

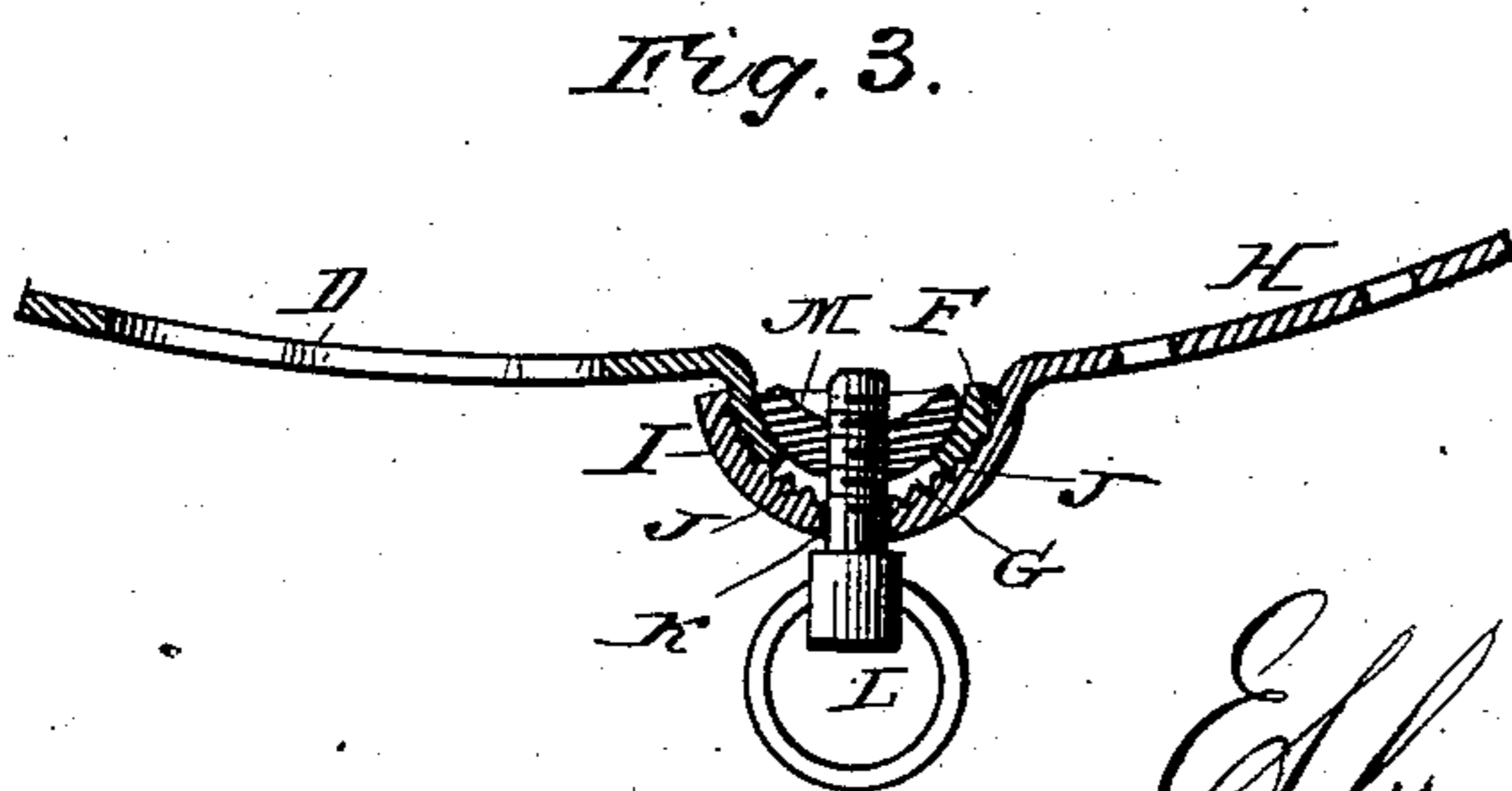
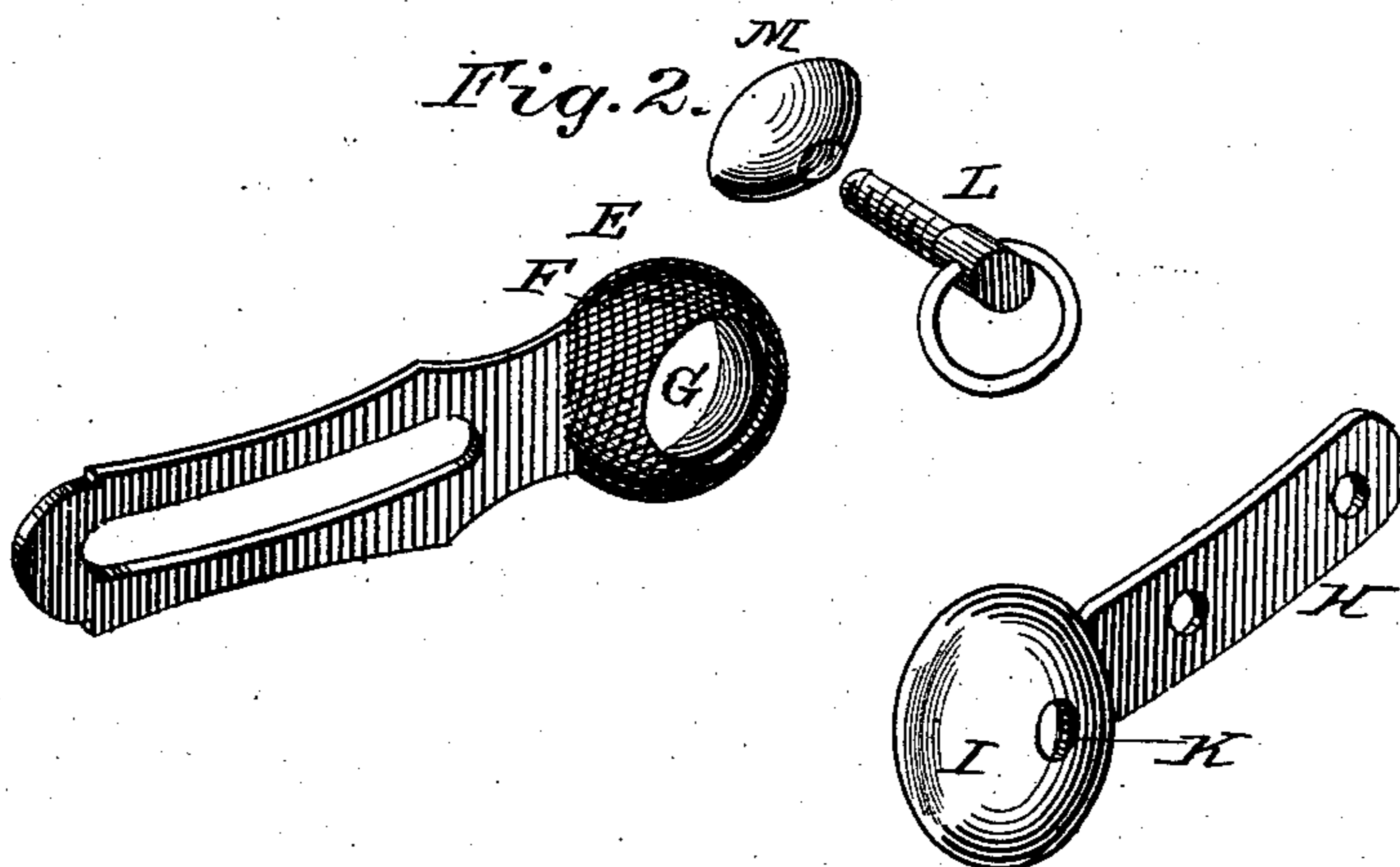
