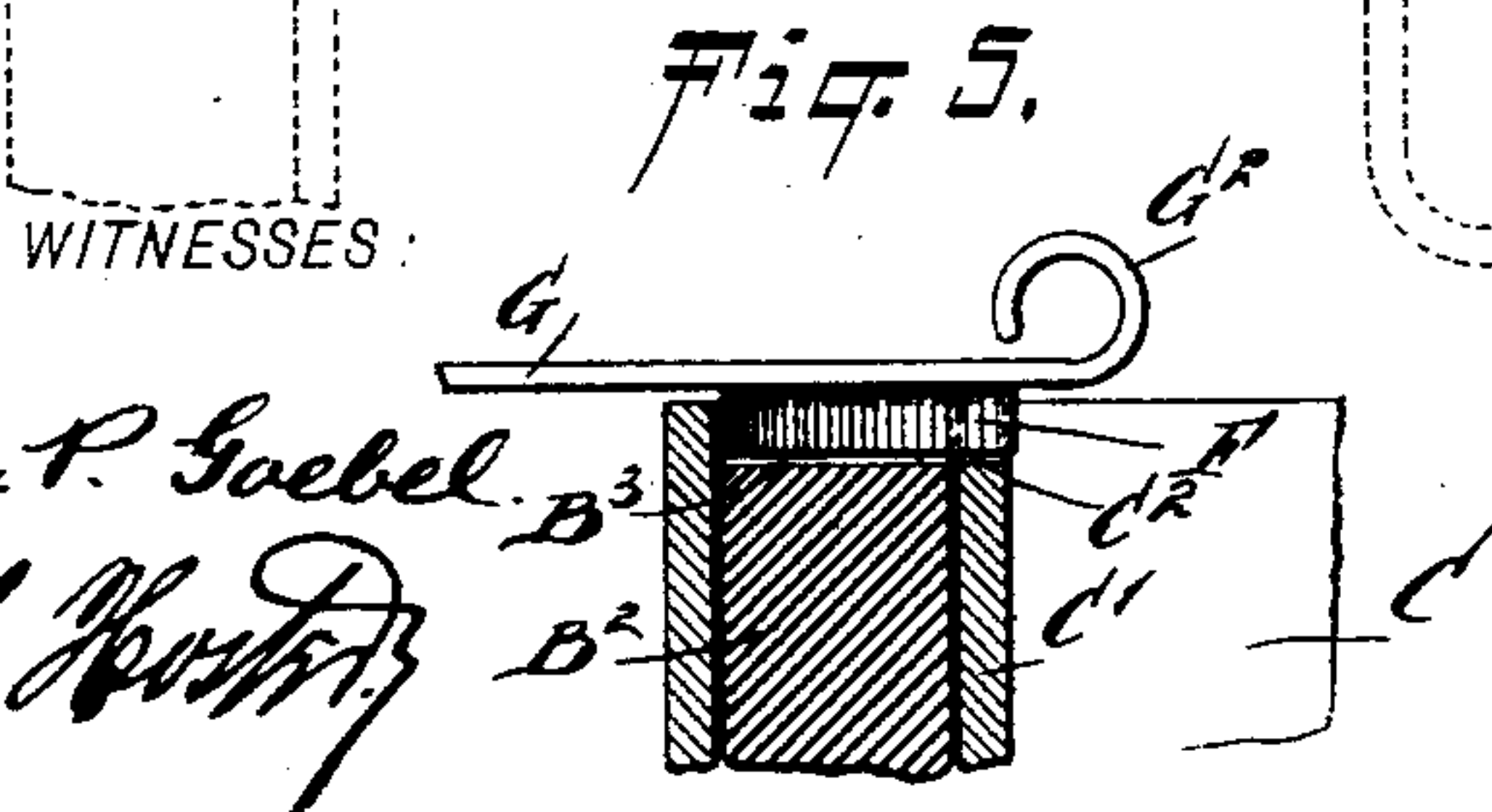
