

(No Model.)

G. C. EDMUNDS.
HOLDBACK.

No. 501,003.

Patented July 4, 1893.

Fig. 1.

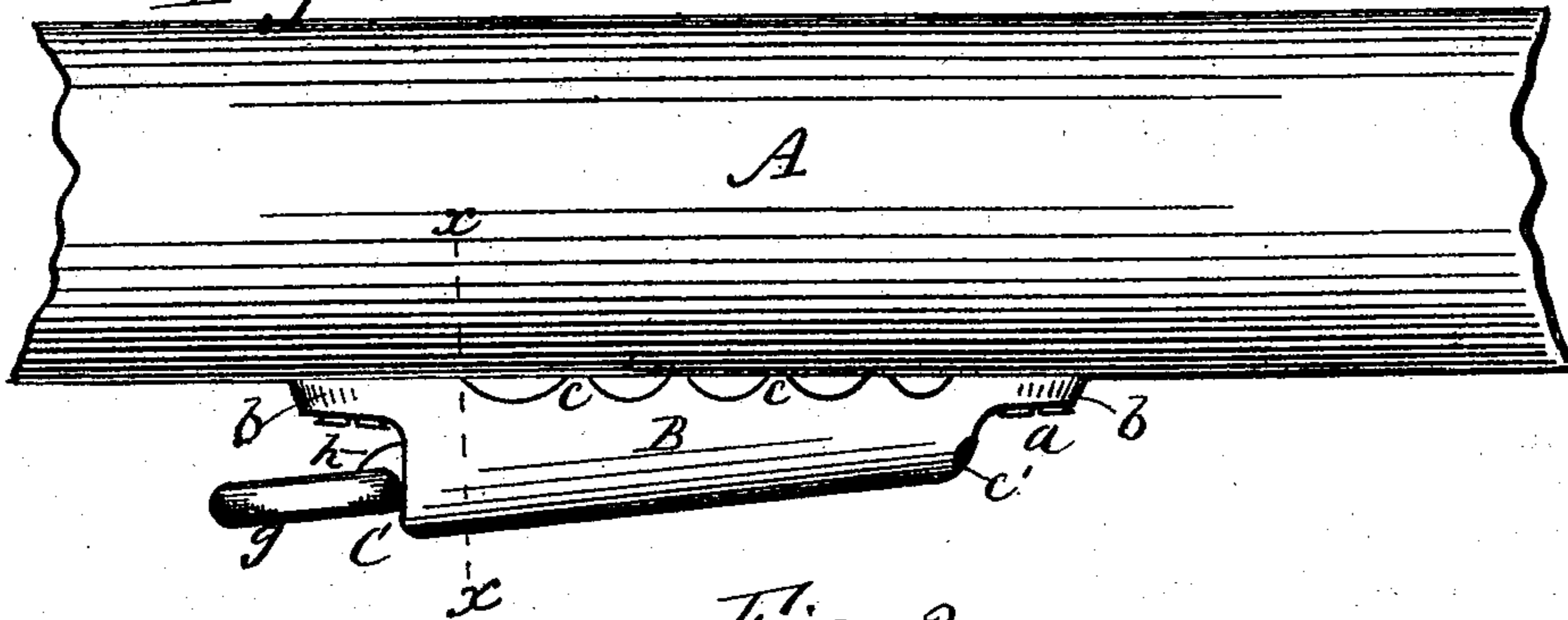


Fig. 2.

