(No Model.)

J. W. CRONAN.

COMBINED BACK BAND BUCKLE AND HOOK.

No. 559,027. Patented Apr. 28, 1896.

Fig. 1

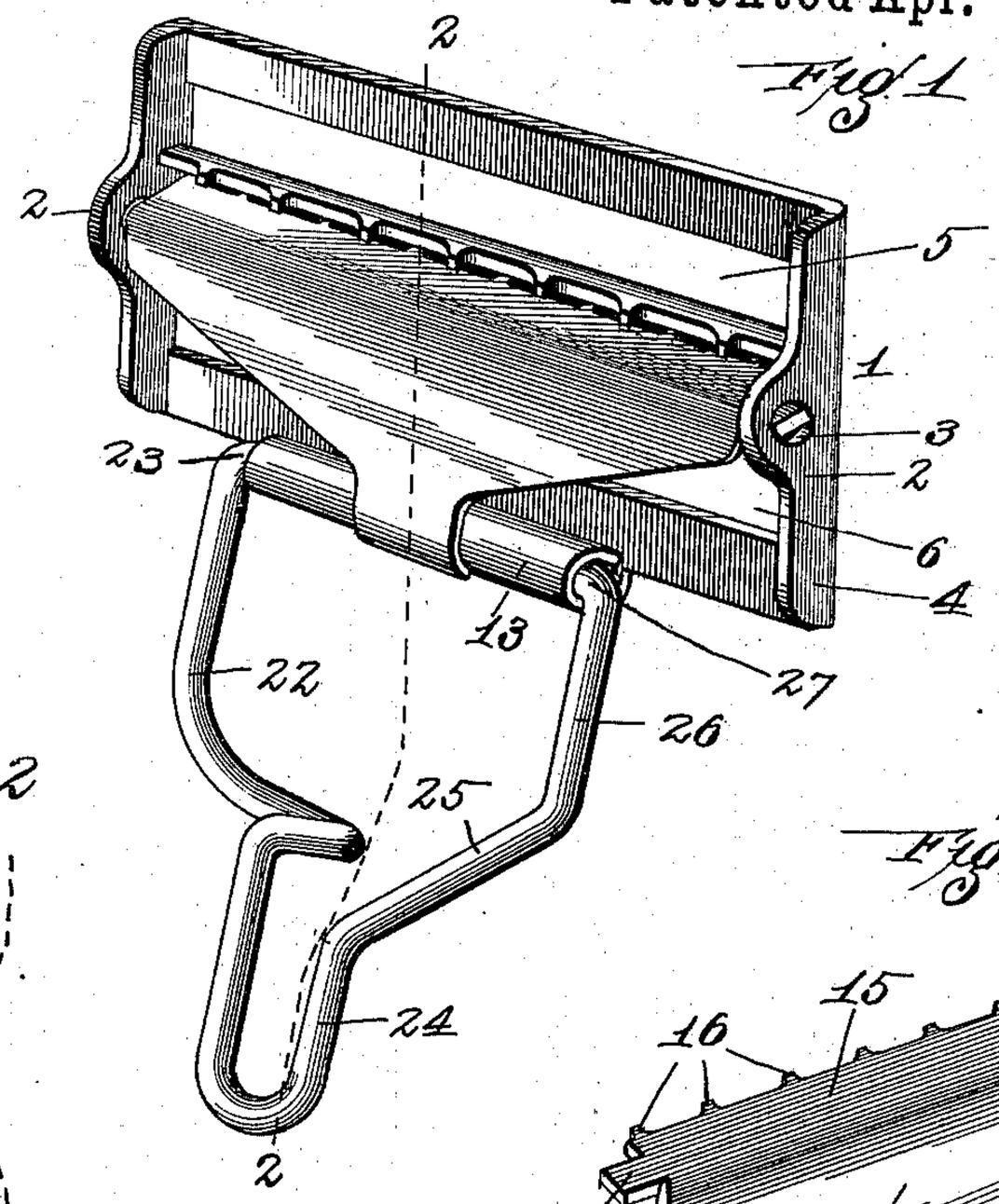


Fig. 2

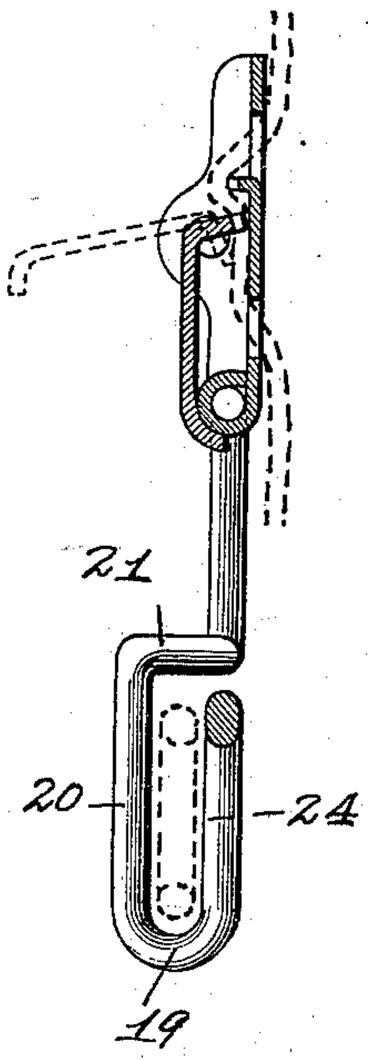


Fig. 3

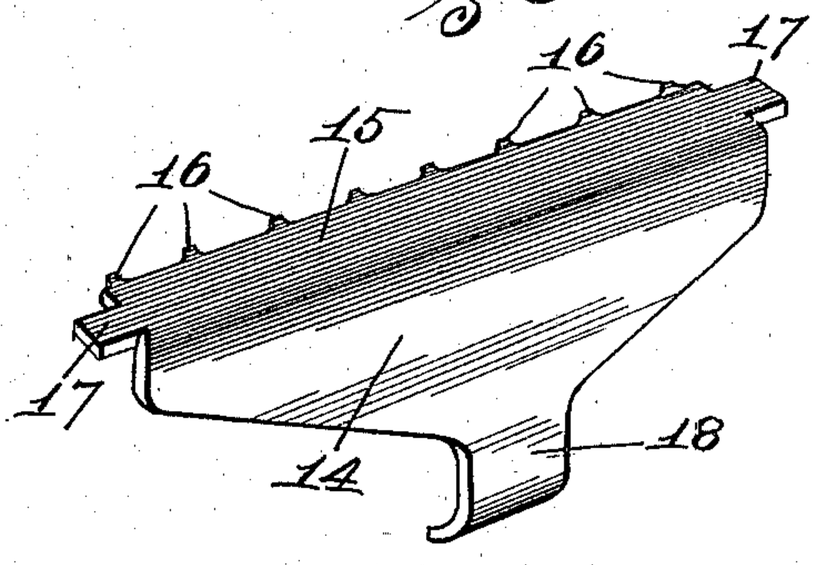


Fig. 5

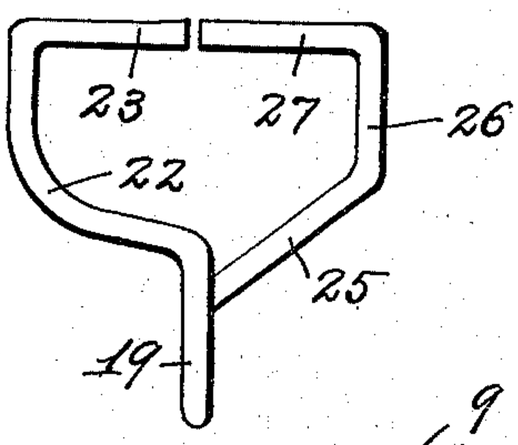
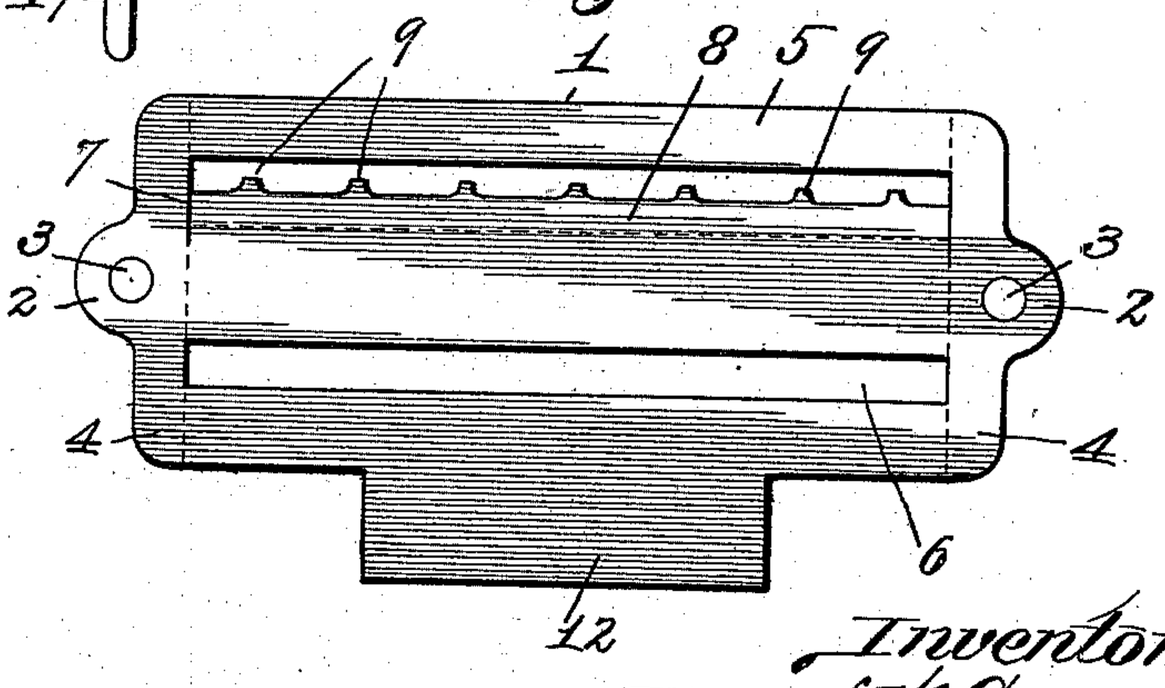


Fig. 4



Attest.
John L. Tunison.
M. P. Smith.

Inventor.
James W. Cronan
By Higdon & Higdon & Longan.
Attys.

UNITED STATES PATENT OFFICE.

JAMES W. CRONAN, OF POINT PLEASANT, MISSOURI.

COMBINED BACK-BAND BUCKLE AND HOOK.

SPECIFICATION forming part of Letters Patent No. 559,027, dated April 28, 1896.

Application filed August 26, 1895. Serial No. 560,528. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. CRONAN, of the city of Point Pleasant, New Madrid county, State of