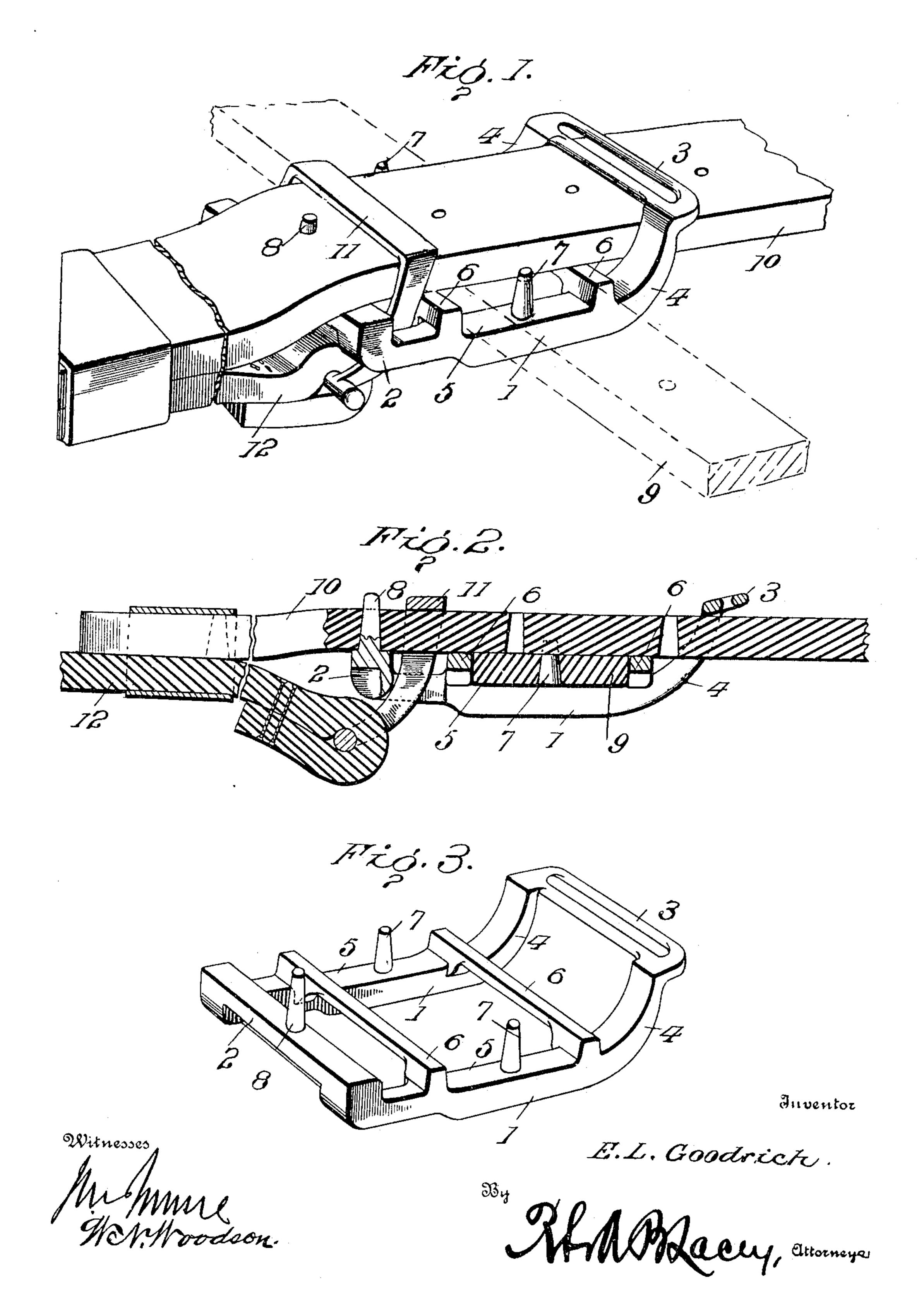
E. L. GOODRICH.

TRACE BUCKLE.

APPLICATION FILED AUG. 2, 1905.



## UNITED STATES PATENT OFFICE.

## EDWIN L. GOODRICH, OF CRANE, MISSOURI.

## TRACE-BUCKLE.

No. 818,881.

