

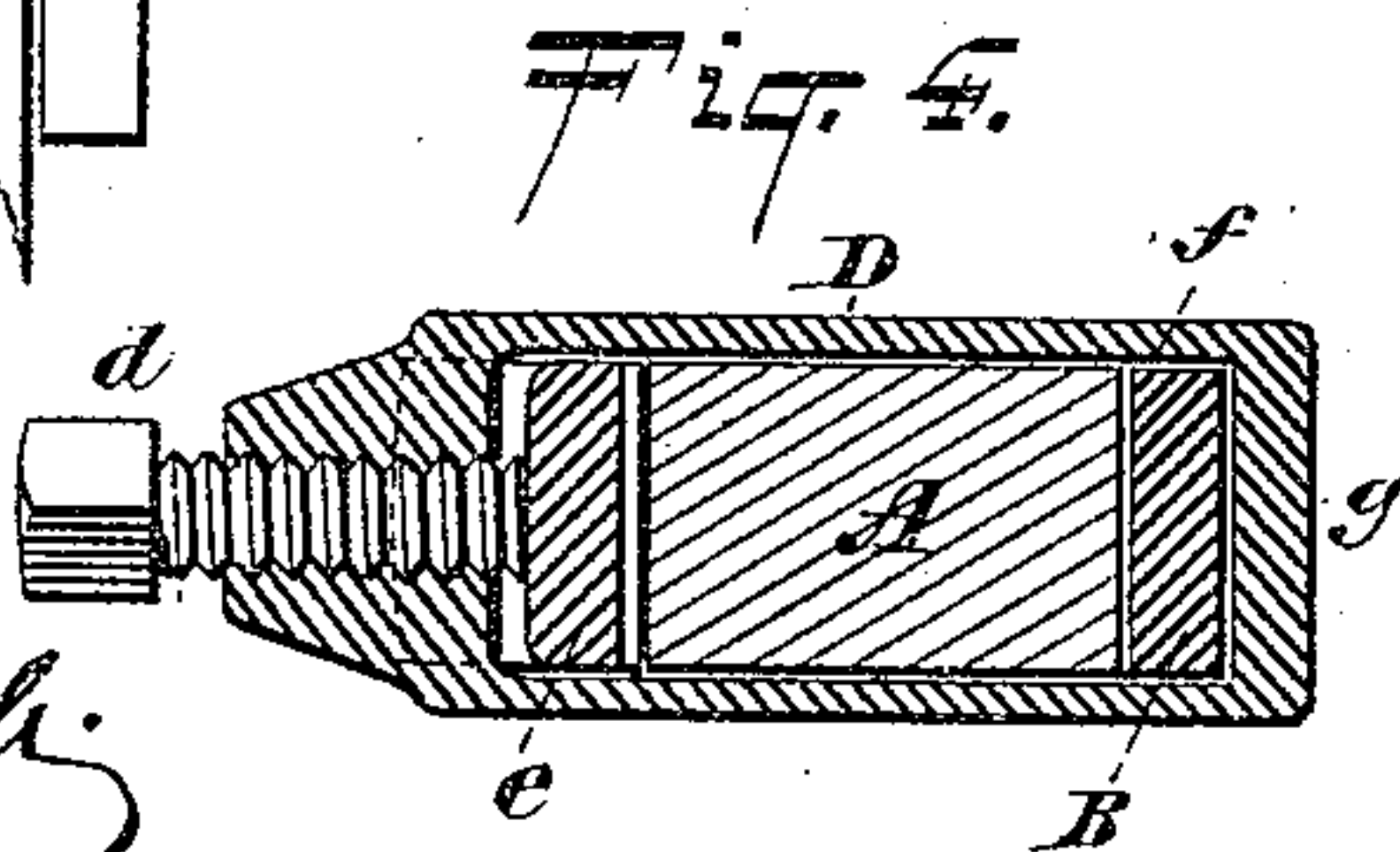