Missouri, have invented certain new and useful Improvements in a Combined Back-Band Buckle and Hook, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved combined back-band buckle and hook; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

In the drawings, Figure 1 is a view in perspective of my improved back-band buckle and hook. Fig. 2 is a vertical sectional view of my improved buckle and hook, the same being taken approximately on the indicated line 2 2 of Fig. 1. Fig. 3 is a view in perspective of the tongue of my improved buckle. Fig. 4 is a plan view of the blank from which the body of my improved buckle is formed. Fig. 5 is a front elevation of the hook made use of.

Referring by numerals to the accompanying drawings, 1 indicates the plate or body of my improved buckle, the same being approximately rectangular in plan view and provided on its side edges with integral ears 2, in which are formed apertures 3. The ends 4 of the body 1 and the perforated ears 2 are bent at right angles to said body 1, and formed in said body 1, between said bent ends 4, are parallel slots or rectangular apertures 5 and 6. Slits 7 are extended downwardly into the body of the plate from the slot 5, and the portion of metal 8 immediately below said slot and between said slits, the upper edge of which is constructed with a series of engaging lugs or points 9, is turned at right angles to the plate or body 1. Said plate or body 1 is provided on its lower edge with an integral depending portion, which is bent into the form of a tube, as indicated by 13, the same extending along the front face of the plate or body 1 and parallel with the slots 5 and 6 therein.

