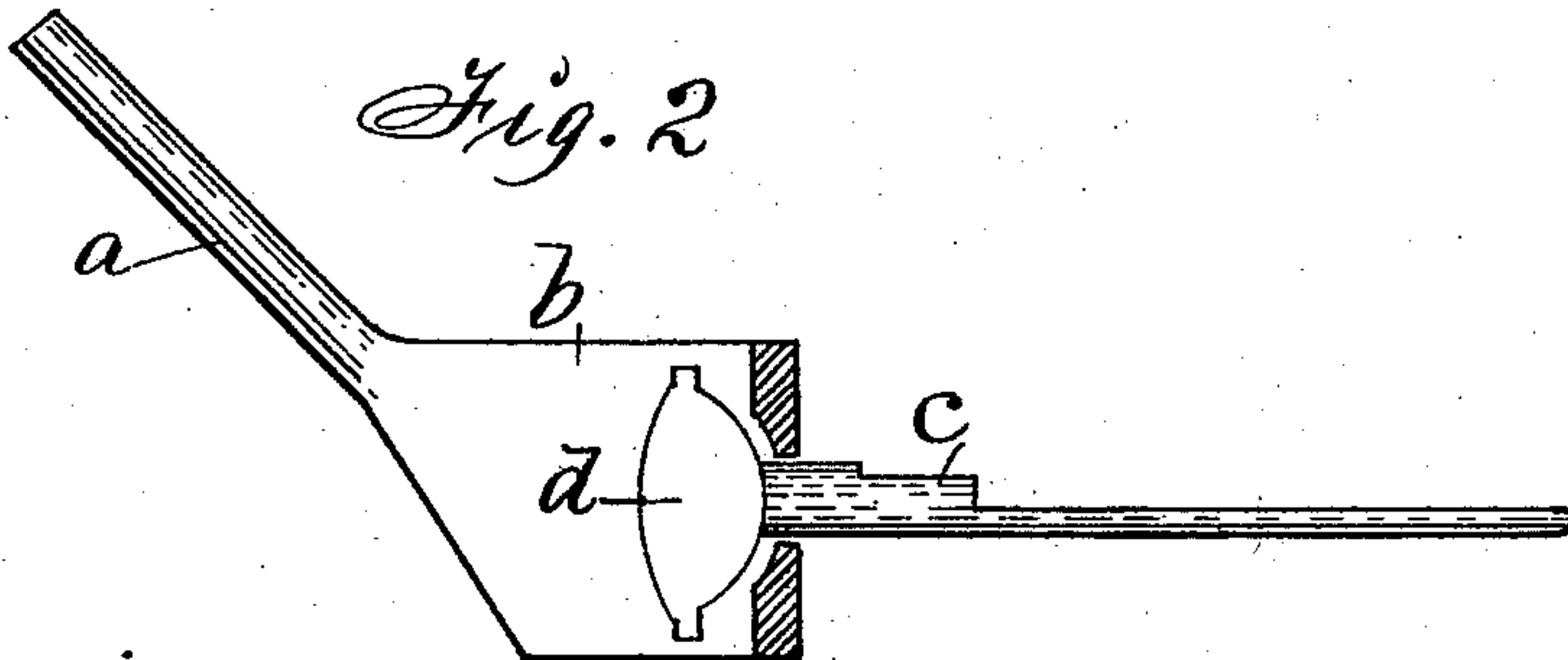
