

A. F. FULLER.

BUCKLE.

(Application filed Oct. 8, 1900.)

(No Model.)

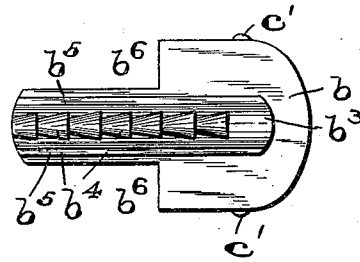
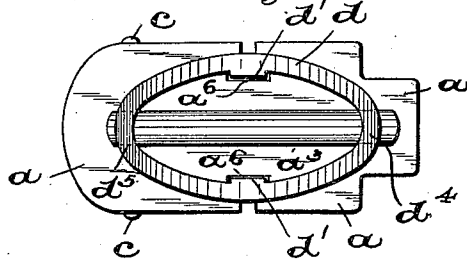
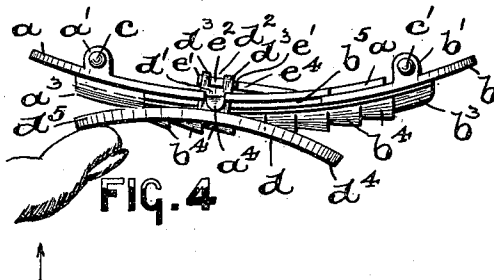
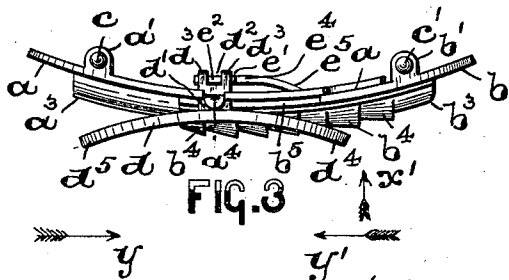
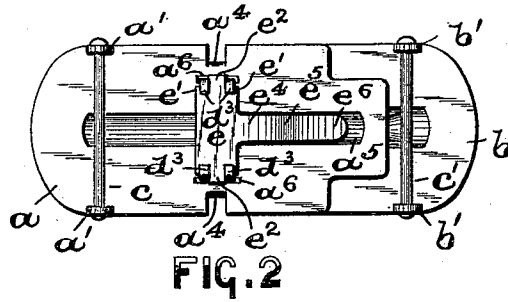
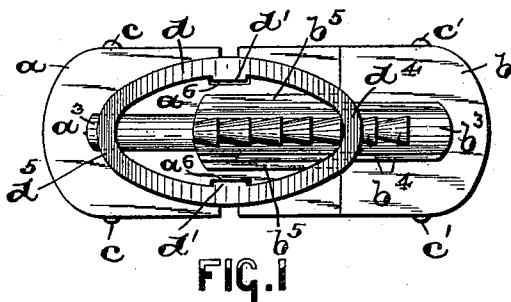


FIG. 5

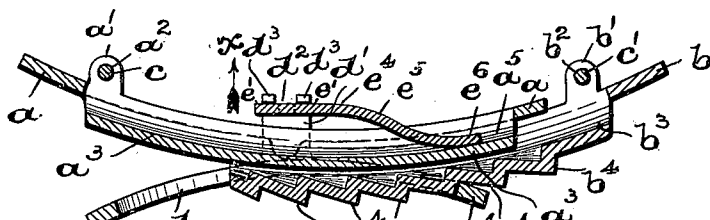
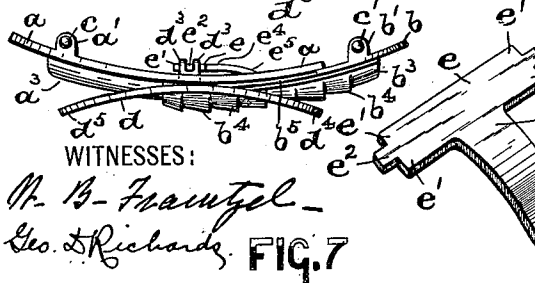


FIG. 8



WITNESSES:

M. B. Fraentzel  
Geo. L. Richards

FIG. 7

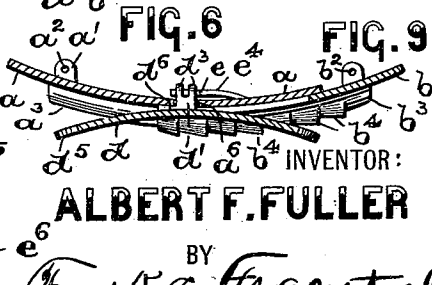


FIG. 6

FIG. 9

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# UNITED STATES PATENT OFFICE.

