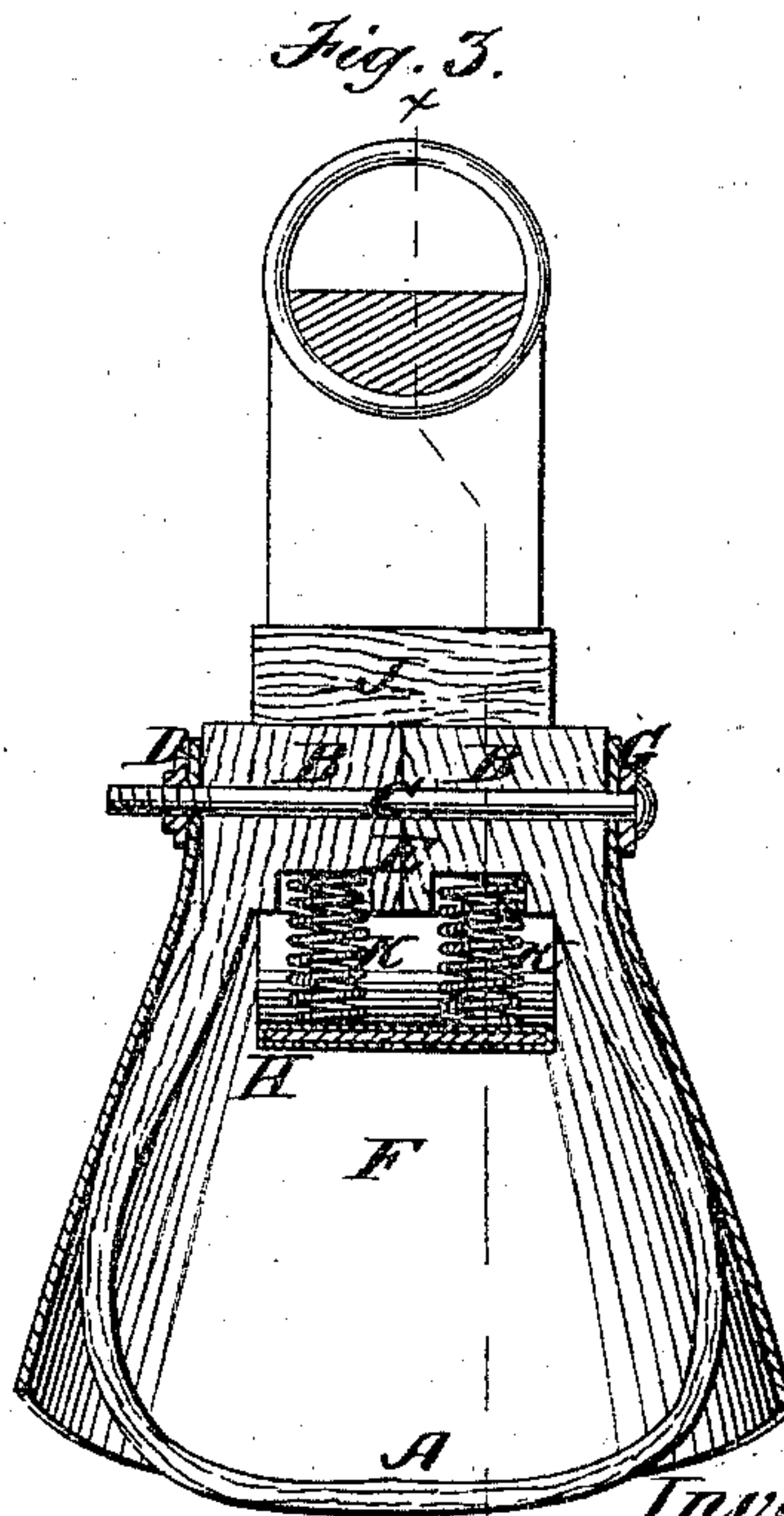
