No. 878,288. PATENTED FEB. 4, 1908.

E. N. HUMPHREY.

BUCKLE.

APPLICATION FILED JULY 1, 1907.

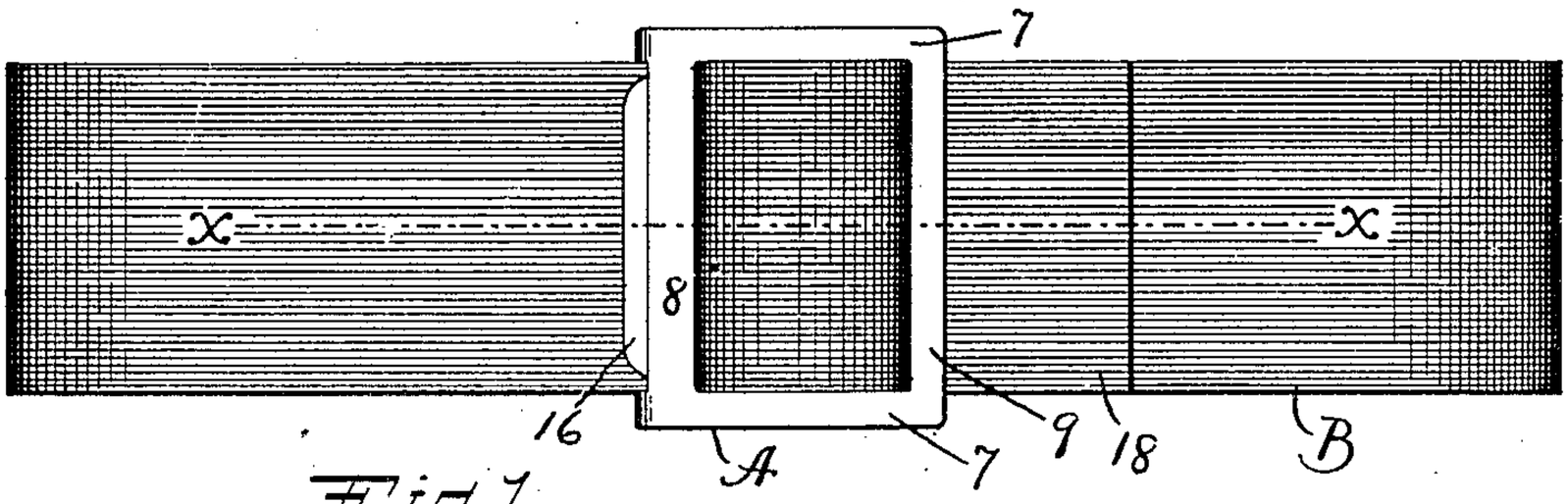

Fig. 1.

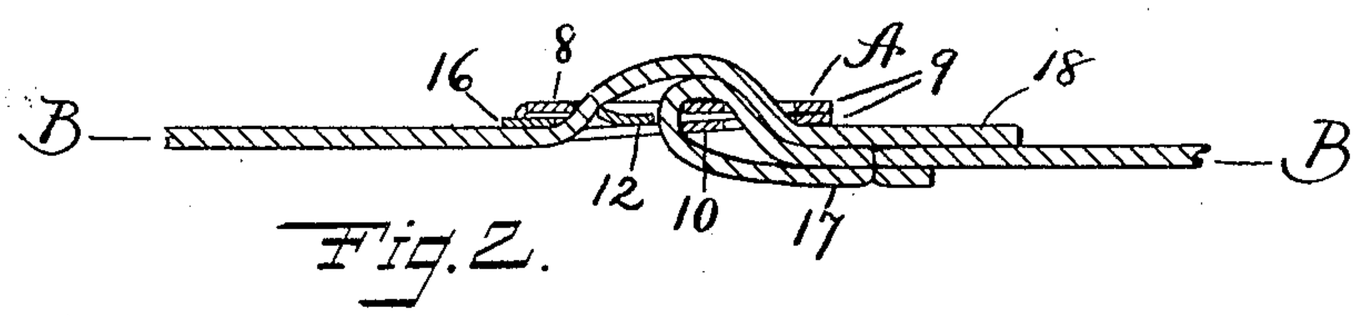

Fig. 2.

