

(No Model.)

J. P. ABBOTT.
EAVES TROUGH HANGER.

No. 377,366.

Patented Feb. 7, 1888.

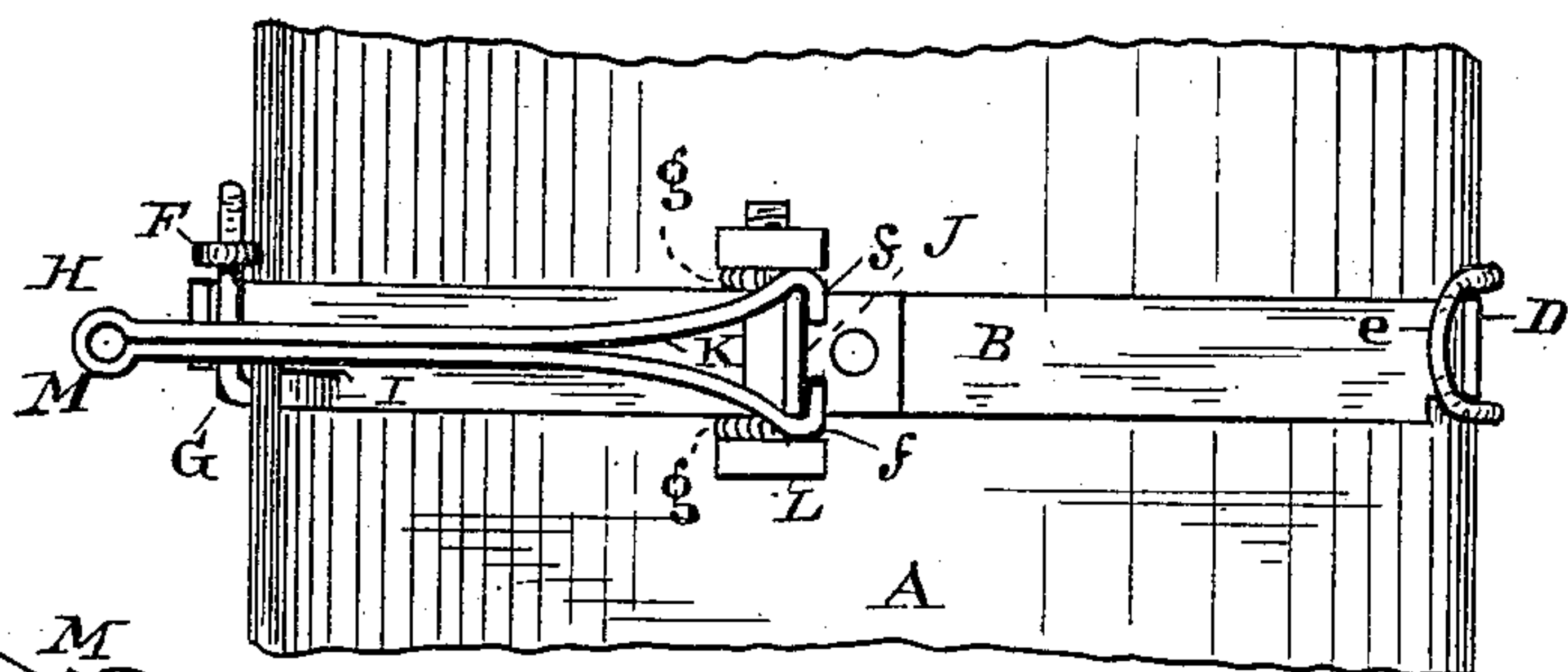


Fig. 2

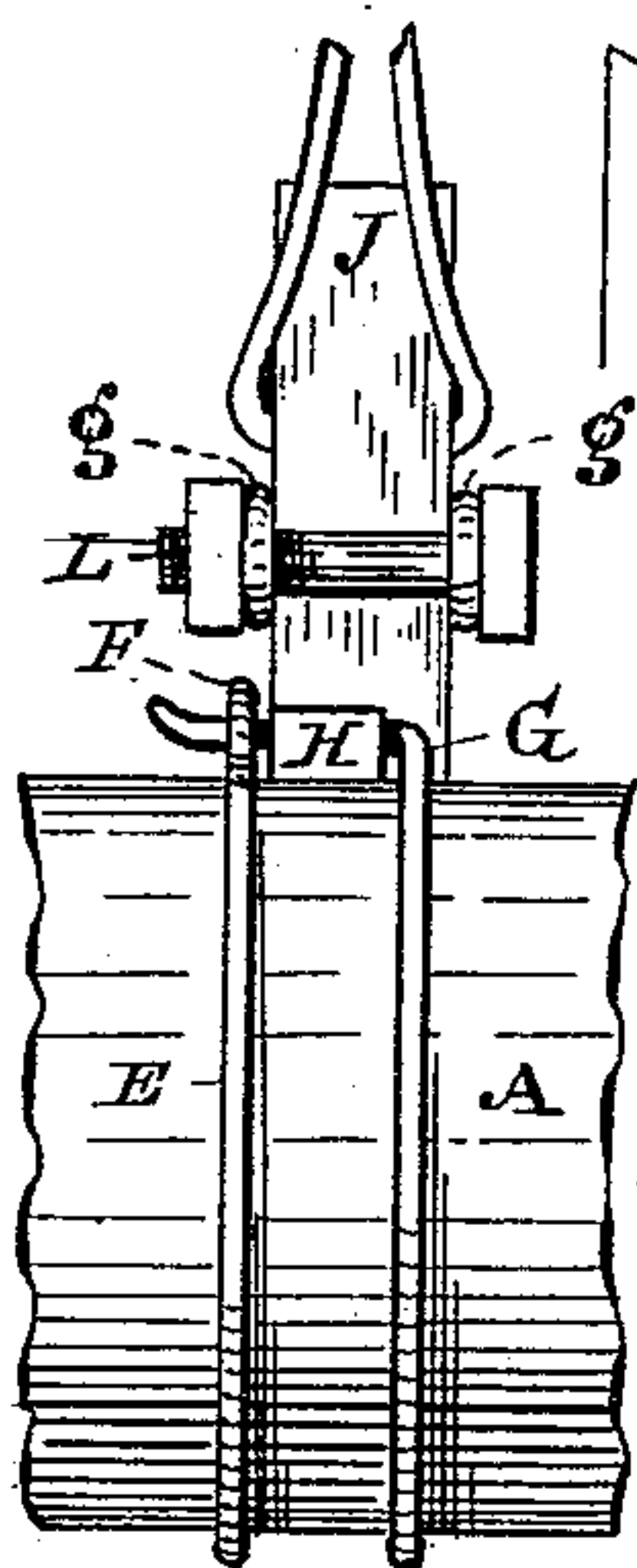


Fig. 3

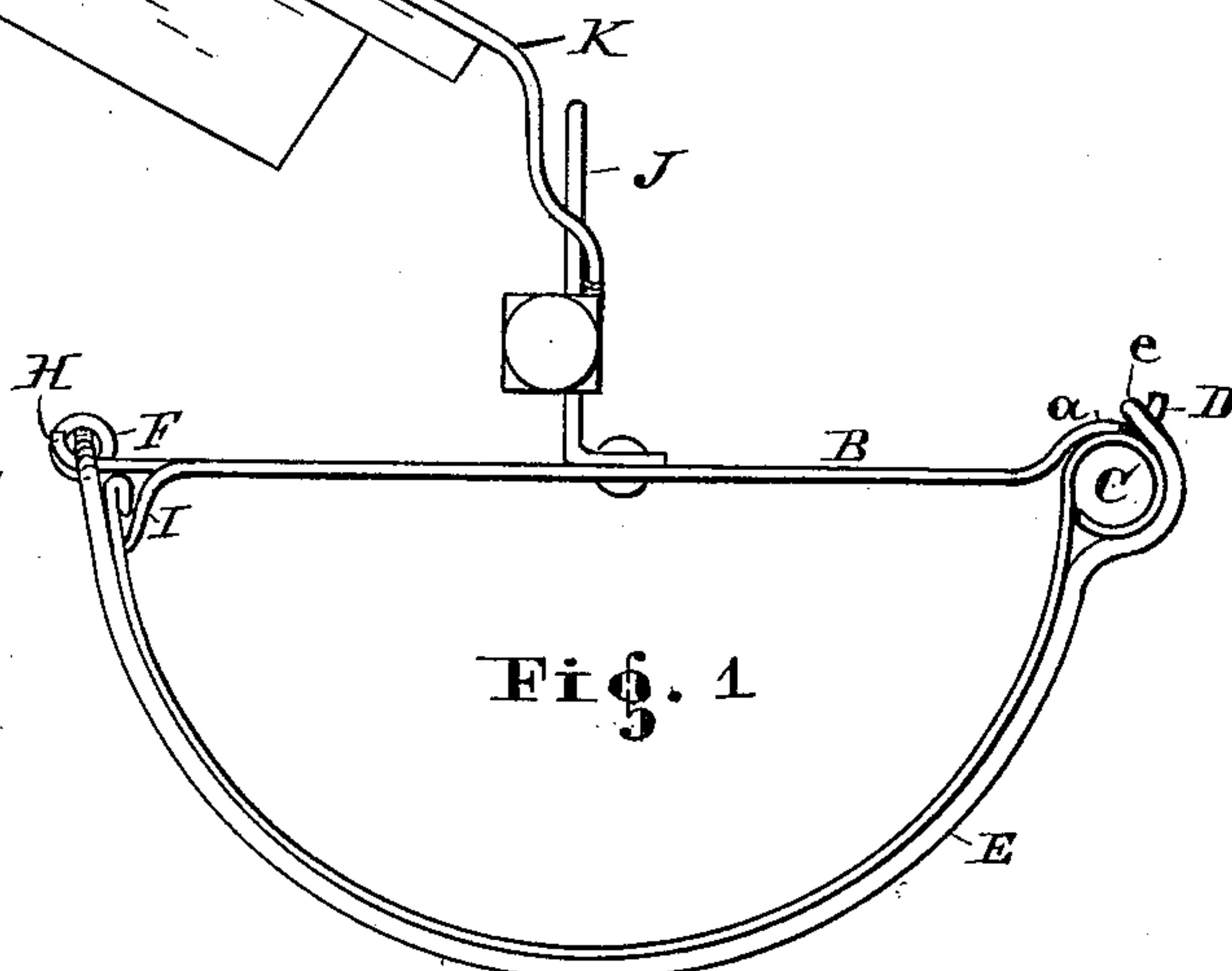