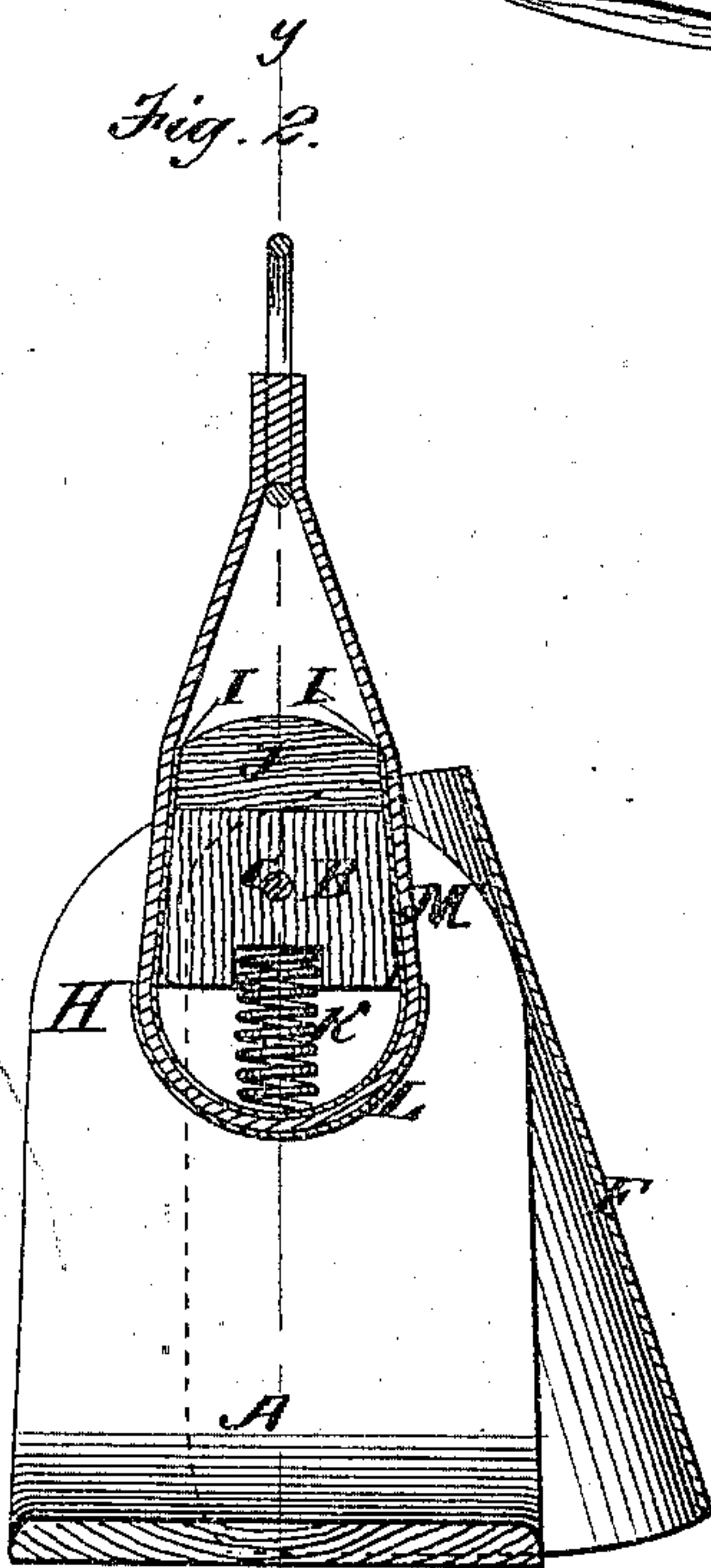