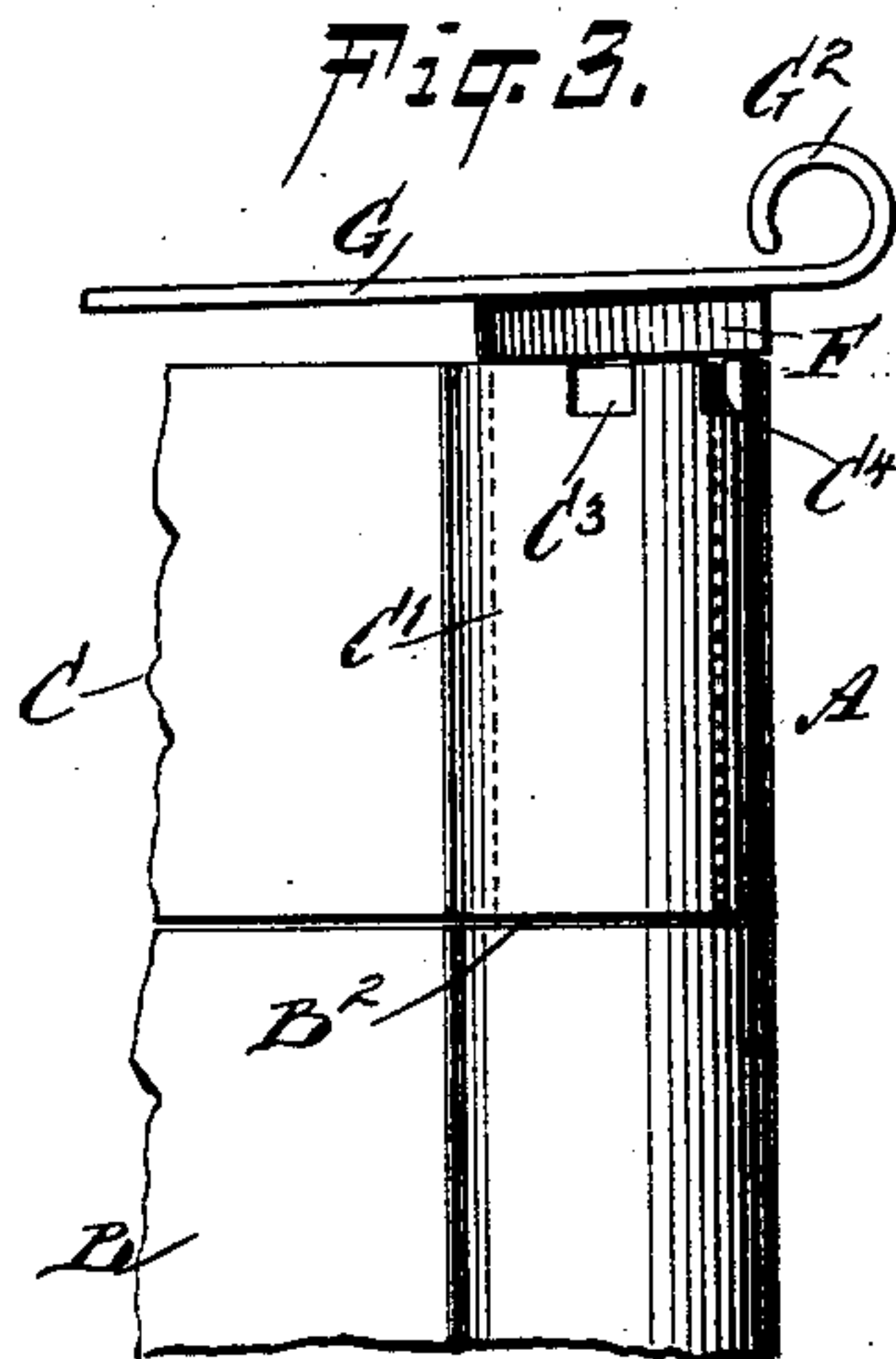