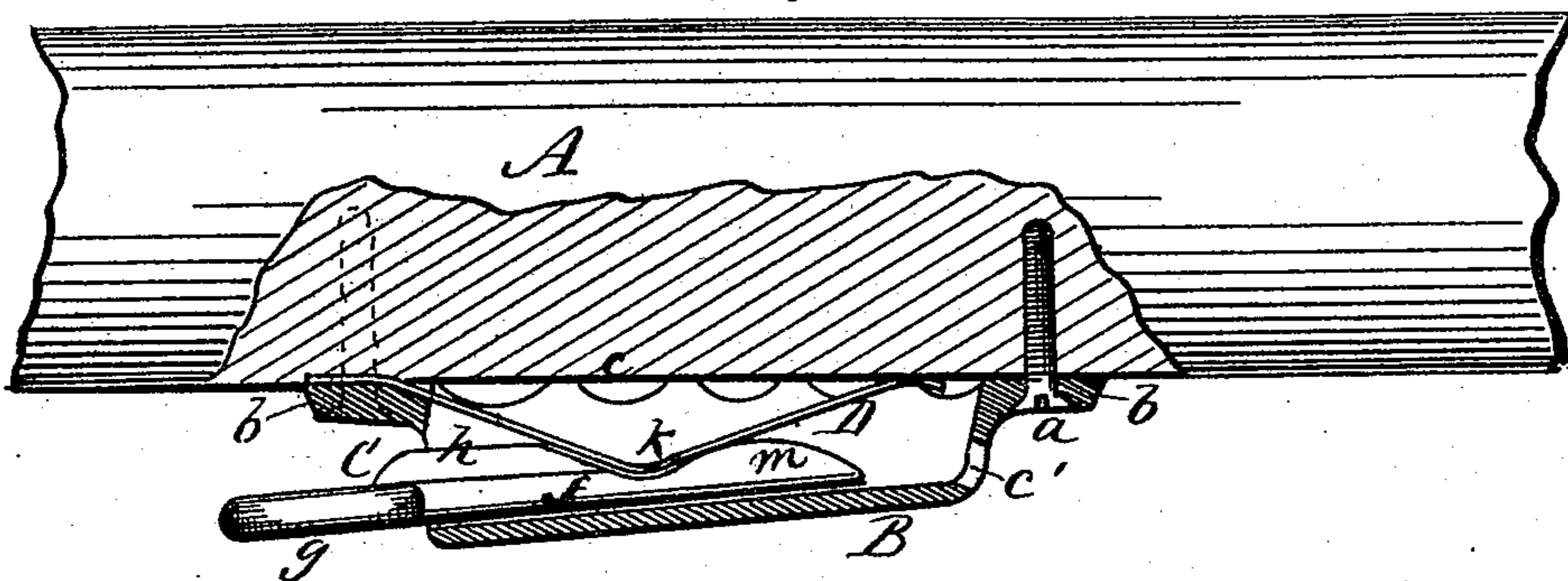


Fig. 3.