Specification of Letters Patent.

Patented April 24, 1906.

Application filed August 2, 1905. Serial No. 272,416.

To all whom it may concern:

Be it known that I, EDWIN L. GOODRICH, a citizen of the United States, residing at Crane, in the county of Stone and State of 5 Missouri, have invented certain new and useful Improvements in Trace-Buckles, of which the following is a specification.

This invention relates to improvements in buckles, and more particularly to that type 10 which are employed in connecting the trace

to the tug.

The object of the invention is to produce a device of this character which will enable the trace and the belly-band and back or saddle-15 connecting strap to be readily adjusted to any position and which can be manufactured at comparatively small cost. These objects are attained by the use of a peculiar form of buckle-frame whereby the belly-band 20 is held in engagement with studs upon the framework by means of the trace and the by means of the tug.

For a full description of the invention and 25 the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which-

Figure 1 is a perspective view showing the application of the device. Fig. 2 is a longitudinal sectional view through the buckle. Fig. 3 is a detail perspective view of the various parts of the buckle.

35 Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same

reference characters.

The buckle-frame comprises the usual side 40 pieces 1, the ends of which are connected by cross-bars 2 and 3. The end of the framework on which the cross-bar 3 is located is bent outwardly, as seen at 4. The side pieces 1 are bent downwardly at an inter-45 mediate point, so as to form a depression 5, and intermediate cross-bars 6 are located on each side of the depression 5. These crossbars 6 project upwardly a certain amount, and the depressed portions 5 of the side pieces 1 50 are provided with upwardly-projecting studs 7. The cross-bar 2 also projects slightly upward above the side pieces 1, and is provided with a stud 8, which is located at an intermediate point thereon.

In operation the belly-band and back or 55 saddle-connecting strap 9 are placed in the depression in the side pieces 1 and are provided with suitable openings which are engaged by the stud 7. The trace 10 is then passed through the opening between the 60 cross-bars 3 and 6 and the stud 8 caused to engage a suitable perforation therein. A link 11 is used in connection with this device and is bent so as to form two arms, one of which passes through the opening between the 65 cross-bars 2 and 6 and holds the trace in close engagement with the stud 8, while the opposite arm of the link is attached to the tug 12 and extends in the general line of the buckle. Attention is called to the fact that 70 since the end cross-bar 2 and the adjacent cross-bar 6 project above the side pieces 1 the link 11 will pull the trace inwardly into a very close engagement with said cross-bars and will therefore have a clamping effect and re- 75 trace itself held in engagement with a stud | lieve the stud 8 of a considerable amount of strain. This method of constructing a buckle by forming a slight depression in the side pieces and allowing the intermediate cross - bars to project upwardly a small 80 amount has the further advantage that it does not necessitate the weakening of the frame, as would be the case if the depression were formed entirely by bending the side pieces 1.

Having thus described the invention, what

is claimed as new is—

1. In a trace-buckle, the combination of a frame comprising side pieces and connecting end cross-bars, said side pieces being formed 90 with a depression and intermediate crossbars being located on each side of the depression, said intermediate cross-bars projecting outwardly beyond the sides of the framework and the depressed portion of the side 95 pieces and one of the end cross-bars being provided with studs, and a link member adapted to pass through the opening adjacent the cross-bar provided with the stud and hold the trace in engagement with said 100 stud.

2. In a trace-buckle, the combination of a frame comprising side pieces and connecting end cross-bars, the side pieces being provided with a depression and intermediate 105 cross-bars being located at each end of the depression, said cross-bars being raised beyond the plane of the side pieces, and one end

of the frame being bent outwardly while the cross-bar at the opposite end projects beyond the plane of the side pieces, said cross-bar and the depressed portion of the side pieces being provided with studs, and a link member adapted to pass through the opening between the cross-bar provided with a stud and the adjacent intermediate cross-bar so as to

clamp the trace against the projecting crossbars and hold it in engagement with the stud. 10 In testimony whereof I affix my signature in presence of two witnesses.

EDWIN L. GOODRICH. [L. s.]

Witnesses:

James C. Huffman, William R. Gillette.