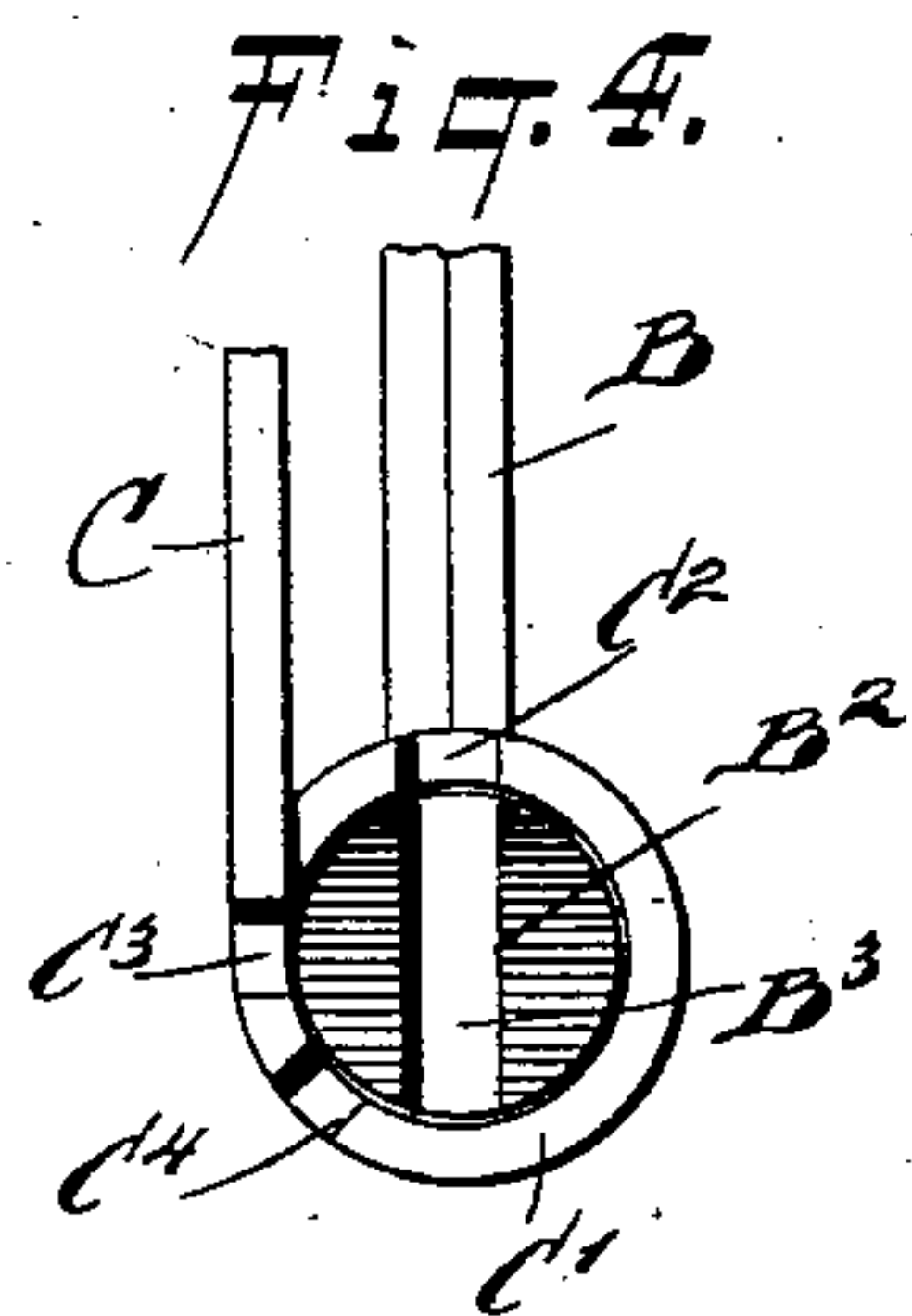