Fig. 4

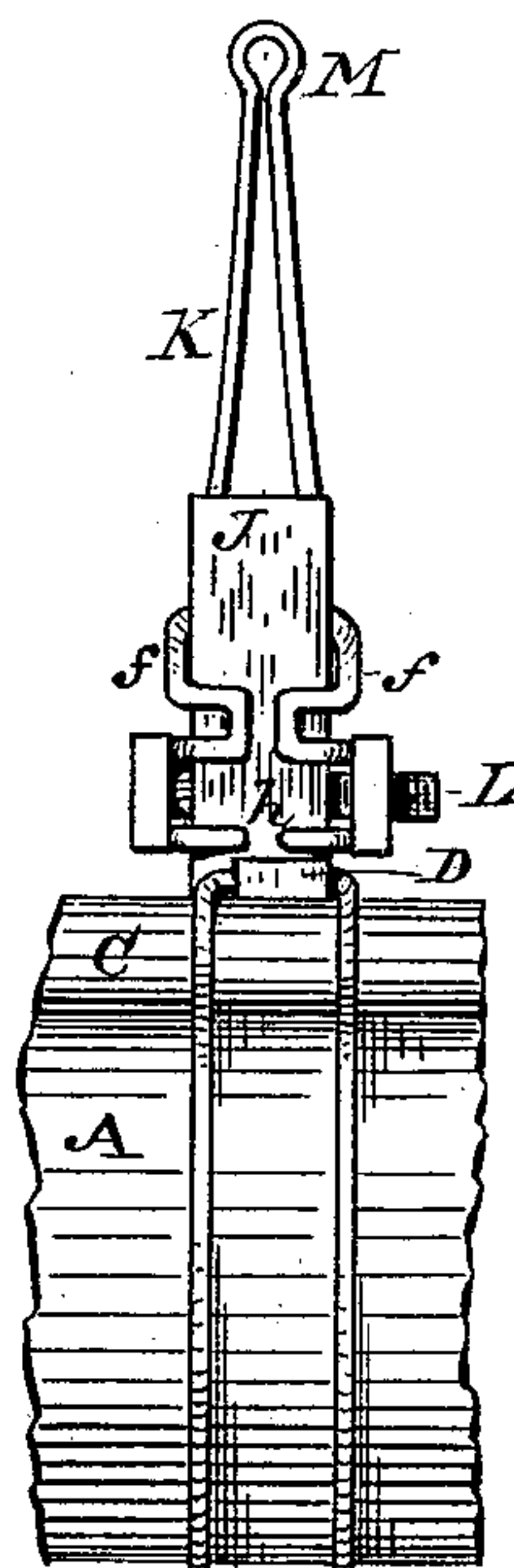


Fig. 5

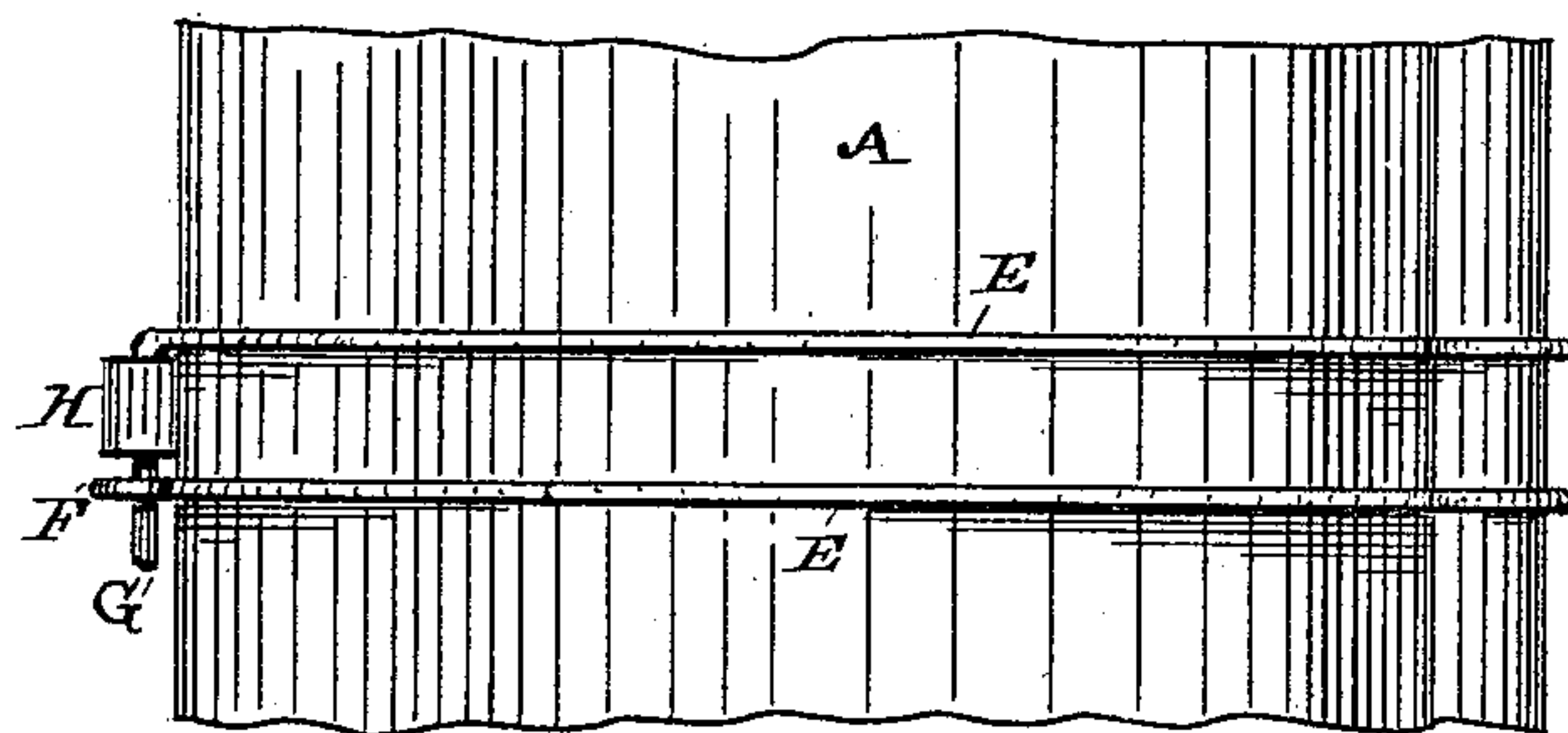


Fig. 6

WITNESSES

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EAVES-TROUGH HANGER.

SPECIFICATION forming part of Letters Patent No. 377,366, dated February 7, 1888

Application filed June 4, 1887. Serial No. 240,245. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN P. ABBOTT, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Eaves-Trough Hanger; and I do hereby declare that the following is a full, clear, and complete description thereof, and such as will enable those skilled in the art to which it pertains to make and use the same.

