

(No Model.)

S. WHITEHALL & W. NEWLIN.

VEHICLE WHEEL.

No. 258,834.

Patented May 30, 1882.

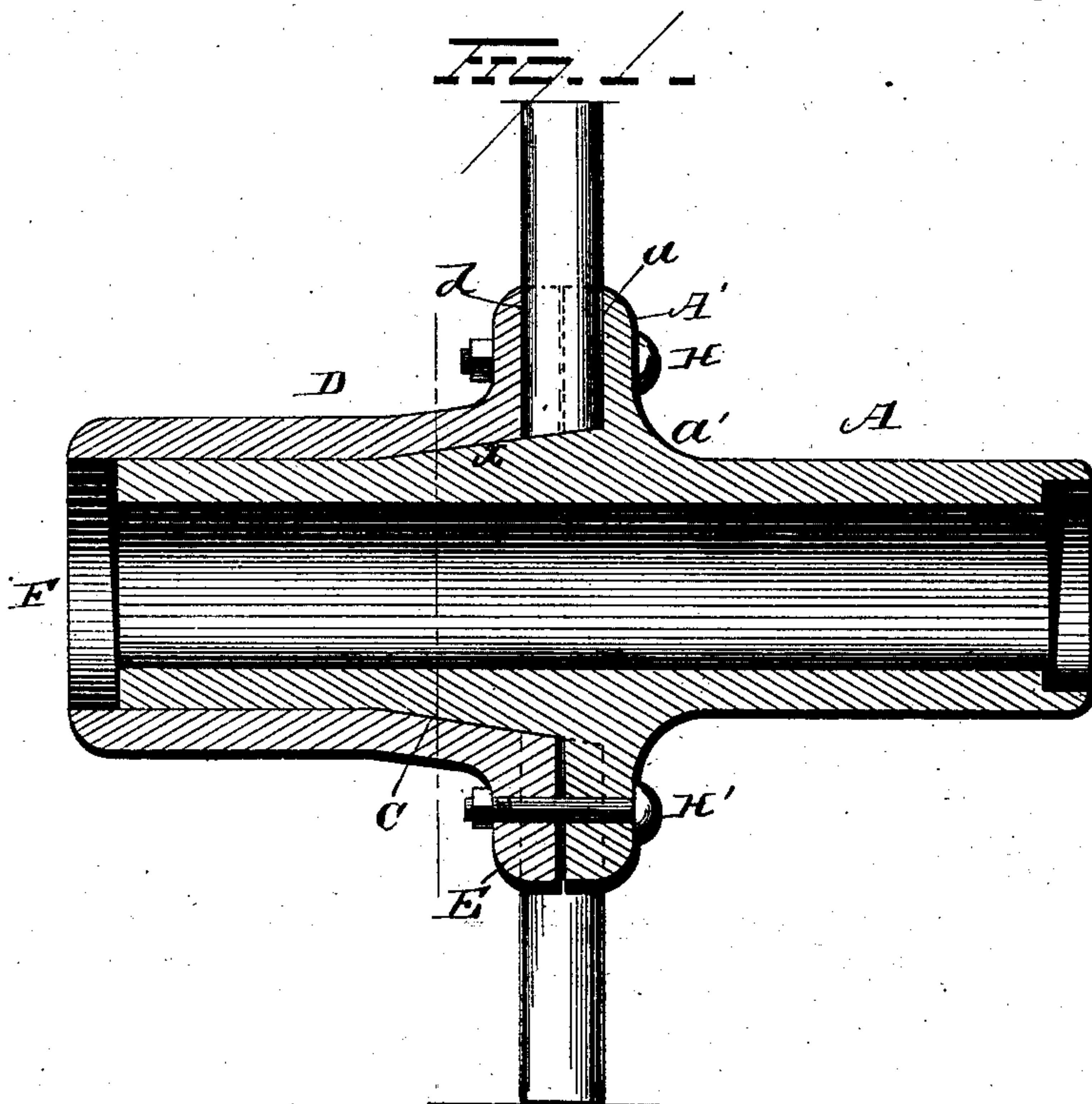
