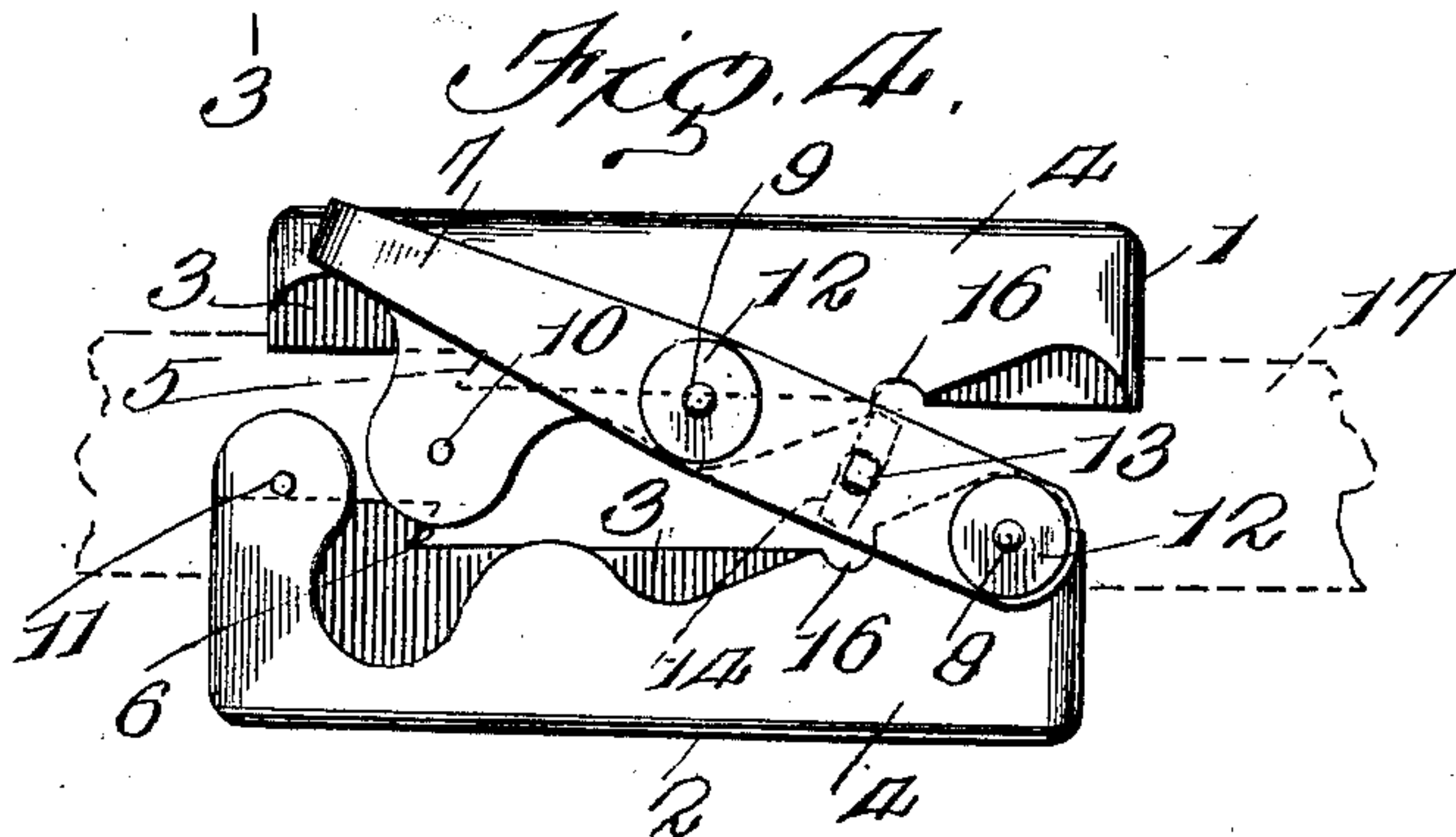
