

(No Model.)

J. F. KNORR.

HAME.

No. 337,338.

Patented Mar. 2, 1886.

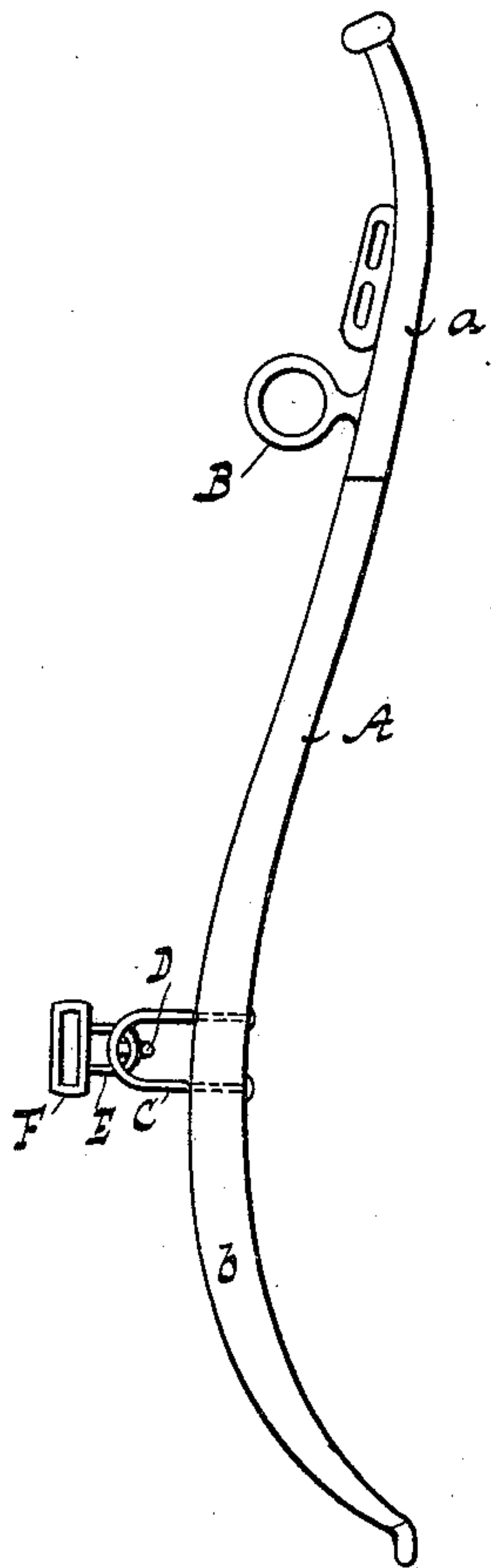


Fig. 1.