ALBERT F. FULLER, OF NEWARK, NEW JERSEY, ASSIGNOR TO THE J. E. MERGOTT COMPANY, OF NEW JERSEY.

## BUCKLE.

SPECIFICATION forming part of Letters Patent No. 667,307, dated February 5, 1901.

Application filed October 8, 1900. Serial No. 32,368. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT F. FULLER, 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 Buckles; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates generally to improvements in buckles, and more particularly to that class of buckles which are employed with ladies' or other belts; and the present invention is in the nature of improvements in the construction of belt-buckles set forth in another application for Letters Patent filed by me on the 21st day of September, 1900, Serial No. 30,667.

The invention has for its principal object to simplify the general construction of the belt-buckle and to provide an effective and durable construction, comprising a pair of sliding members, one of which is provided with serrations or other suitable holding means and the other member being provided with an oscillatory operating and holding clasp, which is actuated by means of a combined back or cross bar and spring, the said operating or holding clasp being operatively connected with said combined back or cross bar and spring, so as to automatically engage the holding means and lock or hold the slide members of the buckle together and to provide a more positive connection which can be pulled apart when the one end of the holding or locking clasp is lifted from its engagement with the serrations or other holding means by means of a direct pressure against the other end of the said locking or holding clasp.

The present invention therefore consists in the novel construction of buckle hereinafter fully described; and, furthermore, this invention consists in the several novel arrangements and combinations of the parts comprising the buckle construction, consisting, essentially, of a pair of sliding members, one

being provided with holding-teeth, serrations, or other suitable holding means and the other slide member being provided with a holding or locking clasp or link upon its face, which is hung in the middle, or approximately so, upon a pair of fulcrumal posts or supports on the other slide member, and the said holding or locking catch or link being provided with rearwardly-projecting lugs by means of which it is operatively connected to and with a combined back bar and spring, all so arranged that the holding or locking clasp or link is capable of oscillation upon said fulcrumal posts or supports, the said combined back bar and spring forcing the one end portion of the said holding or locking clasp or link normally in locked engagement with the serrations or teeth or other holding means and the other end portion of the said holding or locking catch or link being capable of a pressure against the same for lifting the opposite and holding end portion of the catch or link away from its engagement with the said holding means.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 is a face view of a belt-buckle made according to my present invention, the slide members thereof being represented in their held or locked engagement. Fig. 2 is a back or rear view of the buckle with the parts in the same positions, and Fig. 3 is a side or edge view of the buckle. Fig. 4 is a side or edge view of the buckle with the holding or locking catch or link raised from its engagement with the teeth or serrations on the one slide member of the buckle to permit the separation or adjustment of the two members. Fig. 5 is a face view of the two slide members of the buckle, the same being represented in their separated positions. Fig. 6 is a longitudinal vertical section, on an enlarged scale, of the several parts of the buckle in their locked or held positions; and Fig. 7 is a perspective view of the combined back bar and spring. Figs. 8 and 9 are a side view and vertical section, respectively, of a modified form of belt-buckle.

Similar letters of reference are employed in all of the said above-described views to indicate corresponding parts.