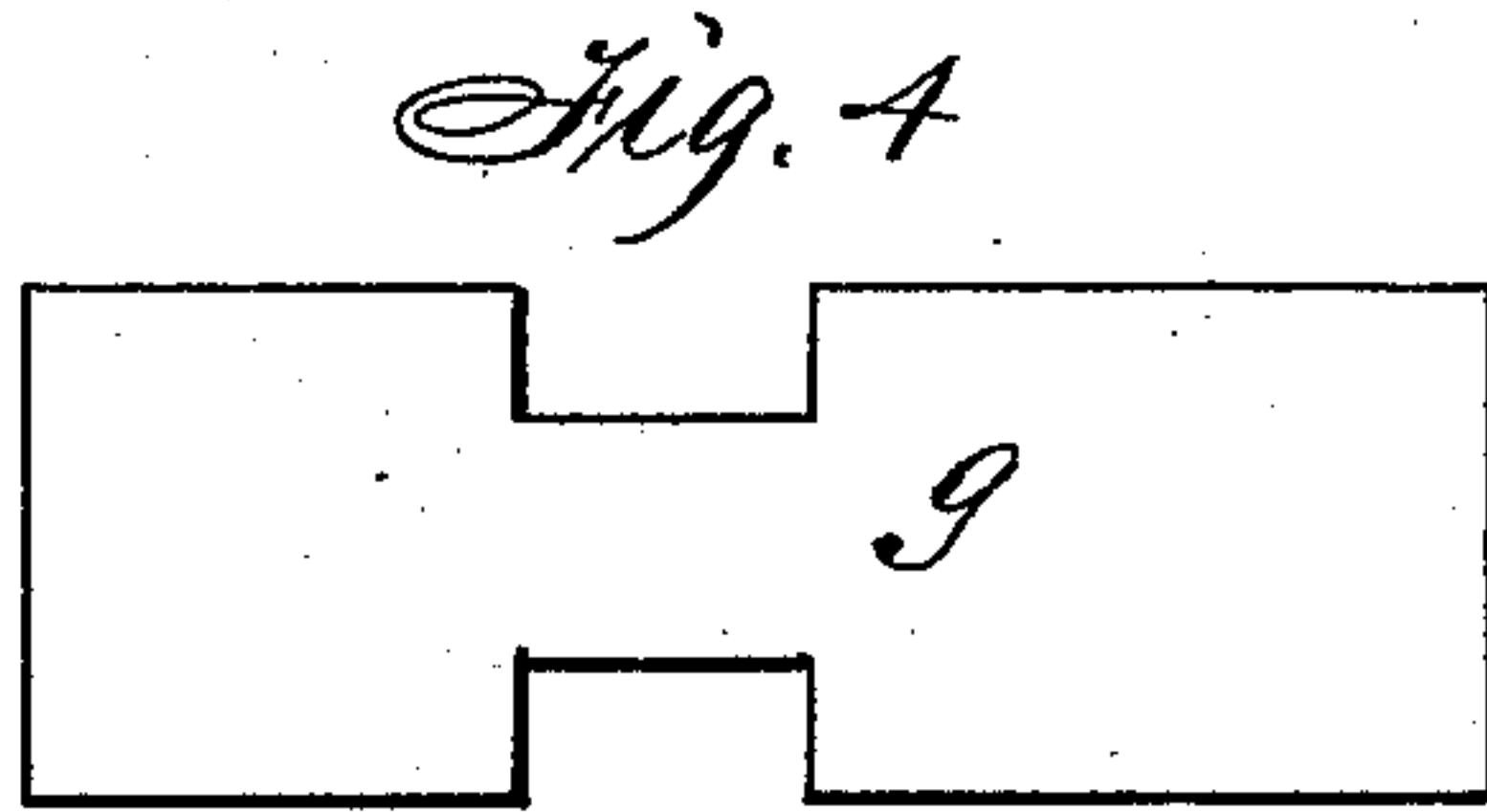
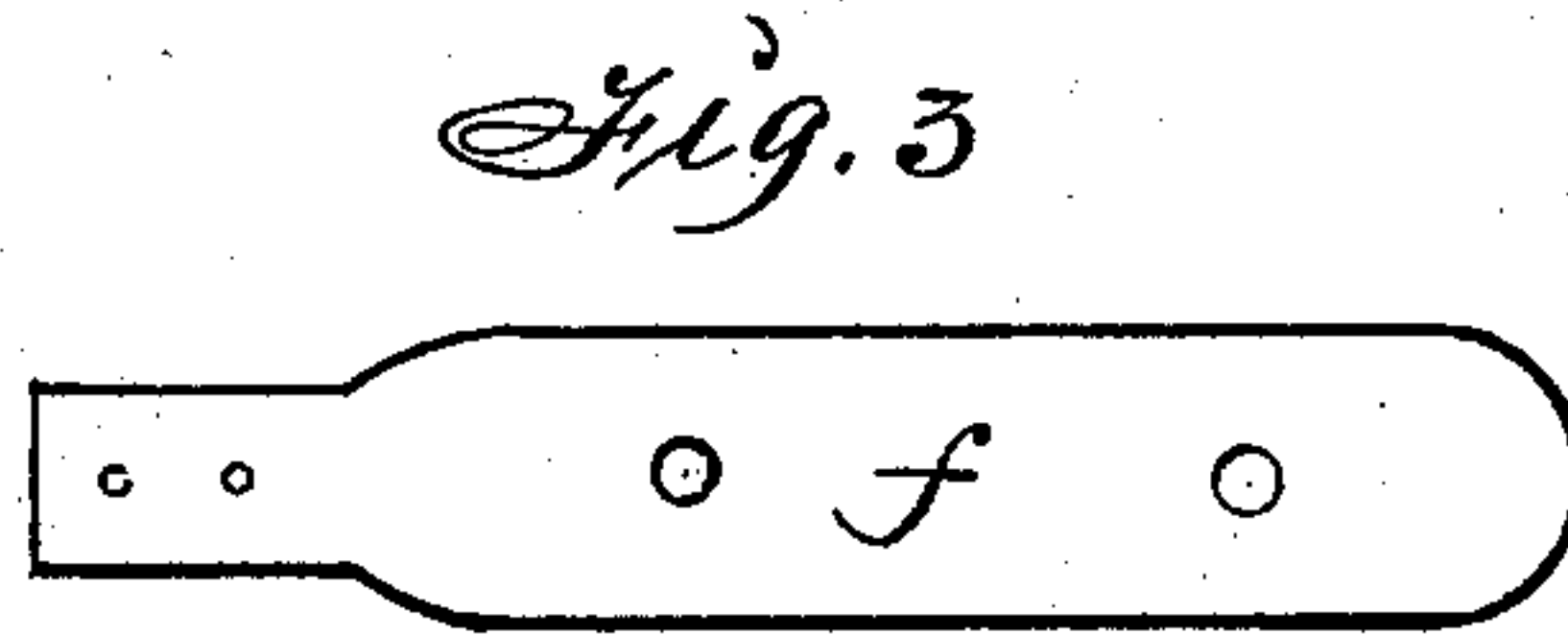
