

(No Model.)

2 Sheets—Sheet 1.

E. L. SNADER.
BURGLAR PROOF VAULT.

No. 549,336.

Patented Nov. 5, 1895.

Fig. 1.

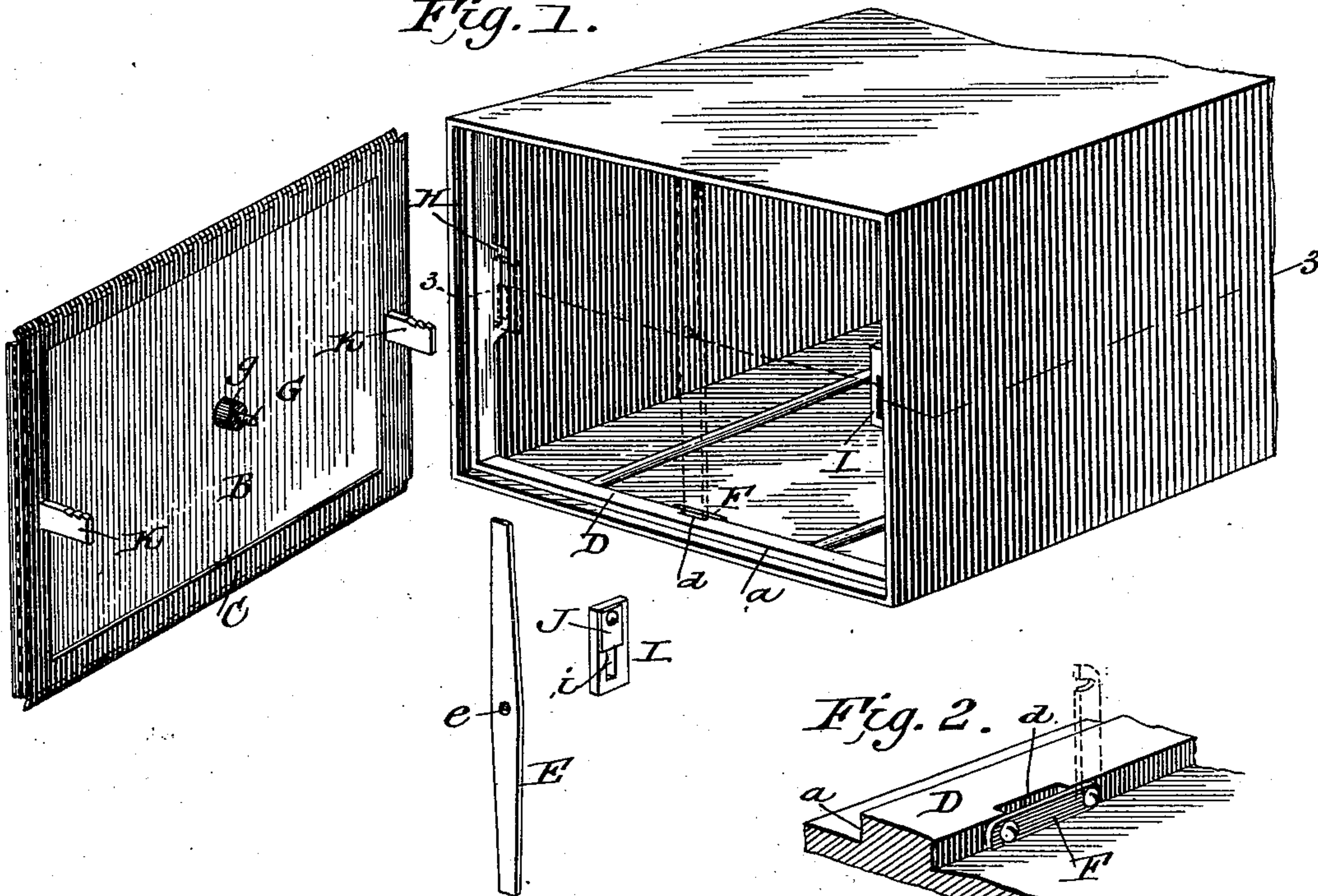


Fig. 2.

