

W. H. HART.
BACK BAND BUCKLE.

APPLICATION FILED SEPT. 3, 1903.

NO MODEL.

Fig. 1.

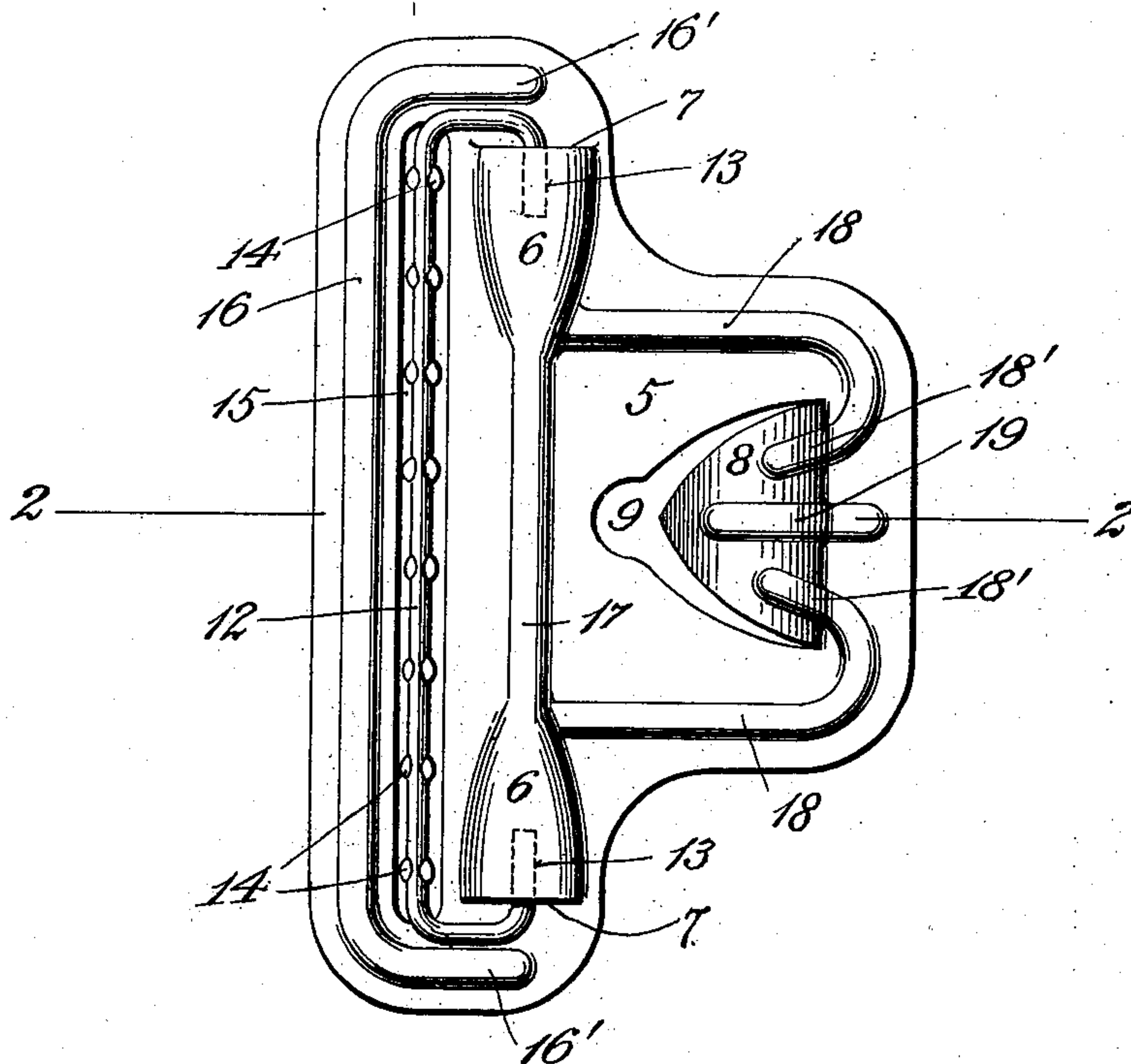
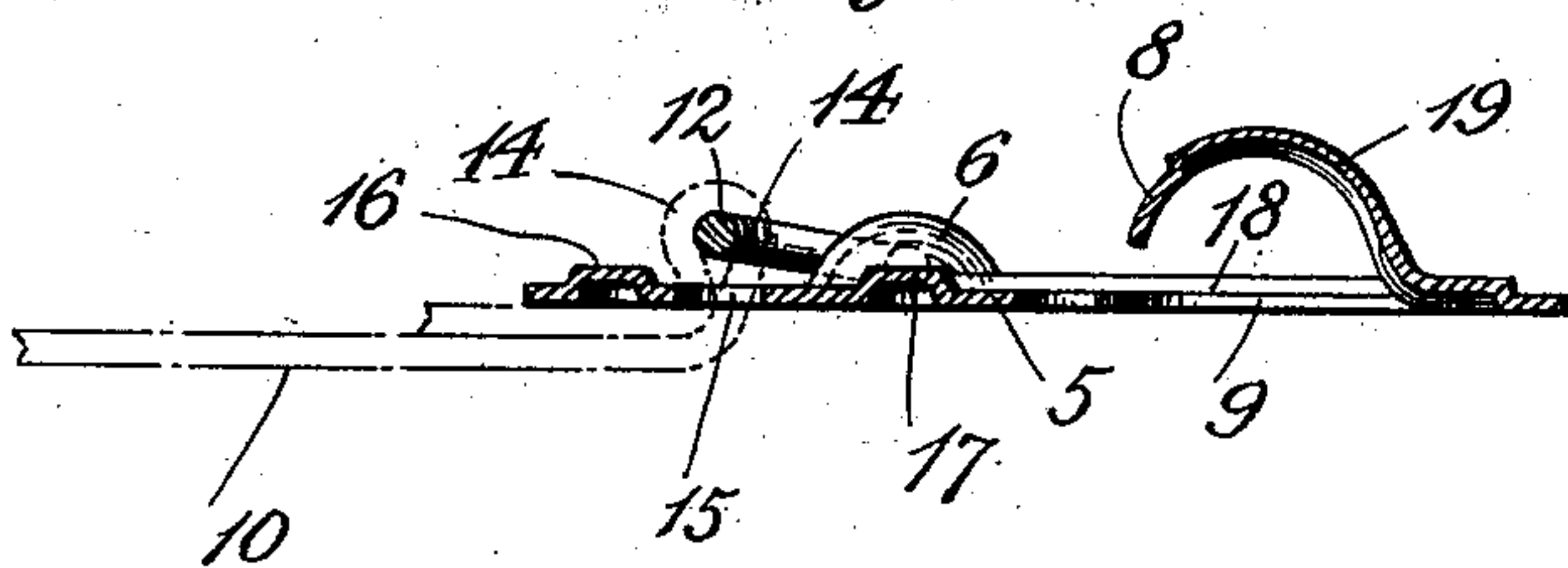