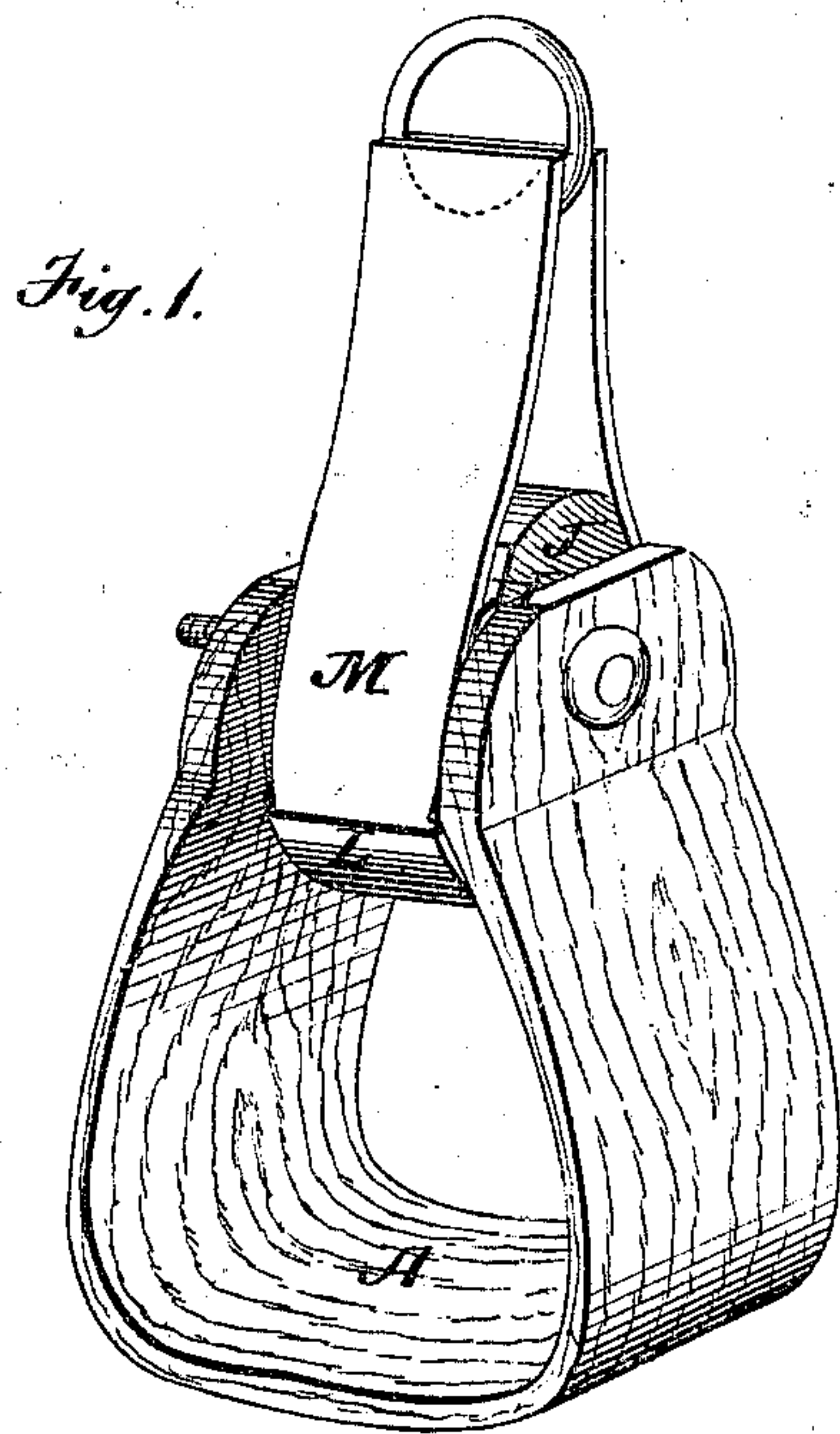