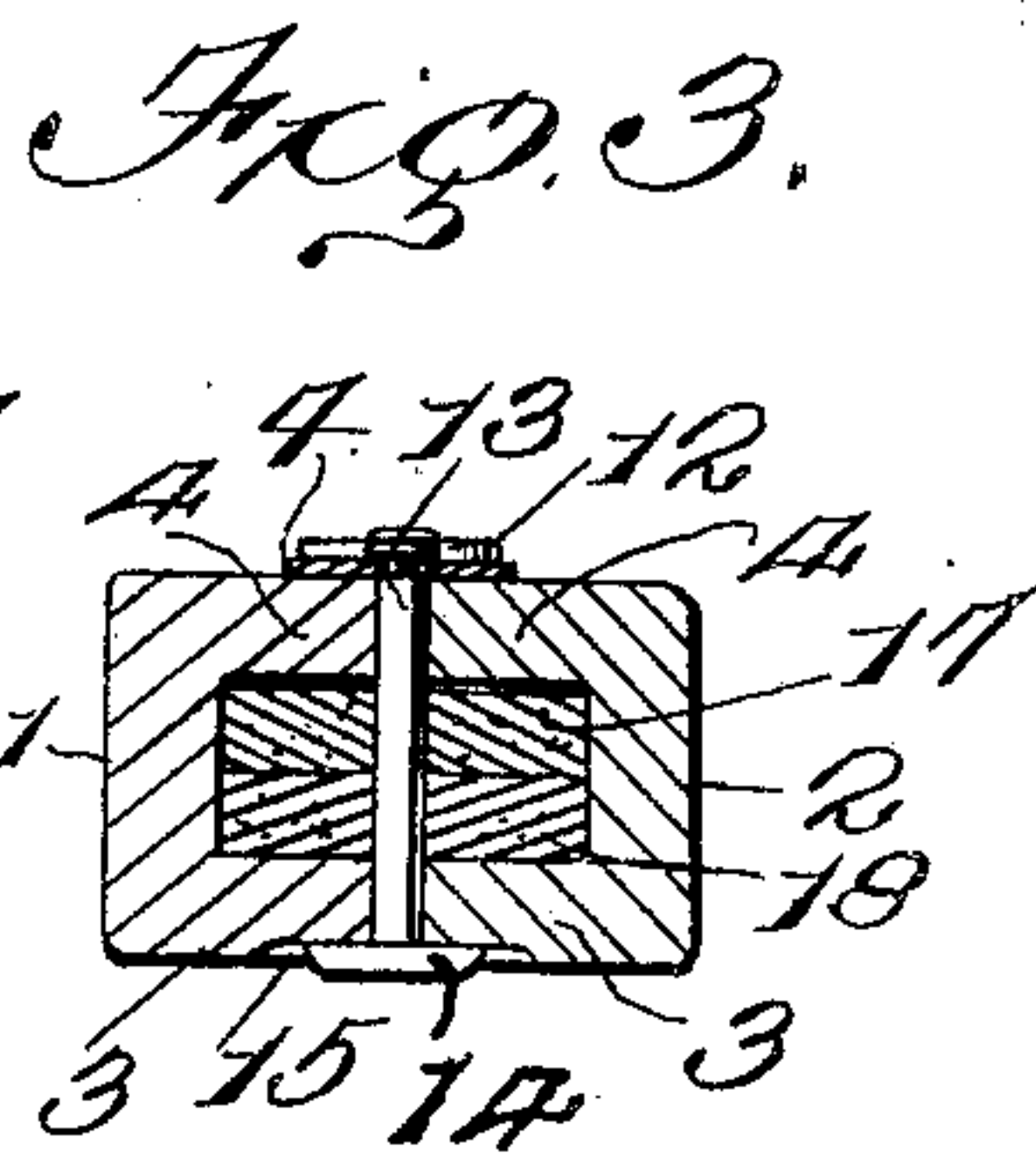
