

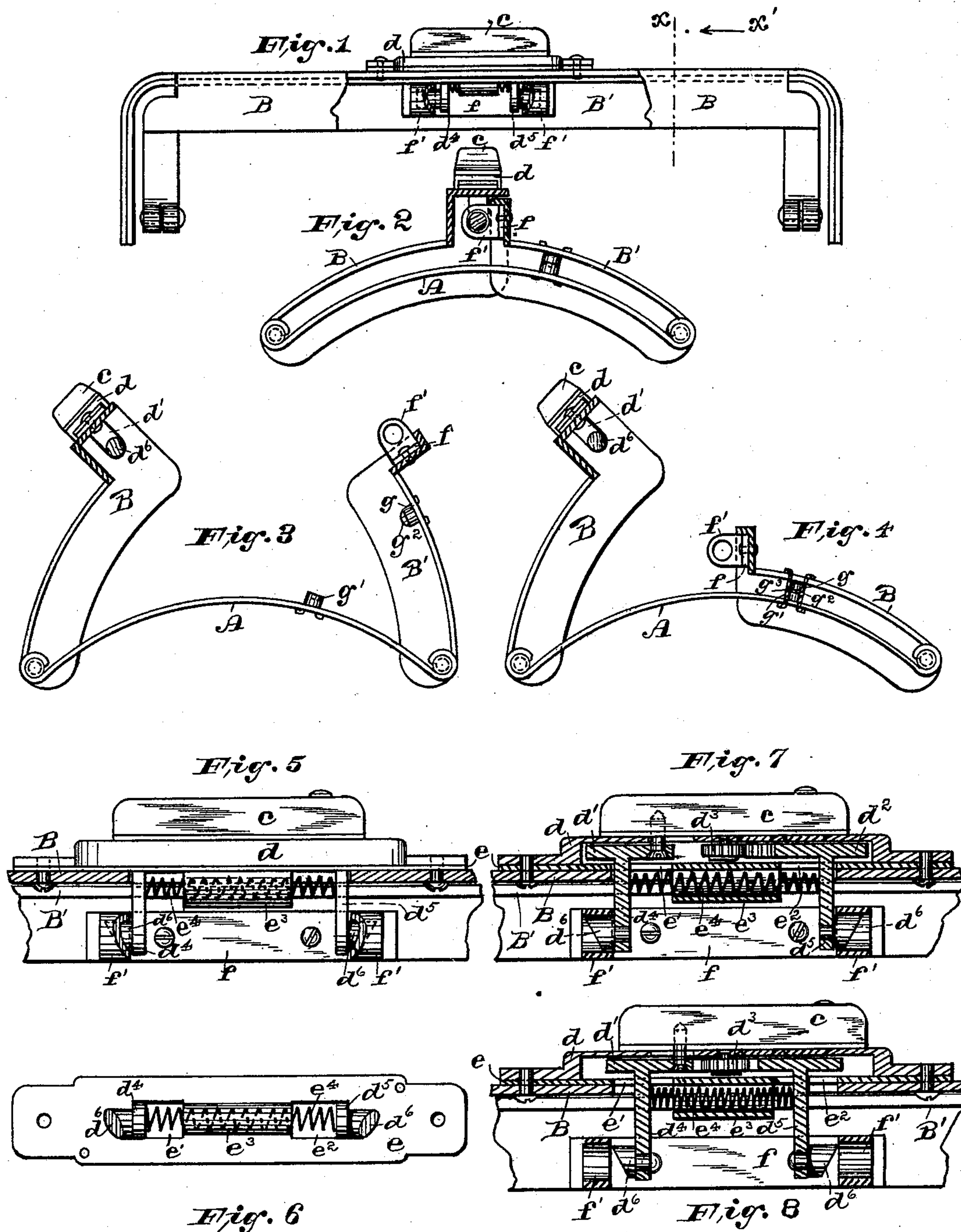
(No Model.)

2 Sheets—Sheet 1.

C. REINISCH.
BAG LOCK.

No. 405,119.

Patented June 11, 1889.



WITNESSES:

H. Fraentzel
William Bennett

INVENTOR:

Charles Reinisch

BY Campbell & Co. ATTYS.