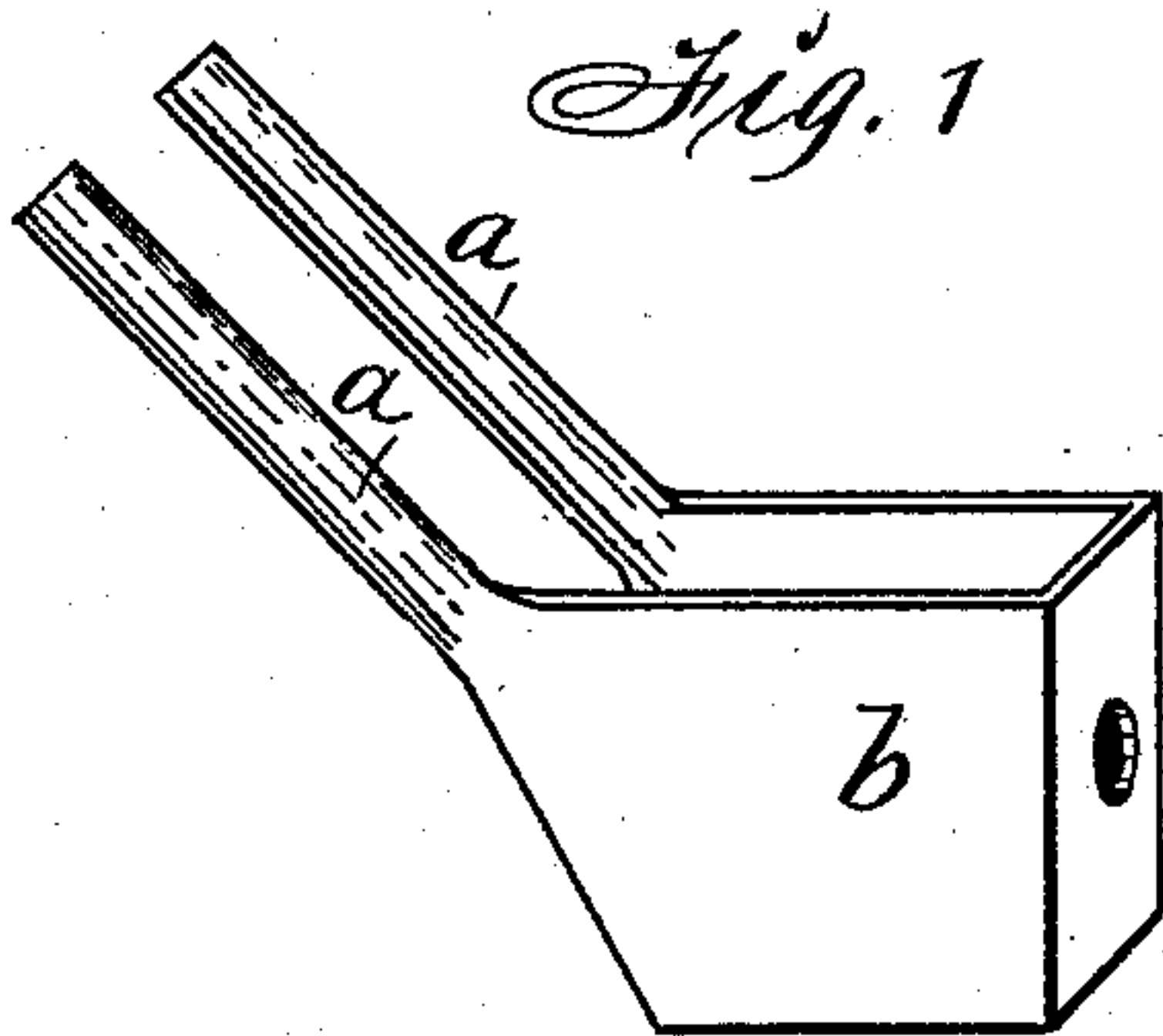