In the said drawings, *a* and *b* represent the two slide members of the buckle, the same being made of metal and in practice being suitably ornamented, as will be clearly understood. The plates or slide members *a* and *b* are respectively provided with rearwardly-extending ears or lugs *a'* and *b'*, which are formed with holes or perforations for the securing therein of suitable holding-pins *c* and *c'*, to which the respective ends of the belt are to be fastened in the usual manner. Of course it will be understood that any other fastening means may be employed in connection with the said plates or slide members *a* and *b* for securing the ends of a belt to the same. The said pins *c* and *c'* are suitably secured in the holes or perforations *a<sup>2</sup>* and *b<sup>2</sup>* in the respective ears or lugs *a'* and *b'*. As clearly illustrated in the several figures of the drawings, the said plate or slide member *a* is provided with a longitudinally-extending raised portion *a<sup>3</sup>*, forming a suitable rib, and the other member *b* is likewise provided with a longitudinally-extending raised portion *b<sup>3</sup>*, which is formed with serrations or holding-teeth *b<sup>4</sup>*, or any other suitable holding means. The said slide member *b*, as will be seen more particularly from an inspection of Fig. 5, is also provided with cut-away portions *b<sup>6</sup>* and with the narrow side flanges *b<sup>5</sup>* adjacent to the longitudinal edges of the said raised portion *b<sup>3</sup>*.

From an inspection of Figs. 3 and 6 it will be seen that when the slide member *b* is slid over the member *a* the raised portion *a<sup>3</sup>* of the slide member *a* slides into the curved and raised portion *b<sup>3</sup>* of the member *b*, and the side flanges *b<sup>5</sup>* will slide upon the outer surface of the said member *a*, thereby imparting a positive action of the said parts when thus put together. The said slide member *a* is also provided with a pair of oppositely-placed holes or slots *a<sup>6</sup>*, into which extend the ears or lugs *d'* of a catch-plate or link *d*, the under curved surface of the said plate or link *d* being arranged on a pair of outwardly-bent and suitably-curved fulcrumal posts or supports *a<sup>4</sup>*, substantially as illustrated in Figs. 3, 4, and 6, the said fulcrumal supports or posts *a<sup>4</sup>* being preferably struck up from the body-plate of the member *a*, as indicated, or a support *a<sup>6</sup>* may be formed directly in the ears *d'*, bearing against the upper surface of the slide member *a* to be employed, as illustrated in Fig. 9. In order that the said catch-plate or link *d* may be held in its operative position upon the said fulcrumal posts or supports *a<sup>4</sup>*, so as to be capable of oscillation thereon, I have provided the free ends of each lug or ear *d'* with a slot *d<sup>2</sup>*, leaving two projections or fingers *d<sup>3</sup>*, which are bent over upon portions *e'* of a back bar *e* in such a manner that a tongue *e<sup>2</sup>* at each end of the said back bar *e* will rest in the slot *d<sup>2</sup>* and between the said fingers *d<sup>3</sup>* of each lug or ear *d'*, substantially as illustrated. The said back bar *e* is provided with a longitudinally-ex-

tending spring-tongue *e<sup>4</sup>*, which is preferably formed integral with the said bar and is provided with a curved or bent part *e<sup>5</sup>* and a free end *e<sup>6</sup>*, which rests in the inner curved part *a<sup>5</sup>* in the back of the rib portion *a<sup>3</sup>*, substantially as illustrated in Figs. 2 and 6. The action of this spring-tongue *e<sup>4</sup>* under normal conditions is to force the end portions of the back bar *e* in the direction of the arrow *x* in Fig. 6 against the bent-over fingers or projections *d<sup>3</sup>* of the ears or lugs *d'*, connected with the catch-plate or link *d*, to thereby positively cause the under curved surface of the said catch-plate or link to ride directly upon the curved edges of the fulcrumal posts or supports *a<sup>4</sup>* and bring the one end *d<sup>4</sup>* of the catch-plate or link *d* in its holding or locked engagement with any one of the serrations or teeth *b<sup>4</sup>* of the slide plate or member *b* of the buckle. The arrangement of these several parts is such that when the two slide members *a* and *b* of the buckle are slid over each other in the directions of the arrows *y* and *y'* (indicated in Fig. 3) the action of the end portion *d<sup>4</sup>* of the said catch-plate or link *d* will be in the direction of the arrow *x'*, which permits the two slide members to be operatively slid one upon the other. In this manner the belt to which the buckle is attached can be readily adjusted around the waist of the wearer, and when so adjusted the pull on the parts in the opposite directions from those indicated by the arrows *y* and *y'* will prevent the displacement of the two slide members until a slight pressure is brought by the person wearing the belt and its buckle against the end portion *d<sup>5</sup>* of the catch-plate or link *d* in the direction of the arrow *x<sup>2</sup>*, as clearly indicated in Fig. 4 of the drawings. This action will cause the holding end portion *d<sup>4</sup>* of the catch-plate or link *d* to become disengaged from its held or locked position with the serration or tooth *b<sup>4</sup>* of the slide member *b*, as clearly illustrated in said Fig. 4, and the two slide members *a* and *b* of the buckle can then be easily separated and the belt removed from the waist of the wearer, or it can be readjusted, if desired.