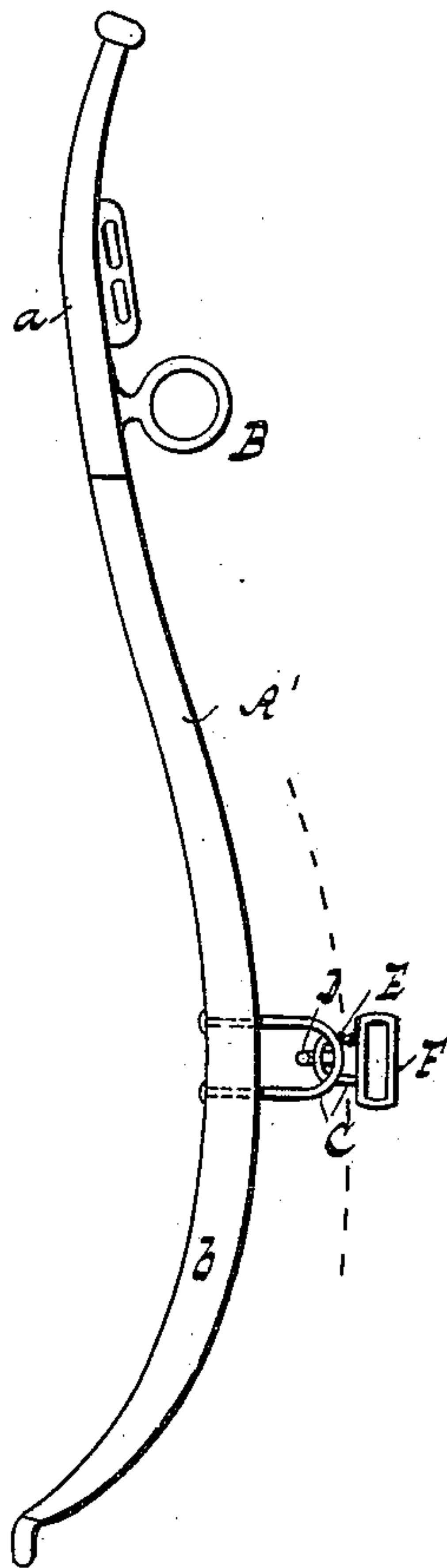


Fig. 2.