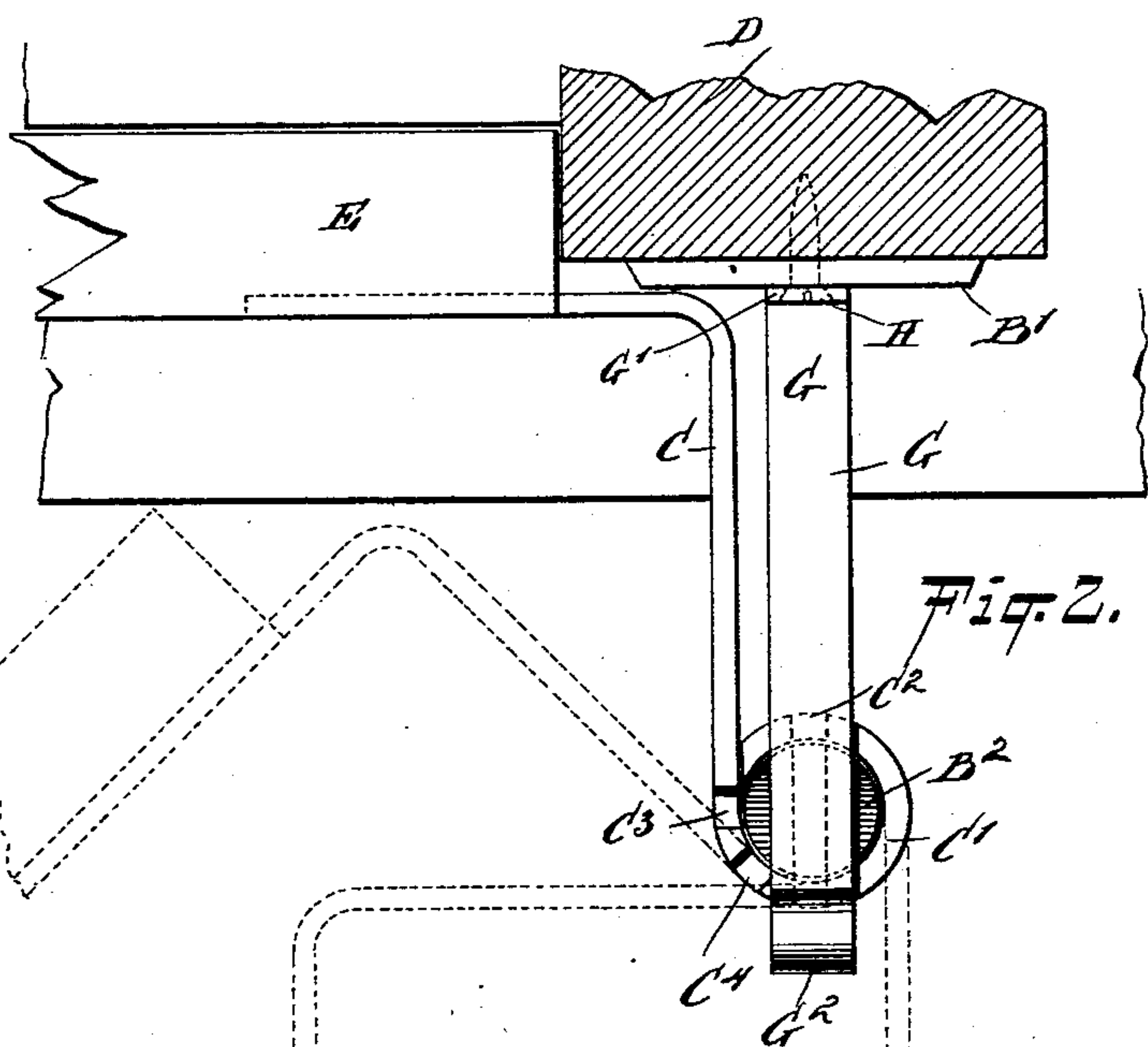
