

A. L. Hill,

Harness,

N^o 79,977.

Patented July 14, 1868.
Fig. 1.

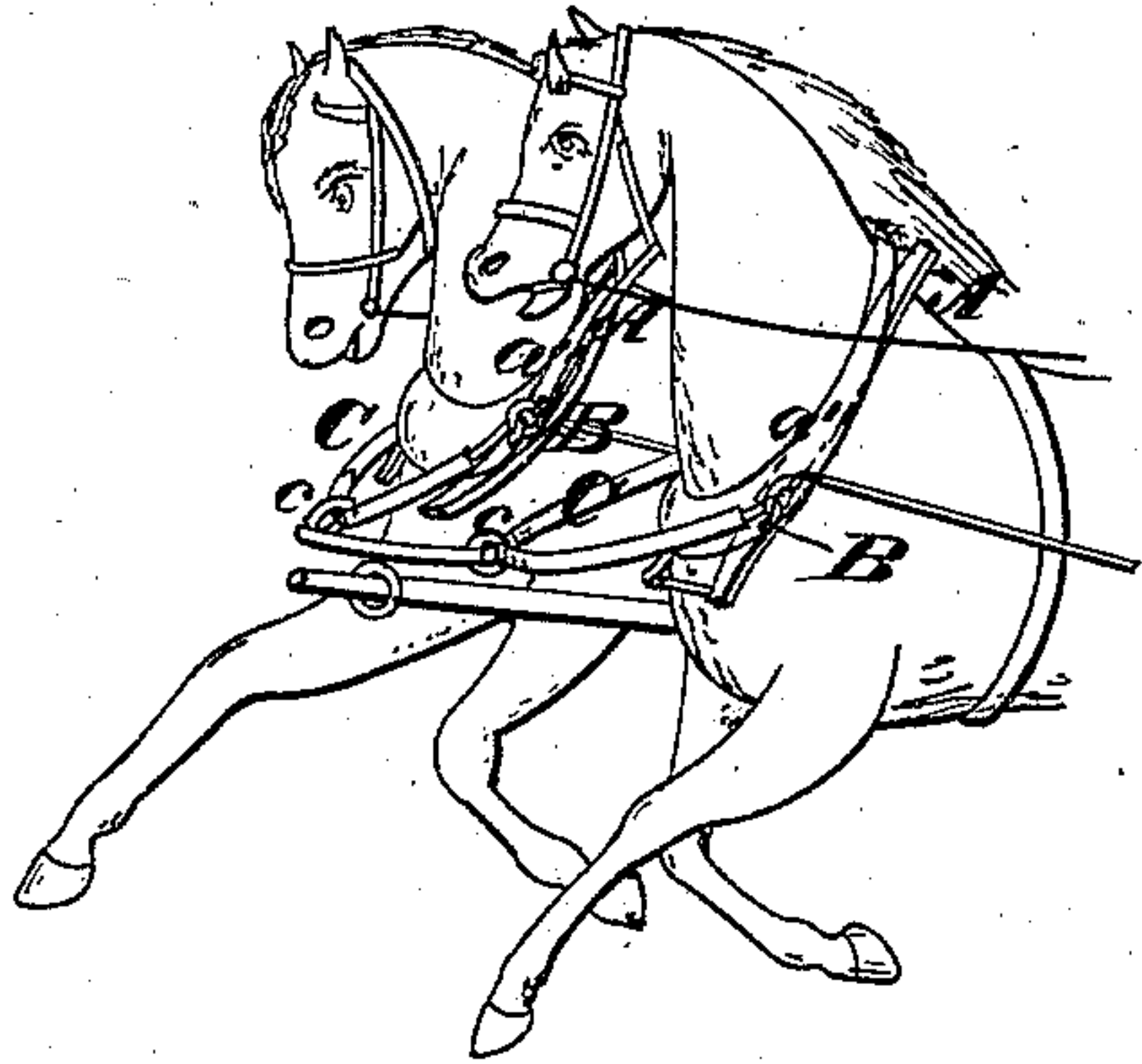


Fig. 2.

