

No. 834,508.

PATENTED OCT. 30, 1906.

D. CASSELS.

LATCH.

APPLICATION FILED JAN. 27, 1906.

Fig. 1.

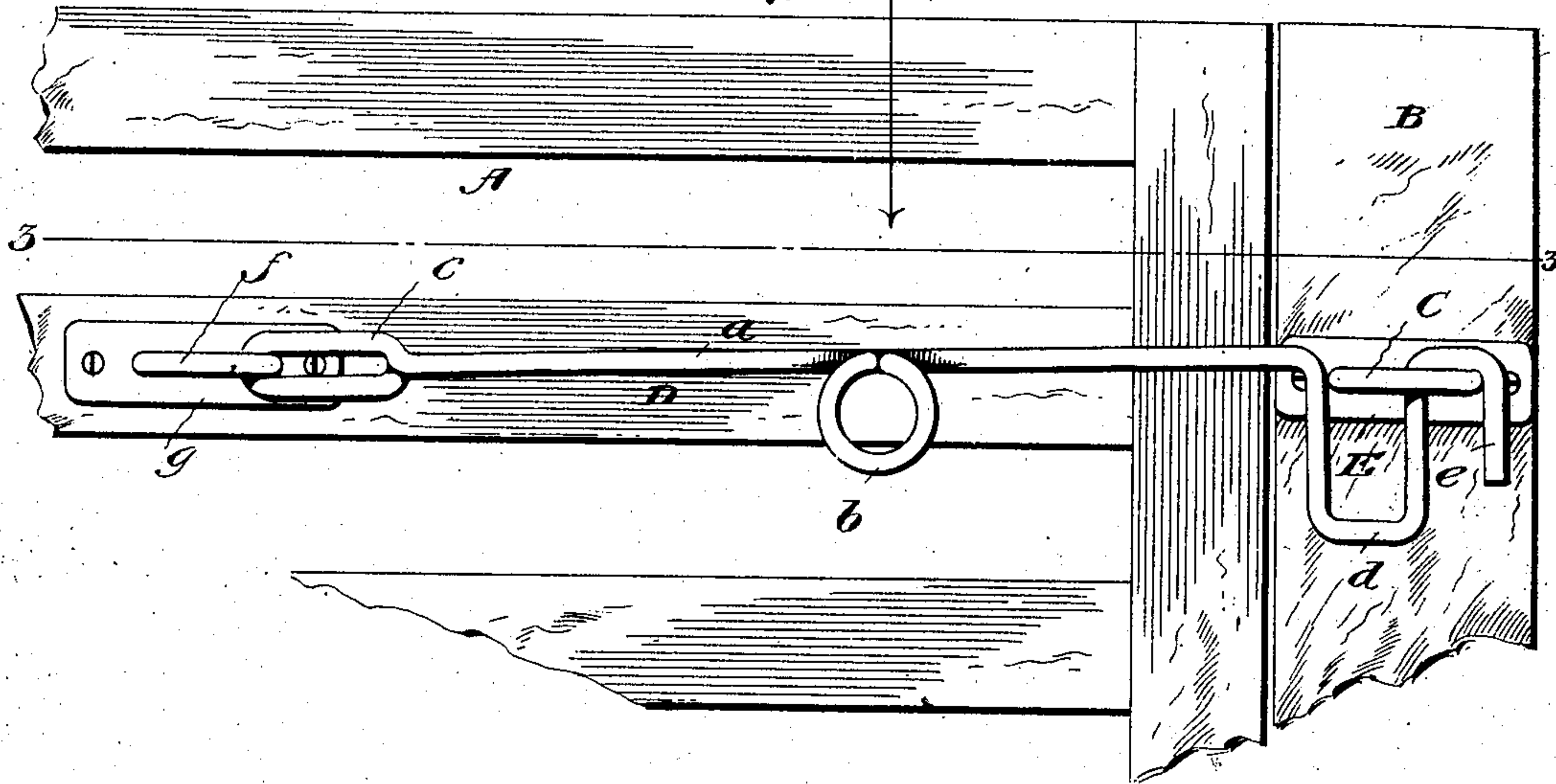


Fig. 2.

