(No Model.)

# J. R. BULLUCK.

## BACK BAND BUCKLE.

No. 423,667. Patented Mar. 18, 1890.

Fig. 1.

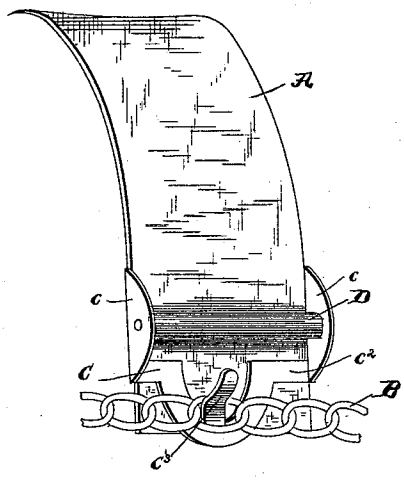



Fig. 2.

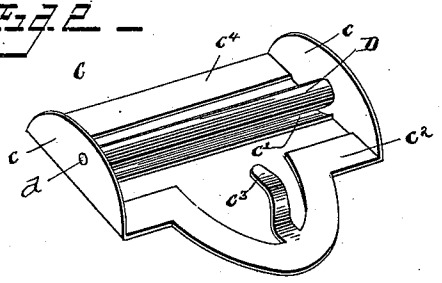



Fig. 3.

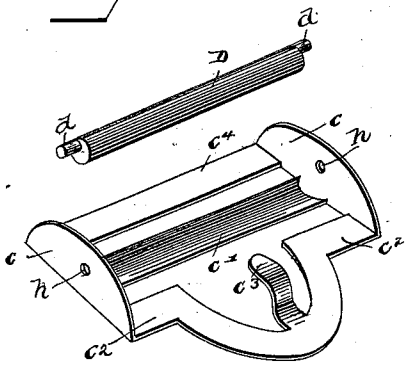
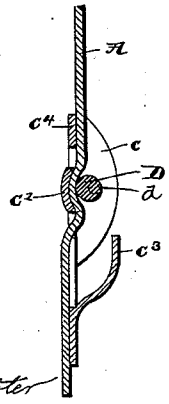



Fig. 4.




Witnesses
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# UNITED STATES PATENT OFFICE.

JAMES ROBERT BULLUCK, OF TARBOROUGH, NORTH CAROLINA.

## BACK-BAND BUCKLE.

SPECIFICATION forming part of Letters Patent No. 423,667, dated March 18, 1890.

Application filed October 19, 1889. Serial No. 327,505. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES ROBERT BULLUCK, a citizen of the United States, residing at Tarborough, in the county of Edgecombe and State of North Carolina, have invented a new and useful Back-Band Buckle, of which the following is a specification.

My invention is a buckle for the back-bands of harness, and especially for plow-harness.

The object of my invention is to provide a buckle which, while being readily adjustable upon the band, will hold it securely at any part thereof at which it may be placed and without perforating the strap; furthermore, to provide a buckle which is simple, cheap, and durable, and may be struck out from a single piece of sheet metal at one blow of a die.

With these objects in view the invention resides in a buckle consisting of two parts—a frame having two outwardly-turned lugs or ears and a transverse groove between the ears—in combination with a cam mounted in the ears parallel to the above and so close thereto that when the cam is moved away from the groove there is just room for the passage of the band, and when it is moved toward the groove the band is clamped between the cam and the groove.

In the accompanying drawings, forming part of this specification, and in which like letters of reference indicate corresponding parts, Figure 1 shows the buckle in position upon a harness. Fig. 2 is a view in perspective of the buckle. Fig. 3 shows the two parts of the buckle separated. Fig. 4 is a longitudinal section through the back-bands and the buckle.

In the drawings, A designates the back-band, and B the chain, of a plow-harness.

C indicates the body or frame of the buckle, and D is the cam or eccentrically-mounted roller. The frame of the buckle C, which I have shown and prefer to make of a single piece of metal, is cut at one blow of a properly-shaped die, after which it has the ears or lugs *c c* bent out in order to form guides for the band and also to afford suitable bearings for the cam D.

*c'* is a groove formed in the act of cutting out the frame in a transverse bar of the frame C.

$c^2$ is the lower bar at the lower part of the buckle, having a semicircular offset, from which projects the tongue $c^3$ for engagement with the chain B, which tongue must also be bent out of the plane of the frame, as will be understood; and $c^4$ is the top bar of the frame.

The cam D is an ordinary cylindrical rod having studs *d* at each end so placed as to make the cam practically an eccentric in cross-section, and in assembling the parts of my buckle these studs are inserted in holes *h* through the turned-up ears *c c* of the frame, whereby the journals of the eccentric-cam D are exactly over the center of the groove *c'*.

When the plowman desires to use my buckle, he turns the cam D until its surface farthest from the axis of its rotation is also farthest from the concave face of the groove *c'*. There is now space enough between the bottom of the groove and the inner surface of the cam to permit of the passage of the back-band A. The buckle is then moved up and down by holding the cam between the thumb and finger of the operator, and as soon as the buckle has been adjusted upon the band and the cam D is released the cam D will, by the friction of the band A, turn upon its axis until the surface farthest from its axis of rotation presses the band A into the groove *c'* and retains the band there. It will be seen that as the cam D presses upon the band A across its entire width, and as the greater the strain upon the band the firmer the cam will press it into the groove *c'*, the buckle is only limited in its sustaining power by the strength of its materials and the strength of the band.

I have shown and described a buckle in which the frame is made of a single piece of sheet metal. This I prefer, as it is cheaper of manufacture.

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

The herein-described buckle to be applied to the band of a harness, the plate of which is struck up from a single piece of sheet metal,

the same consisting of the bar $c'$, centrally located and laterally curved, the upper bar $c^4$, and the lower bar $c^2$, downwardly curved and having the upwardly and outwardly integral tongue $c^3$, the opposite right-angularly-disposed plates $c$, connecting the three bars and having opposite perforations $h$, and the binding-roller D, mounted between the end plates and provided with eccentric end trunnions $d$, journaled in the bearings directly over the central bar $c'$, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES ROBERT BULLUCK.

Witnesses:
ED PENNINGTON,
J. J. PITTMAN.