17th day of September, 1889, No. 411,291, as will be hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a top plan view of my improved buckle when used in connection with a trace-chain. Fig. 2 is an end view of the same. Fig. 3 is a top plan view of the buckle when used with a leather trace. Fig. 4 is an end view of the same, and Fig. 5 is a plan view showing the girth and back-band united by means of two of my buckles.

The body of the buckle consists of a plate A, preferably rectangular, having a slot F near each of what I shall call its "side edges" and a notch H in each end, which extends nearly to the center of the plate. A narrow strip or guard D spans each of these notches, and is preferably formed integral with the plate A. When the buckle is to be used with a trace-chain, the guard is preferably made round or semicircular, as shown in Fig. 2; but when it is to be used with a leather trace it may be made flat or rectangular, as shown in Fig. 4, although the particular shape is immaterial, except that it be small enough to keep the trace in place. The plate is provided with a pin or projection E at its center of any desired shape and size, as round or square, upon which the trace G is secured when in position. When the buckle is to be used for trace-chains, the projection is made larger and higher than when it is used for a leather trace, in which case it may be made sharp enough to pierce the leather, as desired.

By making the notches in the ends of the buckle and then spanning each notch with a raised guard plenty of room is secured for

the passage of the trace, and the weight of the buckle is decreased without detriment to its strength. It also enables the trace to be removed more readily than would be the case if the plate were solid, for with the notches the trace and the end can be bent down through the notches, thus forming a larger or smaller loop with the pin on the buckle in a line with the axis of the loop, and thus all that is necessary is to push the loop off the end of the pin. Pivotal secured upon the top of the plate by means of the malleable lugs C C are two rectangular frames B B, each of which surrounds one of the slots F. One side L of each of these frames is preferably made round like a rod to act as a pivot, and the other side is preferably angular upon the inside and rounding upon its outer edge, which is substantially flush or even with the side of the buckle. There are two of the lugs C C for each frame and are located one at each end of the round portion, so that they will just fit within the ends of the frames, where they are bent down over the rod, and thus prevent lateral movement of the frame without the use of additional means for that purpose.

As above described, the entire buckle may be made of cast material and be put together without the use of any tool except a hammer to bend the tops of the lugs C over the round rods L of the frames B.

In attaching the buckle to the harness the end of the band K is passed up through the slot F from the under side, then over the outer side of the frame B, and back down through the opening F, which thus forms a loop over the frame B. The band and the end which projects below the buckle are then drawn out from the edge of the plate, as shown in Figs. 2 and 4. This causes the end of the band to be clamped between the band and the buckle on the under side and between the frame and the buckle upon the upper side. Thus it will be seen that the greater the draw or pull upon the band the tighter will the end be held and the more secure the fastening will become. On the other hand, when it is desired to remove or change the buckle from one place to another on the band, all that is necessary is to loosen the tension on the band, which will

loosen the pressure upon the ends, and by raising the frame B the end of the band may be shifted as desired or entirely removed.

By making the plate with a frame on each side and the fastening for the trace between them or in the middle the back-band can be secured to one side of the frame and the girth to the other side, and thus cause the buckle to be directly in the path of the trace, so that there will be no strain on any of the parts when the draft comes on the trace, or one of the openings may be dispensed with and the buckle secured by any other means.

If desired, a pad or other means of protecting the animal from being chafed or rubbed by the trace can be secured to the under side of the plate by threads or wires passed through small holes o o in the plate and into the pad or protector.

Having described my invention, what I claim is—

1. A buckle for harness, &c., consisting of a plate having a rectangular opening in each side edge and a notch at each end, two frames

pivotally secured to the top of the plate so as to surround said openings, a raised guard spanning the mouth or outer portion of each notch, and an outwardly-extending projection in the center of the plate, substantially as specified.

2. A buckle for harness, &c., consisting of a rectangular plate having a rectangular opening in each side edge and two malleable projections at one side of each opening, a rectangular frame for each opening, one side of which is round or rod like and pivotally secured to the plate by means of the lugs which are bent over it, one lug coming just within each end of the frame and preventing lateral movement of the frame, and means for securing the trace to the plate, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM A. MARSH.

Witnesses:

HELMUTH HOLTZ,
PERCY D. PARKS.