

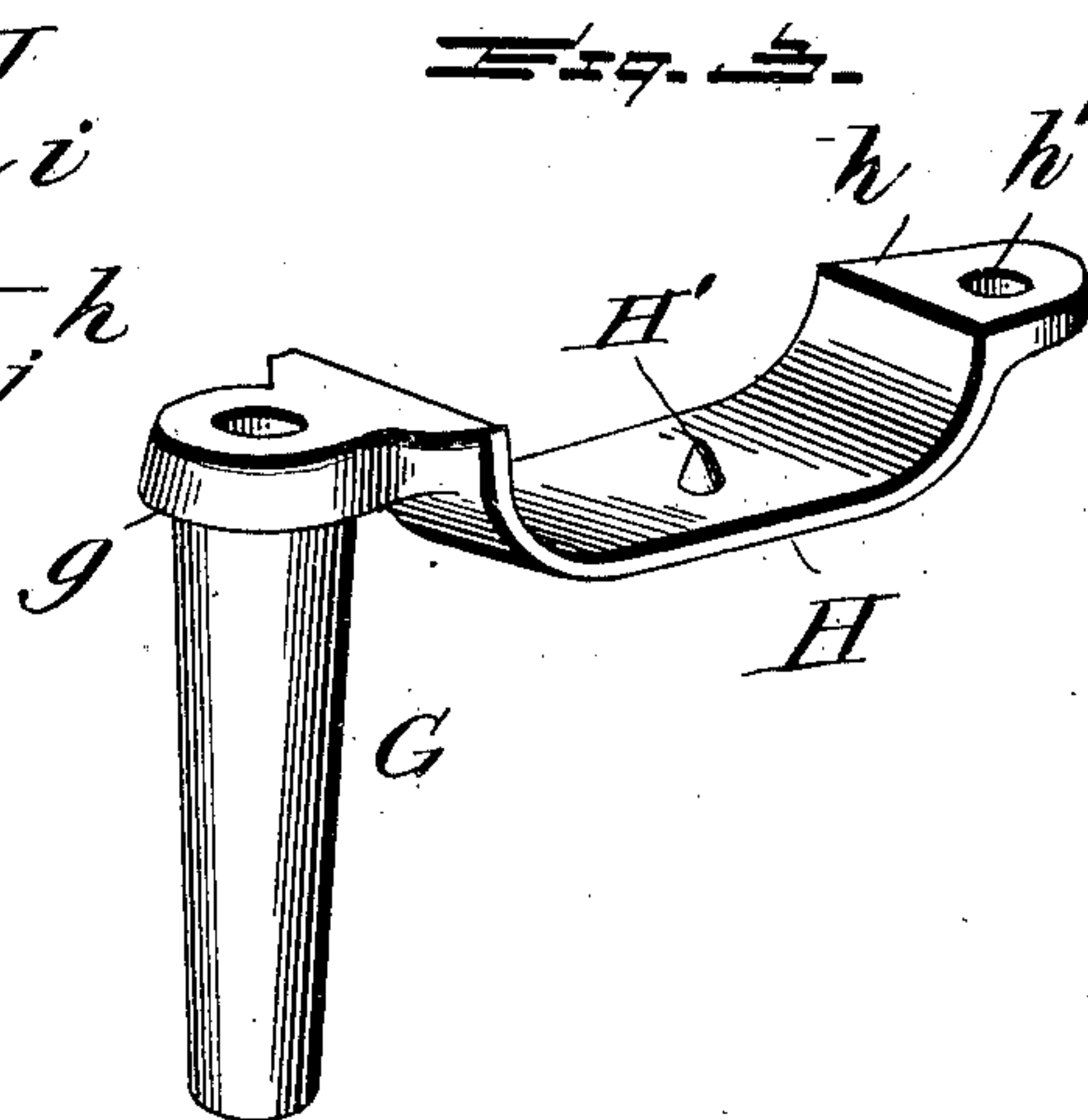
