

W. W. RICHARDSON.

Whip-Sockets.

No. 152,688.

Patented June 30, 1874.

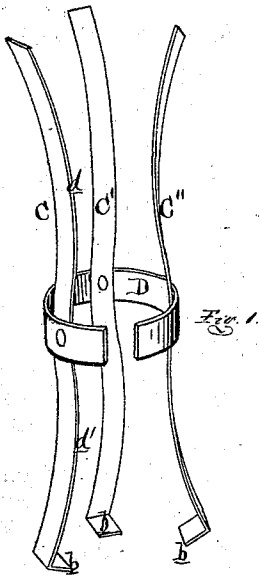


Fig. 1.

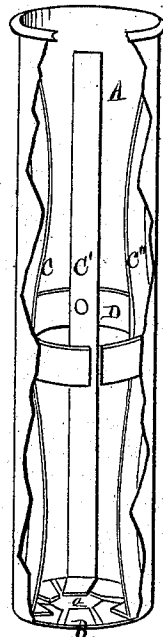


Fig. 2.

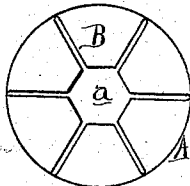


Fig. 3.

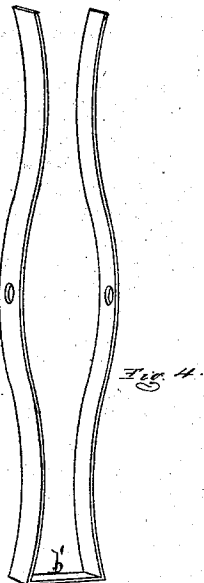


Fig. 4.

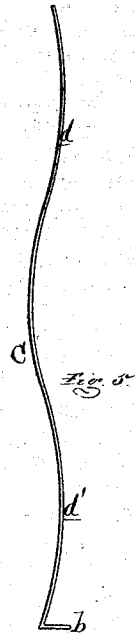


Fig. 5.

ATTEST.  
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# UNITED STATES PATENT OFFICE.

WILLIAM W. RICHARDSON, OF YPSILANTI, MICHIGAN.

## IMPROVEMENT IN WHIP-SOCKETS.

Specification forming part of Letters Patent No. **152,688**, dated June 30, 1874; application filed February 8, 1873.

*To all whom it may concern:*

Be it known that I, WILLIAM W. RICHARDSON, of Ypsilanti, in the county of Washtenaw and State of Michigan, have invented a new and useful Improvement in Whip-Sockets; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1 is a perspective view of the interior springs for the interior of the socket. Fig. 2 is a perspective view of the socket, with a portion broken out to show the arrangement of the springs within the same. Fig. 3 is an end view of the lower or bottom end of the socket. Fig. 4 is a modification of the springs. Fig. 5 is an elevation of one of the springs taken on one edge.

Like letters refer to like parts in each figure.

The nature of this invention relates to the construction of a whip socket or holder, to be attached to vehicles, so arranged, by means of suitable springs, that the whip will be firmly held in place when inserted in the barrel of the implement, in such a manner that the whip will stand in the center of the socket, and that under no circumstances will there be any abrasion or damage to the whip. The invention consists in the peculiar construction and arrangement of the various parts, as more fully hereinafter described.

In the accompanying drawings, A represents the whip socket or barrel, which is a plain cylinder made of sheet metal, the bottom B of which is made by notching that end of the material and turning an inwardly-projecting flange, and leaving an opening, *a*, through which water will pass, the bottom end being constructed as more clearly shown in Fig. 3 of the drawings. C, C', and C'' are a series of springs, made of thin spring metal, in the form shown in Fig. 5, substantially secured near the center of their lengths, by rivets, or otherwise, to the expander-spring D, which, by its elasticity, will always rest against

the inner wall of the socket or barrel of any size. The lower ends of these springs, C, C', and C'', are turned inwardly, and, as shown at *b* in Figs. 1 and 5, to form a support for the lower end of the whip.

A modification of this spring is shown in Fig. 4, where the spring is made of one piece of metal, the flange *b*, as described, extending across the socket, and then turning upwardly to form the other part of the spring. When made in this form the strip of spring metal should be wider, and be concave upon its inner face, to conform somewhat to the shape of the whip-handle, and hold it firmly upright in the center of the socket; or, two of these springs may be made, thereby having four upright parts, the connecting parts *b'* crossing at right angles.

These springs C, C', and C'', being nearly in the form of a double C-spring, secured to the expander-spring, as described, are inserted for their whole length in the socket, and are held in place by said expander-spring, and grasp or hold the whip in two places, *d* and *d'*, thereby keeping the whip steady in the center of the socket, and away from danger of abrasion by coming in contact with the upper end or ring of the socket.

When the bottom end of the socket is made with an inwardly-projecting flange, as above described, it is not necessary, where each of the springs C, C', and C'' are made of separate pieces of metal, as shown in Fig. 1, that their lower ends should be turned inwardly, as at *b*, as the end of the whip may rest on the bottom of the socket.

What I claim as my invention, and desire to secure by Letters Patent, is—

The sheet-metal whip-socket A, having bottom B, in combination with the springs C, C', and C'' and central expanding-spring D, as and for the purpose set forth.

WILLIAM W. RICHARDSON.

Witnesses:

H. F. EBERTS,  
H. S. SPRAGUE.