No. 676,198. Patented June 11, 1901.

J. F. MOLLOY.

SHEET METAL BUCKLE.

(Application filed Apr. 9, 1901.)

(No Model.)

Fig. 1

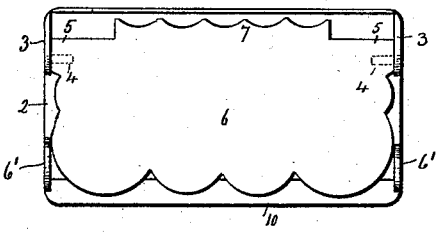


Fig. 2

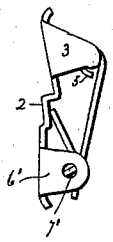


Fig. 3

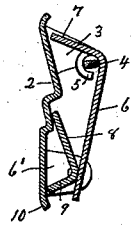


Fig. 6

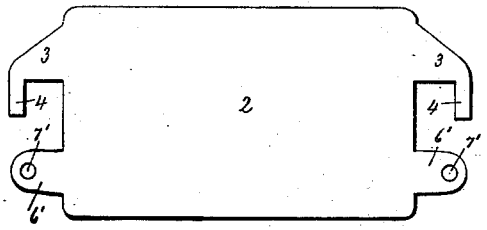


Fig. 4

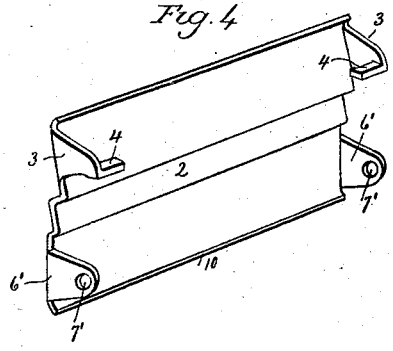
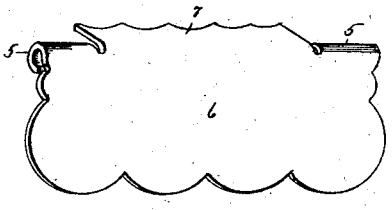


Fig. 5



Witnesses.
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James F. Molloy
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UNITED STATES PATENT OFFICE.

JAMES F. MOLLOY, OF WEST HAVEN, CONNECTICUT.

SHEET-METAL BUCKLE.

SPECIFICATION forming part of Letters Patent No. 676,198, dated June 11, 1901.

Application filed April 9, 1901. Serial No. 55,034. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. MOLLOY, of West Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Sheet-Metal Buckles; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a view in front elevation of one form which a buckle constructed in accordance with my invention may assume; Fig. 2, an end view thereof; Fig. 3, a view thereof in vertical section with particular reference to showing the edgewise presentation of the trunnions to the body-plate; Fig. 4, a detached perspective view of the body-plate; Fig. 5, a detached perspective view of the lever; Fig. 6, a plan view of the body-plate blank after it has been cut out and developed, but before it has been bent into shape.

My invention relates to an improvement in sheet-metal buckles, the object being to produce a simple and convenient article constructed with particular reference to cheapness of construction, to compactness of form, and to strength.

With these ends in view my invention consists in a sheet-metal buckle having certain details of construction, as will be hereinafter described, and particularly recited in the claim.

In carrying out my invention as herein shown I provide the body-plate 2 of the buckle with two integral arms 3, bent forward from its upper portion at a right angle to its plane, and I further provide the forward ends of the said arms with integral trunnions 4, extending inward toward each other in the same axial line from the lower edges of the arms 3 and located in a horizontal plane intersecting the vertical plane of the plate 2. In other words, these trunnions 4 are located edgewise or at a right angle to the plane of the body-plate instead of flatwise or parallel thereto, as in prior sheet-metal buckles having their body-plates formed with integral trunnions for the attachment of their levers. For securing the "edgewise arrangement," so to speak, of the integral trunnions 4 I form the said trunnions upon the lower edges of the outer ends of the supporting-arms 3 of the body-plate 2 as shown in Fig. 6, which represents the plate after it has been blanked out, but before it has been bent up into shape. It will be seen by reference to this figure that the trunnions 4 extend downward parallel with each other and with the sides of the body-plate rather than outward in the ordinary way. It is apparent that when the trunnions 4 are bent forward and upward, so as to stand at right angles with the arms 3, and that when the arms 3 are bent forward, so as to stand at right angles with the plate 2, the trunnions 4 will be brought into edgewise relations with the body-plate 2, as clearly shown in Fig. 4. Now when the ears 5 of the sheet-metal lever 6 are bent around the trunnions and the teeth 7 of the lever 6 are engaged with the webbing the outward strain upon the lever 6, which is very considerable, will be thrown upon the inner edges of the trunnions, as shown in Fig. 3, and will be effectually resisted, because the trunnions are much more difficult to bend edgewise than flatwise. Furthermore, and this is important, the bearing of the arms 5 is thrown upon the inner edges of the trunnions, which edges are located nearer the body-plate than the inner faces of the trunnions are when the trunnions are arranged in the ordinary way flatwise with the body-plate or in planes parallel with the plane thereof, whereby under my improved construction the lever is held closer to the body-plate and the buckle made more compact. By my invention, therefore, I secure a very marked increase of strength, which is an important point in sheet-metal buckles which are made for the sake of economy of the lightest metal that can be safely used, and I also secure compactness of form.

As herein shown, (but this is not important,) the body-plate 2 is formed with arms 6′, formed with perforations 7 for the reception of the trunnions of another lever 8, the teeth 9 of which coact with the forwardly-bent lower edge 10 of the body-plate. If desired, the arms 6 of the body-plate may be provided with trunnions corresponding to the trunnions 4 for the connection of the lever 8.

I would have it understood that I do not

limit myself to the exact details of construction herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a sheet-metal buckle, a body-plate formed at its sides with integral arms standing at a right angle to it, and provided upon their lower edges with integral trunnions extending toward each other, located in the same axial line, and arranged edgewise with respect to the vertical plane of the body-plate.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JAS. F. MOLLOY.

Witnesses:
CHAS. A. MENGE,
HATTIE B. MACDONALD.