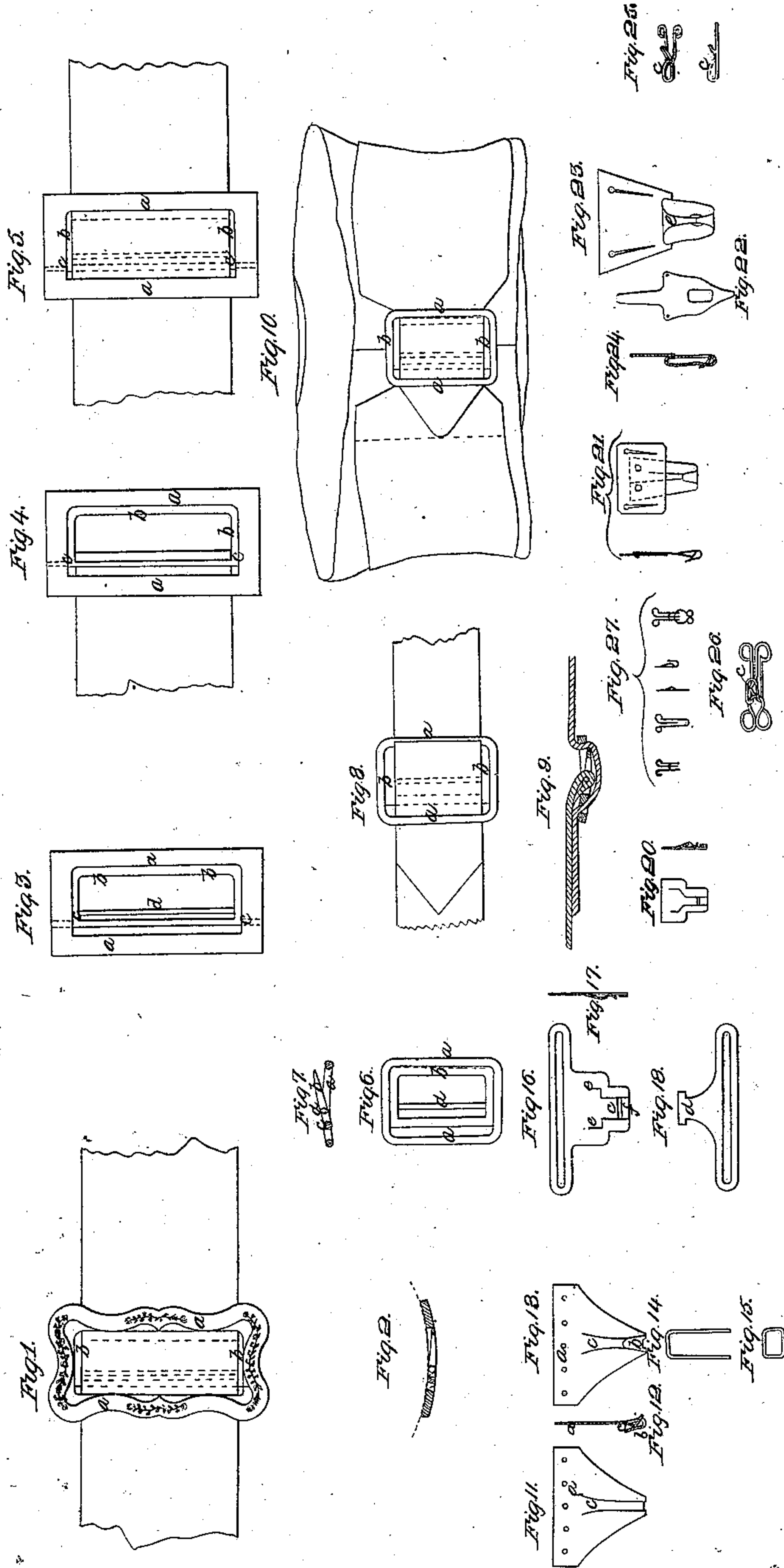


W. Church, Buckle,

No. 1,490.

Patented Feb. 18, 1840.

