

(No Model.)

L. SAMUEL.
DOOR CHECK.

No. 473,785.

Patented Apr. 26, 1892.

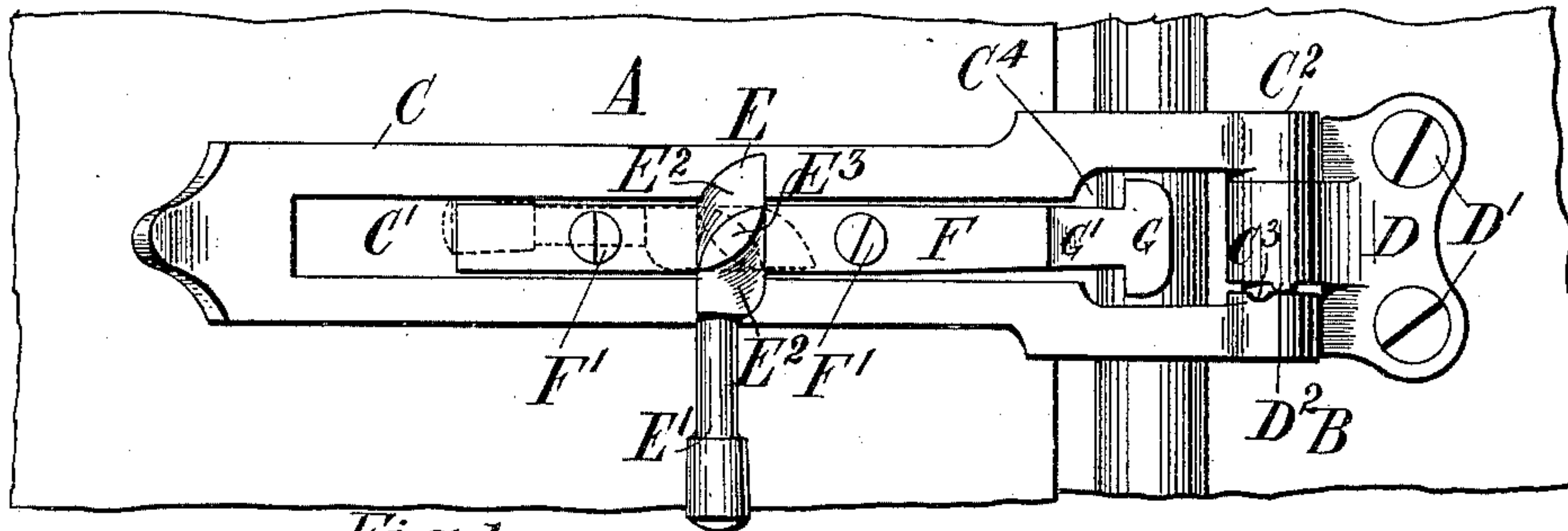


Fig. 1.

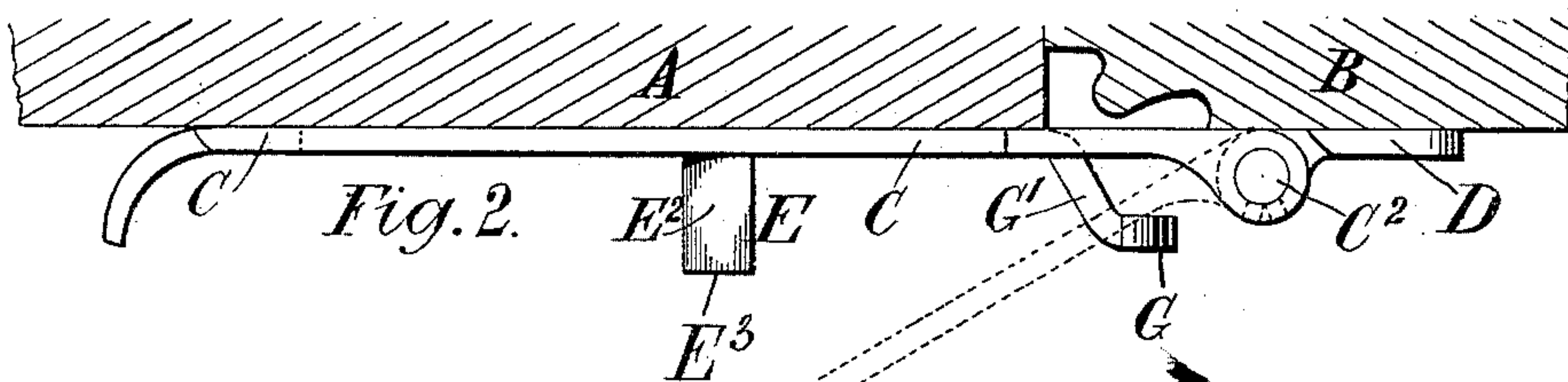


Fig. 2.