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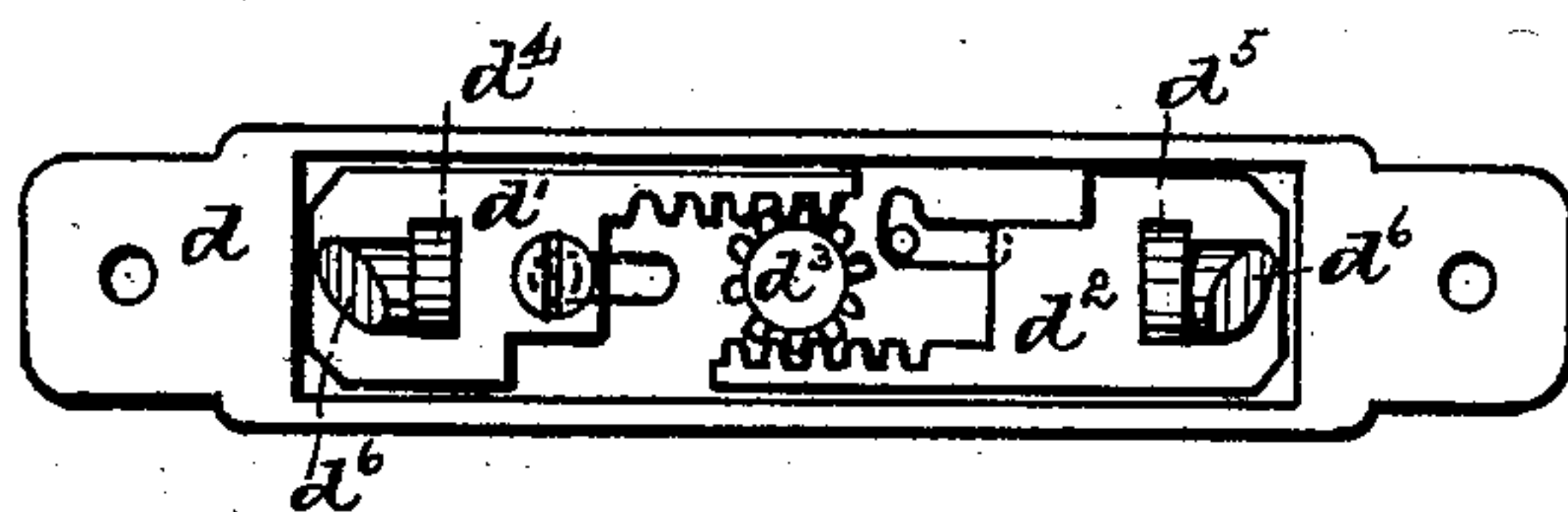