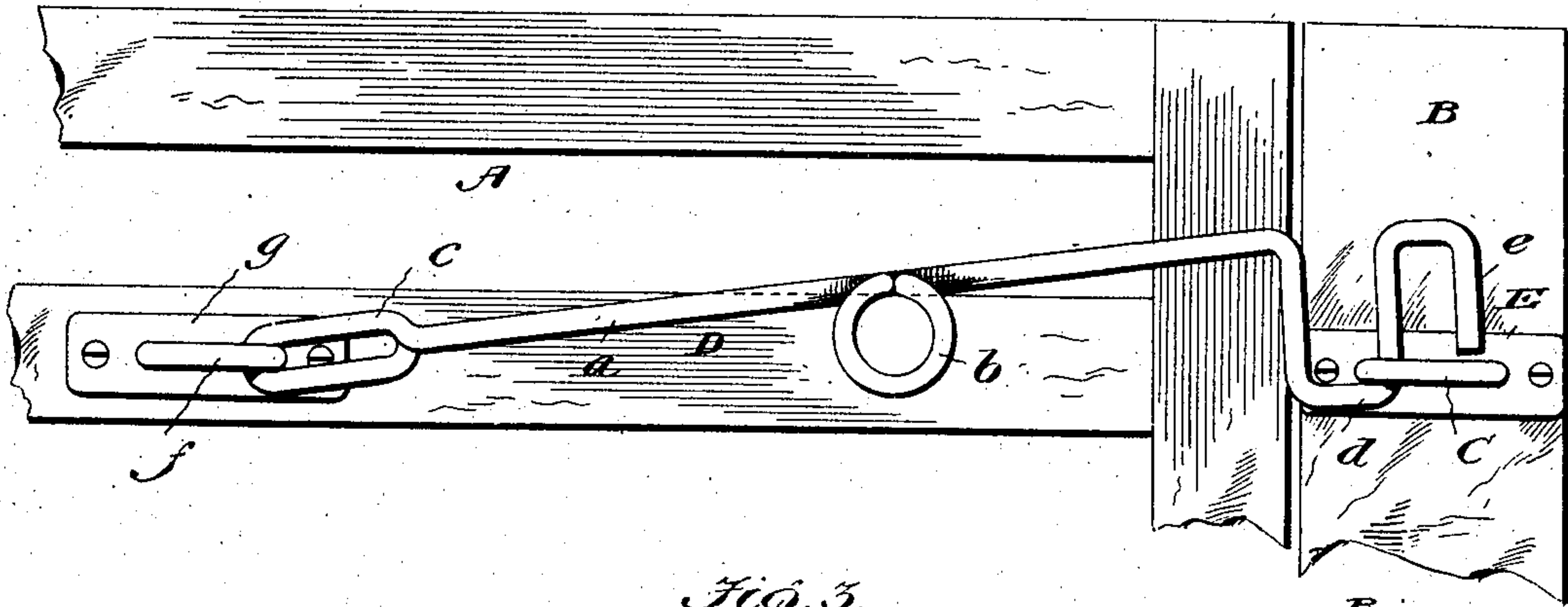


Fig. 3.