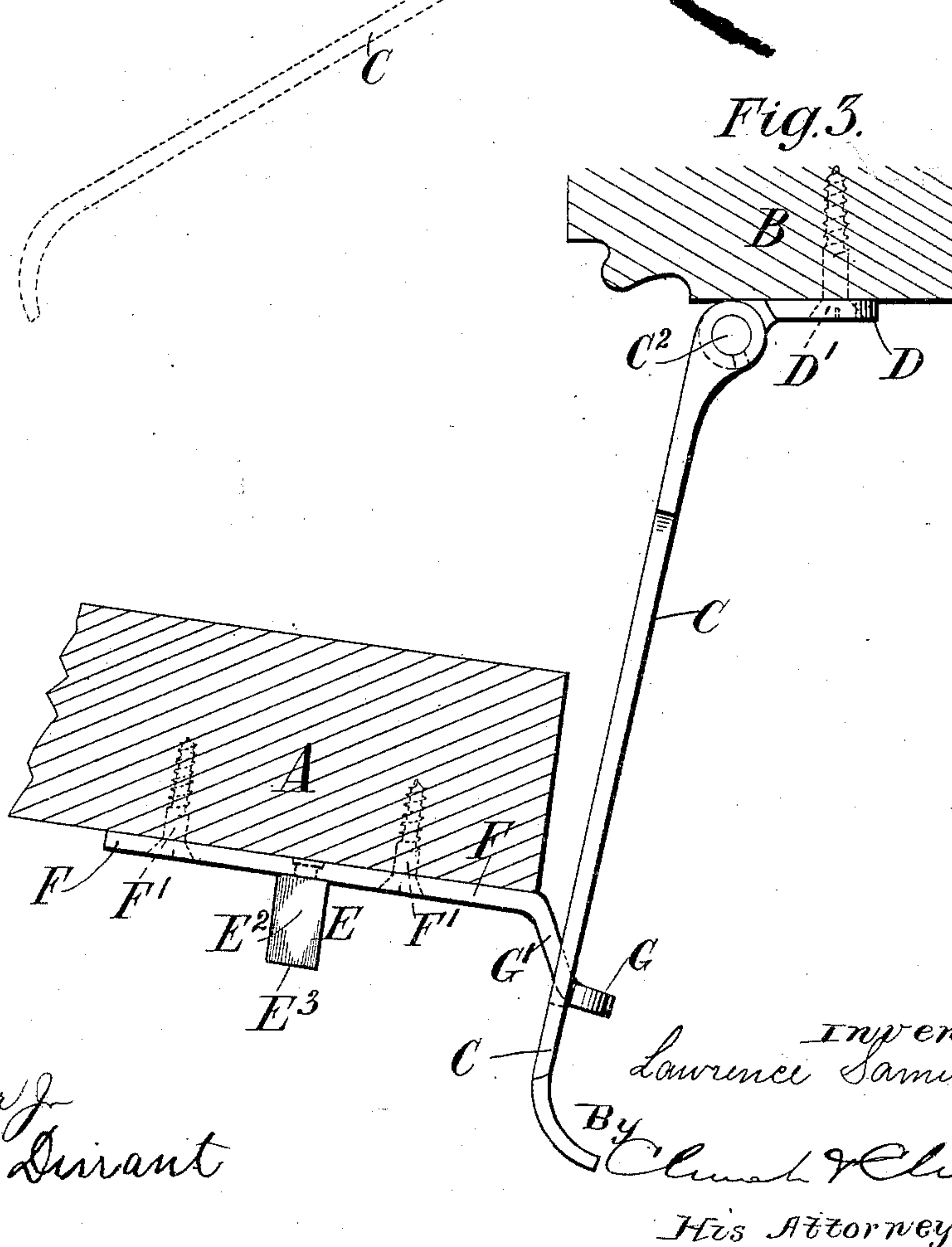


Fig. 3.

Witnesses
J. M. Fowler Jr.
Thomas Durant

Inventor
Lawrence Samuel,

By
Clum & Clum
His Attorneys

UNITED STATES PATENT OFFICE.

LAWRENCE SAMUEL, OF LONDON, ENGLAND.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 473,785, dated April 26, 1892.

Application filed September 8, 1891. Serial No. 405,101. (No model.)

To all whom it may concern:

Be it known that I, LAWRENCE SAMUEL, a subject of the Queen of England, residing at London, England, have invented certain new and useful Improvements in Bolts or Fasteners for Doors, Windows, and the Like, of which the following is a specification.