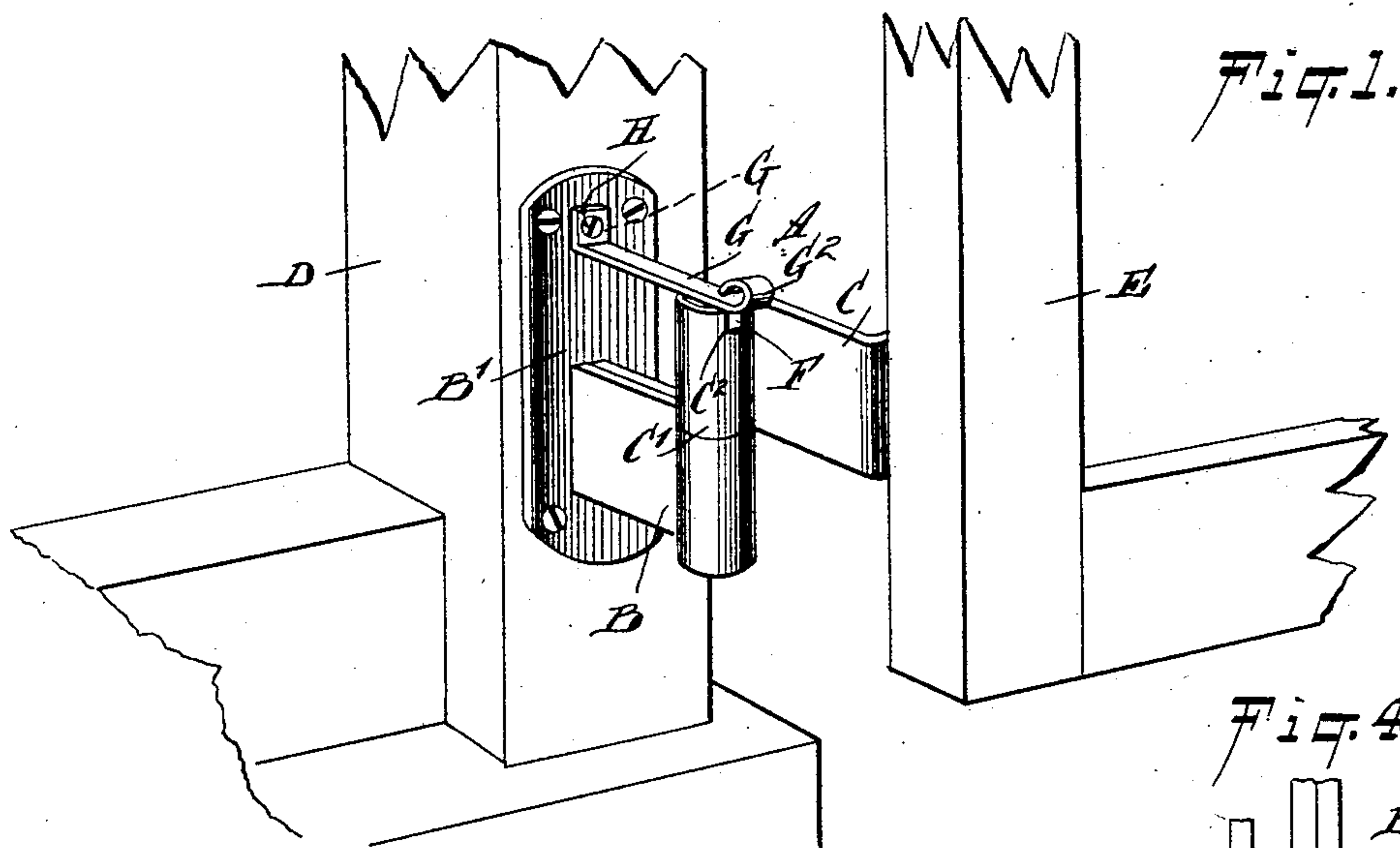