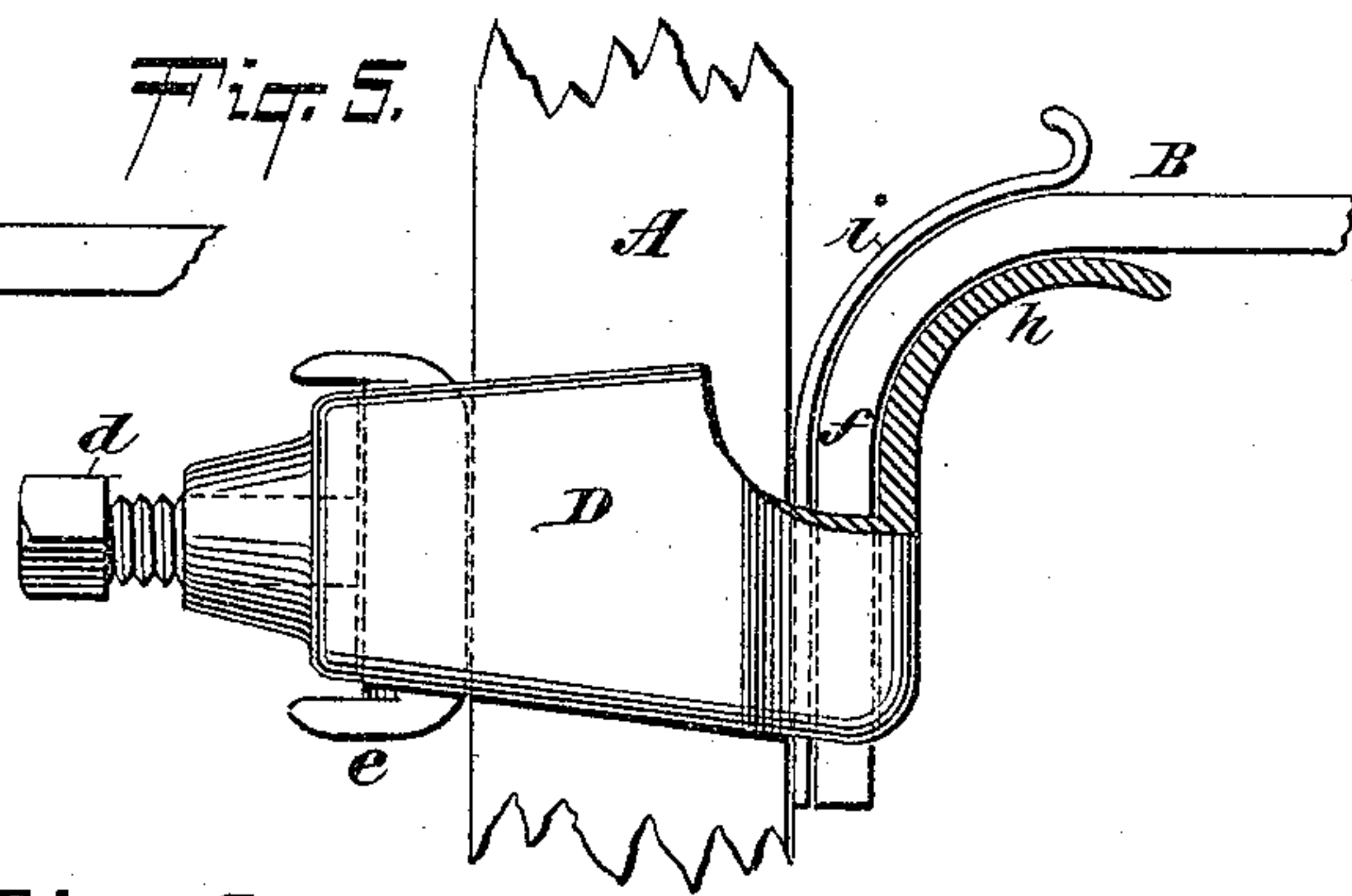