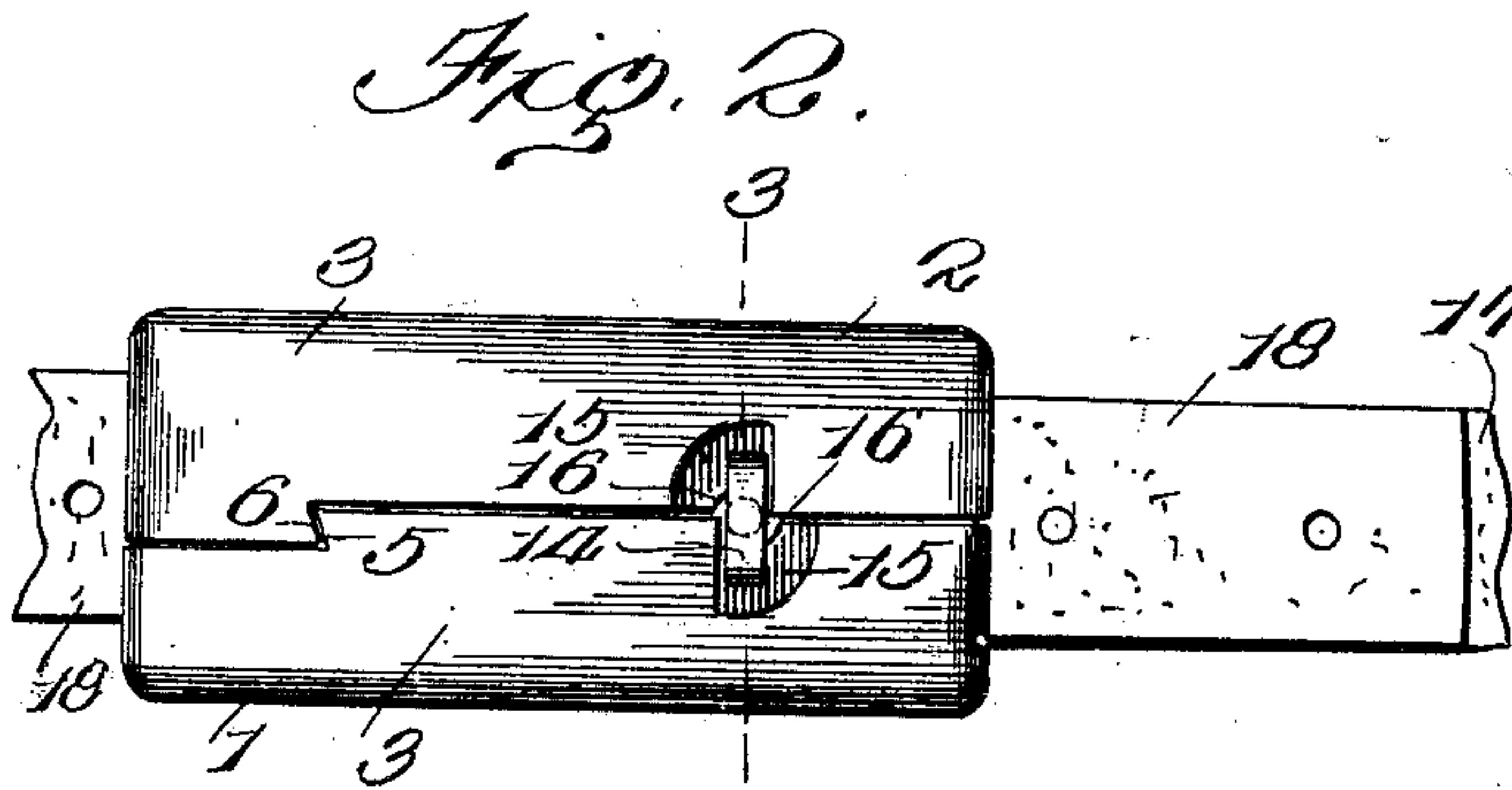