Fig. 2.



Witnesses:

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Inventor:

Walter H. Hart.

By his Attorney

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UNITED STATES PATENT OFFICE.

WALTER HENRY HART, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO
THE STANLEY WORKS, OF NEW BRITAIN, CONNECTICUT, A CORPORATION OF CONNECTICUT.

BACK-BAND BUCKLE.

SPECIFICATION forming part of Letters Patent No. 750,109, dated January 19, 1904.

Application filed September 3, 1903. Serial No. 171,811. (No model.)

To all whom it may concern:

Be it known that I, WALTER HENRY HART, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Back-Band Buckles, of which the following is a specification.

This invention relates to buckles of that class employed to secure back-bands, traces, surcingles, and other straps or fastenings; and it has for its objects the provision of a light, simple, and strong device, as will be hereinafter described.

In the accompanying drawings, Figure 1 is a plan view of the improved back-band buckle, and Fig. 2 is a transverse section on line 2 2 of Fig. 1.

Like numerals designate similar parts throughout the several views.

Heretofore devices of the kind to which my invention relates have been formed from plate and cast metal and have been heavy and cumbersome in order that the necessary strength may be obtained, and it has therefore been a desideratum to produce a light and serviceable buckle sufficiently strong and rigid to withstand the severe strain to which such a device is subjected, and this object has been attained by the improvement now to be described.