(No Model.)

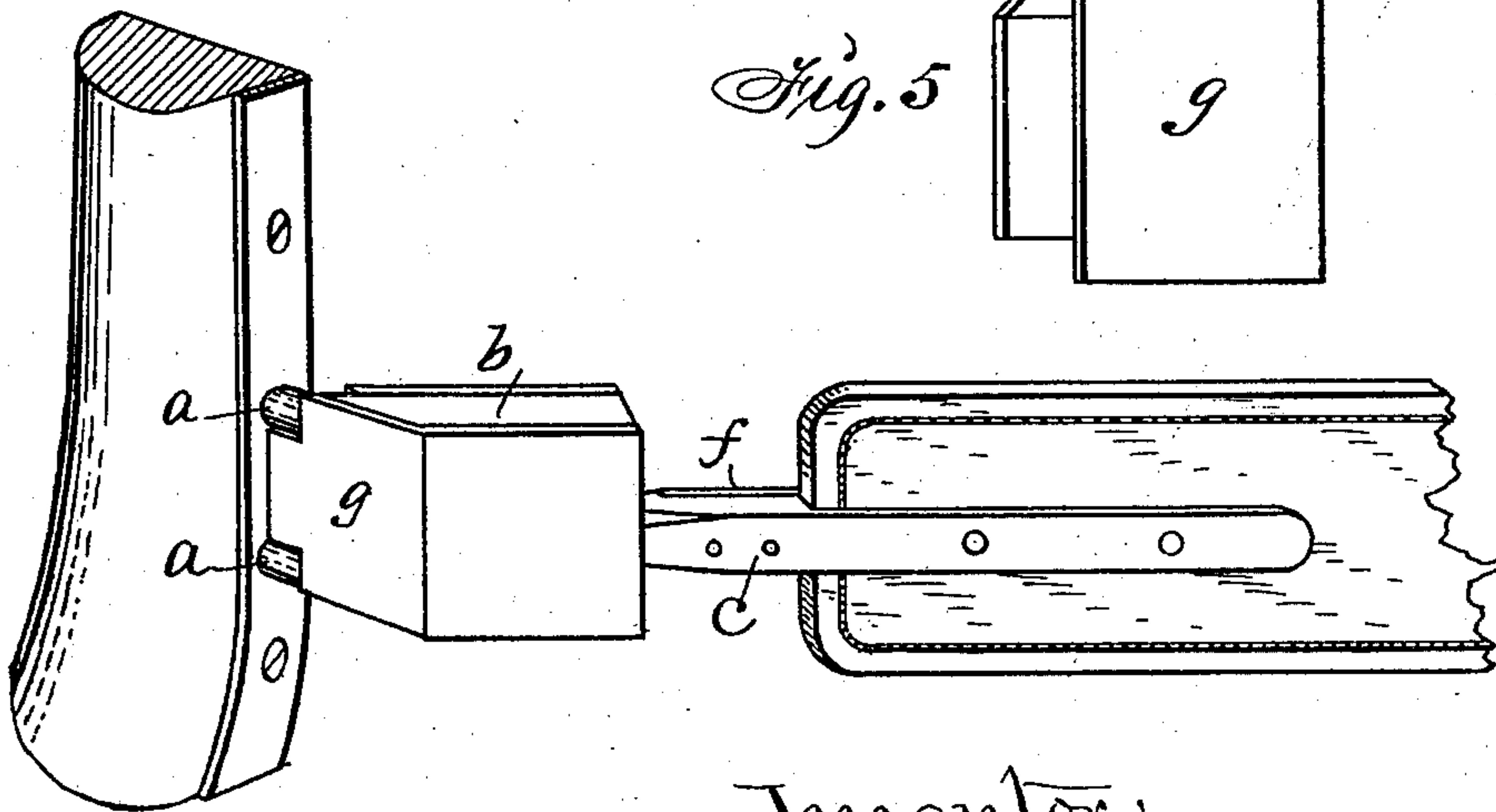
W. S. HAWLEY.  
HAME TUG COUPLING.

