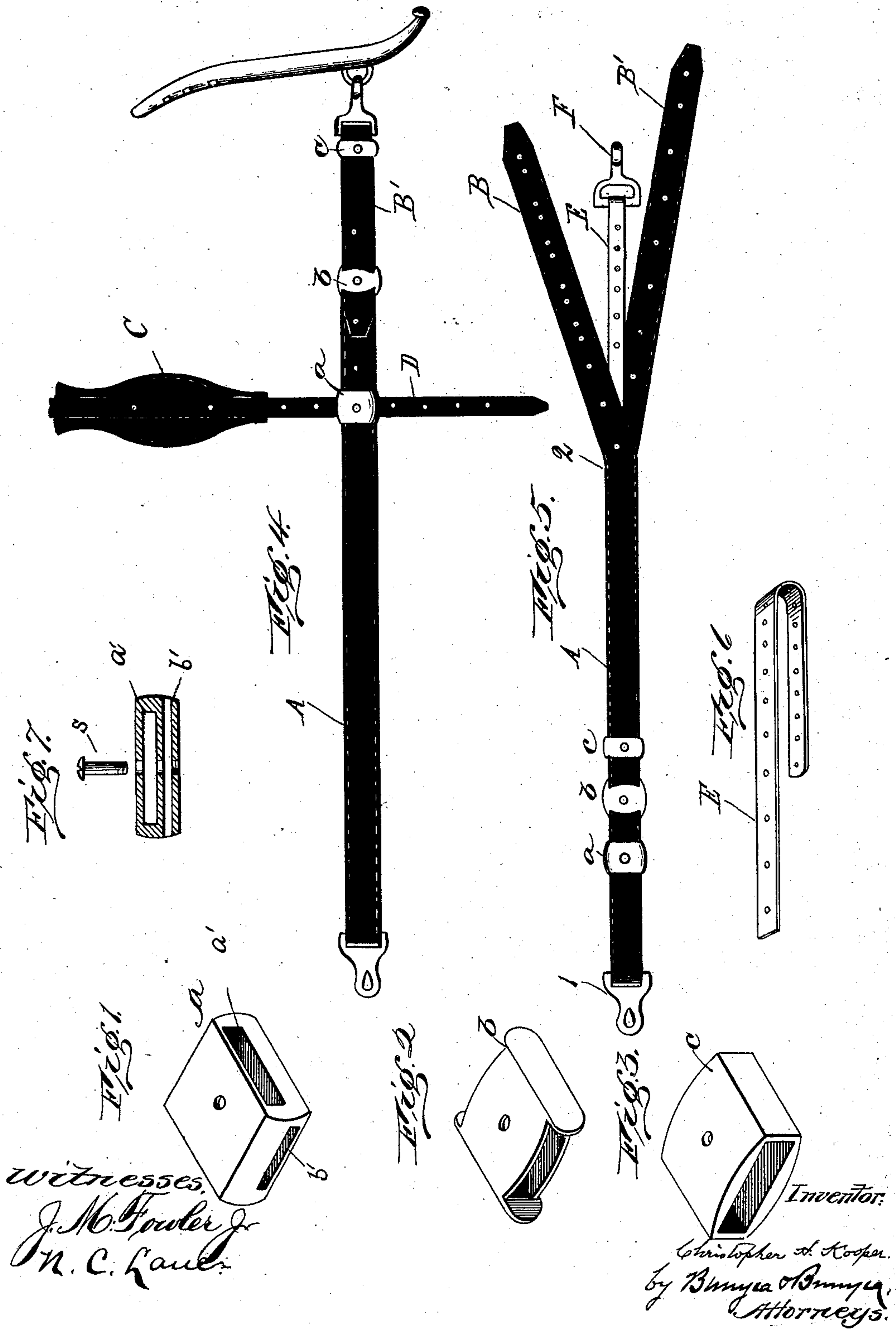


(No Model.)