Referring to the drawings, the numeral 5 designates the frame or base-plate of the improved buckle, which is provided with raised hollow protuberances or bearings 6 6, preferably struck up from the metal of said base-plate and each having an open end 7 for the reception of the extremities of a web-holder, hereinafter described.

Punched from plate 5 is a hook 8, which may be curved to the form illustrated, or it may be of different shape, provided it does not fully cover the opening 9 made in the plate by punching out the hook, thereby leaving sufficient space for the insertion of the usual loop, link, or other device carried by the band or strap 10. (Illustrated by dotted lines in Fig. 2.)

Designated by 12 is the cross-bar of an im-

proved web or band holder, which is bent at its free ends, as at 13, said ends being inserted in the open extremities of the hollow bosses or protuberances 6, as illustrated in Fig. 1, and to provide band-retaining surfaces on said cross-bar short lugs or teeth 14 are swaged from the metal thereof, as also shown in Fig. 1. In cross-bars heretofore known to me the teeth have been formed by cutting and removing the metal to produce serrations on its edge. In my improvement the teeth are made by swaging and displacing the stock, and are therefore compressed and much stronger and have greater rigidity and holding power to resist the strain coming at the point where the cross-bar is located. This is an important feature, for the compressed teeth will not bend under strain, and, furthermore, much lighter stock may be employed in manufacturing the cross-bars, a great desideratum in articles of the class with which said bars are employed, and maximum strength and holding power obtained. This cross-bar overlies a slot 15 in the base-plate, through which the folded end of the web is inserted after it has been passed over the cross-bar.

Struck up from the metal of the base-plate is a hollow strengthening rib or corrugation 16, which extends in a line parallel with and adjacent to the slot 15 in the front of said base-plate, the deflected ends 16 of said corrugation extending along the sides of said plate to a point opposite the protuberances or bearings 6, and connecting said protuberances is another hollow rib or projection 17. Radiating from said corrugation 17 are hollow projections 18, having curved ends 18', which extend for some distance along the hook 8, adjacent to the edges thereof, and thus serve to stiffen and strengthen the same; and to further strengthen said hook a hollow projection or rib 19 is formed along and about on the middle of the same, said corrugation 19 extending for a short distance into the metal of the plate at the base of the hook. All of these corrugations are preferably struck up by a die operating on the back of the plate or

of the metal of which it is made, and they thus form rounded external protuberances of pleasing and ornate appearance, and they are so disposed that they strengthen the plate and its hook on the lines where the greatest strain is exerted, and thus prevent it from buckling or collapse. In this way a light, strong, and serviceable buckle may be produced from sheet metal, preferably steel, which will withstand all of the requirements of usage to which such articles are submitted.

Changes may be made in many of the details of the buckle without departure from the invention, which is not limited to the exact construction described.

Having thus described my invention, what I claim, is—

1. A buckle having a slot for the reception of the ends of the band, a corrugation adjacent to and parallel with said slot, bearings over the ends of which the corrugation extends, and a web-holder journaled in said bearings.

2. A corrugated, sheet-metal buckle having a slot for the reception of the band, a web-holder, bearings in which the free ends of said web-holder are inserted, and a corrugation for stiffening the metal adjacent to the

slot, said corrugation extending at its ends opposite the outer extremities of said bearings.

3. A back-band buckle comprising a plate having a slot adjacent to one end, a corrugated hook projecting from the plate adjacent to its opposite end, bearings formed from the plate, a web-holder having its ends inserted in said bearings, and corrugations extending longitudinally of the plate on each side of the slot, one of said corrugations having ends located opposite the outer extremities of the bearings.

4. A back-band buckle formed from sheet metal, and comprising a plate having a slot at its forward end for the reception of the end of the band, a corrugation parallel to said slot, a pair of bearings connected by a corrugation, a web-holder with ends mounted in said bearings, a hook, and corrugations extending from the plate and along the surface of said hook.

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

WALTER HENRY HART.

Witnesses:

H. P. CARTER,
W. E. DOANE.