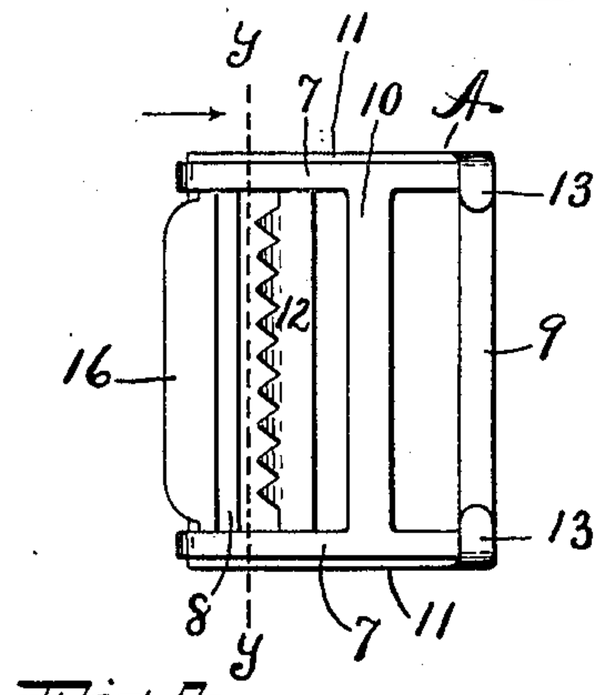

Fig. 3.

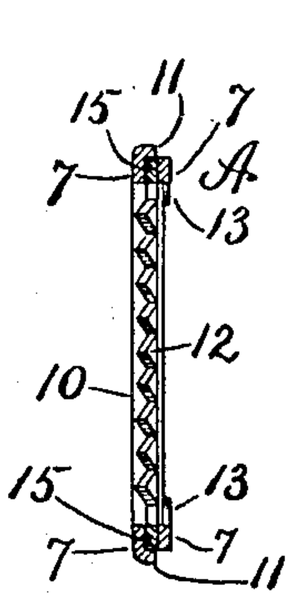

Fig. 4.

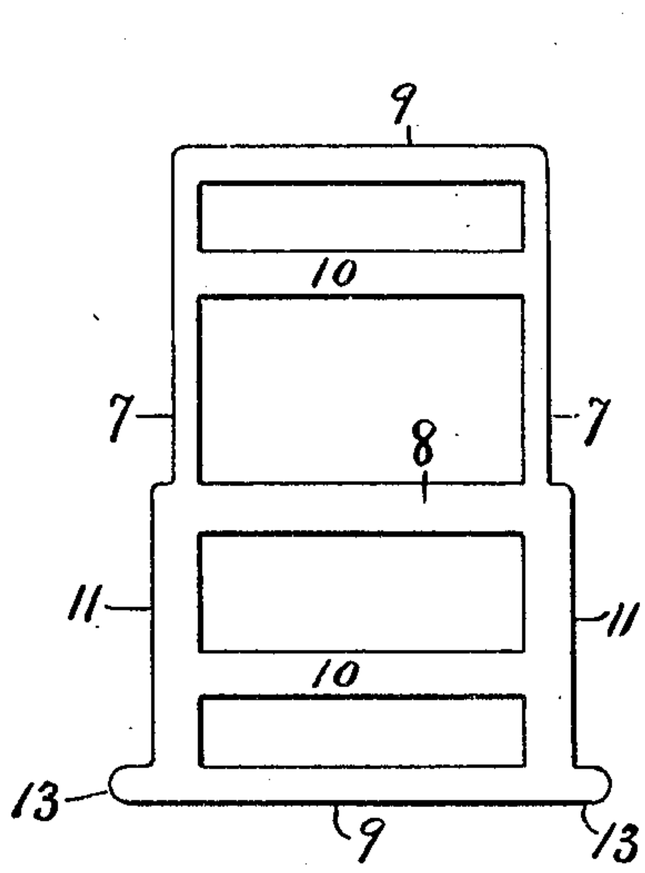

Fig. 5.

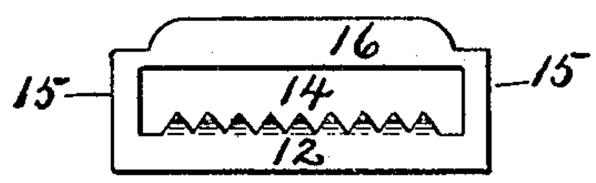

Fig. 6.

Witnesses.

S. H. Clarke.

P. J. Egan

Inventor.

Ernest N. Humphrey.

By James Shepard.

Atty.

UNITED STATES PATENT OFFICE.

ERNEST N. HUMPHREY, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO TRAUT & HINE MANUFACTURING COMPANY, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BUCKLE.

No. 878,288. Specification of Letters Patent. Patented Feb. 4, 1908.

Application filed July 1, 1907. Serial No. 381,618.

To all whom it may concern:

Be it known that I, ERNEST N. HUMPHREY, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

My invention relates to improvements in buckles and the objects of my improvements are simplicity and economy in construction and convenience and efficiency in use.

In the accompanying drawing:—Figure 1 is a front elevation of my buckle together with the two ends of a belt or webbing to which the buckle is applied. Fig. 2 is a sectional view of the same on the line x x of Fig. 1. Fig. 3 is a rear elevation of the buckle without the webbing. Fig. 4 is a sectional view of the same on the line y y of Fig. 3. Fig. 5 is a plan view of the blank from which the frame of my buckle is made. Fig. 6 is a detached plan view of the slide for my buckle.

