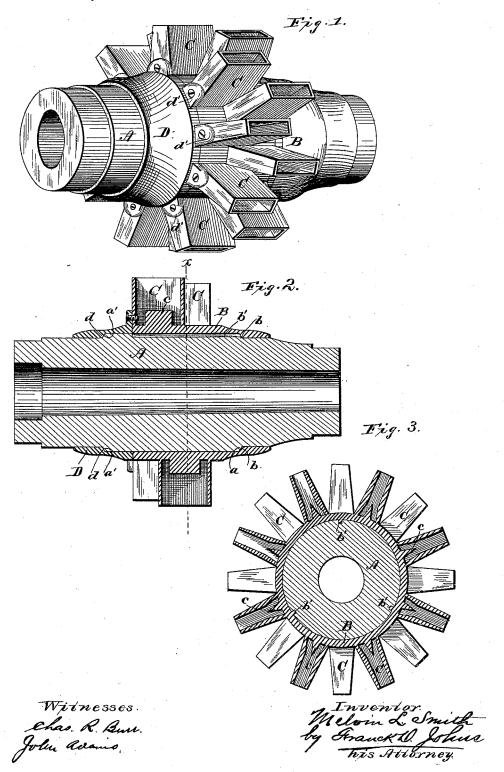
## M. L. SMITH.

WHEEL HUB.

No. 343,501.

Patented June 8, 1886.



## UNITED STATES PATENT OFFICE.

MELVIN L. SMITH, OF BATAVIA, NEW YORK.

## WHEEL-HUB.

SPECIFICATION forming part of Letters Patent No. 343,501, dated June 8, 1886.

Application filed December 3, 1885. Serial No. 184,619. (No model.)

To all whom it may concern:

Be it known that I, Melvin L. Smith, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented certain new and useful Improvements in Wheel-Hubs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in wheel-hubs; and it consists in certain novel construction and arrangement of the various parts, all of which I will now proceed to point out and describe, reference being had to the

accompanying drawings, in which—
Figure 1 is a perspective of a hub embodying my invention; Fig. 2, a longitudinal section taken through the center of the hub; Fig. 2, a vertical cross-section taken on line x x of Fig. 2.

Referring to said drawings, A is a central wooden hub having annular shoulders a a', said shoulders being equidistant from the longitudinal center of the hub.

B is a metal collar having the inner annular flange, b. Said collar is forced on the wooden hub until the shoulder b engages with the shoulder a. b' are ribs which enter the wooden on the same.

C are spoke sockets projecting from the periphery of the collar B. Said spoke sockets are made larger at the bottom and taper outswardly. c are outwardly-projecting wedges in the bottom of the sockets, which wedges split the inner ends of the spokes when they are forced into the sockets, and render them less liable to pull out when there is any lateral to strain. The sockets are also arranged on the collar so that the spokes will be staggered.

D is a collar provided with an inner annular shoulder, d. Said collar D is forced on the wooden hub until the shoulder d engages 45 with the shoulder d' and the inner edge of

the collar rests against the inner edge of the collar B.

d' are outwardly-projecting lugs on the collar D. Said lugs rest against the sides of alternate spoke sockets on the collar B, and are 50 secured to said sockets by suitable screws or rivets, thus securely fastening the collars together, and holding them rigidly on the wooden hub. The inner annular flanges on the collars engaging with the annular flanges on 55 the wooden hub prevent said collars from moving in either direction.

In the construction above described I produce a wheel-hub which is much stronger and more durable than an ordinary wooden hub, 60 and which is lighter and can be manufactured much cheaper than a hub made entirely of metal.

Having thus fully described my invention, I claim as new and desire to secure by Letters 65 Patent—

1. The herein-described wheel-hub, consisting of a central wooden hub, in combination with two metal collars forced on said wooden hub from its opposite ends and connected by 70 suitable screws or rivets, one of said collars having completed spoke-sockets on its periphery formed integral with said collar, substantially as shown and described.

2. The combination of the central wooden 75 hub, A, having annular flanges a a', with the metal collar B, having the inner annular shoulder, b, and completed spoke-sockets C on its periphery and integral with said collar B, and the collar D, having the inner annular 80 shoulder, d, said collars being forced on the wooden hub from its opposite ends and connected with each other by suitable rivets or screws, substantially as shown and described.

In testimony whereof I affix my signature in 85 presence of two witnesses.

MELVIN L. SMITH.

Witnesses:

EUGENE SWANSON, JEROME C. GUITEAU.