(No Model.)

A. RENTSCH.  
LOCK HINGE.

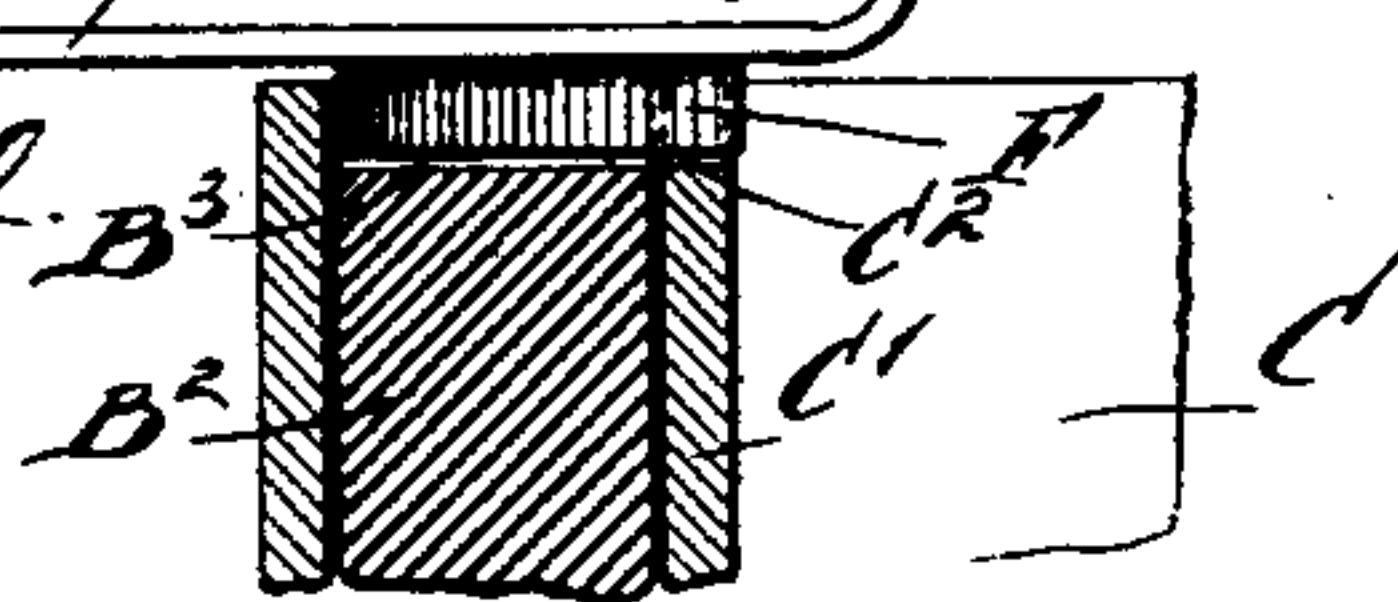
No. 591,693.

Patented Oct. 12, 1897.



WITNESSES:

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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

AUGUST RENTSCH, OF BROOKLYN, NEW YORK.

## LOCK-HINGE.

SPECIFICATION forming part of Letters Patent No. 591,693, dated October 12, 1897.

Application filed April 20, 1897. Serial No. 632,960. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUST RENTSCH, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Lock-Hinge for Shutters, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved lock-hinge, more especially designed for use on shutters and arranged to securely hold the shutter either in open or in angular positions, the hinge being very simple and durable in construction and easily manipulated.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement as applied and with the shutter in an open position. Fig. 2 is an enlarged plan view of the improvement with the shutter in a closed position and with the window-casing in section. Fig. 3 is a side elevation of part of the improvement with the lock disengaged from the slot and notches at the time the shutter is in a closed position, as shown in Fig. 2. Fig. 4 is a plan view of the pintle and eye, and Fig. 5 is a transverse section of part of the improvement and with the lock engaging the registering notch and slot.

The improved lock-hinge, as illustrated in Fig. 1, is used in connection with the lower hinge A of a shutter, and the said lock-hinge is provided with two leaves B and C, of which the leaf B is provided with the usual attaching-plate B', fastened by screws to the window-casing D in the usual manner. The other leaf C is attached to the shutter E proper, and this leaf is provided with an eye or a sleeve C', mounted to turn on the pintle or guide-pin B<sup>2</sup>, forming a rigid part of the other leaf B. On the top of the pintle B<sup>2</sup> is formed a transversely-extending slot B<sup>3</sup>, and in the top edge of the eye C' are formed a series of notches C<sup>2</sup> C<sup>3</sup> C<sup>4</sup>, and adapted to register with the forward end of the slot B<sup>3</sup> in the fixed pintle whenever the shutter E is moved into a

closed or into an angular position, as indicated in dotted lines in Fig. 2.