My buckle consists of two parts, viz: a frame and a slide. The frame A is formed with side bars 7, end bars 8 and 9 and middle bar 10. The side bars have grooves or ways formed in their confronting inner edges within which the slide is mounted to slide longitudinally to the side bars. I prefer to form this frame of sheet metal from a blank substantially such as shown in plan view Fig. 5. This blank before folding or bending upon itself substantially in the line of the edge of the end bar 8 is practically two frames each having a middle bar and end bar that are brought substantially together in the completed frame so that the two middle bars of the blank form the one middle bar 10, and the two end bars together form the end bar 9 while the bar 8 which is substantially in the middle of the blank becomes the end bar 8 of the frame and is of a single thickness only, instead of being formed of two thicknesses like the bars 9 and 10. The side bars 7 are also formed in two thicknesses by doubling one piece upon itself, but one end of this piece is made wider in the blank than its other end in order that the outer edge of the wider portion may be bent into the side flanges 11 at the outer edges of the side bars 7 to cover or confine the ends of the slide which carries the sliding bar 12 within the ways of the said side bars.

The blank is provided with lugs 13 at two corners which lugs are turned over on the end bar 9 to hold the two thicknesses of the metal in said bar together. These two thicknesses of the end bar 9 may rest one upon the other, but the two thicknesses of the side bars 7 from the end bar 8 to the middle bar 10, will be left open a little so as to admit the ends of the slide between them. The slide is substantially a plate with a central opening 14, Fig. 4, that forms the said slide into a frame composed of two end bars, 15, a toothed sliding bar 12, and a finger bar 16. The end bars 15 are guided within the ways of the frame so that the slide may move therein to carry the toothed edge of the sliding bar to and from the inner edge of the end bar 8. The slide is prevented from being pulled out of the frame by the metal at that end of the side bars 7 where the blank is doubled upon itself.

One end 17 of the webbing or elastic B is passed around the middle bar 10 of the frame and secured thereto in any ordinary manner as for example by sewing or riveting the two thickness of webbing together. The other end 18 is passed through the buckle frame inside of the end bar 8 and in front of the toothed or biting edge of the sliding bar 12. If in the way, this sliding bar may be pushed in by pressing upon the outer edge of the finger bar 16. When the end 18 is pulled through the frame as far as may be desired it is passed down through the frame between the middle bar 10 and end bar 9, as shown in Figs. 1 and 2, thereby firmly securing the said end within the buckle. The more the webbing is pulled the harder the sliding bar will hold the webbing against the edge of the end bar 8. In order to detach the end 18 it is only necessary to pull it out from one end of the frame and then pull on the end of the webbing to move the sliding bar back out of engagement. The webbing as a rule may then be pulled out of the frame but if it catches on the webbing the sliding bar may be pushed back to free the webbing by pressing inwardly on the finger bar 16.

By my improvement I produce an inexpensive buckle of a very compact or flat form, and one that is very convenient to operate as well as efficient in action.

I claim as my invention:—

1. In a buckle, the combination of a sliding bar with a buckle frame formed of a piece of sheet metal doubled upon itself, the said piece of metal being practically two

frames each having side bars, a middle bar and an end bar, which bars are brought substantially together in the completed frame while one end bar is common to the said two frames, thereby forming one end bar, the middle bar and the two side bars of the completed frame of two thicknesses while one end bar is of only one thickness, the said sliding bar being arranged to slide within the said side bars to and from that end bar which is of a single thickness only.

2. In a buckle, the combination of a sliding bar in the form of a slotted plate having a finger bar at the outer edge thereof, with a buckle frame formed of a piece of sheet metal doubled upon itself to form side bars having ways for the said sliding bar to move in, and with the doubled over portion of the said side bars in position to be engaged by the outer edge of the said sliding bar to prevent the said bar from being pulled out of the frame.

3. In a buckle, the combination of a sliding bar of a plate like form with a buckle frame formed of a piece of sheet metal doubled upon itself to form side bars of two thicknesses with a space between the said two thicknesses for receiving and guiding the sliding bar and bent up side flanges at the outer edges of the said side bars for retaining the said plate-like bar within the said place.

4. In a buckle, the combination of a sliding bar with a buckle frame formed of a piece of sheet metal doubled upon itself to form side bars of two thicknesses with a space for the slide between them, bent up side flanges at the outer edge of the said side bars and holding lugs formed on one thickness of the bars and bent over the other thickness for holding the two thicknesses together.

ERNEST N. HUMPHREY.

Witnesses:
STANLEY PARKER,
SADIE L. FINNIGAN.