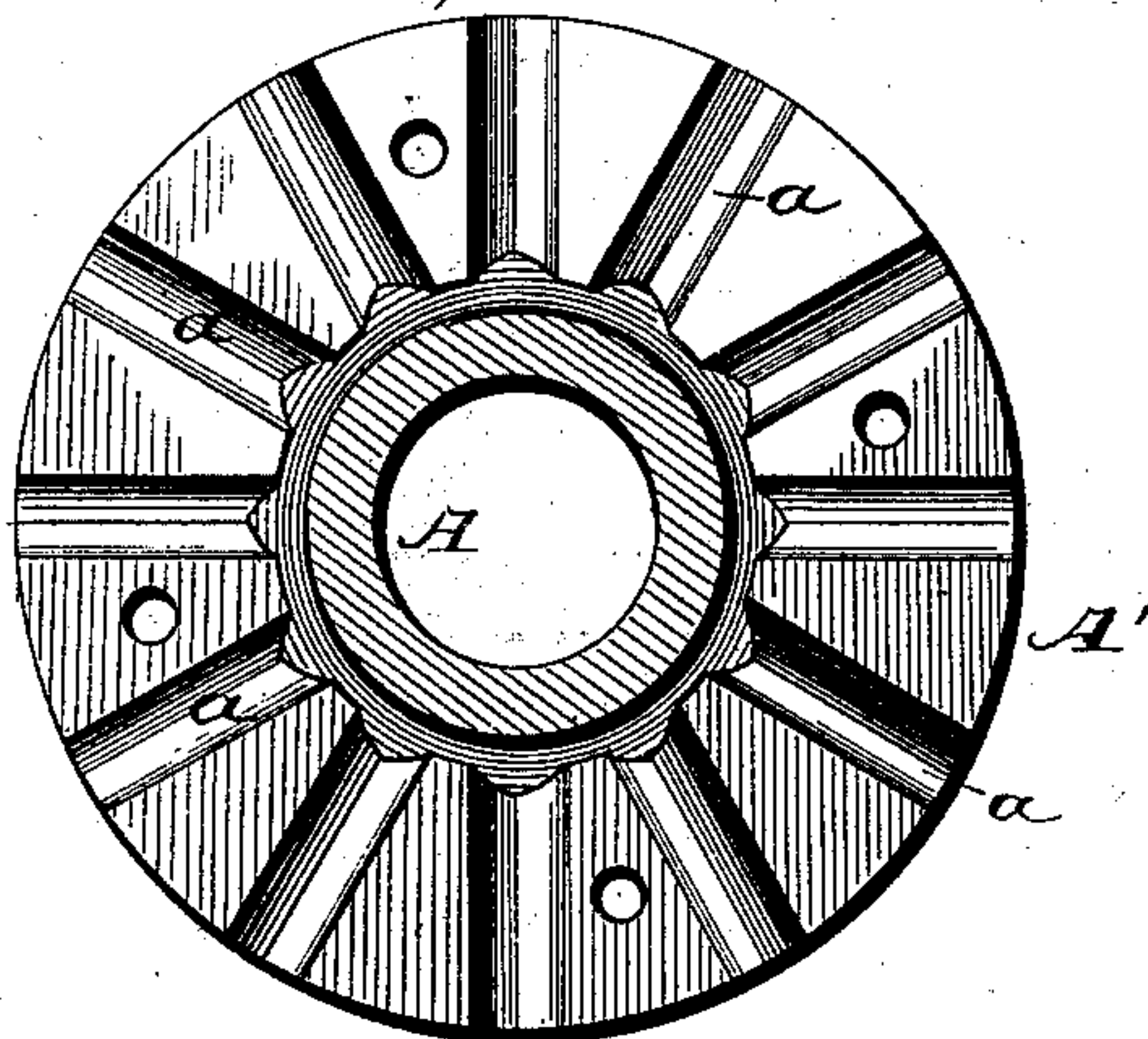


FIG. 2 -



WITNESSES
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SAMUEL WHITEHALL AND WILLIAM NEWLIN, OF ATTICA, INDIANA.