The slot B<sup>3</sup> and the corresponding registering notch C<sup>2</sup>, C<sup>3</sup>, or C<sup>4</sup> are engaged by a lug F, extending transversely and secured to the under side of the free end of a spring G, secured at its rear turned-up flange G' by a screw H to the plate B', the said screw also passing into the wood for the window-casing D, so as to assist in holding the plate B' in position on the window-casing, at the same time securing the spring G in place on the plate B'. The extreme outer end of the spring G is preferably curved up, as at G<sup>2</sup>, to form a handle adapted to be taken hold of by the operator to pull the spring G upward to disengage the lug F from the registering slot B<sup>3</sup> at the corresponding notch C<sup>2</sup>, C<sup>3</sup>, or C<sup>4</sup> whenever it is desired to unlock the shutter to turn the same to a different position. When the shutter E is in a closed position, as illustrated in Fig. 2, then neither of the notches C<sup>2</sup>, C<sup>3</sup>, or C<sup>4</sup> register with the outer end of the slot B<sup>3</sup>, and the lug F is then out of engagement with the slot B<sup>3</sup> and its outer end rests on the top edge of the sleeve C', as plainly indicated in Fig. 3. When the shutter is in this position, it is locked to the window-casing by a suitable device, (not shown,) it being distinctly understood that the lug F is out of engagement with the slot and notches to permit of opening the shutter whenever desired without requiring any manual operation at the lock-hinge.

As indicated in Figs. 2 and 4, the notches C<sup>2</sup>, C<sup>3</sup>, and C<sup>4</sup> are so arranged relative to the forward end of the transverse slot B<sup>3</sup> that when the notch C<sup>2</sup> is in register with the slot B<sup>3</sup> and the lug F engages the said registering parts the shutter E is held in an outermost or open position, as shown in Fig. 1. When it is desired to hold the shutter at right angles to the side of the house, as indicated in dotted lines in Fig. 2, the operator lifts the spring G out of engagement with the slot B<sup>3</sup> and notch C<sup>2</sup> and then swings the shutter inwardly until the lug F drops into the notch C<sup>3</sup> and slot B<sup>3</sup>.

When it is desired to hold the shutter E in an oblique direction, also shown in dotted lines in Fig. 2, the lug F is again unlocked by lifting the spring G upward, the shutter be-



ing then further turned until the lug F drops into the notch C<sup>2</sup> and the slot B<sup>3</sup>.

When it is desired to remove the shutter E for painting, repairing, or other purposes, the operator simply unscrews the screw H to detach the spring G, which on removal permits of lifting the shutter and eye C' off of the pintle B<sup>2</sup>. When, however, the spring G is in use, an accidental unhooking of the shutter E is prevented, as the free end of the spring extends over the top edge of the eye C'.

It will be seen that the device is very simple and durable in construction, can be cheaply manufactured, is not liable to get out of order, and can be easily manipulated to move the shutter into various positions and lock it therein, as above mentioned.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

A lock-hinge, comprising leaves one of which carries a fixed pintle and the other is

provided with an eye mounted to turn on the said pintle, the latter being formed at its upper end with a diametric slot, and the upper edge of the said eye being formed with notches adapted to register with the said slot, the notches being so arranged relative to the slot that when the shutter is in a closed position neither of the notches registers with the said slot, and a spring removably connected with the attaching-plate for the pintle-leaf and provided near its free end with a lug held by the resiliency of the spring in engagement with the said slot and with one of the said notches in register at the time with the slot, the lug resting on the top edges of the eye when the shutter is in a closed position, substantially as described.

AUGUST RENTSCH.

Witnesses:

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JNO. M. RITTER.