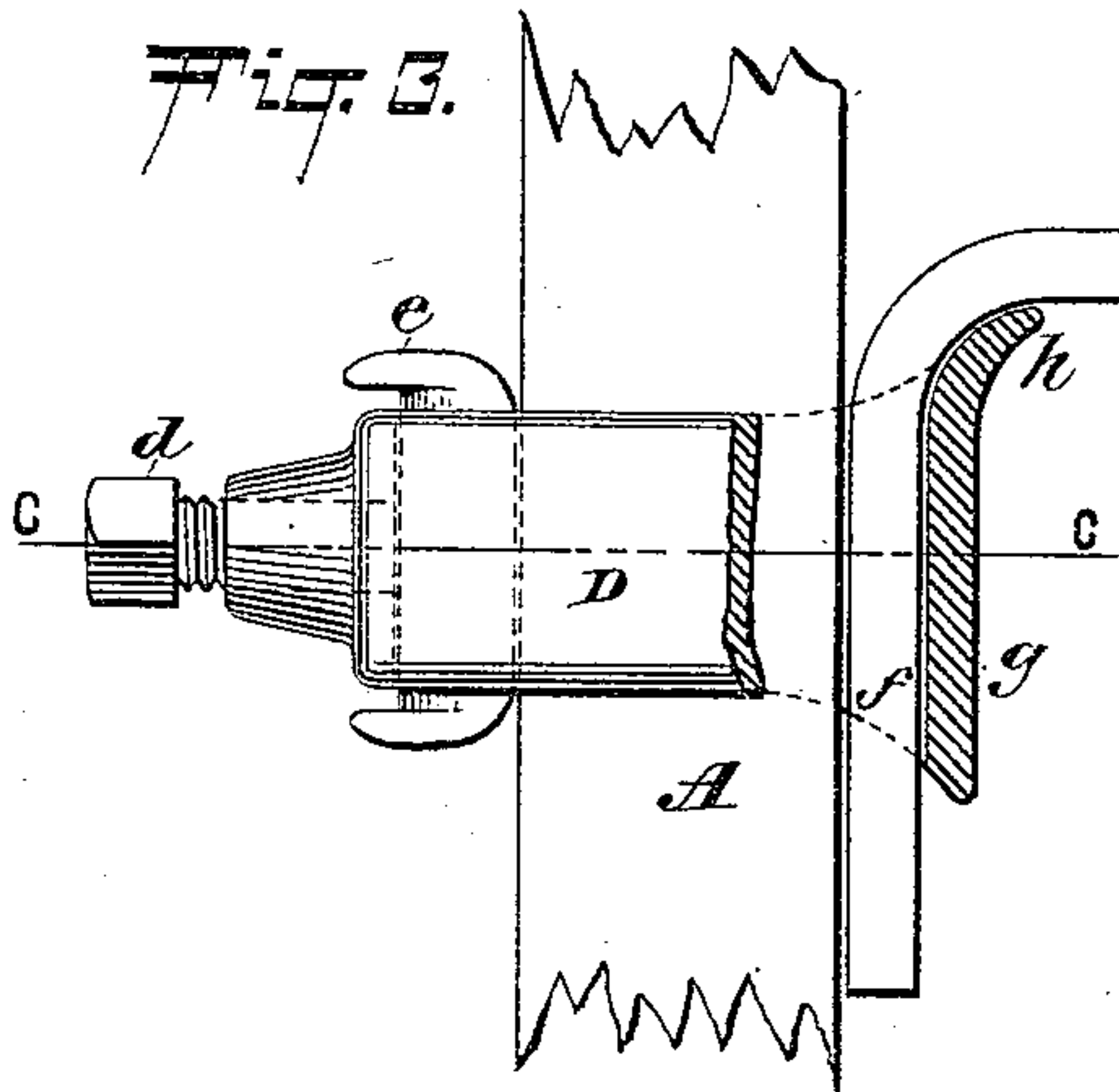