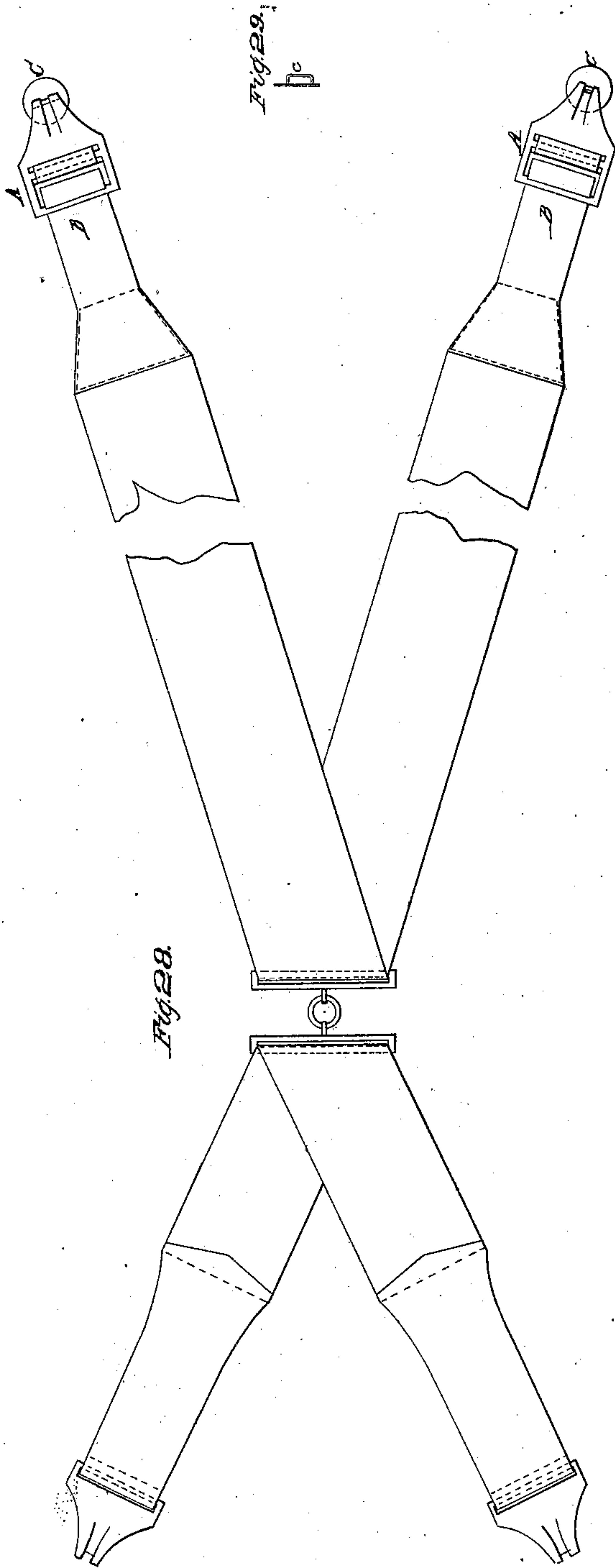


W. Church,

Buckle,

No. 1490.

Patented Feb. 18, 1840.



UNITED STATES PATENT OFFICE.

WM. CHURCH, OF BIRMINGHAM, ENGLAND.

CONSTRUCTION OF BUCKLES AND CLASPS.

Specification of Letters Patent No. 1,490, dated February 18, 1840.

To all whom it may concern:

Be it known that I, the undersigned, WILLIAM CHURCH, a citizen of the United States of America, now resident in Birmingham, in the county of Warwick, England, have invented new and useful Improvements in Buckles, Clasps, Hooks and Eyes, and other Fastenings Principally Applicable to Wearing-Apparel, of which the following is a full and true description, reference being had to the drawings hereunto annexed.

These improvements in buckles, clasps, and other fastenings or connecting pieces principally applicable to wearing apparel consist in the first instance in the adaptation of a lever to the buckle as a substitute for a pointed tongue, and in the second instance in the adaptation of a spring stop to a clasp catch or other fastening for the purpose of retaining the connection between the two parts when united or in a holding position.

These improvements are exhibited at large and in detail in a variety of figures on the accompanying drawings. The buckle may be plain or ornamental without altering the principles of the improved construction.

Figure 1, exhibits an ornamental buckle with a band or ribbon attached to it. Fig. 2 is a section taken horizontally through the same. Fig. 3 and Fig. 4 represent another form of buckle constructed on the same improved principle. Fig. 6 is a buckle in its plainest form, Fig. 7 being a horizontal section of the same. These two last mentioned figures will show the improvement clearly.

a, a, is the outer frame of the buckle; *b, b*, the lever substituted for an ordinary tongue which turns upon pivots at *c, c*.