This invention relates to a fastener for doors of various kinds—such as house-doors, railway-carriage doors, cabin-doors, and the like, and also window-sashes and the like—and is so designed that it may be used as a bolt for entirely fastening the door when closed, or may be employed for the same purpose as the well-known door-chain which allows the door to be opened to a certain extent but no farther.

In the accompanying drawings, Figure 1 is an elevation of a portion of a door and frame with the fastener attached. Fig. 2 is a sectional view showing the fastener in plan; and Fig. 3 is a similar view to Fig. 2 and shows the door partly open with the fastener taking the place of the ordinary chain.

Like letters represent like parts throughout the drawings.

A represents the door, and B the frame-work, C being a yoke, having a long slot C' and pivoted at C² to the frame-bracket D, which latter may be secured in any convenient manner to the frame B, as by the screws D'. Upon the door is pivoted a latch E upon a plate F, secured to the door A by the screws F'. The end of the plate F terminates in a projecting T-head G, the shape of which can be clearly understood from the drawings, Fig. 1 showing it in face view and Figs. 2 and 3 in edge view. A portion of the slot C' of the yoke C is enlarged at C⁴ to permit the passage of the head G, the remaining portion of the slot being too small to allow of the head G passing through it, although the neck G' can freely pass in the slot. The latch E is provided with a balance weight or handle E', so that it naturally rests in its normal position, as shown in the drawings, with the weighted handle hanging down. When in this position the head or latch E is so turned that the yoke C is secured to the door and the latter cannot be opened, as the yoke cannot when so held be turned upon its pivot C². The free ends of the yoke C at C³ are sprung upon

the bracket D, so as to operate in conjunction with the projection or cam D², and the recess C³ in one of the jaws has a spring in the same manner as the well-known pocket articles such as corkscrews or the like, the position thus naturally accorded to the yoke being that approximately indicated in dotted lines in Fig. 2. This position is such that the head G of the plate F cannot pass through the enlargement C² of the yoke-slot C', and consequently when the door is opened it pushes against the yoke, turning it upon its pivot C², and the neck G' slides up the slot C' until the position indicated in Fig. 3 is reached, when the door is as wide open as the yoke will allow, and the head G prevents the yoke coming off the plate F. In this position the yoke acts in a manner similar to and takes the place of the ordinary door-chain. The spring-jaws of the yoke, while serving to normally retain the yoke at the angular position previously described, have the further effect of making it work stiffly upon its pivot, with the result that no slamming of the door or sudden shock will be liable to turn the yoke upon its pivot and throw it so far open that the head G, passing through the enlargement C², would place the head upon the wrong side of the yoke, and thus when the door opened cause the yoke to be useless. This danger would be liable to occur if some such means as those described were not employed for holding the yoke in its required position. The same thing, doubtless, might be accomplished by employing tapered pivots, so that the pressure of the spring or the pressure of nuts upon the ends of the pivot would produce the required stiffness in the movement of the yoke around its pivots, or even an independent spring operating upon the joint in the manner commonly adopted in pocket-knives; but such devices would be more costly and more liable to get out of order than the one described and would be mere colorable imitations of it. When it is not required to use the yoke, it may be turned back against the frame-work out of the way of the plate F G.

The operation of this device is as follows: Suppose the yoke to have been turned back out of the way and the door closed and it is desired to apply the yoke. The yoke is turned upon its pivot until, after passing over the

head G, it comes in contact with the latch E, which, as will be seen in the drawings, is provided with two cam-faces E^2 , leaving only a flat top E^3 , pointed at both ends, as clearly indicated in Fig. 1 of the drawings. The sides of the yoke C, coming in contact with the two cam-surfaces E^2 , have the effect of turning the latch E upon its pivot until the balance-handle E' is parallel with the sides of the slot C', when the yoke can be passed over the whole latch, and the latter resumes its vertical position (shown in full lines in Fig. 1) and the yoke is securely fastened. To undo the fastening, the latch can be turned into its horizontal position by the hand of the operator upon the handle E' . The thickness of the yoke C and the plate F are preferably about the same, so that the latch can easily turn upon the plate F when the yoke is closed without its working face being stopped by contact with the yoke. If desired, a reversal of the position described may be made. Those parts which have been previously described

as being fixed to the door can be placed upon the jamb or frame and those which have been described as placed upon the frame may be placed upon the door.

I claim—

In a fastener such as described, the combination, with the plate having the headed end and the pivoted yoke having the slot therein, enlarged at one end and co-operating with the headed plate, of the pivoted latch having the elongated body, adapted to pass through the yoke, and the cam-surfaces co-operating with the yoke to turn the latch into proper position to enter the slot in the yoke, substantially as described.

In testimony whereof I have hereto set my hand in the presence of the two subscribing witnesses.

LAWRENCE SAMUEL.

Witnesses:

HORATIO SAGIN,
WILLIAM RICHARDSON.