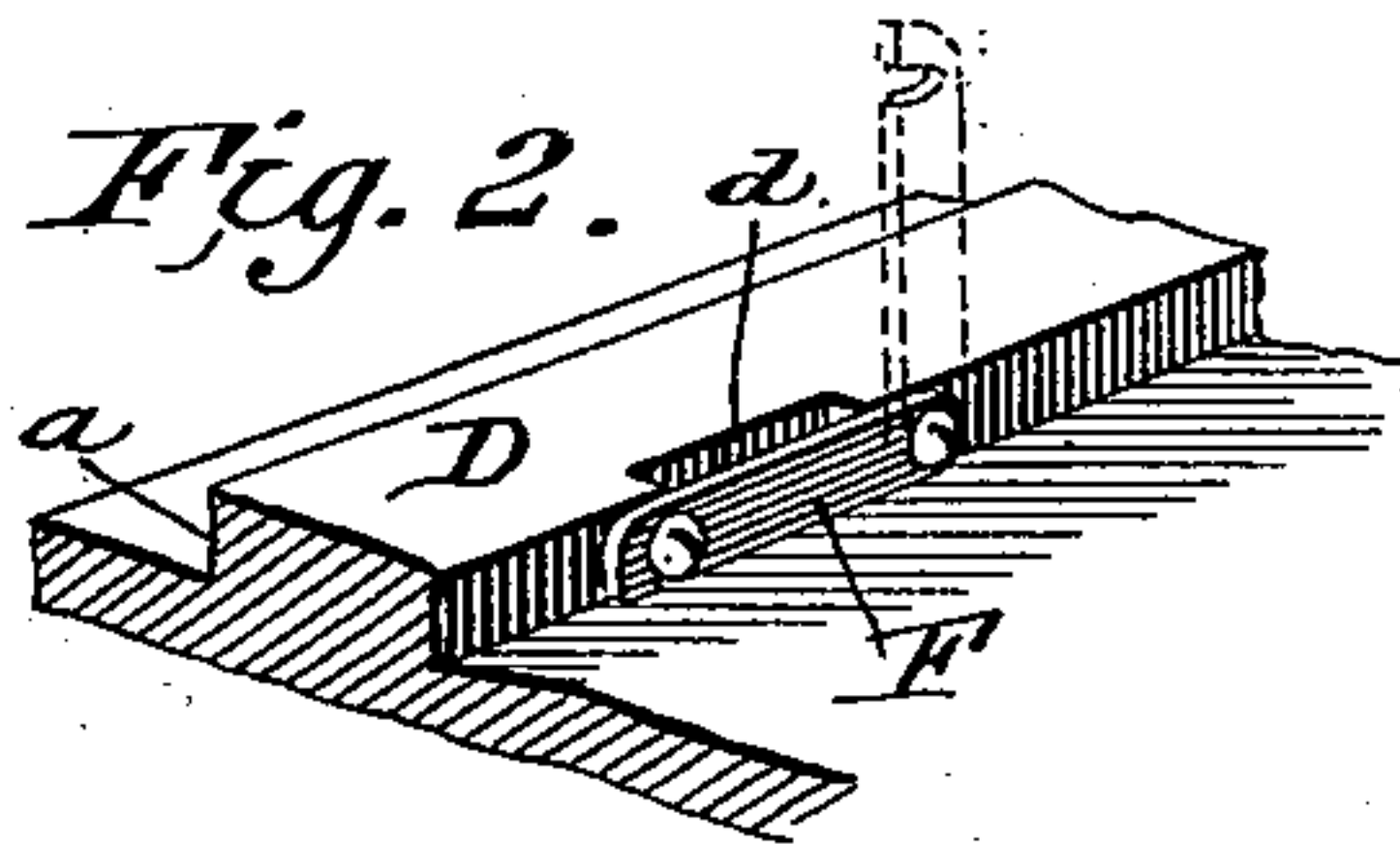


Fig. 3.