C. H. KOOPER.  
HARNESS.

**No. 567,244.**

Patented Sept. 8, 1896.





# UNITED STATES PATENT OFFICE.

CHRISTOPHER HENRY KOOPER, OF PARADISE VALLEY, NEVADA.

## HARNESS.

SPECIFICATION forming part of Letters Patent No. 567,244, dated September 8, 1896.

Application filed November 26, 1895. Serial No. 570,236. (No model.)

*To all whom it may concern:*

Be it known that I, CHRISTOPHER HENRY KOOPER, a citizen of the United States, and a resident of Paradise Valley, county of Humboldt and State of Nevada, have invented certain new and useful Improvements in Harness, of which the following is a specification.

The object of my invention is the production of a harness-trace which is readily adjustable as to length by simple and efficient means and which is cheap to manufacture and reliable in use. I attain these desirable objects by means of the construction shown in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a slide-buckle which I use to support my trace from the back-band. Fig. 2 is a similar view of a slide or loop which I use to confine the billet end of the trace when adjusted. Fig. 3 is a like view of a slide-buckle which I use to secure the draft-hook to the trace. Fig. 4 is a side view of the trace as adjusted and in operative position. Fig. 5 is a side view of trace with the front ends detached from the draft-hook. Fig. 6 is a perspective view of a spring-band which I use for connecting the draft-hook with the trace. Fig. 7 is a central vertical section through the slide-buckle shown in Fig. 1.

Like letters and figures denote the same parts wherever they occur.

A is the trace; B B', the free front ends thereof.

C is the harness-saddle, and D the back-band.

E is the spring-band for connecting the draft-hook to the trace ends, and F is the draft-hook.

a is the slide-buckle; b, the slide or loop, and c the slide-buckle for connecting the ends of the trace to the spring-band.

My trace is made up of two layers or straps stitched together at their rear ends from the cockeye 1 to the point 2. The front ends B and B' are disconnected. The draft-hook F is connected to a bend in the spring-band E, and the rear loop of said draft-hook is sufficiently wide to permit the insertion there-through of the trace ends. The spring-band is provided with a series of perforations, and the free ends of the trace have similar perforations which register therewith.

When it is desired to adjust the trace in length, the screws are removed from the slides and the latter are moved back on the trace, as shown in Fig. 5. The free front end B is then passed through the loop in the draft-hook and the end B' passed through the loop from the rear. The slide-buckle c is then slid to the position shown in Fig. 4 and its screw passed through the trace ends and the spring-band to secure these parts in place. The billet-loop b is then connected in a similar way to the end of the trace-billet. The buckle or support a is then adjusted as shown in Fig. 4.

The buckle a is provided with two slots a' b' for the trace and the back-band, respectively. A screw s passes through the two slots and takes in the lower portion of the buckle. The slides b and c are provided with similar means for attachment to the trace.

It will be readily seen by persons familiar with harness that my trace is simple and efficient, can be easily adjusted as to length, is neat in appearance, exceedingly strong, and very cheap to produce.

What I desire to secure by Letters Patent and claim is—

1. A harness-trace consisting of the two layers or straps connected for a portion of their length, and disconnected at their front ends, said ends being perforated and passed reversely through a draft-hook, a metal bar secured between the layers by an adjustable slide and stud or screw, the front end of the bar being bent upon itself and connected at the bend to the draft-hook, and adjustable slides for holding the disconnected ends of the trace in adjusted position, substantially as described.

2. A harness-trace consisting of the two layers disconnected at their front ends, an intermediate bar connected to a draft-hook, said hook, the ends of the trace passing through the loop in said hook, the sliding loops for holding the parts in adjusted position, and a separate loop and stud for supporting the trace from the back-strap, substantially as described.

CHRISTOPHER HENRY KOOPER.

Witnesses:

J. M. BOUCHER,  
AUGUST BOLLS.