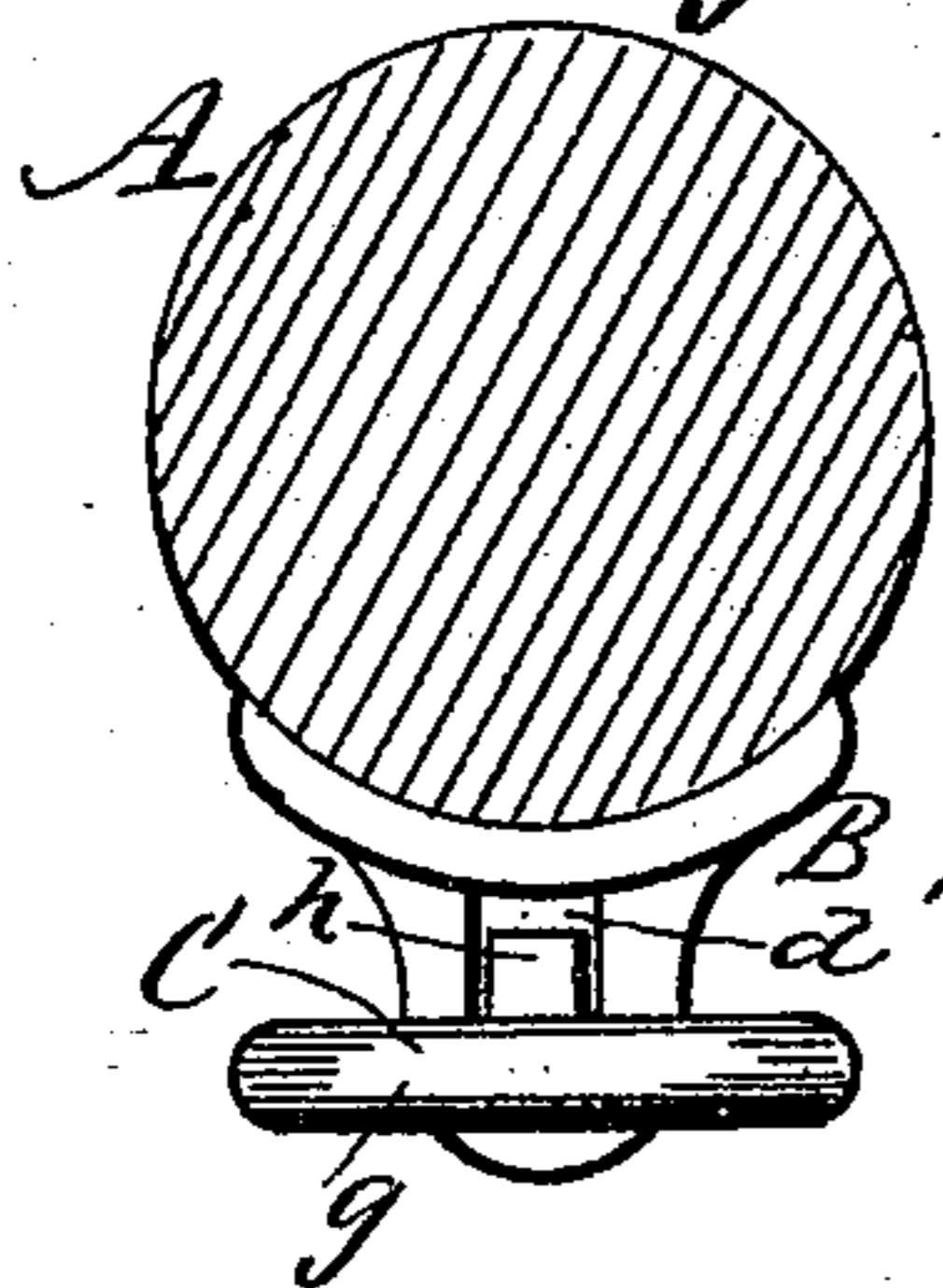


Fig. 4.

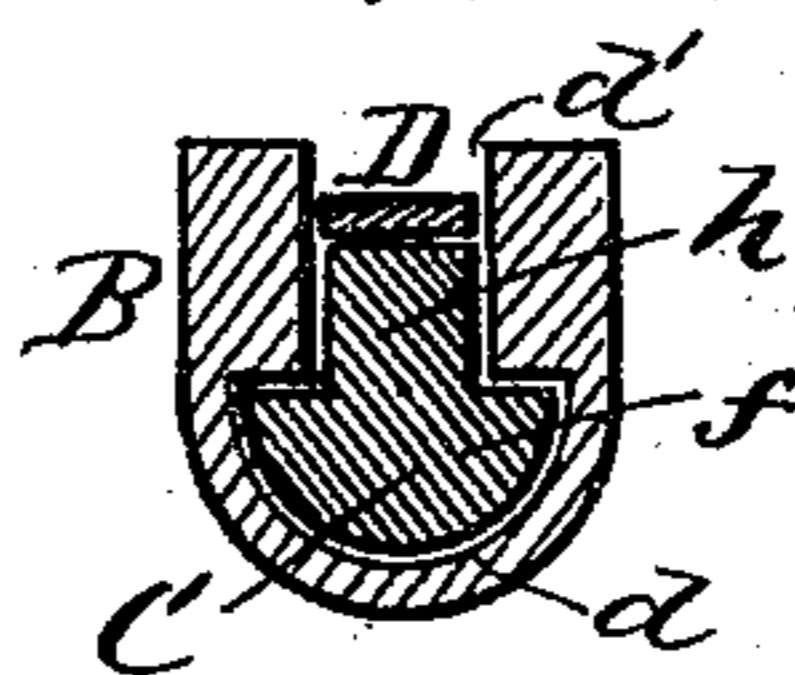
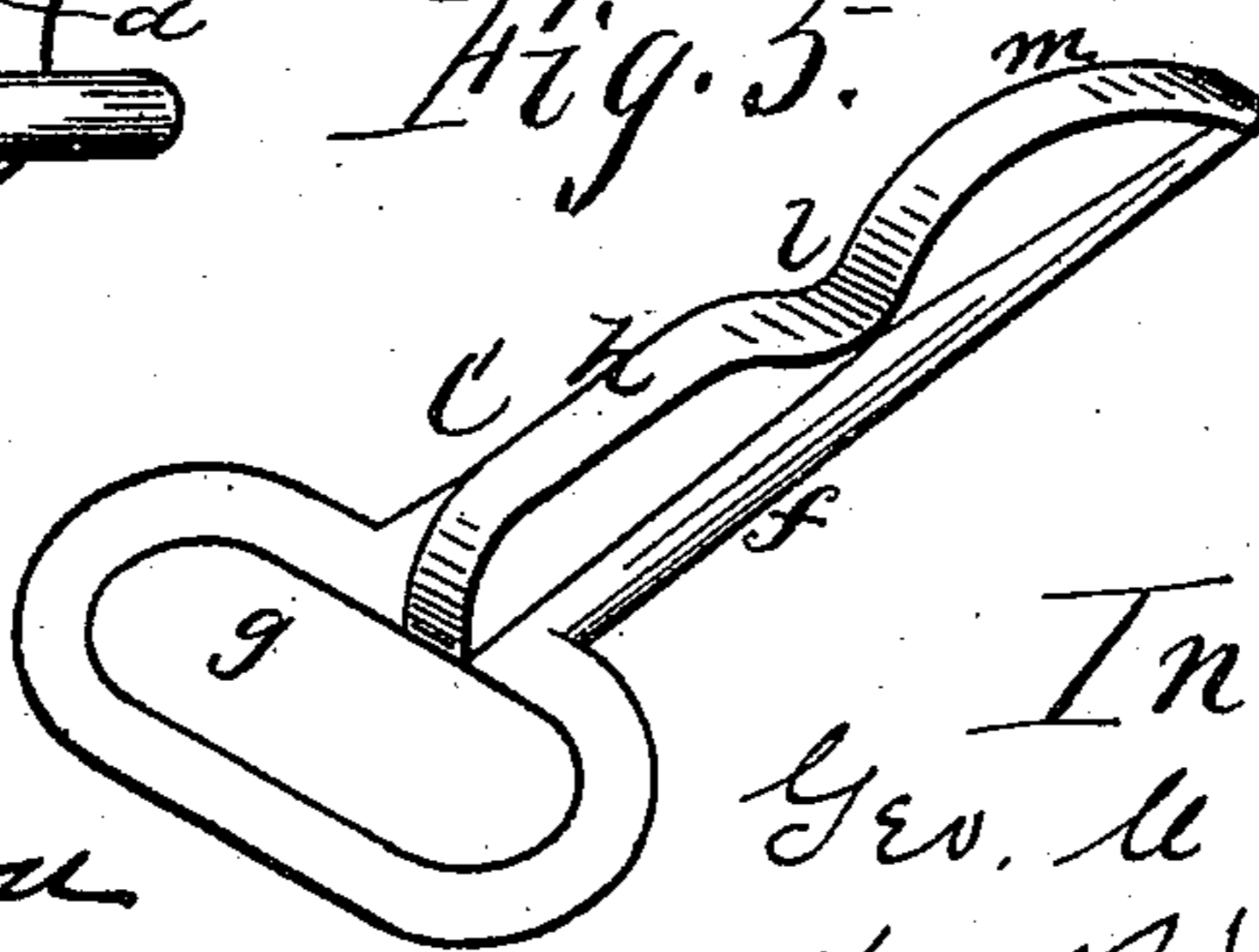


