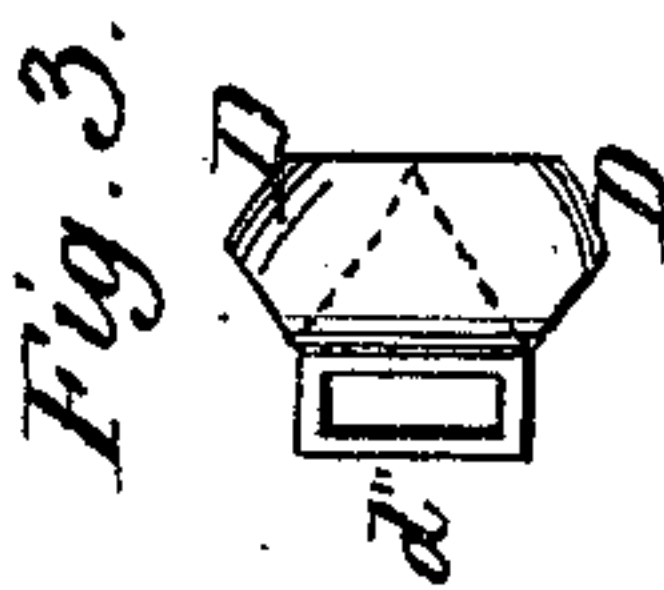
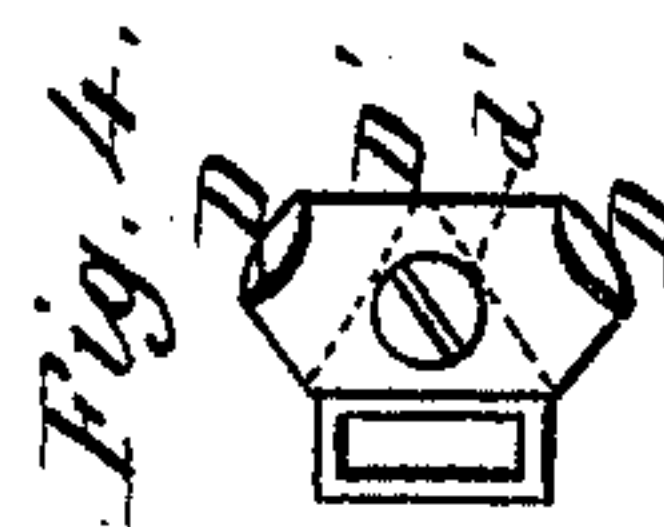
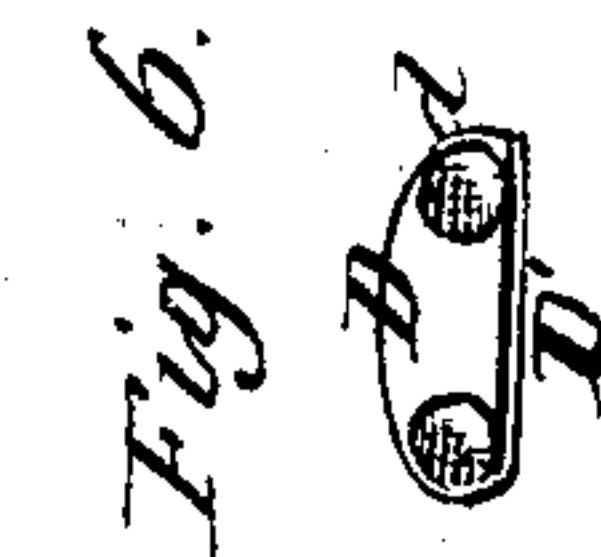
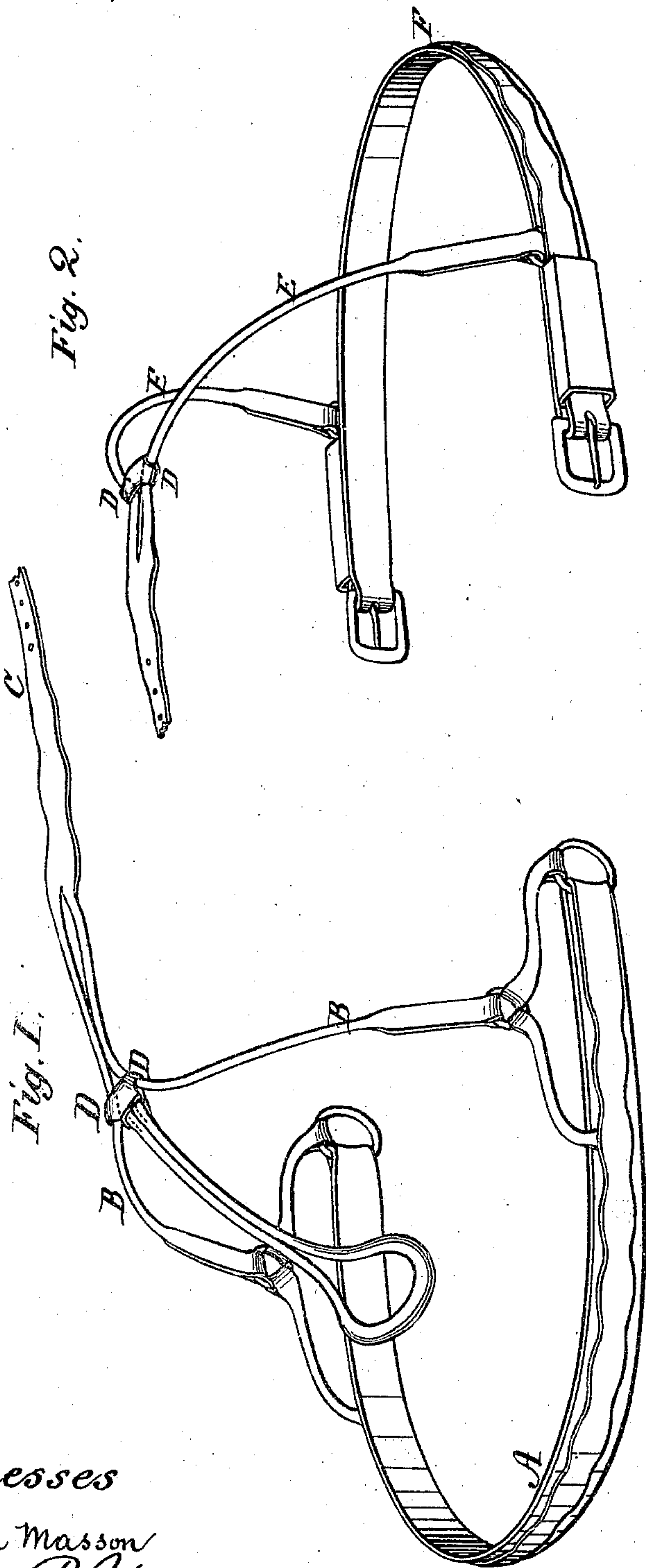


