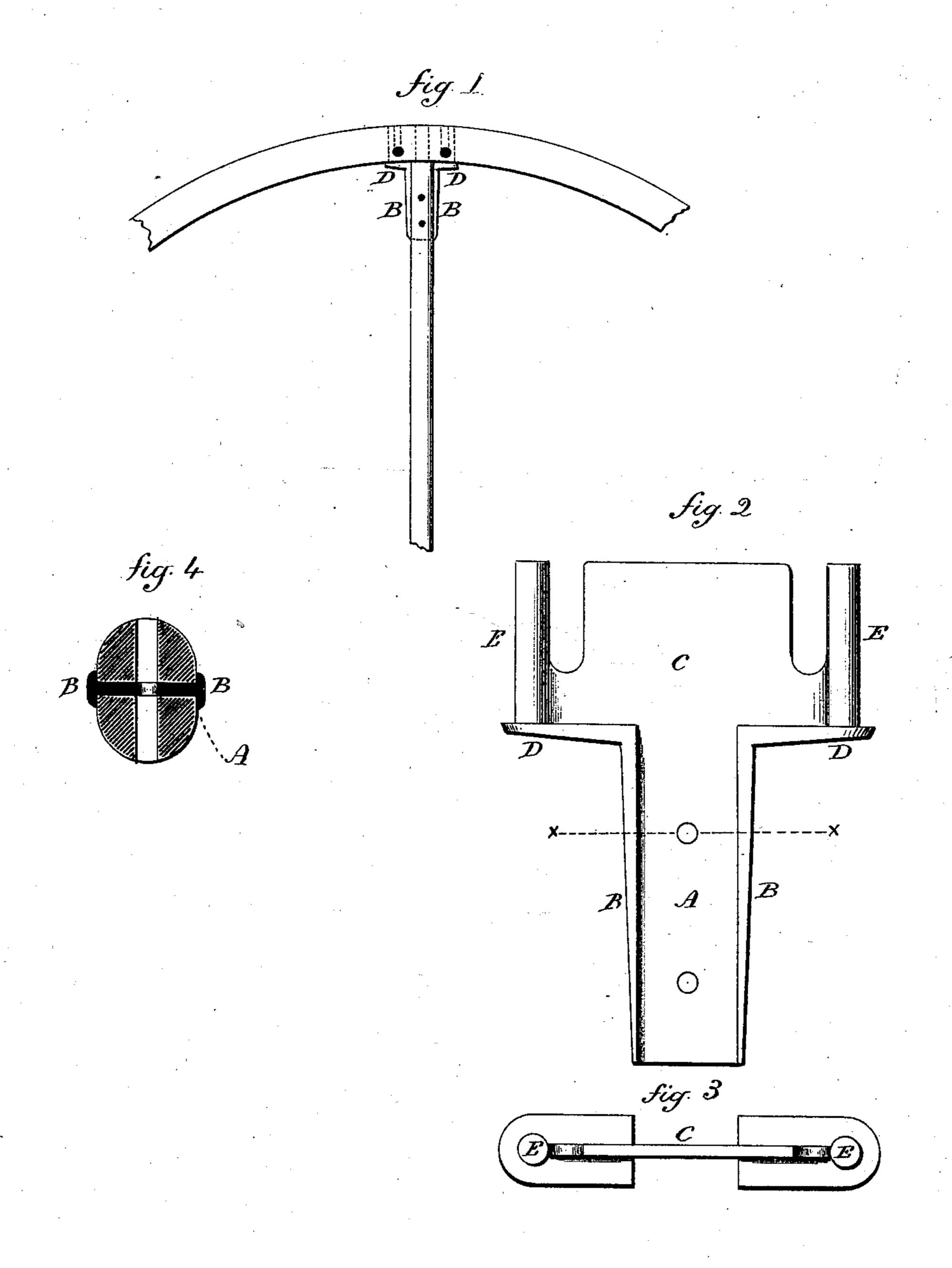
## H. H. OLDS.

## SPOKE-SOCKET

No. 176,883.

Patented May 2, 1876.



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## UNITED STATES PATENT OFFICE.

HENRY H. OLDS, OF NEW HAVEN, CONNECTICUT.

## IMPROVEMENT IN SPOKE-SOCKETS.

Specification forming part of Letters Patent No. 176,883, dated May 2, 1876; application filed March 27, 1876.

To all whom it may concern:

Be it known that I, HENRY H. OLDS, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Carriage-Wheels; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description, and which said drawings constitute part of this specification, and represent, in-

Figure 1, a side view, showing the invention as applied to a carriage-wheel; Fig. 2, a side view of the improved attachment; Fig. 3, a top view of the same; Fig. 4, a transverse section on line x x as applied to the spoke.

This invention relates to a device for strengthening or supporting a carriage-wheel at the point where the spoke is attached to the felly, the object being to prevent the loosening of the tenon, or rather to take the strain from the tenon; and it consists in a plate set into the spoke through and below the tenon, extending into a slot through the mortise in the felly.

A is a plate or web, in width equal to the thickness of the spoke at the tenon end, and at each edge a flange, B, is formed, which will lie close upon the sides of the spoke when the plate is inserted into the slit prepared for it, as seen in Fig. 4. This plate extends up through the tenon, and is made in a broader web, C, at the top, with a flange, D, extending from the flange B to the right and left on the lower edge of the web C. The web or

upper part C is inserted into a slit through the mortise in the felly prepared for it, as indicated in broken lines, Fig. 1, and as an increased strengthening at each edge of the web C an enlargement, E, is made of cylindrical form, which prevents any tendency to circumferential movement. A tenon is formed on the spoke, and mortise in the felly, in the usual manner, and a slit made in the spoke and felly in the plane of the wheel to receive the web portion A C.

The plate or web may be constructed without the flange or ribs, and sustain the spoke fully against transverse strain; but the flanges are preferable, because they give a circumferential support in addition to the transverse support of the plate.

Rivets may be passed through both the spoke and felly to prevent spreading.

I claim—

1. In combination with the mortised felly and tenoned spokes of a carriage wheel, the web or plate A C, arranged in a slot in the end of the spoke through the tenon, and extending into a corresponding slot through the mortise in the felly, substantially as described.

2. The herein-described device for securing spokes to the felly, consisting of the web A C, with the flanges BD, constructed and applied to the spoke and felly, substantially as specified.

HENRY H. OLDS.

Witnesses: JOHN E. EARLE,