Fig. 9

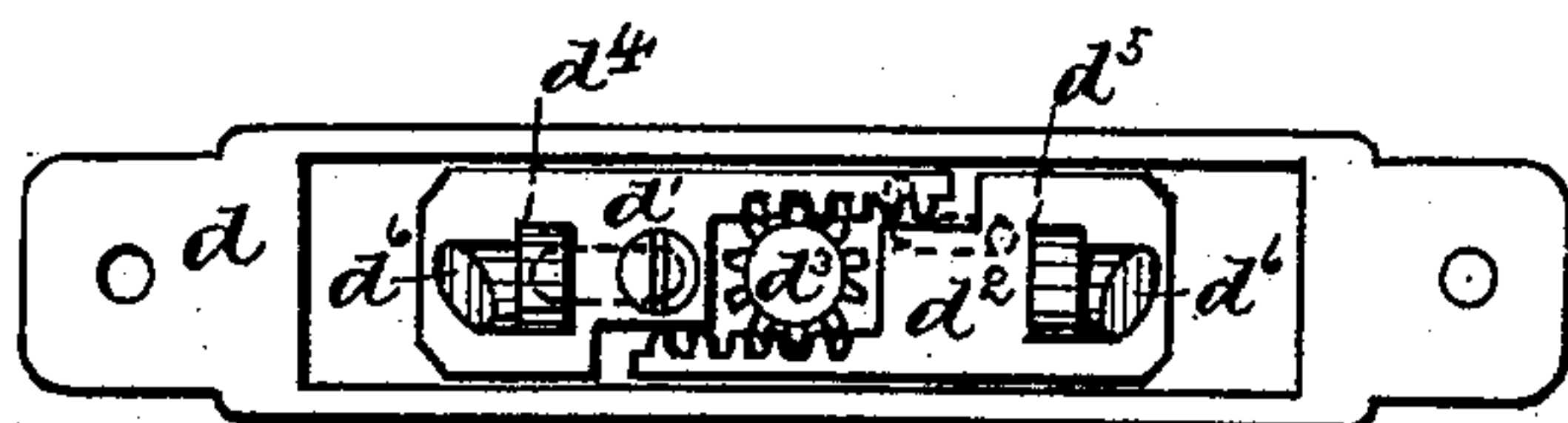


Fig. 10

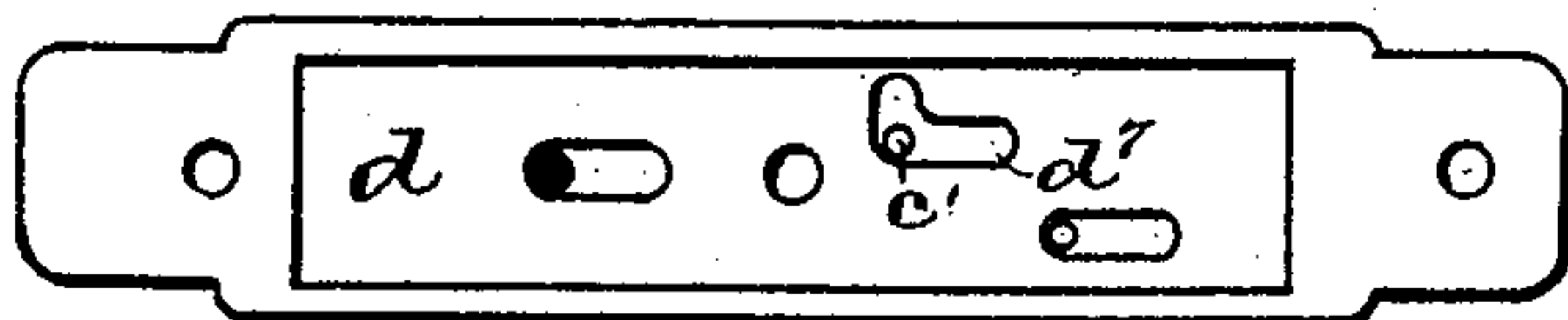


Fig. 11

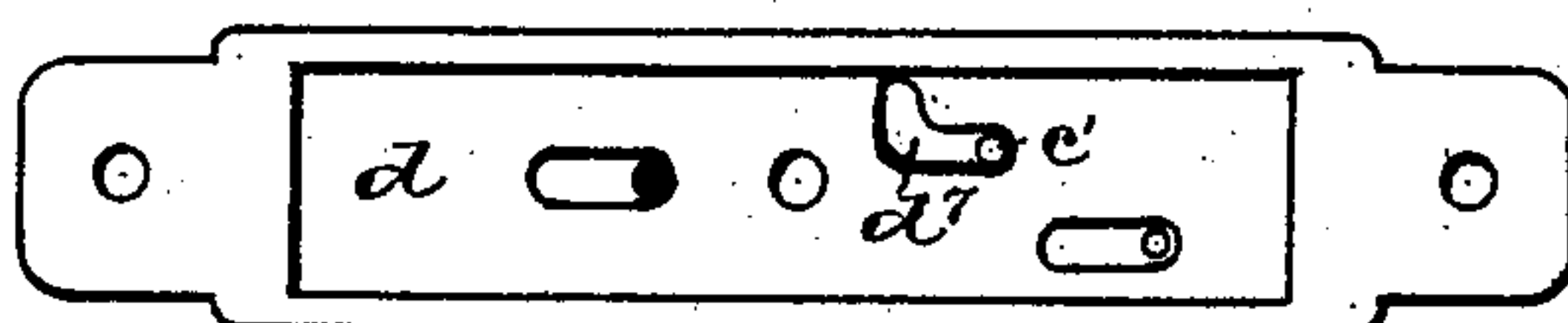


Fig. 12



Fig. 13