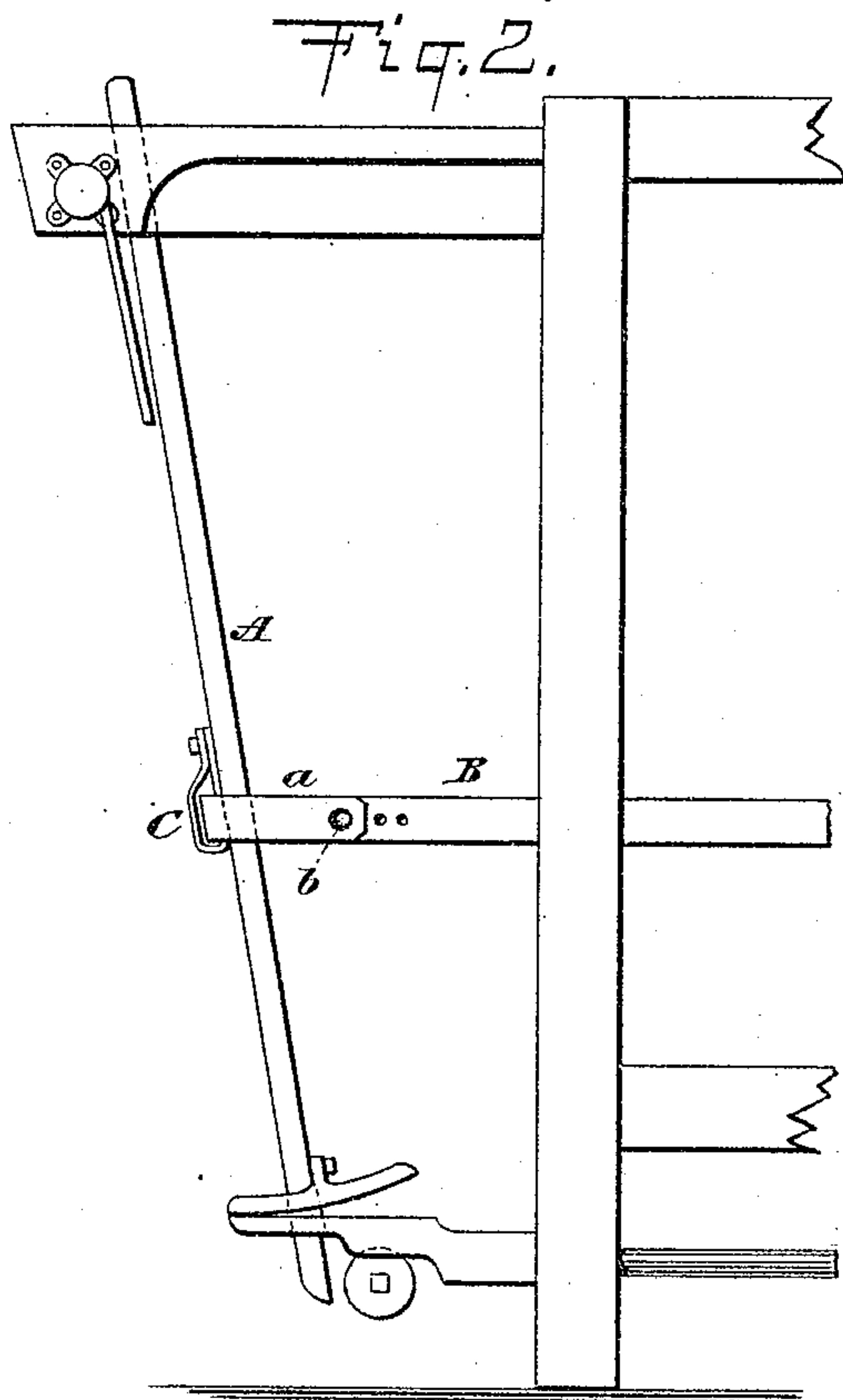