The tongue of my improved buckle and hook comprises a triangular plate 14, from the upper edge of which extends at right angles a laterally-bent portion 15, the edge of which is provided with a series of engaging lugs or points 16. Ears 17 are formed integral with and extend outwardly from the ends of this laterally-bent portion 15, and depending from the triangular plate 14 of the tongue is an ear 18, the same being curved rearwardly or in the same direction that the laterally-bent portion 15 projects.

The hook, as contemplated by my invention, comprises a single length of wire, in the center of which is formed a U-shaped bend 19. The forward arm of this U-shaped bend 19 is indicated by the numeral 20, and the portion of the wire immediately above said arm is bent rearwardly, as indicated by 21, and into the plane occupied by the rear arm of the U-shaped bend 19. From this point the length of wire is bent at right angles to said rearward bend 21 and at right angles to the plane occupied by the U-shaped bend 19, and said length of wire extends in a gradual curve upwardly, as indicated by 22, and the end 23 of this portion of the wire is then bent at right angles to the upper end of the portion 22 and said end 23 passes into one end of the tubular bent portion 13 of the plate or body 1.

The rear vertical arm of the U-shaped bend 19 is indicated by the numeral 24, and at a point immediately below the rear end of the rearwardly-bent portion 21 previously mentioned the length of wire above the vertical arm 24 is bent diagonally upward, as indicated by 25, and the portion of the wire above the portion 25 is bent vertically upward in a parallel plane with the upper end of the portion 22, as indicated by 26, and the extreme upper end 27 of the length of wire is bent at right angles to said portion 26 and is located in the end of the tubular portion 13 of the plate 1 in the opposite end from which the portion 23 of the length of wire is located. It will thus be seen that the U-shaped hook 19 lies in a plane at right angles to the plane occupied by the buckle.

A pair of the combined buckles and hooks is located upon the back-band of a harness, one on each side thereof, said back-band passing through the slot 5, from thence around the engaging-points or lugs 9 on the laterally-bent portion 8 of the plate or body 1, and from thence downwardly and through the slot 6.

Said back-band may be readily passed through these slots when the tongue 14 is swung into the position as shown by dotted lines in Fig. 2, and after the buckles have been properly located upon said back-band the tongues are swung downwardly into their normal positions, and by so doing the engaging points or lugs 16 on the laterally-bent portion 15 of said tongue will engage or grip said back-band and very effectually hold the buckles in proper position. Trace-chains are now passed through the upper portions of the depending hooks, and said chains are so manipulated as that one link in each thereof is passed downwardly into the U-shaped hook 19, as indicated by dotted lines in Fig. 2. The links thus held are in a vertical plane, and the links adjacent said engaged links being in planes at right angles to said engaged links the trace-chains will not be permitted to move an appreciable distance longitudinally in either direction, and said trace-chains will be retained against any vertical movement, as the rearwardly-bent portions 21 of the hooks normally retain the engaged links in the U-shaped hooks 19.

Whenever desired, the links held in the U-shaped bends 19 may be so manipulated as that they may be disengaged from said U-shaped bends, and by raising the tongues of the buckles to the position as shown by dotted lines in Fig. 2 said buckles may be moved to any point desired upon the back-band.

Thus will be seen how I have constructed a combined back-band buckle and hook that possesses superior advantages in point of simplicity, durability, and general efficiency, may be very rigidly held at any point desired on the back-band, and that will very effectually hold the trace-chains.

I claim—

1. A buckle, constructed with a tubular portion extending across its lower edge, and a hook having its ends pivotally arranged in said tubular portion, said hook being constructed with a U-shaped bend that lies in a plane at right angles to said buckle, and an integral stop 21 extending horizontally across the space at the top of said U-shaped bend, substantially as specified.

2. The combination of a buckle having a tubular portion 13 arranged horizontally along its lower edge, a hook constructed of a single length of wire, the upper ends of which are located in the ends of the tubular portion, and a depending U-shaped bend 19 formed in said length of wire and having at its upper end a horizontal stop 21, the same occupying a plane at right angles to the buckle.

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

JAMES W. CRONAN.

Witnesses:

JESSE DE LISLE,

J. M. DOCKERY.