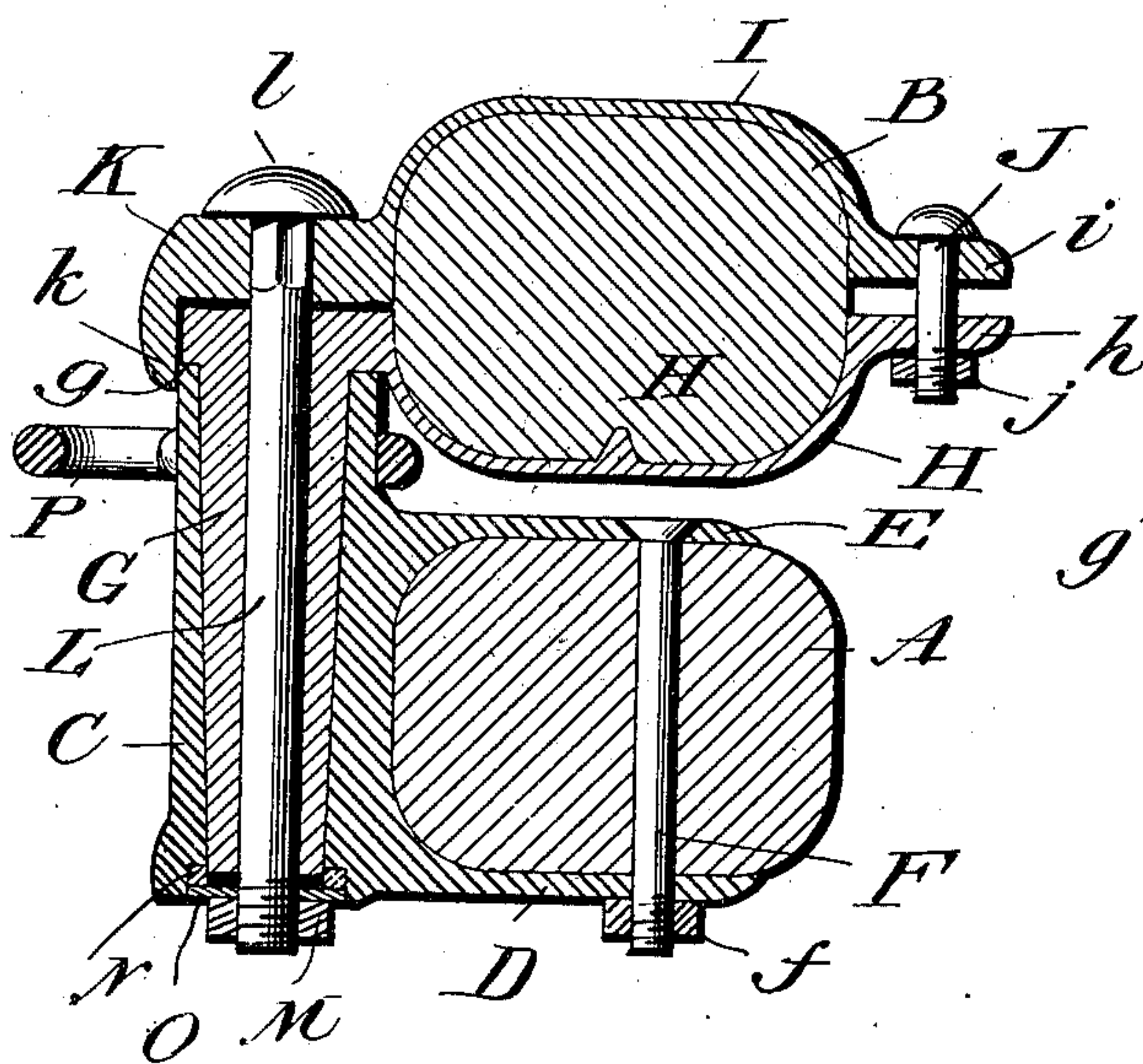