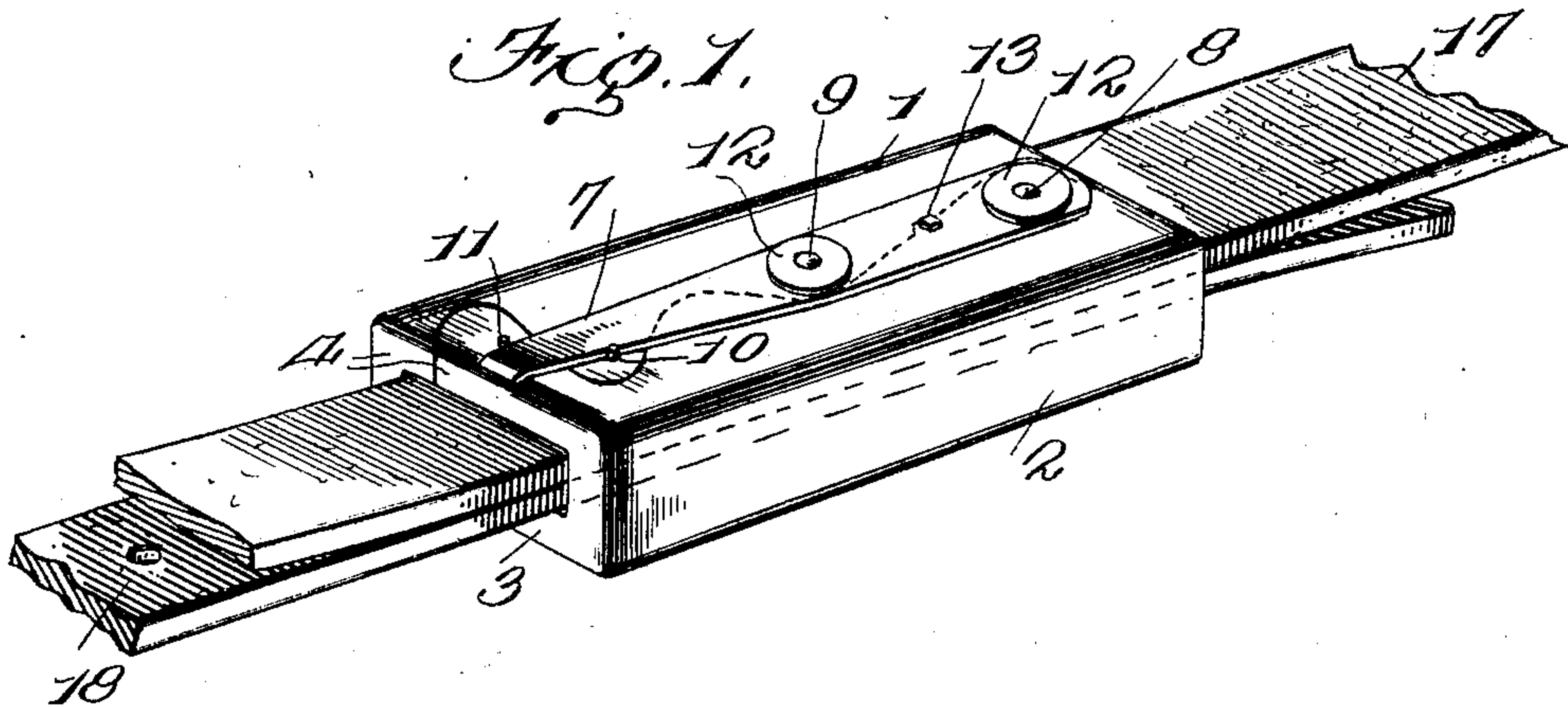