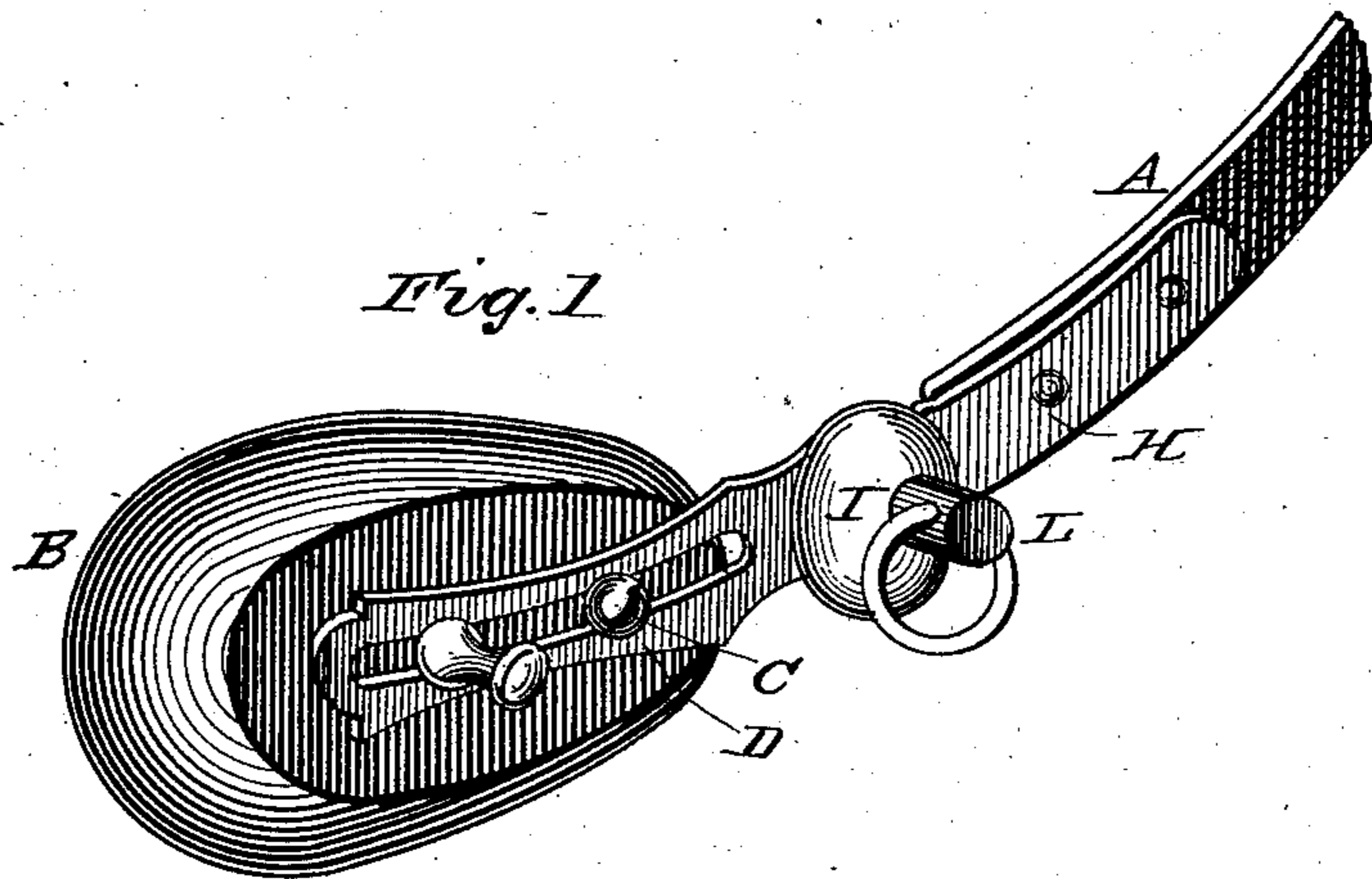
(No Model.)