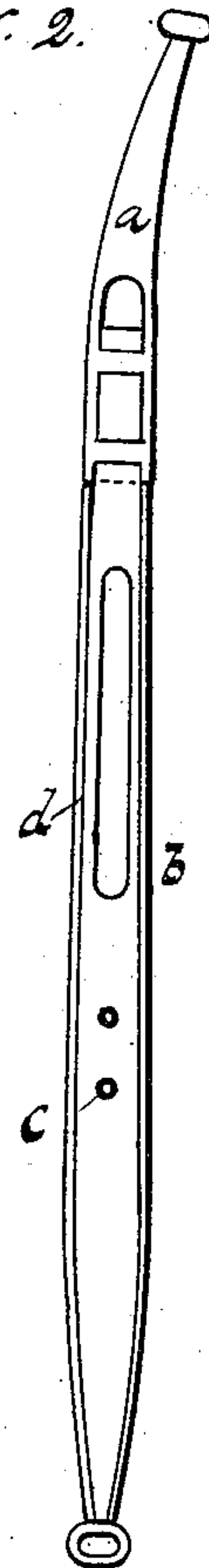
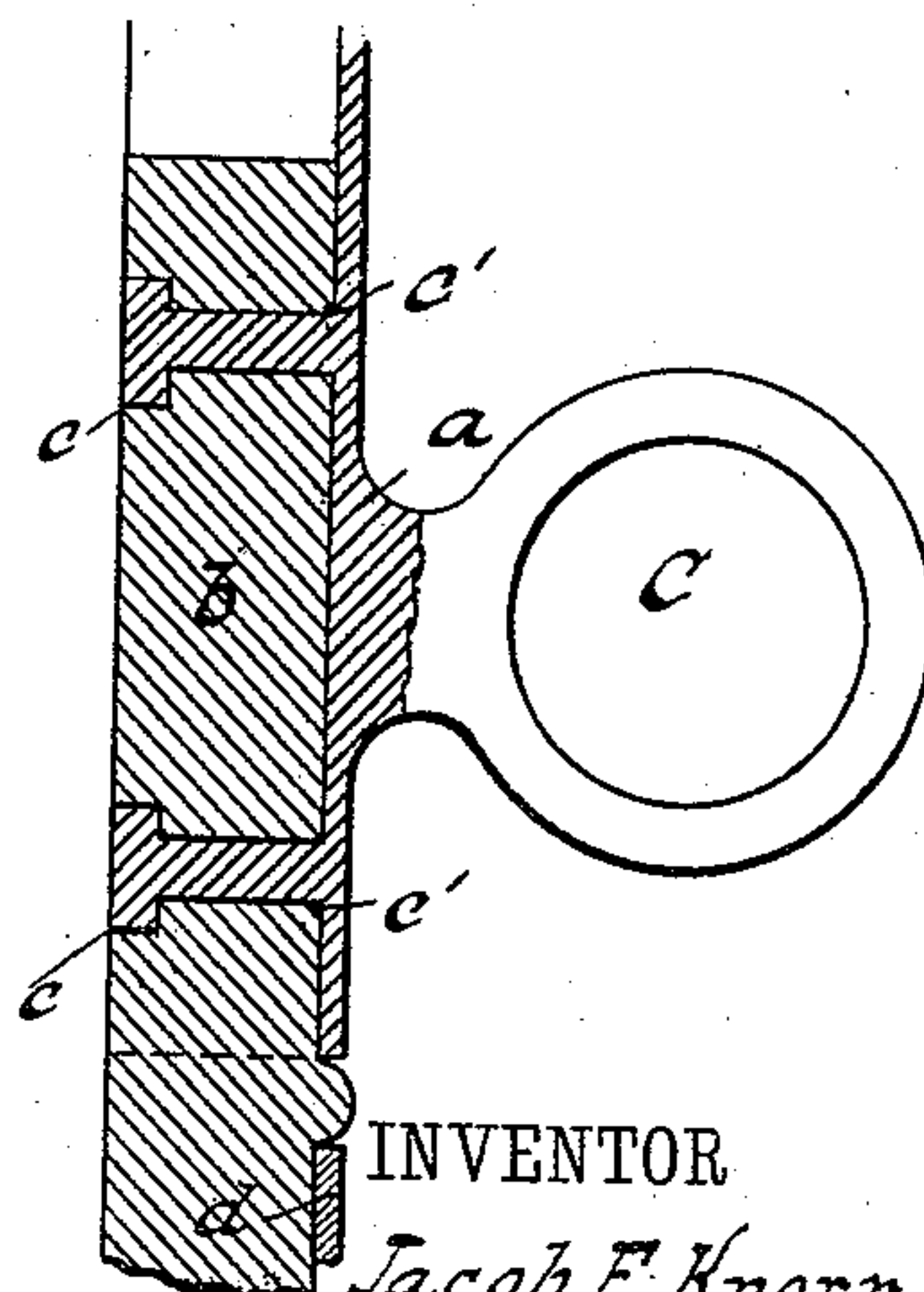
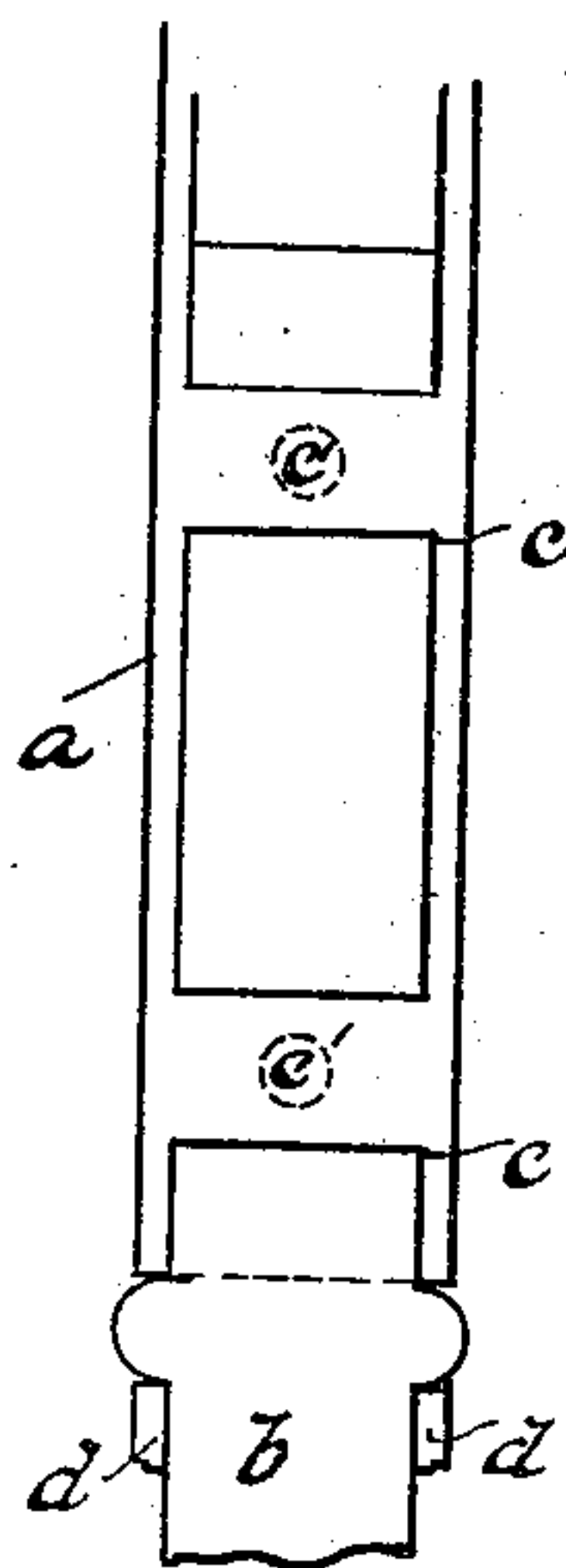