From the above description of the invention and from an inspection of the drawings of the buckle it will be seen that I have devised a simple and effective belt-buckle in which the parts can be readily and quickly manipulated for the proper adjustment of the belt around the body of the wearer and in which there is no undue strain upon the connecting parts of the holding catch or link and the back bar, the direct pressure being brought directly upon the fulcrumal supports or posts *a<sup>4</sup>* of the plate *a*, and since there is no lifting force to be applied to the various parts of the holding catch or link the parts can be rendered inoperative by accidental separation or the jamming of the hinge portions, which, as in the constructions as heretofore made, soon renders the complete buckle inoperative.

My novel construction of buckle may be em-

ployed for many different purposes and is especially adapted for belt-buckles and for use with suspenders, garters, and the like.

I am aware that changes may be made in the several arrangements and combinations of the parts without departing from the scope of my present invention. Hence I do not limit my invention to the exact arrangements and combinations of the parts as herein described, and illustrated in the accompanying drawings, nor do I confine myself to the exact details of the construction of the said parts.

Having thus described my invention, what I claim is—

1. A buckle, comprising, a pair of slide members, movable one on the other, serrations or holding-teeth on one of said members, forwardly-extending fulcrumal posts or supports on the other slide member, a catch-plate or link arranged to oscillate on said fulcrumal posts or supports, and means connected with said catch-plate or link for retaining it in its operative position on said fulcrumal posts or supports, the said catch-plate or link having its one end normally in holding engagement with a tooth or serration, and having its other end extending outwardly in a direction away from the faces of the slide members and constructed to be forced in a direction toward the faces of said members and release the holding portion of the catch-plate or link, substantially as and for the purposes set forth.

2. A buckle, comprising, a pair of slide members, movable one on the other, serrations or holding-teeth on one of said members, forwardly-extending fulcrumal posts or supports on the other slide member, a catch-plate or link arranged to oscillate on said fulcrumal posts or supports, and a spring-actuated back bar connected with said catch-plate or link for retaining it in its operative position on said fulcrumal posts or supports, the said catch-plate or link having its one end normally in holding engagement with a tooth or serration, and having its other end extending outwardly in a direction away from the faces of the slide members and constructed to be forced in a direction toward the faces of said members and release the holding portion of the catch-plate or link, substantially as and for the purposes set forth.

3. A buckle, comprising, a pair of slide members, movable one on the other, serrations or holding-teeth on one of said members, and the other member having a pair of openings, an oscillatory catch-plate or link provided with a pair of ears or lugs extending into and through said openings, bent-over fingers or projections on said ears or lugs formed with an open portion or slot between them, and a spring-actuated back bar having its ends operatively connected to said bent-over fingers, for retaining said catch-plate or link in position, the said catch-plate or link having its one end normally in holding engagement with a tooth or serration, and having its other end

extending outwardly in a direction away from the faces of the slide members and constructed to be forced in a direction toward the faces of said members and release the holding portion of the catch-plate or link from the tooth or serration, substantially as and for the purposes set forth.

4. A buckle, comprising, a pair of slide members, movable one on the other, serrations or holding-teeth on one of said members, and the other member having a pair of openings, an oscillatory catch-plate or link provided with a pair of ears or lugs extending into and through said openings, bent-over fingers or projections on said ears or lugs formed with an open portion or slot between the fingers, and a spring-actuated back bar provided with a tongue at each end extending into the open portion or slot between said bent-over fingers, whereby said back bar has its ends operatively connected with said bent-over fingers, for retaining said catch-plate or link in position, the said catch-plate or link having its one end normally in holding engagement with a tooth or serration, and having its other end extending outwardly in a direction away from the faces of the slide members and constructed to be forced in a direction toward the faces of said members and release the holding portion of the catch-plate or link, substantially as and for the purposes set forth.

