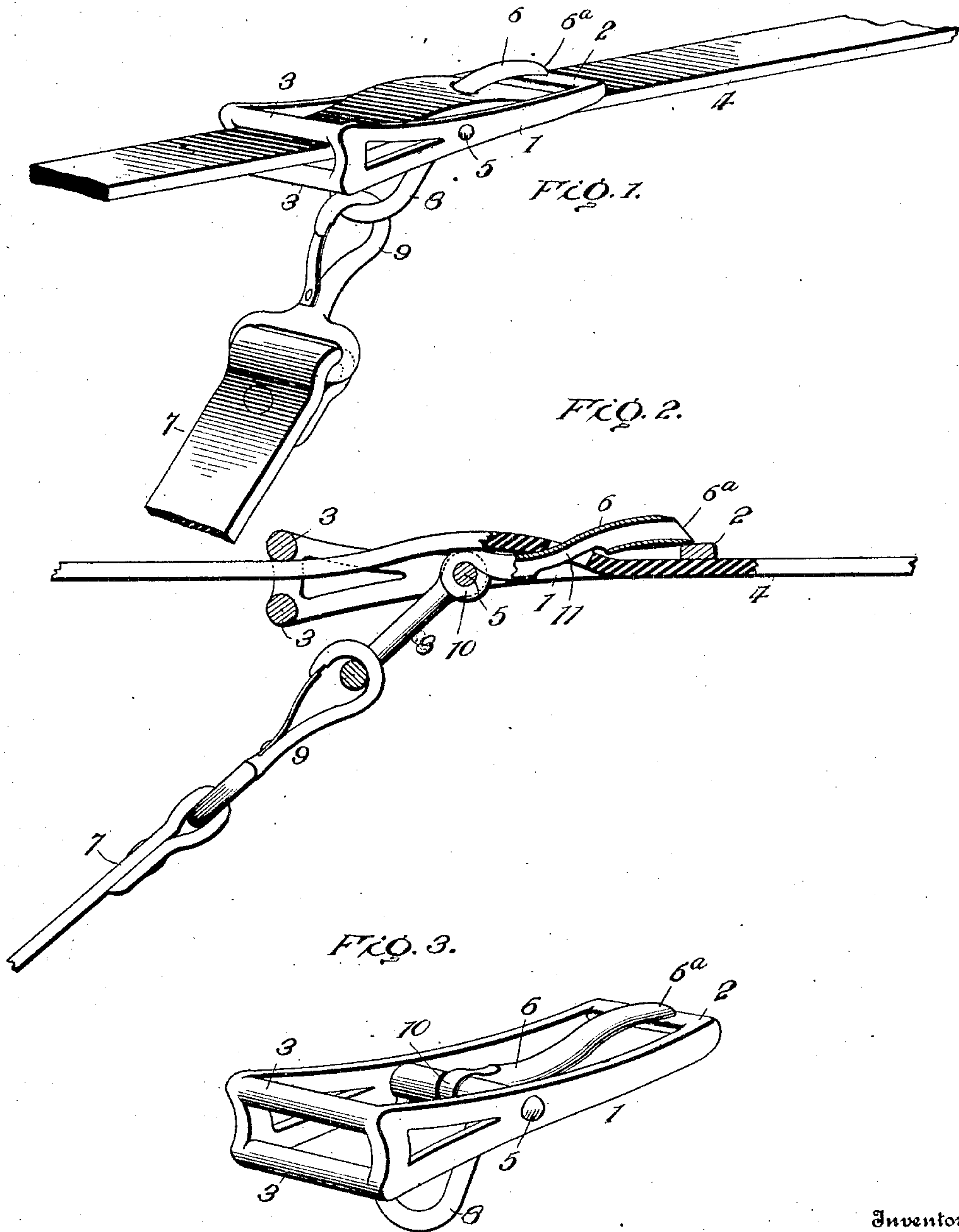


No. 849,486.

PATENTED APR. 9, 1907.

F. W. T. MITCHELL.
CROSS LINE BUCKLE.
APPLICATION FILED MAR. 30, 1906.



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UNITED STATES PATENT OFFICE.

FREDRICK W. T. MITCHELL, OF IRON RIVER, WISCONSIN.

CROSS-LINE BUCKLE.

No. 849,486.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed March 30, 1906. Serial No. 308,924.

To all whom it may concern:

Be it known that I, FREDRICK W. T. MITCHELL, a citizen of the United States, residing at Iron River, in the county of Bayfield and State of Wisconsin, have invented certain new and useful Improvements in Cross-Line Buckles, of which the following is a specification.

This invention consists of novel improvements in that type of buckles particularly designed for connecting cross-lines with long lines in such a way as to admit of ready adjustment, attachment, and detachment of the strap parts as necessary under actual conditions of service.

For a full description of the invention and 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 of a buckle embodying the invention applied. Fig. 2 is a longitudinal vertical sectional view. Fig. 3 is a detail perspective view of the buckle alone.

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.

In the practical embodiment of the invention it is designed to use the customary buckle-frame 1, consisting of suitable spaced side bars, a cross-bar 2 at one end, and cross-bars 3 at the opposite end, the last-mentioned cross-bars being vertically spaced. The end portion of the frame 1 carrying the cross-bars 3 has the sides thereof vertically widened in order to accommodate the arrangement of the cross-bars 3 with reference particularly to the spaced positions thereof. If desired, the widened portions of the sides of the frame 1 may be cut away to lighten the weight of the article as much as possible.

In actual use a long line 4 passes through the space between the cross-bars 3 and beneath the cross-bar 2, extending over an intermediate cross-bar 5, located between opposite ends of the frame. The cross-bar 5 is a tongue-carrying cross-bar, the tongue 6 being pivotally mounted thereon in the customary way. The tongue 6 is adapted to engage the cross-bar 2 in an obvious manner. The cross-line 7 is adapted for connection with the buckle

by means of the link 8, the sides of which are formed with tubular bearings through which the cross-bar 5 passes, said cross-bar 5 being separately formed with respect to the frame 1. The link 8 is provided, so that a snap-hook 9 at one end of the short or cross line 7 may be readily connected with said link, as shown most clearly in Fig. 1. The link 8 is pivotally arranged beneath the frame 1, as shown in the drawings, and when said link is not in use the same is not in the way.

The formation of the tongue 6 is peculiar and forms an essential feature of the invention. Said tongue is made from a short piece of tubing, one end of which is flattened or rolled to form a loop 10, passing about the cross-bar 5 and arranged between the bearings or extremities of the link 8. The tubular formation of the tongue 6 is advantageous, in that the outer end of said tongue may be so sharpened as to form a punch 6^a, adapted to readily form an opening in the strap part or long line 4, with which said tongue coöperates. The advantages of the tongue 6 will be readily apparent in view of the foregoing. The under side of the tongue is formed with a longitudinal slot 11 to afford a clearance-opening for the punched material separated from the strap or line 4 in the actual operation of the invention.

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

In a cross-line buckle, the combination of a frame embodying an intermediate cross-bar, a tongue consisting of a length of tubular material flattened at one end and having the flattened portion formed into a loop receiving the intermediate cross-bar of the frame, the opposite end of the tubular material being sharpened to form a hollow punch, the tongue being provided with a slot intermediate of its ends to form a clearance-opening for the same, and a link provided with spaced bearings receiving the intermediate cross-bar of the frame at opposite sides of the tongue and holding said tongue in a predetermined position.

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

FREDRICK W. T. MITCHELL. [L. s.]

Witnesses:

M. S. McDONALD,
N. W. BARKER.