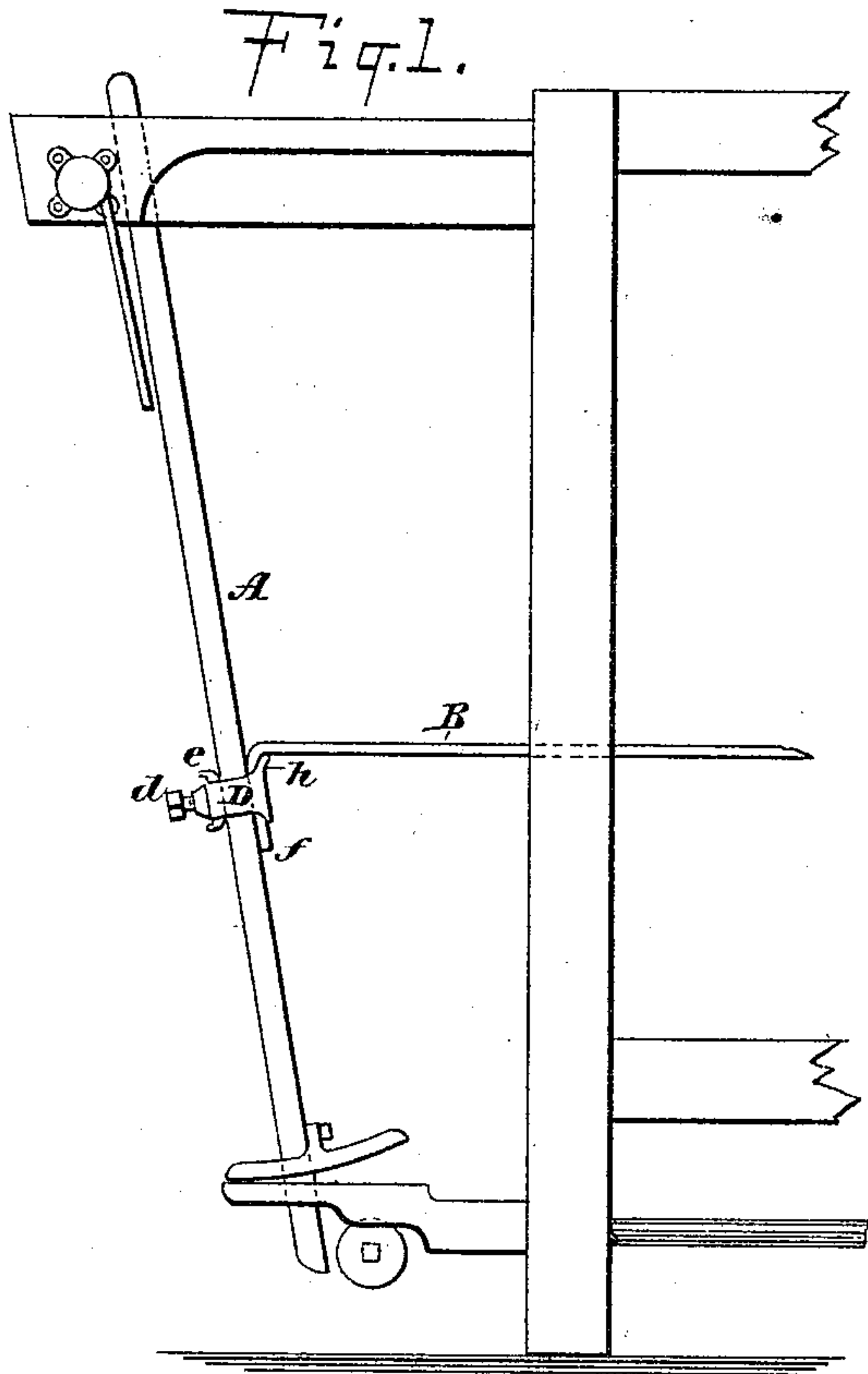
(No Model.)