A. J. HERRING.  
Riding-Stirrups.

No. 135,547.

Patented Feb. 4, 1873.



Witnesses.  
C. F. P. [Signature]  
Dr. W. Ellsworth

Inventor  
A. J. Herring  
by his Attys.  
Wm. Ellsworth



# UNITED STATES PATENT OFFICE.

ANDREW J. HERRING, OF MAUCH CHUNK, PENNSYLVANIA.

## IMPROVEMENT IN RIDING-STIRRUPS.

Specification forming part of Letters Patent No. 135,547, dated February 4, 1873.

*To all whom it may concern:*

Be it known that I, ANDREW J. HERRING, of Mauch Chunk, in the county of Carbon and State of Pennsylvania, have invented a new and Improved Saddle-Stirrup; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a perspective view of my improved stirrup with the hood removed; Fig. 2 is a vertical section taken in the line *x x*, Fig. 3; and Fig. 3 is a similar view taken in the line *y y*, Fig. 2.

Similar letters of reference in the accompanying drawing denote the same parts.

My invention relates to that class of saddle-stirrups which are composed of wood bent into the requisite form to receive the feet of the rider. As usually constructed, a block of wood is bolted between the ends of the stirrup to hold them together and afford the necessary attachment for the stirrup-strap. The whole strain upon the stirrup when in use is, therefore, sustained by its thin ends, and any unusual shock or jar is liable to break out the wood from the bolt-holes and tear the bolt from its place. This breakage, of course, renders the stirrup worthless.

The first part of my invention has for its object to overcome this defect; and to this end consists in constructing the stirrup of one piece of wood with half of the block upon each end, which halves, when the stirrup is bent into the proper form, bear against each other, and are held together by a bolt passing through them. By this construction the top of the stirrup is practically made in one piece with the sides, and furnishes a solid bearing for the bolt. The latter, therefore, cannot be torn from its place under the most violent usage. The second part of my invention consists in connecting the stirrup-strap to the stirrup by a spring frame, for the purpose of relieving the horse and rider from the effects of sudden shocks and jars, the frame being constructed to embrace the top piece of the stirrup and hold the loop of the strap beneath the same so that the breaking of the springs shall not destroy the connection of the parts. The invention consists, lastly, in arranging the springs

of the frame beneath the bolt and top piece of the stirrup, so that the operating parts of the attachment shall be held compactly and securely between the sides of the stirrup.

In the accompanying drawing, A is the stirrup worked out of one piece of wood with the half blocks B upon each end, which halves bear against each other when the stirrup is bent up, and are held in place by the transverse bolt C and nut D. By this construction the top E of the stirrup is made solid with the sides, and cannot be broken out by any strain or violence to which the bolt may be subjected. F is the leather hood of the stirrup secured in place by the bolt C passing through its upper corners. A washer, G, fits upon the bolt outside the hood upon one side and the nut D upon the opposite side, to prevent the hood from being torn off. By this means of securing the hood in place the use of tacks and nails, which disfigure and injure the wood, is avoided.

If desired, the washer and nut may be ornamented to impart a neat and finished appearance to the attachment. H is the spring frame, consisting of a metal loop, I, whose ends are secured to opposite sides of a block, J, resting upon the top of the stirrup. The loop depends from this block so as to embrace the top E, and extend downward between the sides of the stirrup. K are the springs supported in the loop so that their upper ends shall enter sockets formed in the under side of the blocks B to receive them, the tops of the sockets terminating at or near the under side of the bolt C. The springs operate with expansive force and hold the loop down with the block J resting snugly upon the top E. The lower portion of the loop has its edges turned up slightly to afford means for the attachment of a metal shield, L, and thereby form a narrow channel to receive the loop of the stirrup-strap M. The strap plays loosely within this channel, but is prevented from dropping down within the stirrup by means of the shield L.

If desired, one or more openings may be made in the bottom of the shield to discharge any water or moisture which may accumulate in the bend of the channel.

When the stirrup is in use the pressure of



the rider's foot compresses the springs and relieves both horse and rider from sudden jars or shocks.

By constructing the frame as above described, and arranging the loop and stirrup-strap beneath the top E, any breakage of the springs or frame would cause the strap to bear against the top E and prevent the stirrup from being detached.

The arrangement also is such that the spring frame is contained between the sides of the stirrup, and the whole attachment, therefore, presents a neat and compact appearance.

Having thus described my invention, what I claim as new is—

1. A wooden stirrup constructed in one piece, with a block, B, upon each end, which blocks, when the stirrup is bent up, bear against each other, and are held together by a transverse bolt, substantially as described, for the purpose specified.

2. The stirrup-strap connected to the stir-

rup by means of the spring frame H, substantially as described, for the purpose specified.

3. The spring frame consisting essentially of the metal loop I, block J, and the springs K, supported between the loop and the under side of the blocks B, substantially as described, for the purpose specified.

4. In combination, with the spring frame, the shield L, substantially as described, for the purpose specified.

5. The spring frame arranged as described, to hold the loop of the stirrup-strap beneath the top and between the sides of the stirrup, substantially as described, for the purpose specified.

The above specification of my invention signed by me this 31st day of December, 1872.

ANDREW J. HERRING.

Witnesses:

E. A. ELLSWORTH,  
MELVILLE CHURCH.