Fig. 3.

Fig. 4.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JACOB F. KNORR, OF ORANGE, NEW JERSEY.

HAME.

SPECIFICATION forming part of Letters Patent No. 337,338, dated March 2, 1886.

Application filed June 18, 1885. Serial No. 169,088. (No model.)

To all whom it may concern:

Be it known that I, JACOB F. KNORR, a citizen of the United States, residing at Orange, in the county of Essex and State of New Jersey, have invented new and useful Improvements in Hames, of which the following is a specification.

My invention relates to improvements in hames; and it consists in certain novel features of construction of the hames, which are fully pointed out in the following specification and claim, and illustrated in the accompanying drawings, in which—

Figure 1 is a face view of my improved hames. Fig. 2 is a side view of one of the hames. Figs. 3 and 4 are detail face and sectional views of parts.

Similar letters indicate corresponding parts.

In the drawings, the letters A A' designate the separate portions of the hames, both being shaped precisely alike and provided with strap-loops, by means of which they are strapped together at or near their respective ends in the usual manner. Each hame is formed of two metallic sections, *a b*, the lower section, *b*, being preferably made of iron, while the upper section is best made of brass or some similar metallic composition; and I form the connection by casting the upper section around the upper part of the lower section.

To make a firm and reliable joint, the upper end of the cast-iron section, the cross-section of which at this point is best made plano-convex, is provided with one or more grooves, *c*, Figs. 3 and 4, extending transversely across its flat or inner face, and also in the example here illustrated with one or more holes, *c'*, extending through the section perpendicular to the plane of the groove, these holes being located in the said grooves *c*. The cast-iron section, after having been formed as shown and described, is placed in a suitable mold, the upper or brass section is cast around the same, and as the metal finds its way into the

grooves and the holes a very firm joint is secured. These upper sections of the hames are provided with the usual terrets, B, and the loops for the fastening-straps, which are best formed integral with the casting, but may be separately secured thereto.

As shown in the drawings in Fig. 1, the draft device is so placed on the hames that the draft-eye can swivel on the tongue in the direction of the wagon; but this latter motion is prevented by the collar, part of which is shown by dotted lines in the drawings, which extends outward sufficiently to underlie the link on the said draft-eye.

It is evident that the draft-eye can be quickly and easily removed from the draft-staple by turning it somewhat in the proper direction and then lifting it upward, so as to clear the tongue, the great advantage of such a removable draft eye being apparent.

As shown in the drawings, the section *a* can be covered with leather *d*, or the like, if so desired, and in this case the section *b* is cast somewhat larger in cross-section than the iron section, so that it will form with the leather an unbroken smooth surface.

I am aware that a hame has heretofore been made with a separate upper portion, and that metallic hames have been made in sections. Such, therefore, I do not broadly claim.

What I claim as new, and desire to secure by Letters Patent, is—

A hame combining in its structure a lower metallic section, *b*, having transverse grooves *c* and holes *c'*, and the upper metallic section, *a*, having part of its metal rigidly interlocked with the said grooves and holes, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JACOB F. KNORR. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.