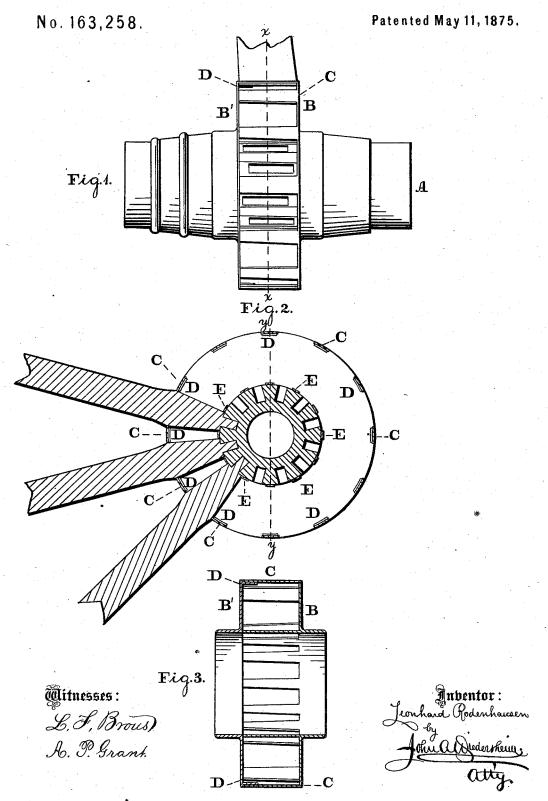
L. RODENHAUSEN.

Hub for Vehicle-Wheels.



## UNITED STATES PATENT OFFICE

LEONHARD RODENHAUSEN, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN HUBS FOR VEHICLE-WHEELS.

Specification forming part of Letters Patent No. 163,258, dated May 11, 1875; application filed February 13, 1875.

To all whom it may concern:

Be it known that I, LEONHARD RODEN-HAUSEN, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Wheels; and I do hereby declare the following to be a clear and exact description of the nature thereof sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which-

Figure 1 is a side elevation of the device embodying my invention. Fig. 2 is a longitudinal section thereof in line x x, Fig. 1. Fig. 3 is a transverse section in line y y, Fig. 2.

Similar letters of reference indicate corre-

sponding parts in the several figures.

My invention consists in forming the metallic socket that encircles the hub of side bands separate from each other, between which, at their peripheries, extend metallic plates for separating and supporting the spokes, so that at the outer circumference of the socket the spokes and metallic plates alternate, and access is had to the spokes for removal of one or all thereof. It also consists in ledges on one band for supporting the plates of the other band. It further consists in providing the socket with plates, so that at the inner circumference of the socket the spokes and metallic plates alternate.

Referring to the drawings, A represents the hub, which may be of well-known form and construction. B B' represent two metallic bands, which are fitted over the hub from opposite sides, and separated the distance of the thickness of the spokes by means of plates C, which are separate from each other, cast with the band B, and project horizontally therefrom from the inner face and at the periphery thereof. With the inner face of the band B' there are cast ledges D, which project horizontally, and are arranged near the periphery of the band, so that when the two bands are in position the outer ends of the plates C rest on the ledges D. With the inner face of one band there are cast plates E, which project horizontally, and are arranged at or about the central opening of the band through which the hub passes.

It will be seen that when the spokes are in position the tenon of each spoke extends into the hub and also between adjacent plates C C, and the swell of the spoke rests against said adjacent plates, so that the spokes will be separated from each other, and yet are solidly supported outside of the hub by the intervening metallic plates, the spokes and plates alternating. The portions of the tenons just outside of the hub will also be supported by the inner plates E, and thus the spokes are most securely braced in the metallic socket produced of the parts stated. The inward strain on the plates C will be received by the ledges D, whereby said plates are protected from fracture and enabled to withstand the force against them. The bands properly screwed, bolted, or otherwise secured to the spokes outside of the hub, will also afford lateral bracing for the spokes. It will also be seen that when a spoke is to be removed one of the bands should first be removed, and this affords convenient access to the spokes, without, however, disturbing their position or arrangement.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is-

1. The combination, with a wheel-hub, of two bands, B B', one having at its outer periphery horizontally extending plates C, substantially as and for the purpose set forth.

2. The combination, with a wheel-hub, of two bands, B B', having at their outer peripheries horizontally-extending plates C and horizontally-extending ledges D, substantially as and for the purpose set forth.

3. The combination, with a wheel-hub, of two bands, B B', one band having at its inner periphery horizontally extending plates E, substantially as and for the purpose set forth.

4. The combination, with a wheel-hub, of two bands, B B', the bands being provided at outer peripheries with horizontally-extending plates C and ledges D, and at inner peripheries with horizontally-extending plates E, substantially as and for the purpose set forth. L. RODENHAUSEN.

Witnesses:

JOHN A. WIEDERSHEIM, ALBERT H. HOECKLEY.