L. COOK.  
CROSS LINE BUCKLE.  
APPLICATION FILED JULY 3, 1908.

924,636.

Patented June 15, 1909.



Witnesses

Frank V. Hillyard.  
Attest.

By

Lewis Cook  
Attorney



# UNITED STATES PATENT OFFICE.

LEWIS COOK, OF ANABELL, MISSOURI.

## CROSS-LINE BUCKLE.

No. 924,636.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed July 3, 1908. Serial No. 441,805.

*To all whom it may concern:*

Be it known that I, LEWIS COOK, citizen of the United States, residing at Anabell, in the county of Macon and State of Missouri, have invented certain new and useful Improvements in Cross-Line Buckles, of which the following is a specification.

The present invention is designed to supply a buckle which may be adjusted upon a strap or admit of the strap being moved according to requirements and without necessitating the uncoupling or disconnecting of the strap from the part to which it may be attached. A buckle of this type is specially advantageous in connection with the main and cross-lines of driving reins, since it admits of the adjustment of the cross-line to meet various conditions and requirements, thereby enabling the desired result to be accomplished in a comparatively short time and without vexation and annoyance.

The invention provides a buckle of novel construction embodying a frame of complementary sections having interlocking parts, and a lever pivotally connected to each of said parts to prevent their displacement and to serve as operating means, said lever co-operating with extensions upon the parts of the frame to secure the sections when closed.

The invention further consists of the novel features and details of construction which hereinafter will be set forth, illustrated and claimed.

Referring to the drawings forming a part of the specification: Figure 1 is a perspective view of a buckle embodying the invention, showing it applied. Fig. 2 is a view of the buckle as seen from the lower or bottom side; Fig. 3 is a transverse section of the buckle on the line 3—3 of Fig. 2 and Fig. 4 is a top plan view of the buckle, the parts being separated.

Corresponding and like parts are referred to in the following description and all the views of the accompanying drawings by the same reference characters.

The buckle comprises a frame, a lever, and a tongue. The buckle-frame comprises complementary sections 1 and 2 which are separable longitudinally on a line between opposite longitudinal edges of the frame. Each longitudinal section or part is hollow and open upon the inner side and the parts of the frame when fitted together form a box loop as indicated in Fig. 3, so as to inclose the strap upon its opposite sides and edges.

For convenience the flange 3 of each section or part is designated the bottom flange, whereas the flange 4 describes the top flange. The inner or meeting edges of the top flanges 4 are of irregular form as indicated most clearly in Figs. 1 and 4, the purpose being to provide interlocking projections and recesses to prevent any longitudinal movement of the parts when closed. The projecting portions are made rounding and the recesses are of corresponding formation, however, the construction may be of any formation to insure a close joint when the parts are closed or fitted together, as shown in Fig. 1.

The lower flange 3 of one section or part is cut away for a short distance from one end to provide a shoulder 5 and the corresponding edge of the lower flange of the other part is similarly cut away from the opposite end to form a shoulder 6, the two shoulders 5 and 6 being undercut so as to interlock and prevent lateral displacement of the sections when closed and secured by means of the operating lever in the manner presently to be explained.

A lever 7 is pivoted at 8 to the section 2 and at 9 to the section 1 and serves to connect the sections to prevent misplacement thereof when open. Said lever also serves to open and close the sections and acts in conjunction with pins 10 and 11 to lock the sections when closed. The lever 7 is thin and wide, thereby enabling it to lie close against the frame and also to be sprung into and out of engagement with the pins 10 and 11 when locking or releasing the sections. The pin 11 projects outward from the section 2 and the pin 10 extends from the section 1, both pins being provided upon rounded projections of the top flanges of the respective sections, thereby enabling the outer or free portion of the lever 7 to come between the pins 10 and 11, as shown in Fig. 1 and lock said sections when closed. Washers 12 are fitted upon the projecting ends of the studs or pivot fastenings connecting the lever 7 to the respective sections.