No. 368,919.

Patented Aug. 23, 1887.



*Fig. 6*



Witnesses:

R. H. Orrig.  
J. C. Tate.

Inventor:  
William S. Hawley,  
By Thomas O. Orrig, Attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM S. HAWLEY, OF EAGLE GROVE, IOWA, ASSIGNOR OF TWO-THIRDS  
TO OTIS L. HATHAWAY AND ELMER EVANS, BOTH OF SAME PLACE.

## HAME-TUG COUPLING.

SPECIFICATION forming part of Letters Patent No. 368,919, dated August 23, 1887.

Application filed May 14, 1887. Serial No. 238,268. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM S. HAWLEY, a citizen of the United States of America, and a resident of Eagle Grove, in the county of Wright and State of Iowa, have invented an Improved Hame-Tug Coupling for Harness, of which the following is a specification.

My object is to produce a neat, strong, and durable connection between the tug and hame of a harness in such a manner that the metal clip and the leather tug will not come in contact with a collar on a horse to chafe and wear it, and will have sufficient flexure to prevent the lateral bending and straining and breaking of the front end of a tug, incident to the use of common clips and staples.

My invention consists in the construction and combination of a staple and a clip with a hame and a tug, as hereinafter set forth, in such a manner as to produce a ball-and-socket joint that has restricted play.

Figure 1 of the accompanying drawings is a perspective view of my staple, having a socket adapted to receive the head of a clip. Fig. 2 is a sectional view of the staple, showing a clip combined therewith. Fig. 3 is a detached part of the clip. Fig. 4 shows the form of a blank cut from plate metal to produce a cover for concealing and protecting the head of the clip in the socket of the staple. Fig. 5 is a perspective view of the cover ready to be connected with the staple. Fig. 6 is a perspective view showing a tug and hame coupled together by means of my device, as required for practical use.

*a a* are the legs of a staple, adapted to be fixed to a hame in a common way.

*b* is a socket formed integral with the legs *a* and adapted in size and shape to admit the head of a clip.

*c* is the body of a clip, and *d* a head formed integral therewith. The body is small enough in diameter to allow it to be passed through the opening in the socket *b* of the staple, as shown in Fig. 2, and the head has lateral projections, or is so shaped relative to the cavity of the socket that it will be allowed to turn only about a quarter of a revolution in either direction, as required, to prevent the tug from turning around and twisting.

*f* is the detached mating section of the clip, that is adapted to be riveted to the flat side at the front end of the clip *c*, and to overlap the front end of a leather tug, to be jointly riveted thereto with the rear end of the clip *c*, as required, to fix the complete clip to the leather tug.

The cover *g* (shown in Fig. 5) is slipped between the legs *a* of the staple after the ball or head *d* of the clip is in the socket *b*, and pressed in place to close the open sides of the socket, as required, to conceal and protect the said head when it is desired to do so; but this cover can be dispensed with to reduce the cost of the coupling without materially affecting its operation and utility.

I am aware that a staple having a shank and ball or head has been fixed to a hame and clips or coupling-plates having sockets fixed to a hame-tug and combined to produce a ball-and-socket joint between the hame and tug; but my manner of forming a socket integral with a staple and a clip having a head and projections on the opposite sides of the head is novel and advantageous, in that the revolving part of the joint is inclosed and concealed and its motion restricted, as required, to prevent a tug from becoming twisted, and also, as required, to prevent the revolving part from rubbing against the collar or any other extraneous object.

I claim as my invention—

1. The staple provided with legs *a a*, having a socket, *b*, and the clip *c*, having a head, *d*, in combination with a harness-hame and hame-tug, substantially as set forth, for the purposes stated.

2. A cap or cover, *g*, in combination with the staple provided with legs *a a*, having a socket, *b*, for the purposes stated.

3. The staple provided with legs *a a*, having an integral socket, *b*, and the clip *c*, having a head, *d*, and projections on the opposite sides of said head, in combination with a hame and a hame-tug, substantially as shown and described, for the purposes stated.

WILLIAM S. HAWLEY.

Witnesses:

W. W. WALLACE,  
THOMAS G. ORWIG.