One end of a bandage or strap is to be attached to the stationary bar *d*, and the other end of the bandage or strap when drawn tight is to be passed under the front part of the frame and over the front edge of the lever and then under the back part of the frame, as shown in Figs. 7 and 8. The front edge of the lever *b* will by the tension of the band or strap be pressed down upon the front part of the frame *a*, so as to pinch it tightly and prevent the band or strap from slipping from its hold as securely as if a pointed tongue or tongues were protruded through the band or strap.

Fig. 9 shows a horizontal section of the buckle and its strap; Fig. 8 and Fig. 10 the

adaptation of such a buckle to the back part of a stock. A buckle of this construction is, however, applicable to a great variety of situations which it is unnecessary to show.

My improvements in clasps, catches, hooks, or other such fastenings consist in the adaptation of a spring stop having a double inclined plane which when the two parts of the clasp or other fastening are put together shall prevent their separation until a force is applied sufficient to push the staple past the inclined part of the spring. Clasps, catches, hooks, and other such fastenings may be made in an infinite variety of forms. I have therefore considered it sufficient to show my improvements in connection with only two or three varieties of each.

In the accompanying drawings Fig. 11 represents a piece of plate brass or other metal, cut or stamped out into a suitable form having a portion of the middle of the plate cut through in the shape of a long tongue. This piece of plate is then to be bent up in the form shown in the section or edge view Fig. 12, *a* constituting the plate of the clasp; *b* the catch or hook at bottom, and the middle part *c* being bent into the shape of a spring having a double inclined plane. Fig. 13 shows the face of the spring clasp when so made. The staple or loop of wire intended to be connected to the clasp is represented at Fig. 14 or 15. The staple being passed over the hook *b* is to be brought down into the recess of the hook below the spring *c*, which will confine the staple and prevent its passing out of the hook until sufficient force is applied to overcome the resistance of the spring. Another modification of clasp having a similarly constructed spring stop is shown at Fig. 16 and in edge view or section at Fig. 7.

Fig. 18 represents a crutch ended catch intended to be coupled to the clasp. The crutch end *d* of the catch being introduced into the recess of the clasp at *e, e*, it is to be drawn down past the apex of the spring *c* until the crutch comes against a cross bar or rest *f*, when the bent end of the spring will act as a stop and prevent the crutch end of the catch from releasing itself from the clasp until the spring is pressed back. Fig. 20 shows a similarly constructed clasp of a smaller size in two positions and Fig. 21 a clasp like Fig. 13, suited to a hawser or garter stop. Another mode of making a clasp is shown at Fig. 22, which represents

a piece of plate brass or other metal stamped out to the desired shape. The upper part is then bent down to form the spring *e* and the lower part bent up to produce the hook 5 as shown in the front and edge view Figs. 23 and 24. This sort of clasp may also be applied to trousers or gaiter straps. It is perhaps scarcely necessary to say that the spring stop may be made separate from the 10 plate and soldered or riveted on in its place. Hooks and eyes formed of wire may be made with a spring stop on the same principle.

Fig. 25 shows in two positions a hook formed of bent wire having a spring stop *c*, 15 and Fig. 26 shows another mode of bending wire to form a hook with a spring stop *c* and also the manner in which the wire eye or catch is held by the spring stop of the hook when they are connected.

20 Fig. 27 shows upon a smaller scale the last described hook and eye in several positions both before and after the hook has been bent up.

Fig. 28 represents a pair of braces for 25 holding up the waistband of trousers in which the two improvements of the buckle and clasp are combined. A, A, represents the lever buckle through which the straps B, B, are passed as described above. The 30 end of the buckle frame is a plate cut or stamped to the desired form and bent up as

the clasp above described. C, C, are the buttons to be fastened to the waistband of the trousers, the face of the button having a loop as shown in the edge view Fig. 29. The 35 end or hook of the clasp is to be passed over the loop of the button, in doing which the spring will be pressed back and when the hook has thus taken hold of the button the spring will stop or prevent the clasp from 40 becoming disengaged without the required pressure.

In conclusion I desire it to be understood that I do not confine my claim to invention to the varieties of forms of buckles set forth 45 in the foregoing specification, but

I claim as my invention—

The application or substitution of the lever *b, b*, which pinches or presses the strap in place of ordinary tongues or points en- 50 tering or piercing the said strap or bandage, as has been the case heretofore.

In testimony whereof I, the said WILLIAM CHURCH, hereto subscribe my name in the presence of the witnesses whose names are 55 hereto subscribed on this seventeenth day of October one thousand eight hundred and thirty nine.

WILLIAM CHURCH.

Signed in our presence:

CHARLES HY. FOSTER,
W. B. PLANT.