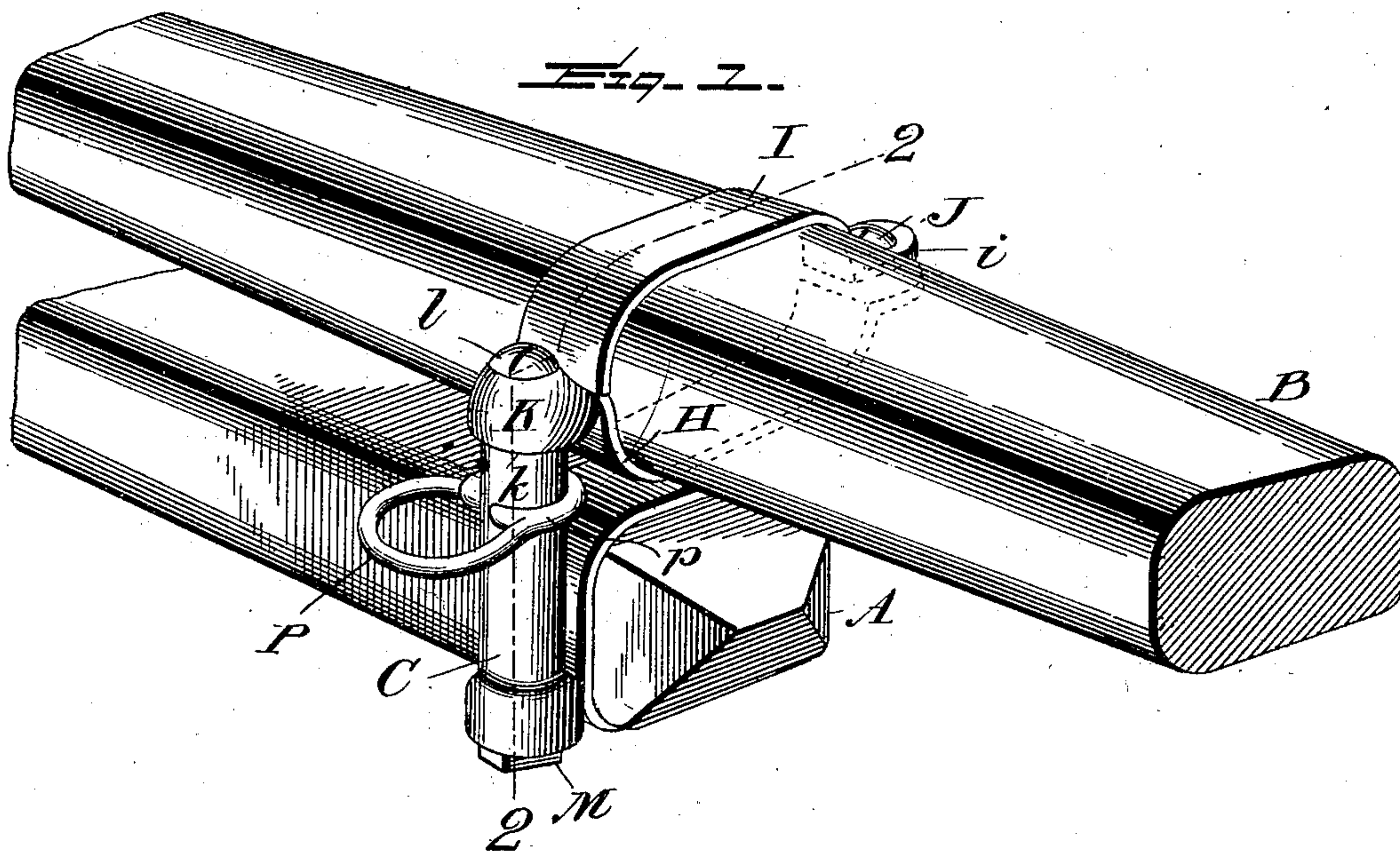
No. 673,189.

