Jan. 12, 1926. 1,569,088

E. N. HUMPHREY

BUCKLE

Filed Nov. 18, 1924

Fig. 1.

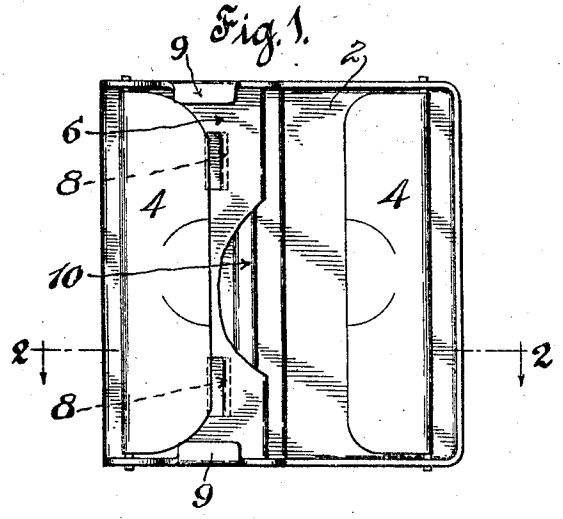
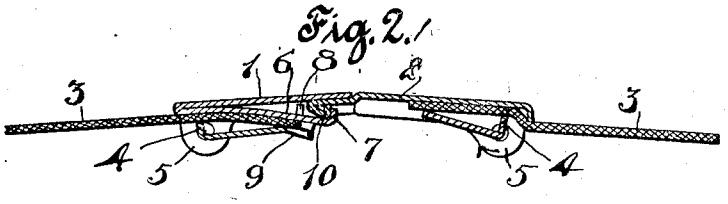


Fig. 2.



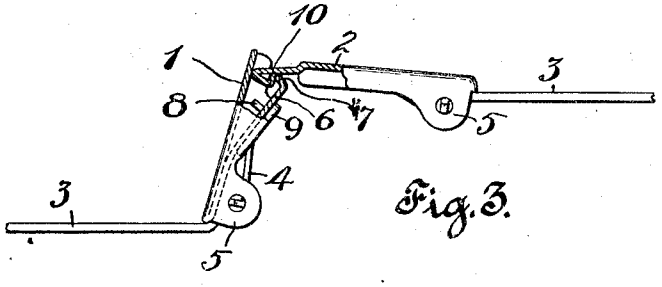


Fig. 3.

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UNITED STATES PATENT OFFICE.

ERNEST N. HUMPHREY, OF NEW BRITAIN, CONNECTICUT.

BUCKLE.

Application filed November 18, 1924. Serial No. 750,548.

To all whom it may concern:

Be it known that I, ERNEST N. HUMPHREY, a citizen of the United States of America, residing at New Britain, Connecticut, have invented a new and useful Buckle, of which the following is a specification.

My invention relates to certain new and useful improvements in buckles, the main object being to provide certain features of improvement that will render the same very durable. Certain features of improvement are provided to prevent the disengagement of the buckle parts in an improper manner, which, if permitted, would tend to so bend or distort the same so that they would not thereafter function reliably.

In the accompanying drawings—

Fig. 1 is a view of the inside of the two parts of the buckle assembled as in use;

Fig. 2 is a section on the line 2—2 of Fig. 1;

Fig. 3 is an edge view partly in section showing the parts in a different position from that shown in Fig. 2.

I have shown my invention in its preferred form; it should be understood that certain modifications may be made without departing from the spirit and scope thereof. In the preferred form shown, the buckle comprises two face plates 1 and 2, which may be provided with any suitable means for securing the same to belt ends 3--3. In the form shown I have provided each plate with a securing means 4 commonly termed a "ratchet," said ratchet being pivoted to ears 5—5 at the rear of each of said plates. Now turning to the means for interlocking the plates 1—2. It will be seen that the face plate 1 is provided at the back with a spring plate 6 which may be formed by a fold at the rear edge of plate 1. The free or forward edge of the spring plate 6 has an upturned lip 7 forming a locking shoulder which preferably extends entirely across the back of plate 1. 8—8 are stop lugs which are preferably struck out from the metal of the plate 6 and project toward the back of the front plate 1, said lugs operating as stops to hold the lip 7 spaced slightly away from the back of the plate 1, so as to provide an entrance slot or passage for the insertion of the interengaging part on the plate 2, which will be later described. 9—9 are stop ears which are turned back from the opposite edges of the plate 1, so as to stand to the rear of the spring plate 6 and limit the outward swinging movement of the free edge of the same, said ears being so positioned as to permit sufficient movement to allow said plate to function while at the same time checking such excessive movement as would tend to so distort the plate that it would not function properly as a holding shoulder for the interengaging part. Now turning to the face plate 2, which carries the aforesaid interengaging part. It will be observed that the forward edge of this plate 2 is bent back to form a lip or locking shoulder 10, which interlocks with the shoulder 7 when the parts are forced together. The bend which forms the interengaging part 10 is so shaped at its front edge that it may be easily entered through the normally narrow space between the edge of the lip 7 and the back of the plate 1. When the lip 10 is forced entirely through this space the plate 6 springs into the position shown in Fig. 2, wherein the two parts of the buckle will be locked together.

To disengage the two parts of the buckle the same are buckled backwardly, as shown in Fig. 3, the plate 2 turning on the edge of lip 7, the spring plate 6 yielding sufficiently to permit the shoulder 10 to be disengaged from the lip 7, as shown in Fig. 3. If an attempt were made to separate the parts by buckling the same in a direction opposite to that indicated in Fig. 3, the stops 9—9 operate to prevent that greater degree of movement of the spring plate 6 necessary to such disengagement which, if not prevented, would tend to strain the spring plate abnormally, and probably so weaken or deform it as to render it ineffective thereafter. It will therefore be seen that the construction guards against any attempt to improperly operate the buckle which if indulged in would quickly destroy its effectiveness. The stops 8 further operate to prevent the edge of plate 2 from being pushed too far into the space between the plate 1 and spring plate 6 as might otherwise occur if the plates were not brought together squarely.

What I claim is:

1. In a buckle of the character described, two plates, a spring plate secured to one of said plates, and located wholly to the rear thereof, said spring plate having its forward edge free, an interlocking shoulder at the free edge of said spring plate, an interlocking shoulder on the other plate adapted to be passed between the interlocking shoulder

on the spring plate and the adjacent rear surface of the plate carrying the same for interlocking engagement, and means for limiting the outward range of movement of the free edge of the spring plate.

2. In a buckle of the character described, two plates, a spring plate secured to one of said plates and located wholly to the rear thereof, said spring plate having its forward edge free, an interlocking shoulder at the free edge of said spring plate, an interlocking shoulder on the other plate adapted to be passed between the interlocking shoulder on the spring plate and the adjacent rear surface of the plate carrying the same for interlocking engagement, and means for limiting the range of movement of the free edge of the spring plate in both directions, said means including a stop carried by the last mentioned plate and a stop carried by the spring plate.

ERNEST N. HUMPHREY.