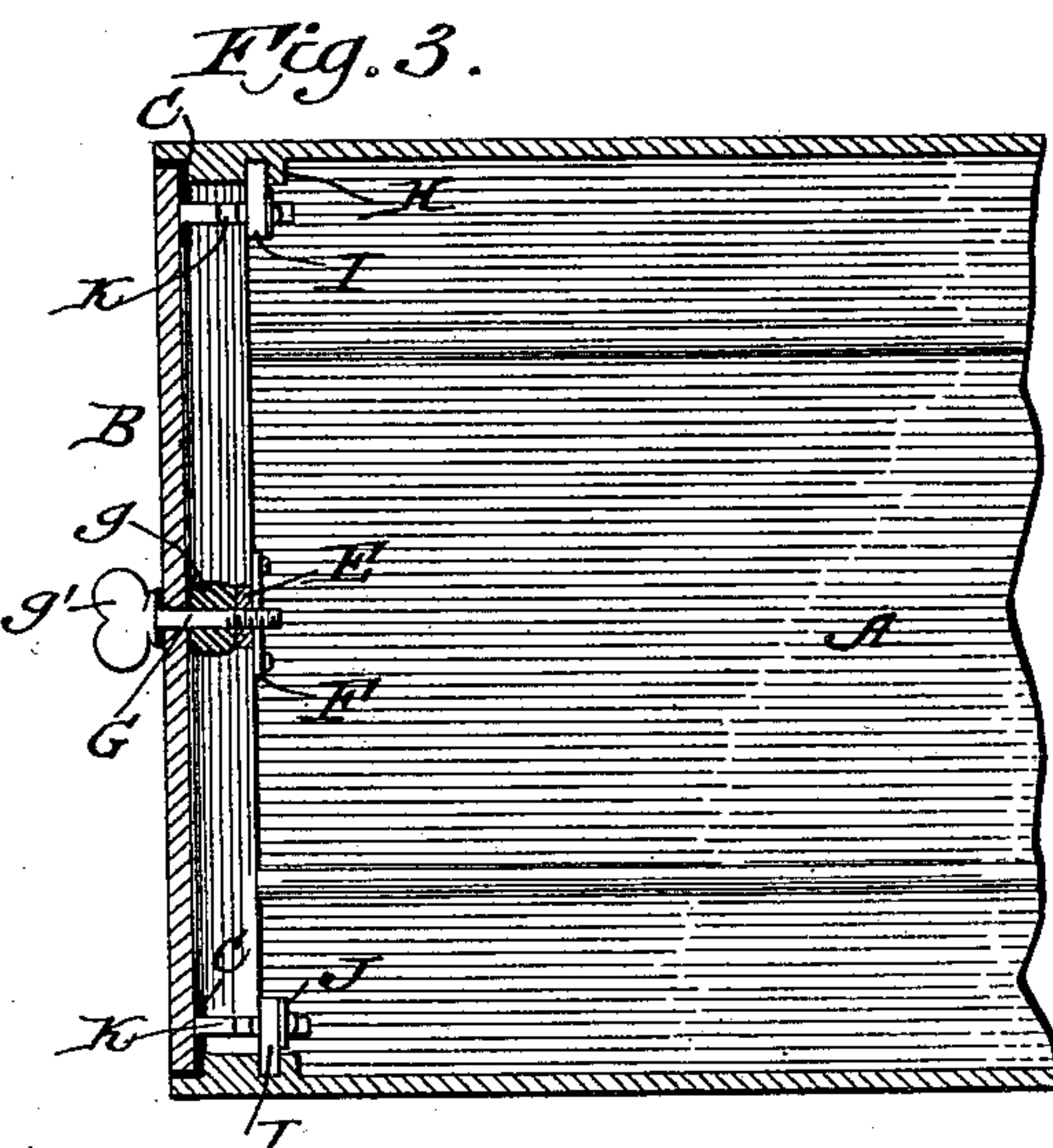
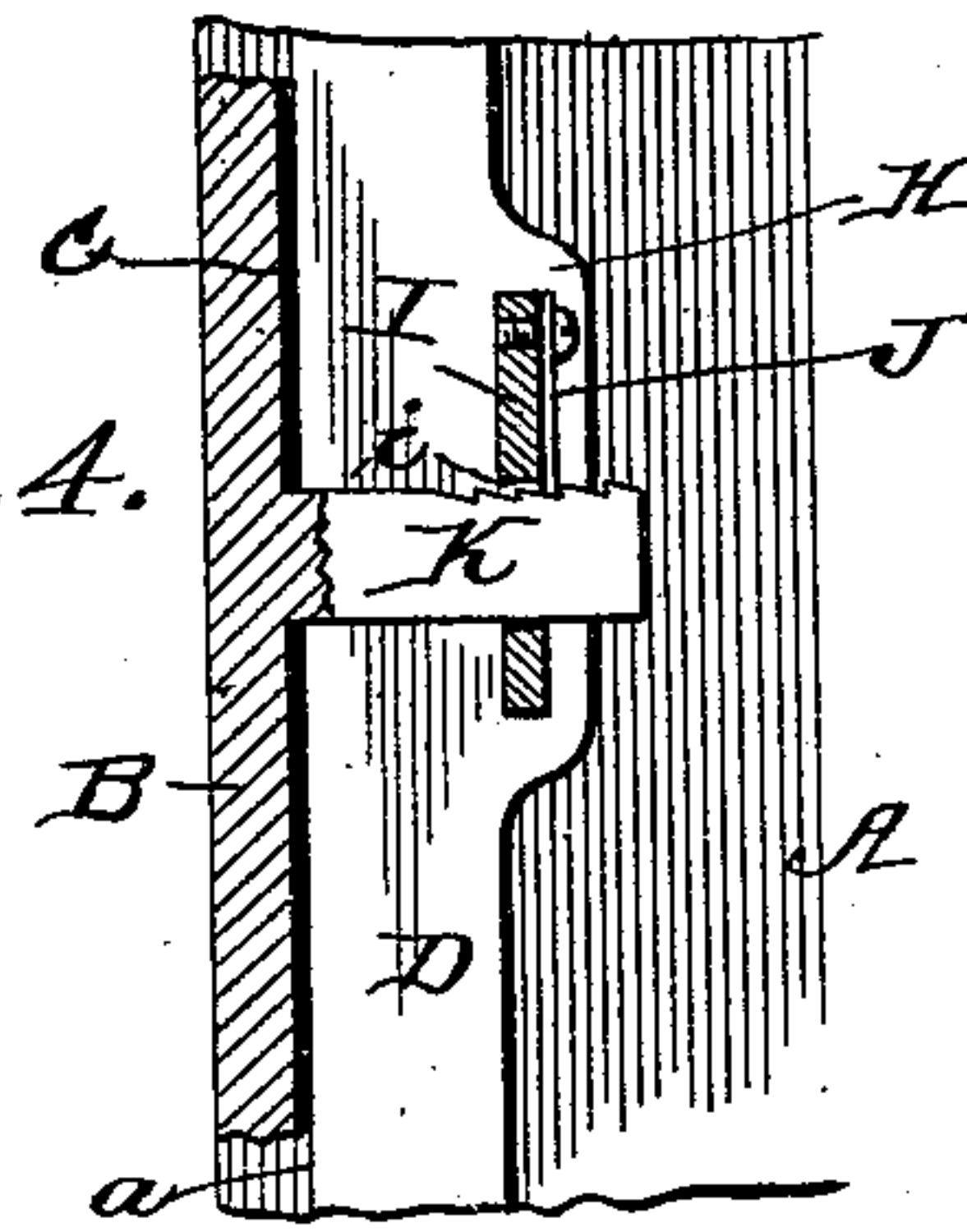