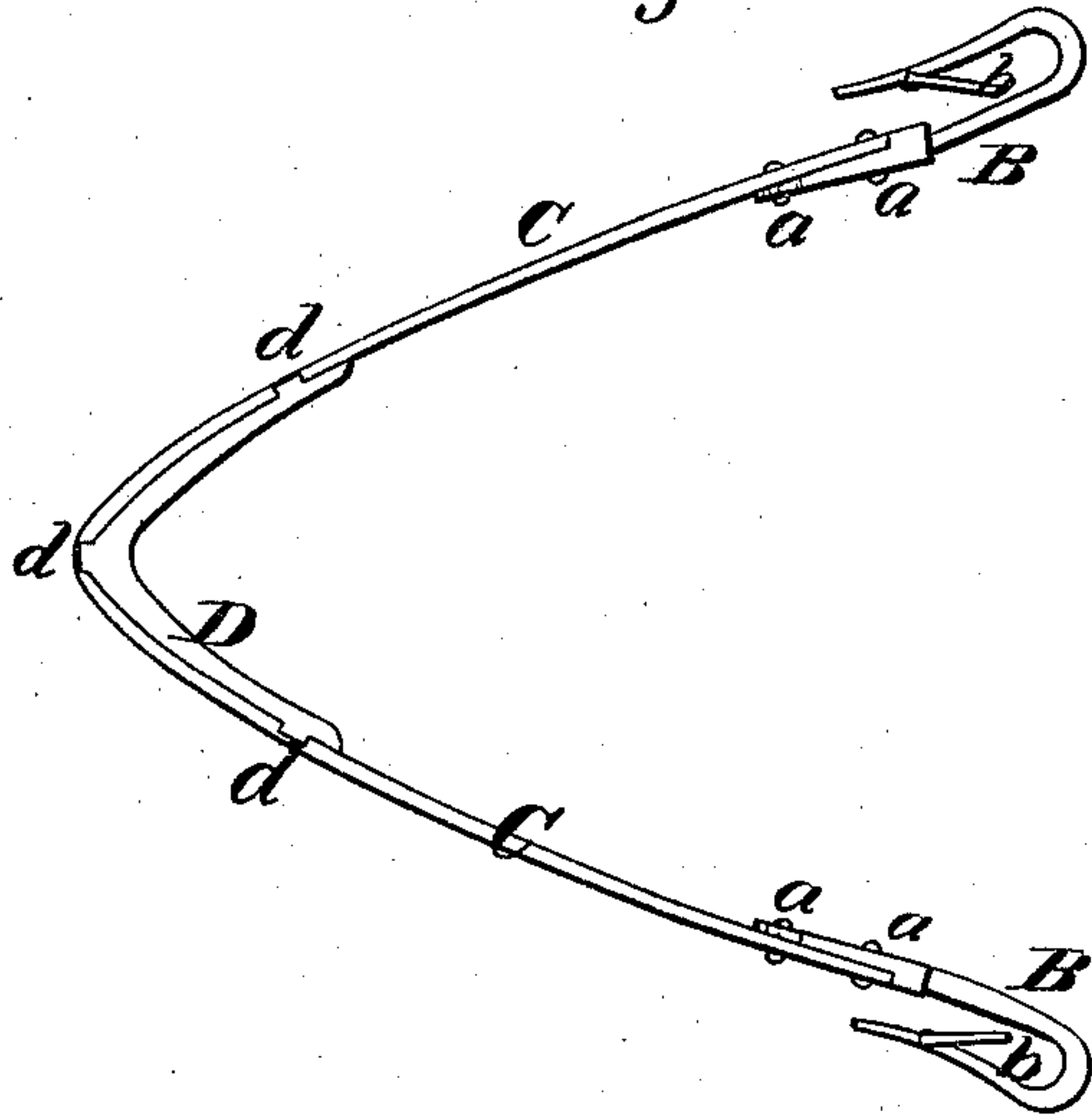
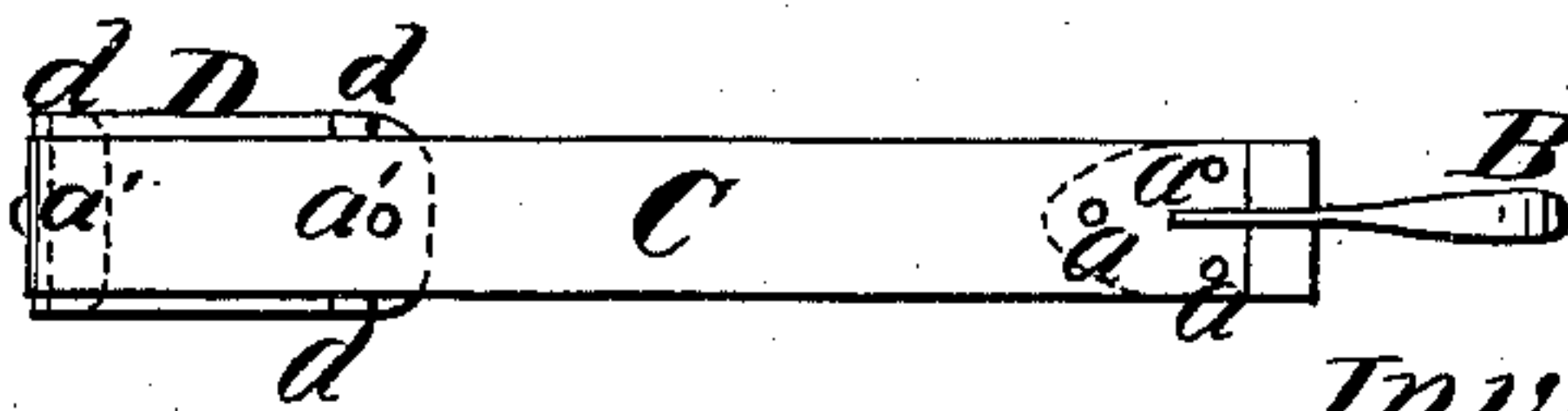