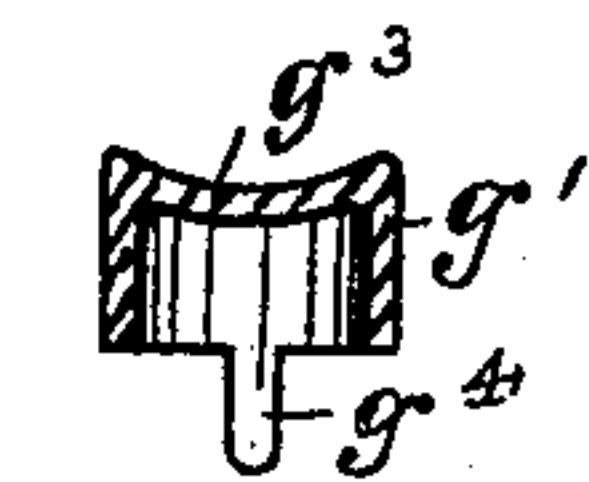


Fig. 19

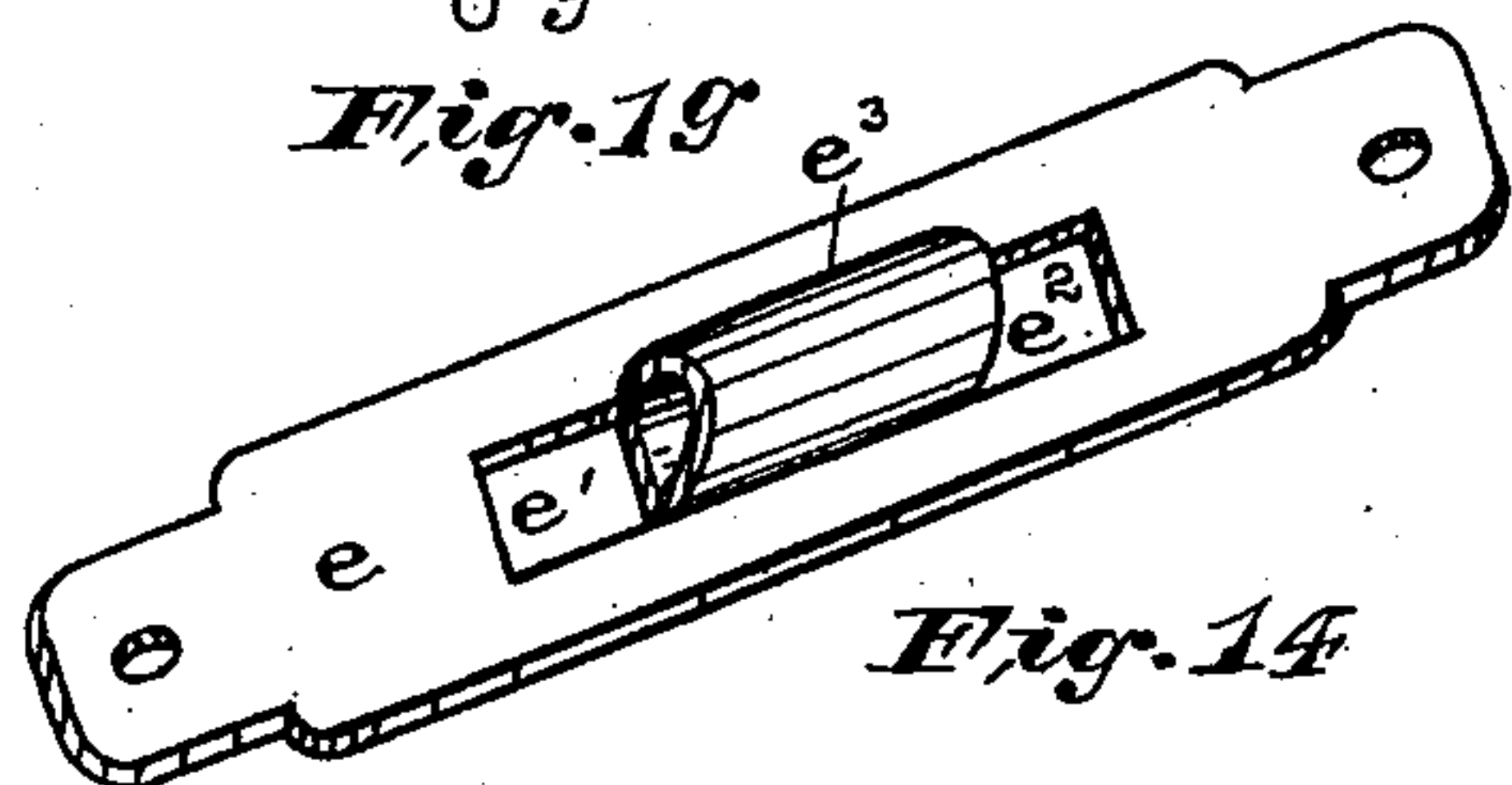


Fig. 14



Fig. 15

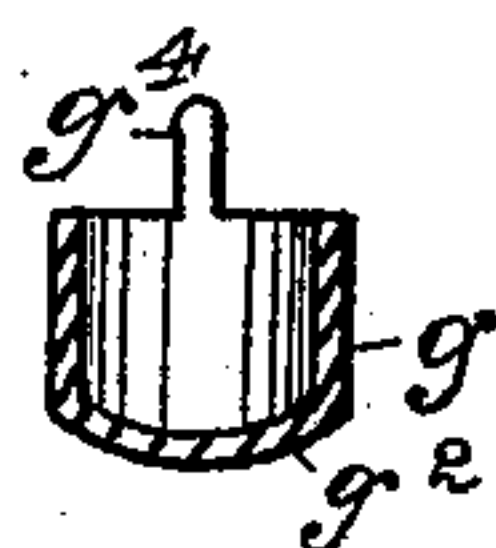


Fig. 20



Fig. 16