Fig. 4.



WITNESSES:

Edwin L. Bradford
J. A. Hummel

INVENTOR

Edward L. Snader

BY

G. H. Stockbridge
ATTORNEY

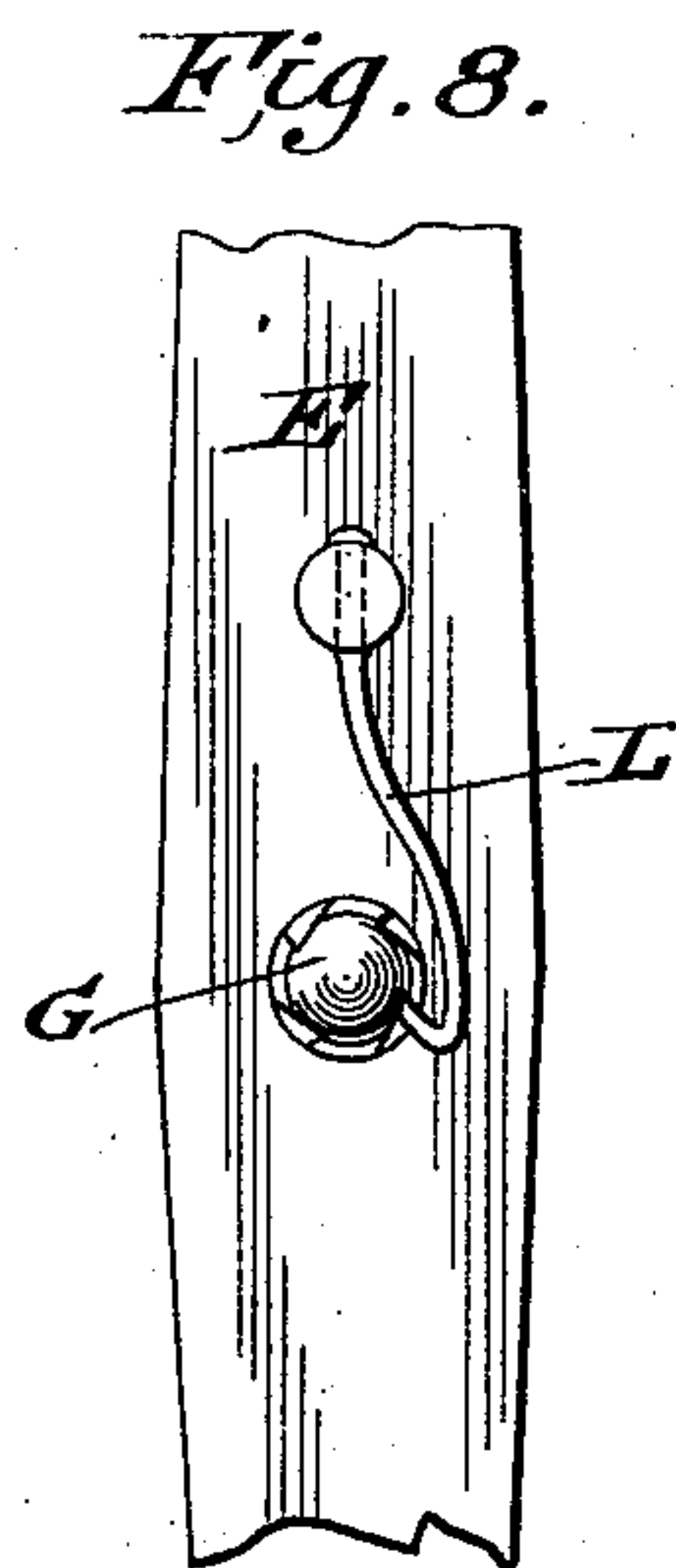
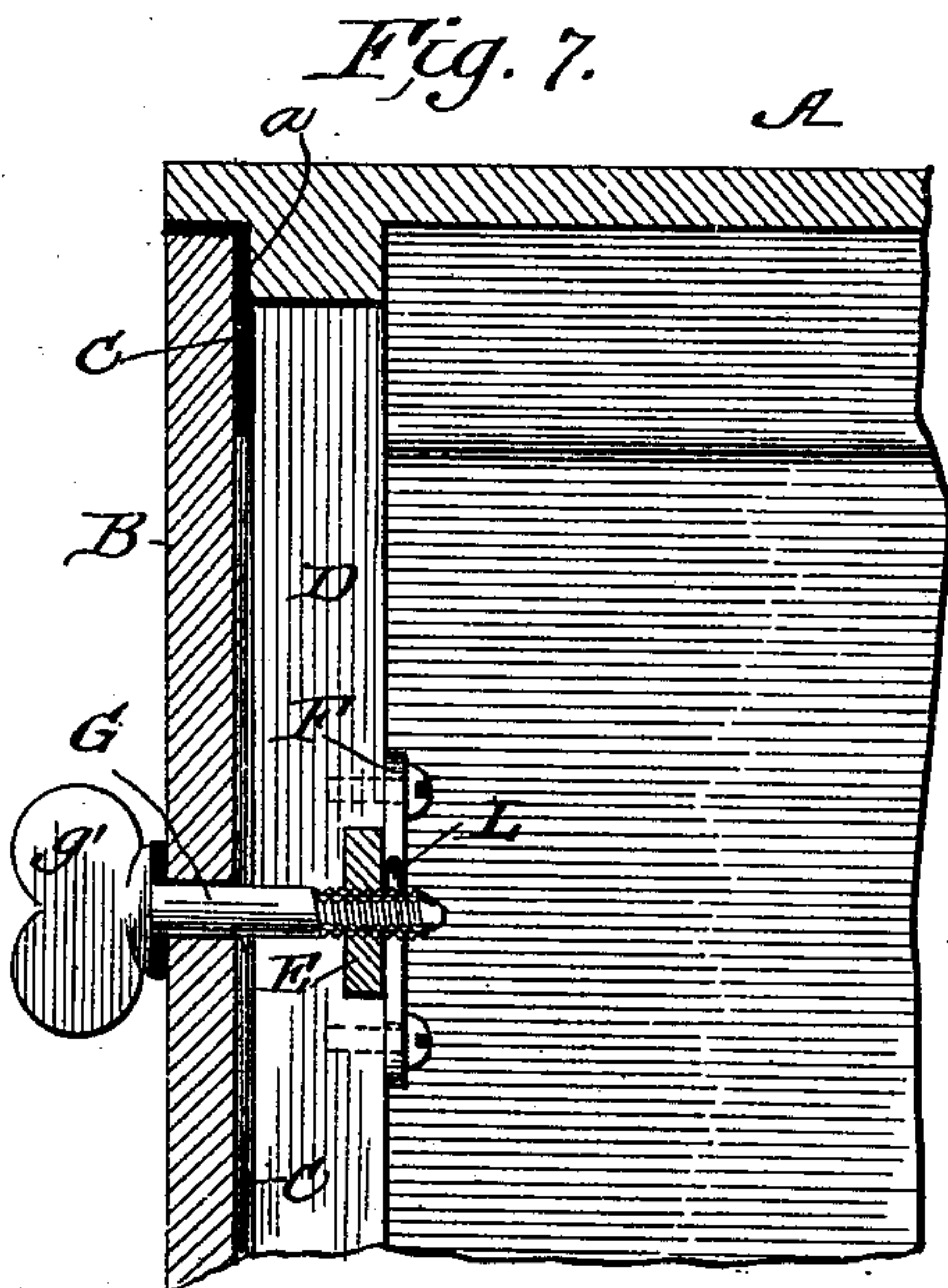
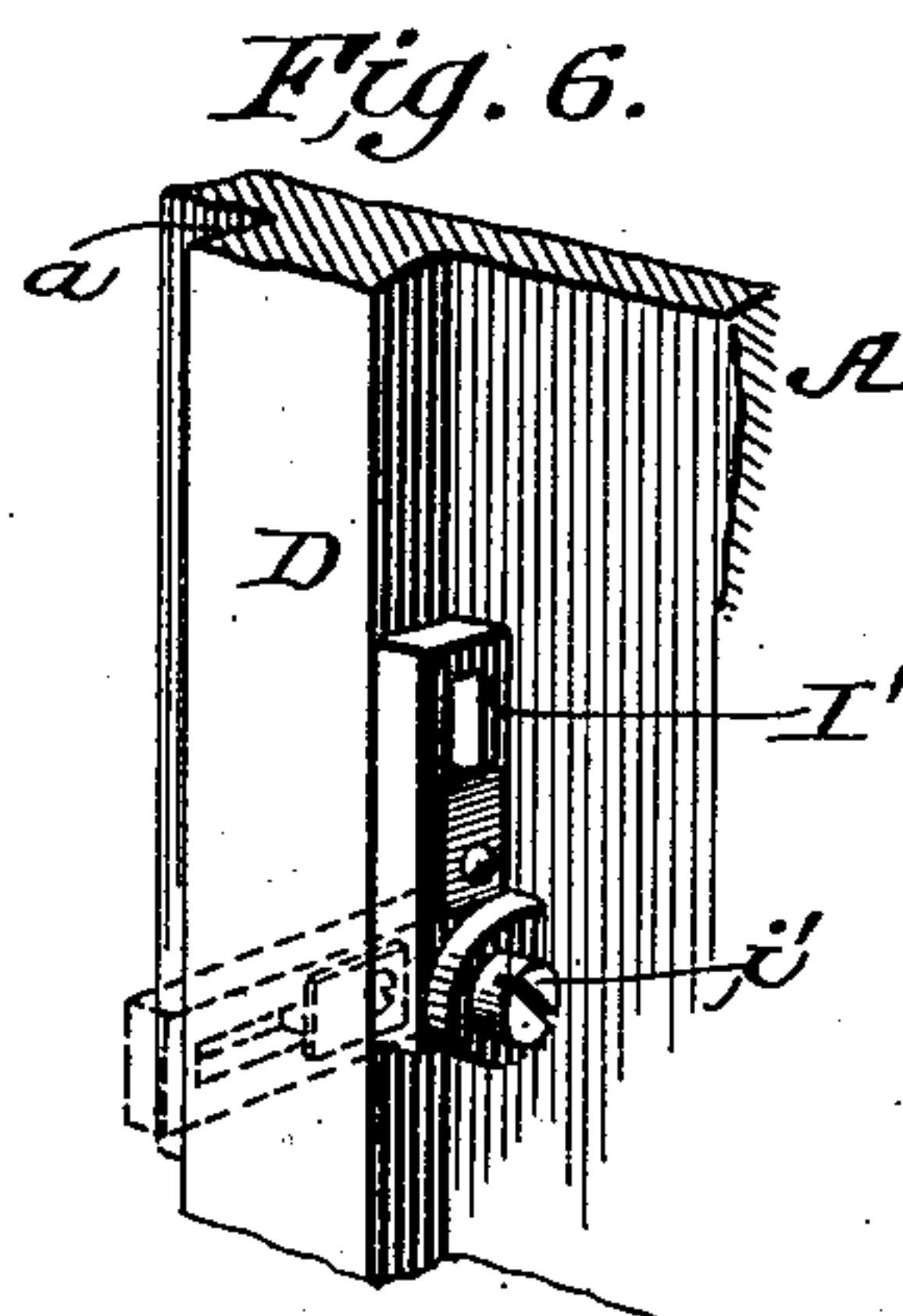