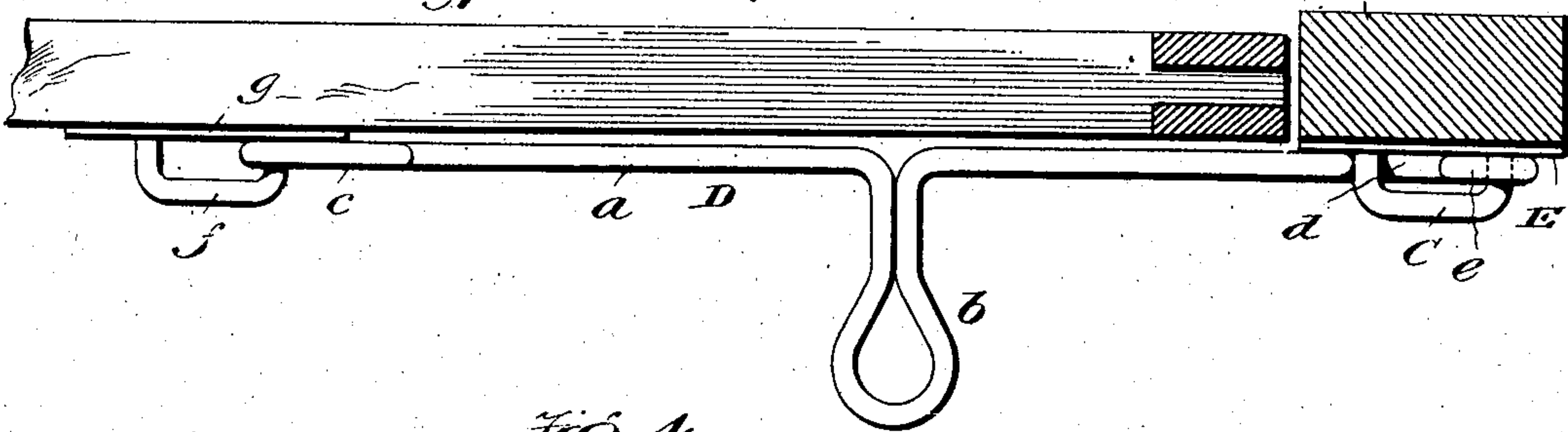
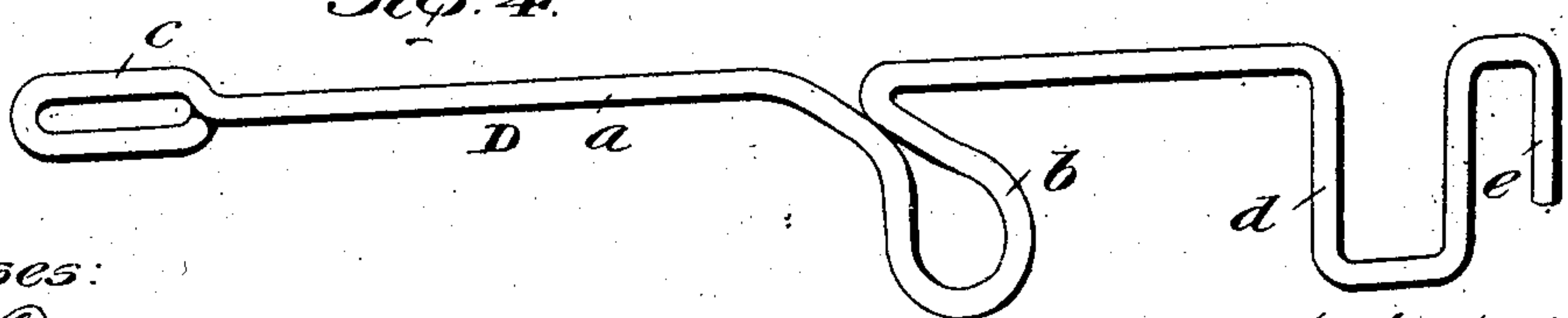


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID CASSELS, OF PORTAGE LA PRAIRIE, MANITOBA, CANADA.

LATCH.

No. 834,508.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed January 27, 1906. Serial No. 298,207.

To all whom it may concern:

Be it known that I, DAVID CASSELS, a citizen of Canada, residing at Portage la Prairie, in the Province of Manitoba and Dominion of Canada, have invented new and useful Improvements in Latches, of which the following is a specification.

My invention pertains to improvements in latches; and it has for its object to provide a latch designed more particularly for use in connection with a gate and constructed with a view of effectually resisting the efforts of horses, cows, and other stock to open the gate, as well as to preclude opening of the gate when the same is shaken or otherwise manipulated.

Other advantageous features of the invention will be fully appreciated from the following description and claims when the same are considered in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation illustrating the latch constituting the present and preferred embodiment of my invention as the same appears when its sliding and swinging member is positioned to secure a gate in its closed position. Fig. 2 is a view similar to Fig. 1 and illustrating the sliding and swinging member of the latch in the position which it is caused to assume precedent to being disengaged from the keeper-loop. Fig. 3 is a horizontal section taken in the plane indicated by the line 3 3 of Fig. 1, and Fig. 4 is a perspective view of the sliding and swinging member of the latch removed.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is so much of a gate as is necessary to illustrate the application of the sliding and swinging member of my novel latch.

B is a post or other suitable stationary support arranged adjacent to the swinging end of the gate.

C is the keeper-loop of my improved latch, and D is the sliding and swinging member thereof. The keeper-loop C is disposed horizontally and is carried by a body-plate E, which in turn is screwed or otherwise fixed with respect to the stationary support B.