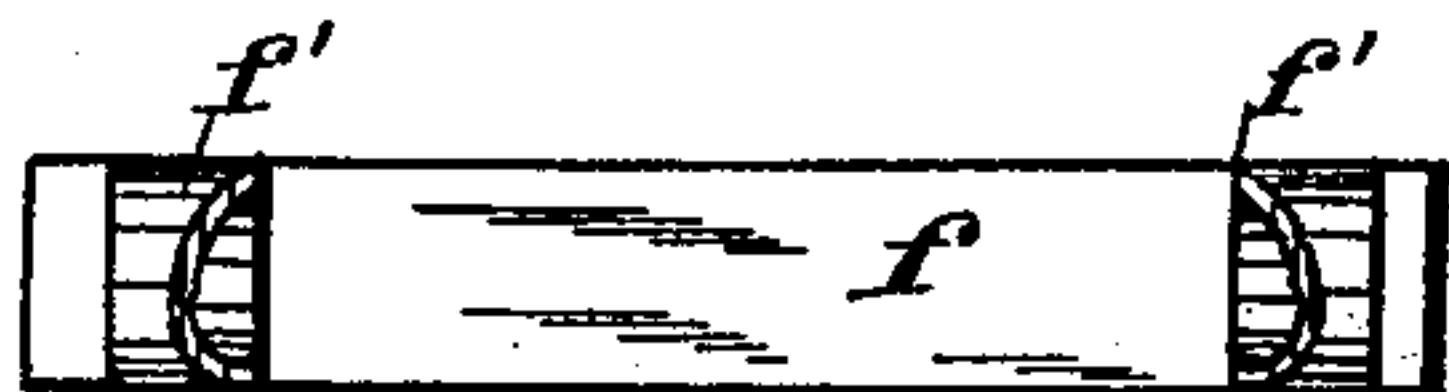


Fig. 18.

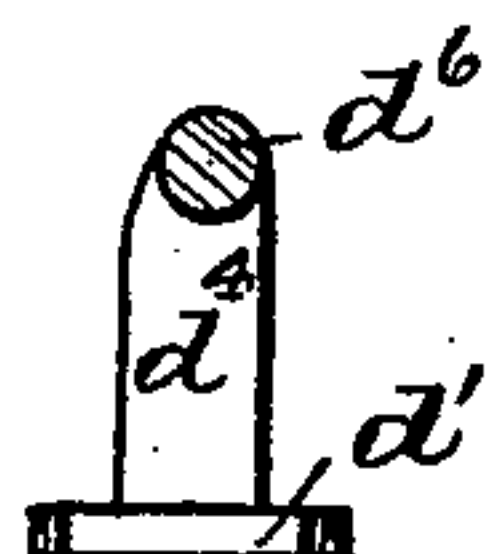


Fig. 17

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UNITED STATES PATENT OFFICE.