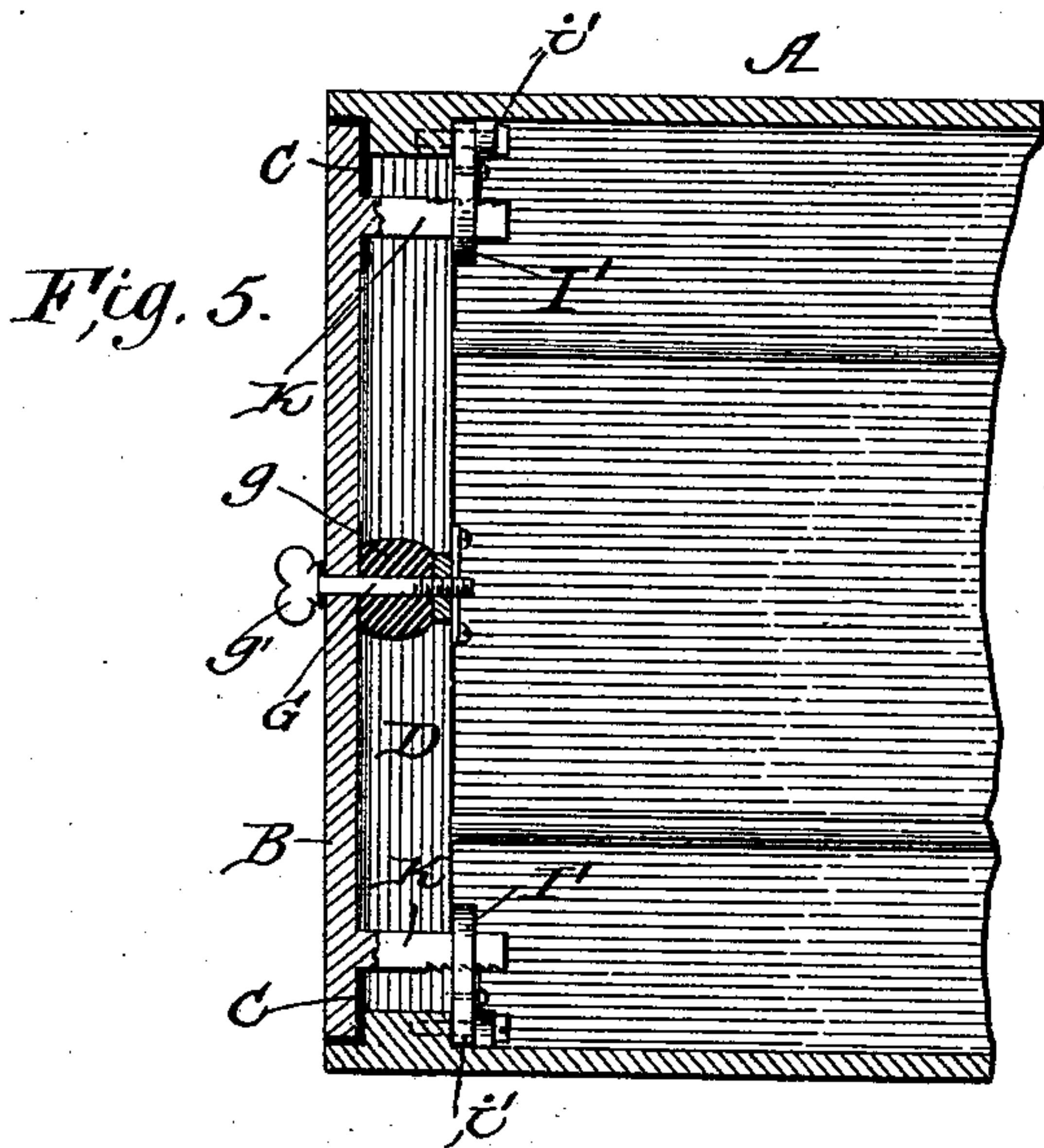
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2 Sheets—Sheet 2.