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE C. EDMUNDS, OF ROCHESTER, ASSIGNOR OF ONE-HALF TO FRANK
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HOLDBACK.

SPECIFICATION forming part of Letters Patent No. 501,003, dated July 4, 1893.

Application filed October 19, 1892. Serial No. 449,352. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. EDMUNDS, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Holdback Attachments for Harness; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this specification.

My improvement relates to that class of holdbacks in which a socket is used attached to the thill and a pin rests in the socket, which pin is self tightening under back strain but is removable under front strain, so that in case of breakage or detachment of the tug the coupling separates and releases the horse from the thills.

The invention consists in the special construction and arrangement of the coupling as hereinafter described and claimed.

In the drawings—Figure 1 is a side elevation of a portion of a thill showing my improvement attached thereto. Fig. 2 is a similar view showing the attachment and a portion of the thill in longitudinal section. Fig. 3 is a cross section of the thill and an end elevation of the attachment. Fig. 4 is a cross section of the attachment in line *x x* of Fig. 1. Fig. 5 is a perspective view of the pin.

A indicates the thill.

B is the socket and C the pin. The socket is made of cast metal of half circular form in cross section and flat on one side, by which it can be fitted to the thill and secured thereto by screws *a a* which pass through lugs *b b*. Preferably it is attached on the under side of the thill as shown, but it may be attached on the upper side. The flat face is formed with a series of corrugations *c c*, by which means when in place it holds better and also serves to discharge any water which may enter. It also has a small discharge hole *c'* in its closed end. The interior of the socket is constructed with an enlarged half circular opening *d* in its bottom and a contracted slot *d'* in its top for the fitting of the pin and spring, as will presently be described.

The pin C consists of a straight shank *f*

and a loop or ring *g* at its outer end. The shank *f* is half circular in cross section to fill the enlarged opening *d*, and is provided with an upwardly projecting flange *h* which rests in the narrow opening *d'*. By this means it can be inserted endwise into the socket but is prevented from turning axially. When so fitted in place the loop or ring *g* only projects, and this loop or ring serves as the attachment for the hold back strap. The back strain of this strap holds the pin in the socket, while the front strain when the horse is released draws it out.

D is a flat spring resting in the narrow opening *d'* of the socket. It is attached at its front end by being clamped between the lug of the socket and the body of the thill. Its rear end is free and rests against the thill. The central part is bent down forming a bow *k*, with inclines on both sides. The flange *h* of the pin is formed with a corresponding depression *l* in which the bow of the spring rests. The end of the flange is also provided with a double inclined cam *m*. When the pin is inserted in place the cam *m* strikes the spring, raises it and passes beyond it and the spring holds the pin in place against any accidental displacement yet yields under sufficient pressure to allow withdrawal of the pin.

Having described my invention, I do not claim broadly a socket and pin.

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

In a hold back attachment, the combination of the socket B constructed with the enlarged opening *d* and slot *d'*, the flat spring D resting in said slot and provided with the central bow *k* and the pin C constructed with the flange *h* provided with the depression *l* and double sided cam *m*, as shown and described and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

G. C. EDMUNDS.

Witnesses:

R. F. OSGOOD,
CHAS. A. WIDENER.