

(No Model.)

J. G. MILLER.
TRACE SUPPORTER.

No. 478,012.

Patented June 28, 1892.

Fig. 1.

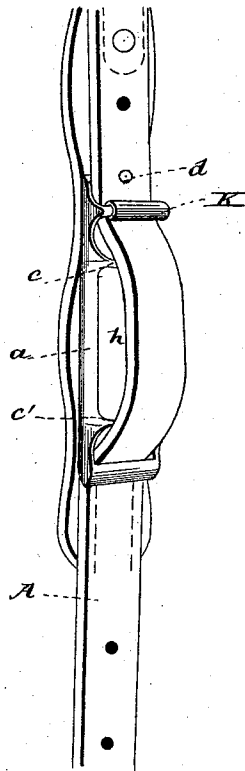
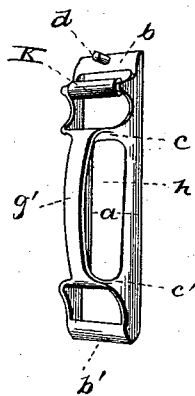


Fig. 2.



Witnesses

Samuel Ker.
Philip C. Massi.

Inventor

J. G. Miller

by E. W. Anderson
his Attorney

UNITED STATES PATENT OFFICE.

JOHN G. MILLER, OF CHAMPAIGN, ILLINOIS.

TRACE-SUPPORTER.

SPECIFICATION forming part of Letters Patent No. 478,012, dated June 28, 1892.

Application filed June 30, 1891. Serial No. 398,047. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. MILLER, a citizen of the United States, and a resident of Champaign, in the county of Champaign and State of Illinois, have invented certain new and useful Improvements in Trace-Supporters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view showing the invention as applied to the back-strap of a harness, and Fig. 2 is a similar view of the invention itself.

This invention has relation to certain new and useful improvements in trace-supporters; and it consists in the novel construction and combination of parts, as hereinafter specified.

In the accompanying drawings, the letters *a a* designate the parallel side bars of the support spaced from each other and curved downwardly near each end and united by the end bars *b b'*. Intermediate of said end bars and above the plane thereof the side bars *a a* are connected by transverse portions *cc'*. The end bar *b* is provided with the pin or projection *d* on its upper surface, said projection serving as a tongue. Integral with the transverse portions *cc'* at each end and curved upwardly therefrom and arranged centrally over the intervening space between the side portions is the longitudinal bridge piece or portion *g*, forming the eye or loop *h*. This bridge piece

or portion *g* is shown as having a flat upper surface *g'*, forming a bearing-surface for the strap *A*, which is passed thereover. At one end is also journaled a small anti-friction roller *K*, located in a plane intermediate of the end bar and transverse portion, and under which said strap is passed. Said strap with this construction is also designed to be passed under the end bar *b'*.

It will be seen that this device can be readily adjusted to any-sized horse.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

A buckle comprising a skeleton frame comprising parallel side bars *a a*, united by transverse end bars *b b'*, one of said bars having on its upper surface a stud or projection *d*, serving as a tongue, transverse portions *cc'*, connecting the side bars at points intermediate of said end bars and above the plane thereof, said portions having integral therewith a longitudinal upwardly-curved bridge-piece, forming a bearing for the strap, and an anti-friction roller journaled between upward projections on the side bars between the end bar *b* and the transverse portion *c*, said roller being in a plane intermediate of said end bar and transverse portion to allow said strap to pass thereunder, substantially as specified.

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

JOHN G. MILLER.

Witnesses:

CHARLES WITT,
JOHN F. MILLER.