E. L. SNADER.
BURGLAR PROOF VAULT.

No. 549,336.

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WITNESSES:

Edwin L. Bradford
H. A. Hammett

INVENTOR

Edward L. Snader

BY

G. H. Stockbridge
ATTORNEY

UNITED STATES PATENT OFFICE.

EDWARD L. SNADER, OF NEW YORK, N. Y.

BURGLAR-PROOF VAULT.

SPECIFICATION forming part of Letters Patent No. 549,336, dated November 5, 1895.

Application filed January 17, 1895. Serial No. 535,236. (No model.)

To all whom it may concern:

Be it known that I, EDWARD L. SNADER, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Burglar-Proof Vaults; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In an application filed by me in the United States Patent Office on the 21st day of September, 1894, the serial number of which application is 523,680, I have shown and described certain improvements in rough boxes or portable vaults, the objects of the invention described in the said application being the improvement of such boxes or vaults in respect to the matter of the simple and easy attachment of the box-head and a quick and effective sealing of the whole structure, such improvement involving, also, an advantage in the way of increased cheapness. It was my purpose to supply an improved box-head and to attach such head either to a box of my own manufacture or to rough boxes already on the market. As a matter of fact, I illustrated in my said application means whereby the improved box-head could be attached to the end of a rough box by a single screw and also means whereby the end of the box would be fully and completely sealed by the operation of thus attaching the head.

My present improvement relates more particularly to providing means for rendering rough boxes of the kind described burglar-proof—that is, I wish to make the act of securing the head in place by simple means, which are, in general, those set forth in my prior application, cause also a locking of the head, so that the head cannot be removed after it has once been put in place in the proper manner.

To this end my present invention consists in the construction and combination of parts substantially as hereinafter described and claimed.

I have illustrated my invention in the accompanying drawings, in which—

Figure 1 is a perspective of a portion of a

rough box, showing the head in a position near the open end of the said box. Fig. 2 is a detail view. Fig. 3 is a horizontal section along the line 3 3 in Fig. 1. Fig. 4 is an enlarged detail view of the locking device which I employ, or rather one of such locking devices. Fig. 5 is a horizontal section showing a detail view of a modified form of locking device. Fig. 6 is an enlarged perspective of the said modification. Fig. 7 is an enlarged view, partly in section, of my central attaching device, and Fig. 8 is an inner end view of the same.

In the drawings, A is a rough box, made of iron, steel, wood, or any other suitable or preferred material. For the purposes of my present invention I prefer to make the box A of steel, and which will resist the attempts of evil-disposed persons to break into the said box or vault.

I show at B a head for the box A, the said head being lined with one or more strips C, of rubber or other sealing material, such strip or strips being suitably secured to the inner side of the said head near the edges thereof. As a matter of fact, the sealing material is arranged so as to extend beyond the outer edge of the cover or head B, so as to fill the space between the said head and the inner wall of the box when the head has been put in place.

