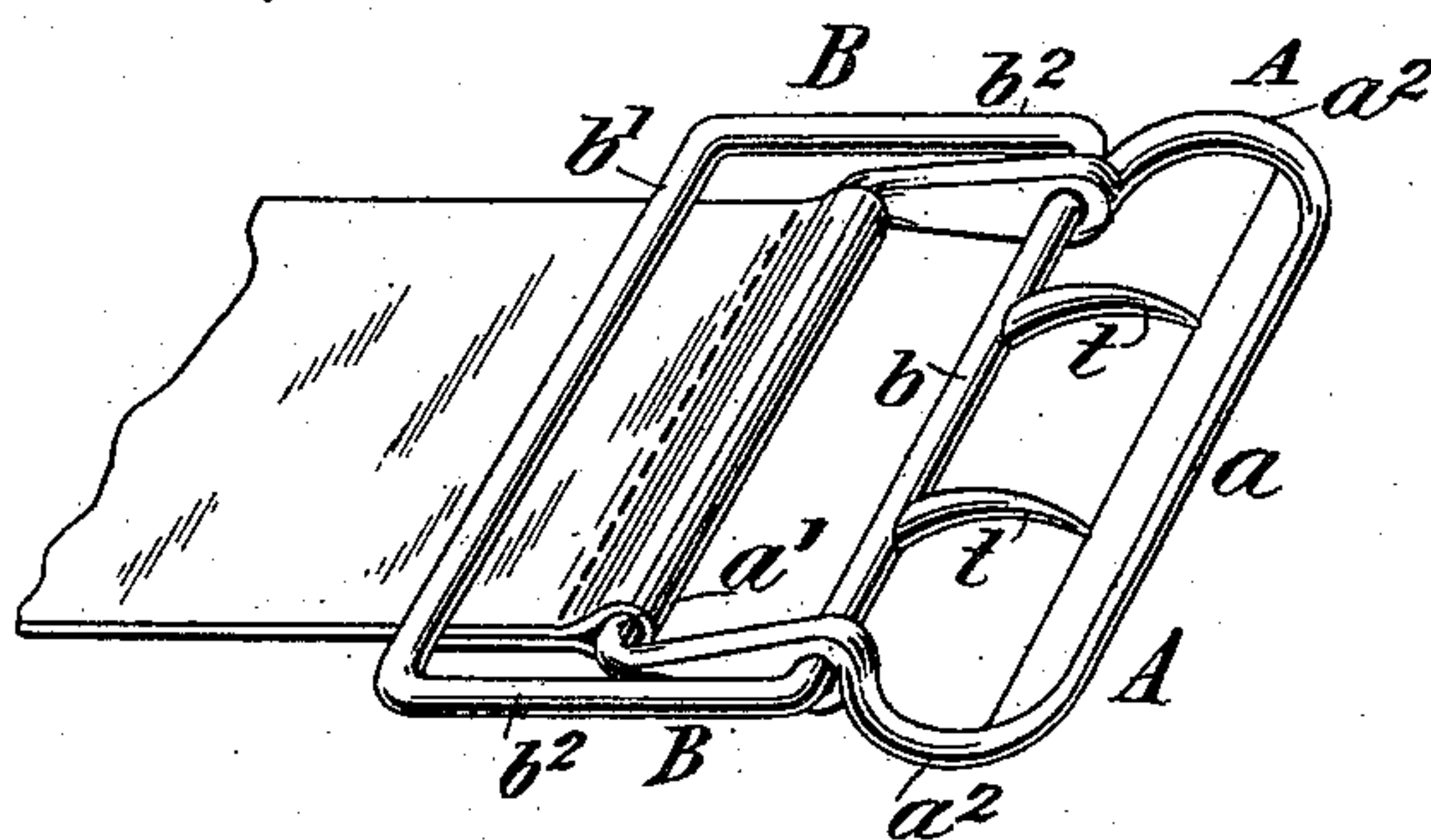


(No Model.)

W. J. FLEMING.  
BUCKLE.

No. 599,695.

Patented Mar. 1, 1898.



Witnesses:  
Raphael Better  
Saml. F. Randall

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by

# UNITED STATES PATENT OFFICE.

WILLIAM J. FLEMING, OF NEW YORK, N. Y.

## BUCKLE.

SPECIFICATION forming part of Letters Patent No. 599,695, dated March 1, 1898.

Application filed July 31, 1897. Serial No. 646,645. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM J. FLEMING, a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Buckles, of which the following is a specification.