E. HOWE.

TRUSS.

No. 294,321.

Patented Feb. 26, 1884.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ELBRIDGE HOWE, OF PETERBOROUGH, NEW HAMPSHIRE.

TRUSS.

SPECIFICATION forming part of Letters Patent No. 294,321, dated February 26, 1884.

Application filed December 3, 1883. (No model.)

To all whom it may concern:

Be it known that I, ELBRIDGE HOWE, a citizen of the United States, and a resident of Peterborough, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Trusses; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a portion of a truss provided with my improved joint. Fig. 2 is a similar view of the joint on an enlarged scale, and Fig. 3 is a longitudinal vertical section of the same.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to joints for connecting adjustably the pad of a truss to the end of the spring; and it consists in the improved construction and combination of parts of such a joint, which will allow universal adjustment, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the end of the spring, and B the pad, the outer side of which is provided with a set-screw, C, upon which slides a slotted plate, D, the outer end of which is concavo-convex, as shown at E, and provided with corrugations F and a central aperture, G. A plate, H, is secured to the end of the spring, and the outer end of this plate has a similar concavo-convex cup, I, which fits over the outer corrugated side of the plate upon the pad, having corrugations J upon its inner side, and a central aperture, K, through which a set-screw, L, passes, the central aperture in the cup upon the plate fastened to the spring being smaller than the perforation in the cup of the plate upon the pad, which latter perforation will allow the set-screw to play in all directions in it. The inner end of the set-screw is provided with a concavo-convex nut, M, which bears against the inner concave side of the inner

cup or the cup of the plate upon the pad. It will now be seen that by loosening the set-screw the outer cup may be turned upon the inner cup, the screw playing in the larger perforation in the inner cup, both cups forming a ball-and-socket joint, and that by tightening the screw the cups will be forced together, and the corrugations upon the outer side of the inner cup and upon the inner side of the outer cup, engaging each other, will prevent the cups from turning within each other. In this manner it will be seen that the pad may be adjusted in almost any position relative to the end of the spring, doing away with these several sets of screws and joints heretofore used for the purpose of accomplishing this result, thus making the truss less cumbersome, and simplifying its construction.

I am aware that joints consisting of concave and convex plates capable of adjustment in one plane have been used in trusses, and I am also aware that ball-and-socket joints have been used, the ball being upon the end of the spring, and the socket in the back of the pad, and I do not claim such construction, broadly; but

What I claim is—

In a truss, the combination of a plate secured upon the pad, and forming a concavo-convex cup upon its outer end, provided with corrugations upon its convex side, and having a large central aperture, a plate secured upon the end of the spring, and forming a concavo-convex cup upon its outer end, provided with corrugations upon its concave side, and having a small central aperture, a set-screw fitting in the smaller aperture and playing in the larger aperture of the cup, and a concavo-convex nut fitting upon the inner end of the screw, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ELBRIDGE HOWE.

Witnesses:

EZRA M. SMITH,
JOSEPH DAVIS.