5. A buckle, comprising, a pair of slide members, movable one on the other, serrations or holding-teeth on one of said members, and the other member having a pair of openings, forwardly-extending fulcrumal posts or supports on said member, a catch-plate or link arranged to oscillate on said fulcrumal posts or supports, a pair of ears or lugs extending into and through said openings, bent-over fingers or projections on said ears or lugs, formed with an open portion or slot between them, a spring-actuated back bar having its ends operatively connected to said bent-over fingers, for retaining said catch-plate or link in its operative position on said fulcrumal posts or supports, the said catch-plate or link having its one end normally in holding engagement with a tooth or serration, and having its other end extending outwardly in a direction away from the faces of the slide members and constructed to be forced in a direction toward the faces of said members and release the holding portion of the catch-plate or link from the tooth or serration, substantially as and for the purposes set forth.

6. A buckle, comprising, a pair of slide members, movable one on the other, serrations or holding-teeth on one of said members, and the other member having a pair of openings, forwardly-extending fulcrumal posts or supports on said members, a catch-plate or link arranged to oscillate on said fulcrumal posts or supports, a pair of ears or lugs extending into and through said openings, bent-over fingers or projections on said ears or lugs formed with an open portion or slot between them, a

spring-actuated back bar provided with a tongue at each end extending into the open portion or slot between said bent-over fingers, whereby said back bar has its ends operatively connected to said bent-over fingers, for retaining said catch-plate or link in its operative position on said fulcrumal posts or supports, the said catch-plate or link having its one end normally in holding engagement with a tooth or serration, and having its other end extending outwardly in a direction away from the faces of the slide members and constructed to be forced in a direction toward the faces of said members and release the holding portion of the catch-plate or link from the tooth or serration, substantially as and for the purposes set forth.

7. The herein-described buckle, consisting, essentially, of slide members *a* and *b*, a longitudinally-extending raised portion *a*<sup>3</sup> on said member *a*, and a longitudinally-extending raised portion *b*<sup>3</sup> on said member *b* provided with serrations or holding-teeth, an oscillatory holding catch-plate or link on said slide member *a*, having lugs or ears extending on the back of said member *a*, a back bar *e* secured at its ends to said lugs or ears and a spring-tongue *e*<sup>4</sup> forming an integral part of said back bar, said spring-tongue having its free end in engagement with the back of the said slide member *a*, substantially as and for the purposes set forth.

8. The herein-described buckle, consisting, essentially, of slide members *a* and *b*, a longitudinally-extending raised portion *a*<sup>3</sup> on said member *a*, and a longitudinally-extending raised portion *b*<sup>3</sup> on said member *b* provided with serrations or holding-teeth, the

said member *a* being provided with slots or openings, an oscillatory catch-plate or link on said member *a*, lugs or ears on said catch-plate or link extending through said slots or openings in the member *a*, holding-fingers *d*<sup>3</sup> on said lugs or ears, a back bar *e* secured at its ends to said fingers *d*<sup>3</sup>, and a spring-tongue *e*<sup>4</sup> forming an integral part of said back bar, and said spring-tongue having its free end in engagement with the back of said slide member *a*, substantially as and for the purposes set forth.

9. In a buckle, the combination, with a pair of slide members, one of which is provided with a holding means, of an oscillatory holding catch or link, and a back bar provided with a spring-tongue forming an integral part of said bar, and said holding catch or link having ears or lugs connected with said back bar, whereby said holding catch or link has its one end normally in holding engagement with the holding or locking means upon the one slide member, and has its other end extending outwardly in a direction away from the faces of the said slide members, but can be forced in a direction toward the faces of the slide members to cause the disengagement of the holding portion of the catch or link from the said holding or locking means on the slide member, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 5th day of October, 1900.

ALBERT F. FULLER.

Witnesses:

FREDK. C. FRAENTZEL,  
JULIUS E. MERGOTT.