Inside the box A is a shoulder *a*, formed by a projection D extending around the inner end of the box. The said projection is notched at *d* to receive the lower end of a brace E, which is adapted to stand behind the said projection both at the top and bottom of the box on the inside. In other words, the brace E extends all the way across the inside of the rough box, its ends being located behind the projection D. Behind its lower end, where it rests in the notch *d*, is a latch F, adapted to hold it in place. In Fig. 1 the brace E is shown detached from the box. In the center of the said brace is a screw-threaded opening for receiving a screw-bolt G in the center of the head B. The said screw-bolt is surrounded by a thick washer *g*, of rubber or similar material, the thickness of the said washer being such that when the head B is screwed to the brace E by means of the screw-

bolt G the said washer is compressed, so as to form a perfect seal for the opening through which the bolt passes in the head itself.

When it is desired to apply the head B to the rough box, the brace E is taken in the hand and its lower end is set into the notch *d*, the latch F being thrown back for this purpose. The upper end of the brace is brought into position behind the projection D, and the latch is then turned by hand into the position illustrated in full lines in Fig. 2. The brace now has rigidity enough to take the end of the screw-bolt and the head can be screwed into position by means of the single screw-bolt G. Of course there may be more than one brace and more than one screw-bolt, if desired. It will be understood that the operation of attaching the head, as already described, causes a sealing-joint to be made between the head and the box by reason of the presence of the sealing material C at the edges of the head. Now at the rear of the projection D, I build up or attach a bracket H, having the form illustrated in Fig. 1. Into the said bracket I set a detachable catch I, the details of which are shown in Fig. 1 below the box A. The said catch is slotted at *i* and has secured to it a spring clip or detent J. The said clip is so placed as to cover the upper part of the slot *i*, for a reason which will be explained farther on. The construction is such that any one setting up the apparatus can take the catch I and set it into the opening in the bracket H, where it will remain without falling. There is such a bracket and such a catch at each side of the rough box.

At either side of the head B is formed a bar or rod K, shaped like the slot *i* in the catch I, and adapted to enter the same and pass a little distance beyond the catch. The height or thickness of the bar is such that in passing through the slot it pushes back the lower end of the spring-clip J, so that any attempt to pull the bar back after it had been thrust partly through would be resisted by the force of the spring-clip engaging with the surface of the bar. This would be true whether the said surface were smooth or rough; but I prefer to roughen the surface of the bar somewhat, and I may notch the same, as shown in Figs. 1 and 4. The bars are thrust in place in the catches I at the same time that the head is attached in the manner set forth above. Manifestly, therefore, the head when once attached cannot be detached without meeting the full resistance of the locking devices, consisting of the catch and the bar at each side of the box.

In Figs. 5 and 6 I illustrate another form of catch, the same consisting, essentially, of a bar I', pivoted at *i'*, and adapted to be turned down, as shown in dotted lines in Fig. 6, so as to be ready for engagement with the bar

K. It will be seen that the slot here runs at a different angle from the slot shown in Figs. 1 and 4, for which reason it will be necessary to set the bars in a position at right angles to that which they occupy in the said figures. The summing up of the whole matter is that the head is automatically locked in place during the process of attachment to the box.

In order that there may be no access to the box through the removability of the screw-bolt G, (the bolt corresponding thereto being made removable in my application already referred to,) I provide that the said bolt may, without difficulty, be turned, say, to the right for the purpose of tightening the head, but that it may be impossible to turn the said bolt to the left for loosening the head. This I accomplish by attaching a spring-pawl L to the rear of the brace E and by putting ratchet-teeth around the inner end of the bolt in the manner illustrated in Fig. 8.

I prefer to make the outer end of the screw-bolt G into a thumb-piece *g'* and to place a washer, of rubber or other sealing material, between the said thumb-piece and the head B.

The bars or catches I' are pivoted at *i'*, and therefore have sufficient lateral movement to permit them to automatically accommodate themselves to slight variations in the positions of the bars K. The same advantage is possessed by the catches I, since they are simply set in recesses in the brackets of the shoulder or projection D and are capable of moving slightly therein. Furthermore, if the catches I or I' were rigid they would be liable to break or bend the bars K if the sides of the box should become slightly bent.

Having now described my invention, I claim—

1. The combination with the box A having the internal shoulder or projection D provided with movable slotted catches and spring detents carried by the latter, of the head B having the rigid bars K adapted to pass through the slots of the catches, and means independent of the said catches and bars for clamping the head to its seat, substantially as described.

2. The combination with the box A having the internal shoulder or projection D provided with movable slotted catches and spring detents carried by the latter, of the head B having the rigid bars K adapted to pass through the slots of the catches, the cross brace E having pawl L, and the screw-bolt G having longitudinal grooves or ratchet teeth adapted to be engaged by the said pawl, substantially as described.

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

EDWARD L. SNADER.

Witnesses:

G. H. STOCKBRIDGE,
HUGH M. STERLING.