Fig. 3.



Witnesses:

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A. L. HILL, OF DECATUR, ILLINOIS.

Letters Patent No. 79,977, dated July 14, 1868.

IMPROVED BREAST-STRAP.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, A. L. HILL, of Decatur, in the county of Macon, and State of Illinois, have invented a new and useful Improvement in Breast-Straps; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in breast-straps, whereby several advantages are obtained over those in present use, to wit:

First, much greater strength and durability; second, the avoidance of wear by the friction of the rings of the neck-yoke on the straps; and third, a more ready means of detaching them from the harness and neck-yoke.

In the accompanying sheet of drawings—

Figure 1 represents a perspective view of my invention applied to a team in harness.

Figure 2, a detached plan or top view of a breast-strap.

Figure 3, a side view of the same.

Similar letters of reference indicate corresponding parts.

B B represent two hooks, of any suitable metal, each of which is provided with a link, *b*, to prevent the casual detachment of said hooks from the rings of the harness in which they are fitted. These links are fitted in the outer parts of the hooks, so that their inner ends will bear against the inner parts of the hooks.

C C represent two leather straps, one end of which is firmly attached to the shanks of the hooks B B by rivets *a*, (see figs. 2 and 3.) The opposite ends of these straps C C are attached by rivets *a'* to the exterior surface of a metal V-shaped bar, D, which surface is provided with ribs, *d*, to sink into the leather, C C, when the former is riveted to the latter; said ribs relieving the rivets *a'* of strain, and forming a firmer attachment of the bar D to the leather straps.

These leather straps may be composed of one piece of leather, bent at its centre around the bar D. The hooks B B, it will be seen, curve outward from the strap, and then extend towards the bar D, as shown clearly in fig. 2.

A breast-strap is attached to the hames of each collar, the hooks B being fitted in the rings of the harness, as shown at *a''*, fig. 1, and the rings *c* of the neck-yoke fitted on the bars D of the breast-straps.

The metal bar D effectually prevents the rings *c* of the neck-yoke from wearing or injuring the straps C C.

By this arrangement it will be seen that a very strong and durable breast-strap is obtained, as each horse has two straps attached, one to each hames of his collar, whereas with the ordinary breast-straps each horse is provided with one only, and as no connections are made directly with the leather straps, the latter are not subjected to the wear, as is now the case, by being passed through rings either on the hames or neck-yoke.

The breast-straps also may be very readily attached to the neck-yoke and hames, and as readily detached therefrom.

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

1. The breast-strap, constructed as described, and consisting of the strap C, to which the plate D, having ribs *d*, is rigidly secured, when said strap is provided at each end with a hook, B *b*, all arranged and operating as and for the purpose described.

2. I further claim the ribs *d* on the exterior surface of the bar D, when used in combination with and applied to the strap or straps C, for the purpose substantially as set forth.

The above specification of my invention signed by me, this 6th day of December, 1867.

A. L. HILL.

Witnesses:

D. S. HUGHES,

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