My invention may be applied to buckles generally, but is more especially intended to be used in connection with that class of buckles employed for fastening straps upon garments, as the straps of men's vests and trousers, and for similar purposes. Such buckles as heretofore constructed have consisted of a rigid frame, between the two ends of which is pivoted a cross-bar carrying the teeth of the buckle, the ends of which rest against one side of the frame, while the end of the strap, which is permanently fastened to the buckle, is variously attached either to one side of the frame of the buckle or to the tooth-bar by means of a loop forming a part of such bar. Both constructions present certain difficulties. Thus in the former case the free end of the strap must be left loose, and while in the latter construction it can be secured by slipping it under the frame of the buckle this tends, especially where the strap is of thick material, to lift the teeth of the buckle and loosen the strap. In both these forms of construction in order to unbuckle the strap it is necessary to lift the teeth of the buckle with the fingers in order that they may be held clear of the strap while it is being withdrawn from the buckle. In order to obviate these difficulties, I construct a buckle of two frames of about equal size. One of these is the ordinary buckle-frame, to one side of which is attached the fixed end of the strap and upon the opposite side of which rest the ends of the buckle-teeth. In the ends of this frame is pivoted the tooth-bar of the buckle, the ends of which extend through the ends of said first-mentioned frame. To the ends of the tooth-bar are attached end pieces or arms which extend along outside of the end pieces of the said frame to points in the rear thereof, where they are connected by a cross-piece, which completes the second frame and lies outside of the fixed end of the strap. Under this cross-piece the free end of the strap may be inserted

and secured. The arms or end pieces attached to the tooth-bar act as a crank or cranks by means of which the tooth-bar may be conveniently rotated and the teeth of the buckle opened or closed. The presence of the free end of the strap under the connecting-piece tends to so rotate the tooth-bar as to hold the buckle-teeth more firmly closed, while pressure upon this connecting-piece or side in the opposite direction rotates the tooth-bar oppositely, thus lifting the teeth and facilitating their disengagement from the strap.

The invention will be best understood by reference to the accompanying drawing, which shows a view thereof in perspective.

Referring to the drawing, A indicates the usual buckle-frame, upon one side  $a$  of which rest the ends of the buckle-teeth and to the opposite side  $a'$  of which is secured that end of the strap which is permanently fastened to the buckle. In the ends  $a^2 a^2$  of the frame A is pivoted a tooth-bar  $b$ , carrying the teeth  $tt$ . The ends of the tooth-bar  $b$  project through the ends  $a^2 a^2$  of the frame A, and to them are attached the arms or end pieces  $b^2 b^2$ , which extend beyond the ends  $a^2 a^2$  of the frame A and are there connected by the cross-piece or side  $b'$ , which lies to the rear of the frame A and completes the frame B, having sides  $b b'$  and ends  $b^2 b^2$ . The arms or end pieces  $b^2 b^2$  of the frame B act as cranks or levers, by means of which the side or tooth-bar  $b$  may be rotated. The fixed end of the strap, which is attached to the side  $a'$  of the frame A, passes under the side  $b'$  of the frame B, and the free end of the strap when the strap is buckled is secured by inserting it under the side or piece  $b'$ . The presence of the straps in this position tends to lift the side  $b'$ , and by thus rotating the tooth-bar  $b$  in the proper direction by means of the end pieces  $b^2 b^2$  to press the buckle-teeth toward the side  $a$  of the frame A and thus hold the buckle more firmly closed. When it is desired to unfasten the buckle, pressure, which may be conveniently applied by the thumb upon the side  $b'$ , rotates the tooth-bar in the opposite direction, thus lifting the teeth of the buckle and facilitating the withdrawal of the strap therefrom.

It is evident that with this construction while the free end of the strap may be neatly



secured its presence under the buckle-frame, however thick it may be, will not open the buckle-teeth, but the greater its thickness the more securely will the teeth be held in place, 5 and at the same time it is not necessary to pick up the teeth with the fingers in order to unfasten the buckle, advantages which will be readily apparent to those skilled in the art.

What I claim as new, and desire to secure 10 by Letters Patent, is—

1. A buckle composed of two frames, one side of one of which frames is pivoted in the ends of the other frame and serves as the tooth-bar of the buckle and the ends and other 15 side of which frame lie outside of said other frame, substantially as and for the purposes set forth.

2. In a buckle, the combination of a frame adapted to have the fixed end of the strap to 20 be fastened by the buckle secured thereto, a tooth-bar pivoted in said frame, arms attached to said tooth-bar and lying outside of said frame and a cross-piece connecting said

arms and lying outside of said strap, substantially as and for the purposes set forth. 25

3. In a buckle the combination with the tooth-bar of the buckle of arms attached to said tooth-bar and lying outside of the buckle-frame, and a cross-piece connecting said arms, substantially as and for the purposes set forth. 30

4. In a buckle, the combination of a frame, a tooth-bar pivoted in said frame, an arm connected with said tooth-bar and lying outside of said frame and operating to rotate the tooth-bar, and a cross-piece connected to said 35 arm in the rear of said frame and adapted to hold in place the free end of the strap secured by the buckle, substantially as and for the purposes set forth.

In testimony whereof I have hereunto subscribed my name this 29th day of July, A. D. 1897. 40

WM. J. FLEMING.

Witnesses:

CLARKSON A. COLLINS,  
SANDS F. RANDALL.