W. HANSE & T. EDER.

DEVICE FOR CONNECTING THE PICKER STRAPS TO THE PICKER  
STICKS OF LOOMS.

No. 438,152.

Patented Oct. 14, 1890.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM HANSE AND THOMAS EDER, OF BROOKLYN, NEW YORK.

DEVICE FOR CONNECTING PICKER-STRAPS TO THE PICKER-STICKS OF LOOMS.

SPECIFICATION forming part of Letters Patent No. 438,152, dated October 14, 1890.

Application filed May 10, 1890. Serial No. 351,235. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM HANSE and THOMAS EDER, both residents of the city of Brooklyn, Kings county, and State of New York, have invented an Improvement in Devices for Connecting Picker-Straps to the Picker-Sticks of Looms, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof, wherein—

Figure 1 represents a side view of our improved picker-stick. Fig. 2 is a side view of the picker-stick as heretofore made and connected. Fig. 3 is an enlarged side view, partly in section, of the clamp uniting the picker-stick to the actuating-strap. Fig. 4 is a cross-section on the line *c c*, Fig. 3; and Fig. 5 is a side view, partly in section, of the preferred form of clamp used in my invention.

This invention relates to a new clamp for uniting the actuating-strap to the picker-stick of a loom; and it consists, mainly, in the combination of a metallic clamp embracing the picker-stick with a fastening-screw and with a projecting lip, all arranged for the purpose of clamping the end of the actuating-strap directly against the face of the picker-stick in manner more fully hereinafter described.

Heretofore the usual manner of joining the picker-stick *A*, Fig. 2, to the actuating-strap *B* has been by means of a loop *C*, attached to the outer side of the picker-stick and adapted to receive another looped strap *a*, to which, by a pin or rivet *b*, the strap *B* was secured. There are three objections to this mode of connection. The first is that the picker-stick, under the frequent concussions to which it is subjected, is liable to crack and has to be thrown away when cracked. The second is that the attachment does not allow of a convenient adjustment of the strap as to length, adjustment being only possible by perforating the strap *B*, as indicated in the drawings, and putting the rivet *b* into another hole. Apart from the awkwardness of this adjustment it results in an inexact adjustment. The third objection has reference to the manner of securing the loop *C* to the picker-stick and the loop *a* within the loop *C*. This results in weakening the picker-stick by the rivet which

holds the loop *C* and in causing considerable waste of time in making the connections.

By our invention all these difficulties are intended to be overcome, and we will now proceed to describe the same with reference to Figs. 1, 3, 4, and 5 of the drawings. In these figures the letter *A* represents the picker-stick suitably pivoted or supported at its lower end for the purpose of being capable of vibratory motion for throwing the shuttle. *B* is the strap for moving said picker-stick toward the shuttle. *D* is a clamp, of metal, put around the picker-stick and around the end of the strap, and provided with a clamp-screw *d* and with a washer *e*, against which said clamp-screw bears. The metallic clamp, when tightened onto the picker-stick by means of the screw *d*, clamps the end *f* of the strap *B* also against the face of the picker-stick, the said end *f* of the strap being confined between the inner wall *g* of the clamp and the picker-stick, as clearly appears from an inspection of Fig. 3. This inner wall *g* is carried up into the form of a rounded edge or lip *h* to admit of the necessary curvature of the strap, the extent of the lip *h* being either as in Fig. 3, sufficient for the purpose, or as in Fig. 5, which is the most convenient form. In Fig. 5 we have also represented a shield *i*, to be introduced between the end *f* of the strap *B* and the picker-stick *A*, said shield curving over the strap, as shown, for the purpose of preventing it from being whipped against the picker-stick when slack. The metal clamp *D*, embracing as it does the picker-stick *A*, holds the same in operative condition even if said picker-stick should be cracked or split, and it holds the strap *B* tightly on the picker-stick, yet permitting of its convenient adjustment as to length, which can be accomplished by merely loosening the screw *d*, drawing the strap *B* in or out as far as desired, and then retightening said screw. The entire connection can be made in the most convenient way by even unskilled hands, and the strap can be attached to the picker-stick at any desired height, which height can be varied from time to time, as may be found necessary.

What we claim, and desire to secure by Letters Patent, is—

1. The combination of the picker-stick *A*

and the actuating-strap B, having its end *f* placed parallel with the picker-stick, the metal clamp D, surrounding said picker-stick and said end *f* of the strap, and the screw *d*, substantially as and for the purpose herein shown and described.

2. The combination of the picker-stick A and the actuating-strap B, having its end *f* placed parallel with the picker-stick, the metal clamp D, surrounding said picker-stick and said end *f* of the strap, and of the screw *d*, the metal clamp having the lip *h*, substantially as

and for the purpose herein shown and described.

3. The combination of the picker-stick A and strap B, having its end *f* placed parallel with the picker-stick, the metal clamp D, having lip *h*, screw *d*, and curved shield *i*, all substantially as herein shown and described.

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