Patented Apr. 30, 1901.

W. I. WOLVERTON.
VEHICLE COUPLING.

(Application filed Aug. 16, 1900.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

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VEHICLE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 673,189, dated April 30, 1901.

Application filed August 16, 1900. Serial No. 27,088. (No model.)

To all whom it may concern:

Be it known that I, WASHINGTON I. WOLVERTON, a citizen of the United States, residing at Avery, in the county of Erie and State of Ohio, have invented certain new and useful Improvements in Vehicle-Couplings; and I do hereby 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.

This invention relates to certain new and useful improvements in vehicle-couplings, and more particularly to that class designed for pivotally securing a singletree upon the doubletree or other support.

The present invention has for its objects, among others, to provide an improved coupling by which the employment of a number of bolts heretofore necessary is dispensed with, thus permitting me to obtain the full strength of the wood. By my improved construction no bolt through the singletree is necessary, the part which attaches to the singletree being in the nature of a clip which serves to add strength thereto. The portion which attaches to the doubletree is also in the nature of a clamp, embracing the same upon opposite sides and requiring but a single bolt to secure it thereto. The top plate acts as a brace, and, furthermore, in case the singletree has a backward pull the top horizontal plate prevents the coupling from bending backward. The strap-loop is applied in such a manner that it can be readily lifted off in case the coupling is used for shafts. Provision is also made to prevent the ingress of dirt into the coupling, and other details in construction tend to improve generally the device as a whole.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of a portion of a singletree and a doubletree connected by my improved coupling. Fig. 2 is a vertical cross-section through the same on the line 2 2 of Fig. 1. Fig. 3 is a perspective view of the

hollow tapering post and its associated portion of the clamp which embraces the singletree.

Like letters of reference indicate like parts throughout the several views on which they appear.

Referring now to the details of the drawings by letter, A designates one end of a doubletree, and B the singletree. The singletree is secured to the doubletree in the following manner:

C is a hollow tapered casting having formed integral therewith the bottom plate D, which engages upon the under side of the doubletree, and the top plate E, which engages the upper side of the doubletree, as shown best in Fig. 2, a single bolt F, passing vertically through the two plates and the doubletree, serving to secure the same together, the bolt being provided at its lower end with a nut *f*, as shown.

G is a hollow tapered post fitting the tapered opening or bore of the casting C, as shown in Fig. 2, and adapted to revolve therein, being formed at its upper end with the horizontal flange or shoulder *g* to engage the upper end of the casting C, as seen in Fig. 2, and from this upper end of the post extends the integral horizontal portion H, which is depressed or made rounded, as seen, to receive the under face of the singletree, and at its outer end formed with the horizontal lug or shoulder *h*, with an opening *h'* to receive a bolt or other means, as will soon hereinafter appear. At the center this horizontal portion H is formed with a teat or projection H', adapted to enter the wood of the singletree, as seen in Fig. 2, and hold the clamp more firmly thereupon.

I is the upper portion of the clamp. It is formed with a horizontal lug or ear *i*, adapted to lie parallel with the lug or ear *h* of the lower part of the clamp, as shown, and through an opening therein and the opening in the lug *h* passes a bolt J, provided with a nut *j* upon its under side and which serves to securely fasten the clamp about the singletree, as seen clearly in Fig. 2. This upper portion of the clamp has a portion K, adapted to rest upon the top of the post G, and this portion is provided with the depending flange *k*, which embraces the portion *g* of the post, as shown in Figs. 1 and 2, and thus excludes the ingress

of dust and dirt and moisture into the coupling.

L is the bolt, which is provided with a head 7, which bolt passes downward through the hollow post and upon its lower end receives a nut M, a leather washer N being provided in a socket or recess in the lower end of the casting C, and a washer O also being employed, which bears against the leather washer and which in turn receives the nut M, all as clearly illustrated in Fig. 2.

P is the strap-loop, having a portion *p* to embrace the casting C near its upper end and below the shoulder *g*, as shown. This permits of the necessary movement of the loop, and yet it is prevented from displacement. Still it may be easily removed when desired by simply removing the nut M and lifting out the hollow post and bolt, as will be readily understood.

It will thus be seen that I have provided a coupling that is simple, yet strong and durable, and which will serve to better brace the parts and add material strength thereto and prevent the coupling from bending backward.

What I claim as new is—

1. A vehicle-coupling comprising a hollow casting with top and bottom horizontal plates,

a hollow tapered bolt or post with horizontal member, a complementary part with means for securing them about a singletree, and means for securing the post within the casting, as set forth.

2. A vehicle-coupling consisting of a hollow casting with horizontal upper and lower plates, a hollow post revoluble therein and having horizontal clamp member, a complementary clamp member with horizontal portion, and a bolt passed through said horizontal portion and through the hollow post.

3. A vehicle-coupling comprising a hollow upright casting, a hollow post rotatably mounted within the casting and provided at its upper end with a clamp member arranged to partly embrace a singletree, and a complementary clamp member also arranged to partly embrace the singletree and having a fastening connection with the upper end of said post.

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

WASHINGTON I. WOLVERTON.

Witnesses:

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