My improvement in eaves-troughs and hangers consists of the means employed for hanging the gutter or trough to the roof and for adjusting the same to obtain the required pitch and strengthening the same when secured in place, as hereinafter described in connection with the annexed drawings.

Figure 1 is an end view of the trough, showing its connection with the hanger and roof. Fig. 2 is a top view. Fig. 3 is a side view. Fig. 4 is a side view opposite to that of Fig. 3. Fig. 5 is a view of the under side of the trough and part of the hanger.

Like letters of reference designate like parts in the drawings and specification.

In the drawings, A represents the eaves trough or gutter connected to the hanger, which consists of the cross-bar B, Figs. 1 and 2, having one end bent or curved at *a* to fit the upper part of the bead C of the trough, as seen in Fig. 1. From the curve *a* of the bar projects a hook, D, to which is attached the loop *e* of the two-part brace E. This brace is preferably made of wire and extends from the loop *e*, in two parts, around under the trough A, as seen in Figs. 3 and 4. One end of the two parts terminates in an eyelet, F, and the other in a hook, G, Figs. 1 and 5. This hook G extends from the brace across the end of the bar B into the eyelet F of the other part of the brace, as seen in Figs. 1 and 2. The outer end of the bar B is split or divided into two parts, one of which is bent up, forming the hook H on the outside of the hook G, Figs. 2 and 3, and the other part is bent down on the inside of the trough in contact therewith, forming a stay, I, Figs. 1 and 2. By this means the gutter A is held in position from lateral displacement. As the brace E supports the exterior, the stay I and curve *a* at the ends of the brace support the interior. In this way the trough is supported between the brace E on one side in connection with the bar B,

as arranged on the upper side, Figs. 1 and 2. At or near the center of the bar is secured the standard J, Figs. 1 and 2, to which is connected the supporter K, preferably made of wire. The upper end is fastened to the roof by any suitable means sufficient to support the trough. The lower part of the supporter is entwined about the standard J, as seen in Fig. 4, so as to form a loop, *ff*, about the standard. The wire is then bent or turned back and around the screw-bolt L, as seen at *g*, Figs. 2 and 3, and from the bolt the wire is again bent, and both ends hooked over the standard J, as seen at *h*, Fig. 4. The wire is entwined closely about the standard, and by means of the screw-bolt having its head and nut on the outside of the wire, as seen in Figs. 2 and 4, the standard J is securely clamped and fastened within the entwined wire by means of the said screw bolt and nut. The hook and eye at the respective ends of the brace E admit of the trough making an attachment and detachment with the hanger without moving the connection of the cross-bar with the roof. This adjustable connection of the standard with the supporter K admits of the eaves-trough being raised and lowered so as to obtain the required pitch for the discharge of the water.

The supporter K is made out of one piece of wire and bifurcates from the loop end M, and each part of the wire extends to and entwines around the standard, as before described.

The described hanger and eaves-trough may be attached to roofs by other means than the supporter K, as there are various devices for this purpose which may be employed without departing from the improvements in the said eaves-trough hanger shown in direct connection with the trough. As an example, a simple strap may be extended from the standard J to the roof and fastened thereto.

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

1. In an eaves-trough hanger, the brace E, having a loop at one end engaging the hook at the terminal of the cross-bar B, extending around under the trough connected to the hook H of said cross-bar by means of a hook and eye formed on the ends of the brace, in combination with the cross-bar provided with a

hook, H, at one end, and a hook, D, at the other adapted to engage the trough and brace, with a standard, J, fastened thereto for an attachment to connect the hanger to the roof, substantially as described, and for the purpose set forth.

2. An eaves-trough hanger consisting of the cross-bar B, having a hook, D, at one end, and a hook, H, at the other, in combination with the brace E, and attached to the roof by means of the supporter K, adjustably connected to the standard J by the entwining wires of the supporter and screw bolt and nut, arranged in the manner substantially as described, and for the purpose set forth.

3. In combination with an eaves-trough hanger, the supporter K, made of a simple piece of wire and at its lower part formed to entwine about the standard for the purpose of attaching the hanger to the roof and adjusting the pitch of the trough conjointly with a screw-bolt, substantially as set forth.

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

JONATHAN P. ABBOTT.

Witnesses:

W. H. BURRIDGE,
B. F. EIBLER.