VEHICLE-WHEEL.

SPECIFICATION forming part of Letters Patent No. 258,834, dated May 30, 1882.

Application filed March 3, 1882. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL WHITEHALL and WILLIAM NEWLIN, of Attica, in the county of Fountain and State of Indiana, have
5 invented certain new and useful Improvements in Wheels; and we 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 pertains to make
10 and use the same.

Our invention relates to vehicle-wheels, the object being to provide a wheel with a hub of such construction that the tenons of the spokes may be held securely in position with-
15 out liability of their becoming loose or insecure.

The invention consists in the improved construction and combinations of parts hereinafter described, and pointed out in the claim.

20 In the drawings, Figure 1 is a central lengthwise section of the hub with two spoke-tenons secured in position. Fig. 2 is a section on the line $x x$ of Fig. 1, the spoke-tenons being removed.

25 A represents the axle-box, provided with the annular flange A', formed integral therewith, and provided with a series of slots or indentations, a , to receive the spoke-tenons B. The outer side of the flange A' is thickened or
30 re-enforced, as shown at a' , to give it strength and finish. Upon the inner side of said flange and adjacent thereto the axle-box A is provided with an annular tapering or inclined bearing, C.

35 D represents a clamping-sleeve adapted to fit upon the inner end of the axle-box A. The outer end of this sleeve is provided with an annular flange, E, provided with slots or indentations d , corresponding to those of the
40 flange A' of the axle-box. The flanged end of the sleeve is adapted to be forced upon the inclined bearing C of the axle-box to firmly clamp the spokes between the flanges A' and E. The inner end of the sleeve is so constructed
45 that when the spokes are in position and the wheel complete it will form a sand-band, F, to protect the hub. The spoke-tenons G are placed between the opposite indentations of the flanges A' and E, after which the sleeve
50 D is forced upon the inclined bearing C of the axle-box to push the inner ends of the spokes outward and give the desired strain upon the

tire. The spokes are thereby secured between the flanges A' and E by bolts H and nuts H'. The indentations or half-bearings
55 of the flanges materially assist in securely retaining the spokes in place. The inner ends of the spokes are beveled, as shown at x , to adapt them to fit upon the inclined bearing C.

The wheel as thus constructed will be
60 strong, durable, and not liable to become loose or insecure, and at the same time have a neat and finished appearance.

It will be apparent that the construction above described may be modified without de-
65 parting from the spirit of our invention. For instance, we might use two sleeves with annular flanges at their inner ends, having corresponding indentations for spoke-sockets, and adapted to be clamped together by bolts and
70 nuts, in connection with a separate box having an inclined bearing, the latter being held in position by a set-screw passing through one of the sleeves. We therefore do not limit our-
75 selves to the exact construction shown, but reserve to ourselves the right to make such alterations as may properly fall within the scope of our invention.

We are aware that it is not broadly new to provide a flanged axle-box with a sliding
80 sleeve and flange. Hence we make no claim to such a construction; but

What we claim is—

A wheel-hub made of two sections, consisting of the axle-box A, having the flange A',
85 and extended inclined bearing C, formed integral therewith, the inner face of the flange A' being provided with separate radial grooves, the sleeve D, provided with a flange, E, hav-
90 ing separate radial grooves formed in its inner face, said sleeve being provided with an extended conical or tapering bearing that fits upon the inclined bearing C of the axle-box, and fastening-bolts inserted through the flanges
65 and between the spoke-grooves, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

SAMUEL WHITEHALL.
WILLIAM NEWLIN.

Witnesses:

WILL B. REED,
LONZO ROLEY.