CHARLES REINISCH, OF NEWARK, NEW JERSEY.

BAG-LOCK.

SPECIFICATION forming part of Letters Patent No. 405,119, dated June 11, 1889.

Application filed June 14, 1888. Serial No. 277,041. (No model.)

To all whom it may concern:

Be it known that I, CHARLES REINISCH, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Bag-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The invention set forth in detail hereinafter relates to improvements in locks designed to be used more particularly on what is known as a "cabin-bag" or "Victoria" frame, and is designed to secure a lock of greater strength and thereby better adapted to be used on the kind of frame mentioned above, and, further, a lock which, although very strong, is simple and cheap in construction.

In the accompanying drawings is illustrated my invention, in which similar letters of reference indicate corresponding parts in each of the views.

In said views, Figure 1 is a front elevation of my improved lock applied to the above-mentioned frame, part of the frame being broken away to show more clearly the manner of securing the hasp-plate to the inside of the frame. Fig. 2 is a transverse section taken through line x , Fig. 1, looking in the direction of the arrow x' , showing the relation of the parts of the lock when the frame-sections of the bag are in their closed position. Figs. 3 and 4 are views similar to Fig. 2, the first of said figures indicating the positions of the parts when the frame-sections have been opened, and the latter of said figures showing the method of closing the frame-sections. Fig. 5 is a front elevation of the lock and hasp-plate secured to the frame-sections. Fig. 6 is a plan view of the under plate which is interposed between the lock and the bag-frame and part of the fastening mechanism projecting therethrough. Figs. 7 and 8 are longitudinal sections taken centrally through Fig. 6, showing the relation of the parts in their locked and unlocked positions, respectively; and Figs. 9 and 10 are plan views of Figs. 7 and 8, respectively. Figs.

11, 12, and 13 are plan views similar to those shown in Figs. 9 and 10 with the hasp-fastening mechanism removed therefrom, and illustrating the operation of the mechanism for locking the sliding casing or finger-piece. Fig. 14 is a perspective view of a slotted spring holding-plate. Figs. 15 and 16 are plan views of toothed plates provided with bolt-carrying arms, and Fig. 17 is an end elevation of one of the toothed plates. Fig. 18 is a plan view of the hasp-plate, and Figs. 19 and 20 are sectional views of centering devices arranged on the frame-sections of the bag.

The cabin-bag or Victoria frame on which my improvement is intended to be used is shown in the drawings, and consists of the rigid end pieces A and the oppositely-hinged sections B and B', which close down over said rigid end portions and meet in the center of the frame, as is shown in Fig. 2, and as will be understood by those skilled in the art. This kind of frame requires a particularly strong lock because of its peculiar construction, to obtain which is the object of my invention.

As shown in the drawings, the entire fastening device consists of a sliding casing c , which also by reason of its sliding movement acts as a finger-piece to fasten and unfasten the hinged sections of the bag, and which also contains the locking mechanism of the fastening device, which is not shown in detail, as I do not claim anything new in connection therewith. Said sliding casing moves reciprocally on a chambered plate d , between which and the hinged section B is inserted a plate e . (Shown more particularly in Figs. 5 and 7 and also in detail in Fig. 14.) Arranged and moving within said chambered plate d are toothed plates d' and d'' , the toothed arms of which are held normally in mesh with an intermediately-arranged pinion d^3 , journaled to the chambered plate d , one of said toothed plates d' being secured to and moving with the sliding casing c , as shown in Figs. 7 and 8.

Projecting downwardly through slots e' and e'' in the plate e , and also through slots formed in the hinged section B of the frame, are arms d^4 and d^5 , from which project oppositely-arranged bolts d^6 .

The plate e is provided with a loop e^3 , in

which is arranged a spiral spring e^4 , which projects oppositely from each end of said loop and engages with the arms d^4 and d^5 and acts to hold said arms away from each other, as shown in Figs. 5 and 7, which is their normal position.

To the opposite hinged section B' is secured the hasp-plate f , from which project catching-loops f' , which, when the bag is fastened, engage automatically with the locking-bolts d^6 , carried by the opposite frame-section B .