A tongue or pin 13 is carried by the lever 7 and is adapted to engage with the main line 17 and cross line 18, to which the buckle may be fitted so as to hold the parts in adjusted position. The tongue 13 is provided at its free end with a cross-head 14, which engages with the lower side of the flange 3 and in connection with the lever 7 prevents transverse movement of the sections when



closed. Recesses 15 are formed in the flanges 3 to receive the ends of the cross-head 14 and thereby prevent the same from projecting beyond the bottom side of the buckle to cause chafing of the animal or parts of the harness. Recesses 16 are formed in the edges of the flanges 3 and 4 to receive the tongue 13 and admit of the sections coming close together.

When the buckle is closed it is held fast by the interlocking shoulders 5 and 6, the engagement of the outer end of the lever 7 with the pins 10 and 11, and by means of the lever 7 and the cross-head 14 of the buckle tongue.

To release the sections and admit of their separation, the outer end of the lever 7 is sprung outward to clear the pin 11 and is then moved in a direction away from the section 2, with the result that the sections 1 and 2 are spread as in Fig. 3, thereby admitting of the cross-line 18 being adjusted to the required position. The tongue or pin 13 is passed through one of the openings of the cross-line in the accustomed way. After the adjustment has been effected the sections are closed or drawn together by swinging the free end of the lever 7 inward, the sections being directed to cause the shoulders 5 and 6 and the rounded projections and recesses of the flange 4 to come together properly. After the sections have been closed, they are secured by springing the lever 7 over the pin 11.

From the foregoing description, taken in connection with the accompanying drawings, it will be understood that I have devised a cross-line buckle which may be readily applied, is simple and which may be cheaply manufactured, and is both reliable and adapted to be easily manipulated when adjustment is to be effected, and which further more is safe and not liable to become easily loosened and detached.

Having thus described the invention, what is claimed as new is:

1. A buckle of the character described comprising a frame of box form separable to provide complementary sections having interlocking parts, and a lever pivotally connected to each of said parts to prevent their displacement and to serve as operating means, and extensions upon the parts of the frame to engage with opposite sides of said lever and secure the same and the buckle frame when closed.

2. A buckle comprising a frame of box form and separable to provide complementary parts, each part having upper and lower flanges, the upper flanges having corresponding projections and recesses constructed to

interlock, an operating lever pivotally connected to each of said parts, and extensions projecting from the parts to engage with opposite sides of the lever and secure the same and the parts of the frame when closed.

3. A buckle-frame comprising complementary sections each having upper and lower flanges, the lower flanges having interlocking shoulders and the upper flanges having matching projections and recesses forming interlocking means, a lever having pivotal connections with each of the sections, and extensions projected from the sections and adapted to engage with opposite sides of the lever to secure the same and hold the sections closed.

4. A buckle-frame comprising complementary sections each having upper and lower flanges, the lower flanges having interlocking shoulders and the upper flanges having matching projections and recesses forming interlocking means, a lever having pivotal connection with each of the sections, and extensions projected from the sections and adapted to engage with opposite sides of the lever to secure the same and hold the sections closed, and a tongue carried by said lever.

5. A buckle-frame comprising complementary sections each having upper and lower flanges, the lower flanges having interlocking shoulders and the upper flanges having matching projections and recesses forming interlocking means, a lever having pivotal connection with each of the sections, and extensions projected from the sections and adapted to engage with opposite sides of the lever to secure the same and hold the sections closed, and a tongue carried by said lever and adapted to enter recesses formed in said upper and lower flanges of the sections.

6. A buckle-frame comprising complementary sections each having upper and lower flanges, the lower flanges having interlocking shoulders and the upper flanges having matching projections and recesses forming interlocking means, a lever having pivotal connection with each of the sections, and extensions projected from the sections and adapted to engage with opposite sides of the lever to secure the same and hold the sections closed, and a tongue carried by said lever and having a cross-head at its free end to engage with the flanges of the sections opposite the flange to which said lever is pivotally connected.

In testimony whereof I affix my signature in presence of two witnesses.

LEWIS COOK. [L. s.]

Witnesses:

W. E. NAYLOR,  
J. L. MILLER.