H. B. RICHMOND.

Improvement in Harness.

No. 130,747.

Patented Aug. 20, 1872.



Witnesses
Edmund Masson
John R. Young

Inventor,
H. B. Richmond, by
Prindle and Co., his
attys.

UNITED STATES PATENT OFFICE.

HENRY B. RICHMOND, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN HARNESS.

Specification forming part of Letters Patent No. 130,747, dated August 20, 1872.

To all whom it may concern:

Be it known that I, HENRY B. RICHMOND, of New Britain, in the county of Hartford and in the State of Connecticut, have invented certain new and useful Improvements in Harness; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a perspective view of the rear portion of a harness containing my improved fastening. Fig. 2 is a like view of the front portion of said harness having attached thereto said device. Figs. 3 and 4 are plan views of the upper and lower sides, respectively, of said fastening; and Figs. 5 and 6 are elevations of opposite ends of the same.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to furnish a simple, cheap, and efficient means whereby the vertical adjustment of the breeching and of the breast-strap may each be effected by the manipulation of a single buckle; and it consists in the peculiar construction and combination of the parts of the device, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A represents the breeching, constructed in the usual form and supported by means of two hip-straps, B, which extend upward to the back of the horse, and from thence forward, and, uniting, form the back-strap C. At a point about in a line fore and aft with their points of connection with the breeching, the hip-straps, which are preferably round, are connected together by means of a slide, D, that is provided with two round openings, *d*, which receive and contain said strap and extend rearward and outward in lines corresponding to the curve of the same.

As thus combined, it will be seen that by moving the slide forward or back upon the straps their available length from said slide to the breeching will be increased or diminished so as to correspondingly lower or raise the latter, while by lengthening or shortening the back-strap the fore-and aft position of the parts will be secured.

In order that the slide may be secured in place when the proper adjustment of parts is

made, it is divided horizontally into two sections, the lower of which, D', is provided with a central opening that receives a screw, *d'*, which screw passes upward into a threaded opening formed within the lower side of the upper section, and enables said parts to be compressed vertically so as to firmly clamp between them the straps. The elasticity of the material from which the straps are made causes a sufficient outward pressure to insure the position of the screw and prevent the same from becoming loosened by use.

In order to accommodate the crupper E a loop, *d''*, is formed upon the rear side of the slide D, through which loop the forward end of the crupper-strap is passed. The adjustment of the slide to or upon the neck-straps F, which support the breast-strap G, is substantially the same as has been hereinbefore shown, and therefore needs no further description.

The advantages possessed by this device are—first, it enables the buckles usually employed at the lower ends of the hip and neck straps to be dispensed with, and thereby not only lessens the cost of the harness, but also abates the annoyance of the projecting ends of said straps, which catch the reins whenever the latter slip down over the same; second, the adjustment of the vertical position of the breeching-and-breast strap is not only effected with greater ease and in less time than usual, but the relative vertical positions of opposite sides of said strap are caused to correspond, instead, as heretofore, of depending upon the skill of the harness-maker in correctly spacing the tongue-holes in the supporting-straps or of the operator in shortening or lengthening said straps.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The hereinbefore-described slide and fastening, constructed with sections D and D' connected together by means of the screw *d'*, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of August, 1872.

HENRY B. RICHMOND.

Witnesses:

GEO. S. PRINDLE,
EDM. F. BROWN.