Between the frame-sections B' and the end pieces A are arranged centering devices g and g' , one of which, as g , is provided with a convex surface g^2 , while the other g' has a concave surface g^3 , which surfaces fit upon each other, and thus prevent the frame-section B' from dropping upon the end piece A , and also prevents any side movement of the frame-sections.

It will readily be seen that this is a very essential feature, as by this means the frame-section B' , and with it the hasp-plate, are brought in a position that when the other frame-section B is closed said position is exactly right to enable the engagement of the locking-bolts with the hasps or catching-loops. As shown in Figs. 19 and 20, said centering devices may be struck up from sheet metal and provided with teeth or tongues g^4 , by means of which they can be riveted to the frame-sections, or said pieces may be cast solid, as is desirable.

In the drawings herewith accompanying the lock or fastening device has been shown in connection with what is known as a "cabin-bag" or "Victoria" frame, which necessitates the securing of the hasp-plate on the inner side of one of the frame-sections. This is of great advantage, since the appearance of the bag is not marred by the same. Said lock, however, may also be used on the ordinary bag-frame by securing the hasp-plate to the outside of the frame, allowing the catching-loops on the hasp-plate to project through the frame and into the side of the casing instead of the bottom, as shown herein.

By reference to the drawings it will be seen that the beveled surfaces on the bolts are cut at a peculiar angle, as also the inclined sides of the loops of the hasp. The object of this arrangement is to enable the bolts and hasp-loops to enter into engagement.

In operating the fastening device the sliding movement of the finger-piece c causes the toothed plate d' to move, which in turn produces a movement in an opposite direction in the plate d^2 through the pinion with which both of said plates mesh. The result of this operation is that the bolts d^6 are caused to move toward one another and away from the hasp-loops, as shown in Fig. 8. Upon the release of the finger-piece the bolts, toothed plates, &c., return to their normal position by the action of the spiral spring, as indicated in Figs. 5 and 7.

As mentioned above, the locking mechanism in the sliding casing or finger-piece c may be of any known construction, a pin c' therein projecting into an L-shaped slot d' in the chambered plate d , by means of which pin the bolt or fastening mechanism may be locked, as will be understood from Figs. 11, 12, and 13.

Having thus described my invention, what I claim is—

1. A bag-frame consisting of end pieces A , to which are pivoted hinged sections B and B' , substantially as shown, having arranged on said end pieces A centering devices g , and on the frame-section B' similar devices g' , said devices fitting one within the other when the bag-frame is closed to prevent the side movement of the frame-sections of the bag, substantially as and for the purposes set forth.

2. A bag-frame consisting of end pieces A , to which are pivoted the hinged sections B and B' , substantially as shown, having arranged on said end pieces A centering devices g , and on the frame-section B' similar devices g' , said device g being provided with a concave surface g^2 , and the other device g' having a convex surface g^3 , said surfaces fitting one upon the other to prevent any side movement of the frame-sections of the bag, as and for the purposes set forth.

3. In a bag-lock, the combination, with a sliding casing c , of a chambered plate d and a fastening device consisting of a pinion and toothed plates, said plates being provided with arms projecting downwardly within the bag through the frame-section and provided with oppositely-projecting bolts which engage with loops on a hasp-plate, for the purposes set forth.

4. In a bag-fastening, the combination, with catching-bolts and catching-loops, of a bolt-operating device consisting of a sliding casing moving reciprocally on a chambered plate, a pinion therein, toothed plates meshing with said pinion, said plates having arms projecting downwardly within the bag through the frame-section and having bolts thereon provided with beveled surfaces which engage with inclined surfaces on the loops on the hasp-plate, and means to cause the return of said bolts to their normal position, substantially as described.

5. In a bag-fastening, the combination, with catching-bolts and catching-loops, of a bolt-operating device consisting of a chambered plate having arranged therein toothed plates to which said bolts are connected, a pinion meshing with said toothed plates, a longitudinally-sliding finger-piece arranged on the top of said chambered plate and connected with one of the toothed plates in said chambered plate and operating in relation to said catching-bolts to cause their disengagement from the catching-loops, and a spring arranged to cause the return of said bolts to their normal positions, for the purposes set forth.

