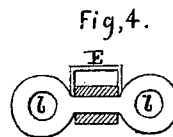
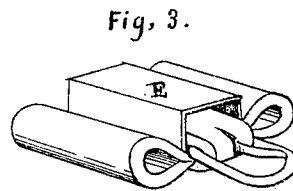
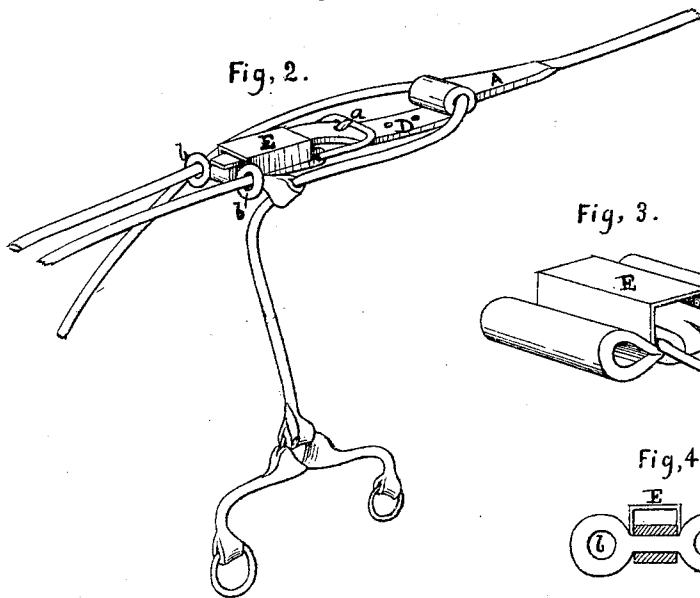
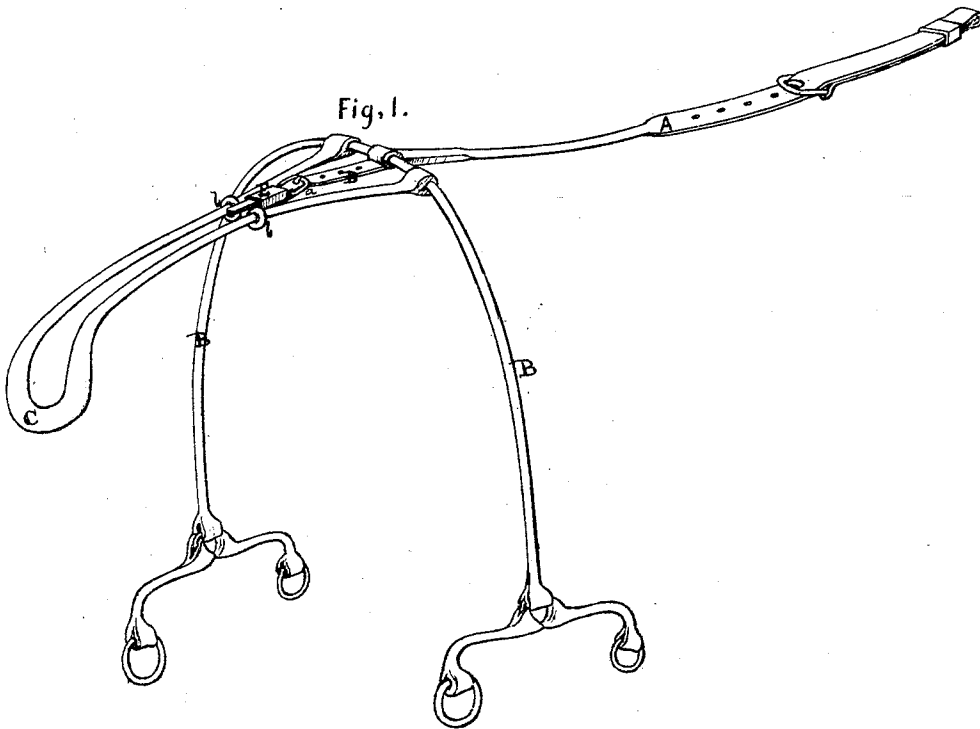


A. McCracken.  
Improvement in Harness.

No. 114,318.

Patented May 2, 1871.



Witnesses,

*John A. Simons*  
*R. H. Conway*

Inventor,

*A. McCracken.*  
*By A. W. Ballum atty.*

# United States Patent Office.

ASA McCracken, OF SOUTH BYRON, NEW YORK.

Letters Patent No. 114,318, dated May 2, 1871.

## IMPROVEMENT IN HARNESS.

The Schedule referred to in these Letters Patent and making part of the same.

I, ASA McCracken, of South Byron, in the county of Genesee and State of New York, have invented certain Improvements in Harness, of which the following is a specification.

My invention relates to improvements in harness; and

It consists in a new and improved method of uniting and adjusting the back-strap, hip-strap, and crupper with relation to each other by means of a regulating device, whereby the same harness may be adjusted to suit different horses with convenience and dispatch.

In the accompanying drawing—

Figure 1 is a perspective view of a portion of a set of harness in which the parts are extended and united by my regulating device.

Figure 2 is a similar view, showing the manner in which the parts are shortened relatively.

Figure 3 is a separate view of the regulator.

Figure 4 is a cross-section of the same.

A represents the back-strap.

B, the hip-strap.

C, the crupper.

D is a short strap passing rearward from the back-strap, with which it is united.

E is the regulating-piece, provided with a buckle *a*, and a double-eyed swivel-piece, *b b*.

The back-strap, hip-strap, and crupper are made in separate pieces and united or connected by the regulating-piece E in manner as follows:

The two ends of the crupper are passed through the eyes *b b* of the swivel-piece and formed into loops; the rear end of the back-strap is also looped, and through these loops on the ends of the crupper and back-strap the hip-strap is passed; the short strap D is then secured to the regulator E by the buckle *a*, and the connection is complete.

When it is desired to shorten the hip-strap all that is necessary is to pull its central portion through the loops on the ends of the crupper, and the length of the back-strap is adjusted through the agency of the strap D and buckle *a* of the regulator.

What I claim as my invention is—

In combination with the back-strap, hip-strap, and crupper, constructed substantially as described, the regulator E and strap D, constructed and operated substantially as and for the purpose specified.

Witnesses:

ASA McCracken.

J. RAMBO,

FRANK SMITH.