The sliding and swinging member D comprises a body portion *a*, having a lateral handle *b* at an intermediate point of its length, a closed loop or eye *c* at one end of the body *a*, a U-shaped loop *d* at the opposite end of the

body *a*, with reference to the loop or eye *c*, and a hook *e* at the opposite side of the loop *d*, with reference to the body *a*. The said sliding and swinging member D is preferably connected to the gate A in the manner illustrated—that is to say, through the medium of a loop *f*, similar to the before-described keeper-loop C, which loop *f* loosely extends through the loop or eye *c* of the member D and is carried by a body-plate *g*, which is screwed to or otherwise fixed on the gate. The sliding and swinging member D of the latch is shown in Fig. 1 in its closed position, and it will be readily apparent that the said member cannot be disengaged and removed from the keeper-loop C by merely lifting the member, this because the bight of the loop *d* will bring up against one end of the said keeper-loop C. This will be appreciated as an important advantage when it is remembered that on many farms there are pet horses and cows which are able to raise the swinging members of latches, and thereby open gates. With my novel latch it is first necessary to swing the member D upwardly until the bight of the loop *d* brings up against one end of the keeper-loop C and then move the member D endwise to the left, Fig. 2, until the hook *e* as a whole is above and in alinement with the keeper-loop C, and then swing the said member D downwardly to carry the hook *e* through and out of engagement with the keeper-loop C. With this done the gate is entirely disconnected from the support B and may then be swung open.

It will be gathered from the foregoing that the three movements of the member D necessary to disconnect the said member from the keeper-loop C are beyond the mental grasp of an animal, and hence there is no liability of the member D being disengaged and the gate opened by the efforts of a horse, cow, or other pet. It will also be gathered that vertically-swinging movements of the member D will not suffice to disengage the said member from the keeper-loop C, and consequently there is no liability of the gate being unlatched by shaking or other manipulation thereof.

When the gate A is closed and it is desired to secure the same in such position through the medium of my improvements, the member D is swung upwardly to carry the hook *e* through the keeper-loop C. Then when the free end of the hook *e* is above the keeper-loop C and the bight of the loop *d* is

against the under side of one end of said keeper-loop the member D is moved endwise to the right, Fig. 2, and finally the free end of the member D is permitted to gravitate,
5 when, as will be readily apparent, the bight of the hook *e* will bear on that end of the keeper-loop C remote from the point of connection of the member D.

10 The handle *b* permits of the member D being conveniently swung up and down and moved endwise, and I therefore prefer to employ the said handle. I do not desire, however, to be understood as confining myself to the use of the handle, inasmuch as the
15 same might obviously be dispensed with without affecting my invention.

In addition to the security of my novel latch and the facility with which it may be closed and opened it will be noted that the
20 latch is simple and inexpensive in construction and at the same time well adapted to withstand the shocks and strains to which latches are ordinarily subjected, as well as exposure to the weather.

25 The sliding and swinging member D may be made in any manner and of any material compatible with the purpose of my invention, the member illustrated being shaped of wire of about the caliber shown.

30 While designed more particularly for use in connection with farm-gates, my improvements may obviously be used to advantage on the doors of buildings and cars and the

tail-gates of wagons, as well as in other connections. 35

I claim—

1. In a latch, the combination with a keeper-loop; of a sliding and swinging member having a loop at one end and also having a hook at the opposite side of the said loop
40 with reference to the remainder of the member.

2. In a latch, the combination with a horizontal keeper-loop; of an endwise and vertically movable member having a depending
45 loop at one end and also having a hook at the opposite side of the said loop with reference to the remainder of the member.

3. In a latch, the combination with a horizontal keeper-loop; of a vertically and end-
50 wise movable member having a handle at an intermediate point of its length and a closed loop or eye at one end and also having a depending loop at its opposite end and a
55 hook at the opposite side of the depending loop, with reference to the remainder of the member, and a loop resting loosely in the loop or eye of the member and adapted for attachment to a gate or the like.

In testimony whereof I have hereunto set
60 my hand in presence of two subscribing witnesses.

DAVID CASSELS.

Witnesses:

W. R. McLAURIN,
GEORGE A. MUIR.