6. A bag-fastening consisting of a cham-

bered plate d , a plate e , having a spring-receiving loop thereon, a pinion d^3 , toothed plates d' and d^2 , meshing with said pinion, arms d^4 and d^5 , projecting downwardly from said toothed plates through said plate e and the bag-frame, oppositely-projecting bolts d^6 , provided with beveled ends engaging with catching-loops having surfaces inclining toward each other, a spring arranged between said bolt-arms to cause the return of said bolts to their normal position within the loops, and a sliding piece c , arranged and operating in relation to said chambered plate d to cause the disengagement of said bolts from the catching-loops, for the purposes set forth.

7. A combined bag fastening and lock consisting of a chambered plate d , a sliding casing or finger-piece c , moving reciprocally on said plate, toothed plates d' and d^2 , meshing with a pinion, all arranged and moving within the chambered plate, one of said toothed plates being secured to the sliding casing, substantially as indicated, arms d^4 and d^5 , projecting downwardly from said toothed plates through slots e' and e^2 in the plate e and through the bag-frame, oppositely-projecting bolts secured to said arms, the inclined ends of which engage with inclined ends projecting toward each other on catching-loops on a loop-plate, a spring arranged within a loop on said plate e , projecting oppositely from each end thereof and engaging with the downwardly-projecting arms d^4 and d^5 to cause the return of said bolts to their normal position when caused to be withdrawn from the loops by the finger-piece, all of said parts being arranged substantially as and for the purposes set forth.

8. The combination, with a locking device, substantially as described, of the frame-sections B' and B , hinged to a rigid end piece A , the section B' being provided with a hasp-plate having loops, the inclined surfaces of which project toward each other, the other of said hinged sections B being provided with a fastening device adapted to engage with said hasp-plate, as and for the purposes set forth.

9. In a bag-fastening, the combination, with catching-bolts and hasp-loops, of a bolt-operating device consisting of toothed plates to which said bolts are connected, a pinion meshing with said toothed plates, and means operating with said plates to cause the same to operate the bolts, for the purposes set forth.

10. In a bag-fastening, the combination, with catching-bolts and catching-loops, of a bolt-operating device consisting of toothed plates provided with arms projecting down within the frame and to which arms said bolts are connected, said toothed plates being arranged within a chambered plate or casing, a

pinion meshing with said toothed plates, and means operating with said plate to cause the same to operate the bolts and cause the locking engagement of said bolts with the hasp-loops, for the purposes set forth.

11. In a bag-fastening, the combination, with catching-bolts and catching-loops, of toothed bolt-plates having arms arranged at right angles on said plates, a pinion meshing with said bolt-plates, all of said parts being arranged in a chambered casing, a finger-piece secured to one of said bolt-plates, catching-bolts attached to and projecting at right angles from said projecting arms and moving longitudinally with said toothed plates and the finger-piece within the bag-frame and within the bolt-openings in the catching-loop, and a spring whereby said bolts are held normally within said catching-loops, said finger-piece moving reciprocally on the chambered casing and operating to cause the sliding longitudinal movement of the bolt-plates, for the purposes set forth.

12. In a bag-fastening, the combination, with catching-bolts and catching-loops, of a casing arranged on the top of a bag-frame, provided with means for operating said bolts, said bolts being concealed beneath the frame-section of the bag and moving longitudinally within the bolt-openings in the catching-loops, a spring whereby said bolts are normally held within said openings, and a finger-piece arranged on the casing on the outside of the bag-frame, the catching-loops being beveled and engaging with the beveled ends of the catching-bolts to receive the same in the perforations in said loops, substantially as for the purposes set forth.

13. The combination, with a locking device, substantially as described, of the frame-sections B' and B , hinged to a rigid end piece A , the section B' being provided with a hasp-plate having loops the inclined surfaces of which project toward each other, the other of said hinged sections B being provided with a fastening device adapted to engage with said hasp-plate, and centering devices g and g' , arranged on the end pieces A and the sections B' , respectively, fitting one upon the other to prevent the side movement of the frame-sections of the bag when the same is closed, for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 12th day of June, 1888.

CHARLES REINISCH.

Witnesses:

FREDK. C. FRAENTZEL,
L. S. COOK.