No. 743,734. PATENTED NOV. 10, 1903.

W. LAATSCH.

WHEEL FOR VEHICLES.

APPLICATION FILED APR. 9, 1903.

NO MODEL.

Fig. 1.

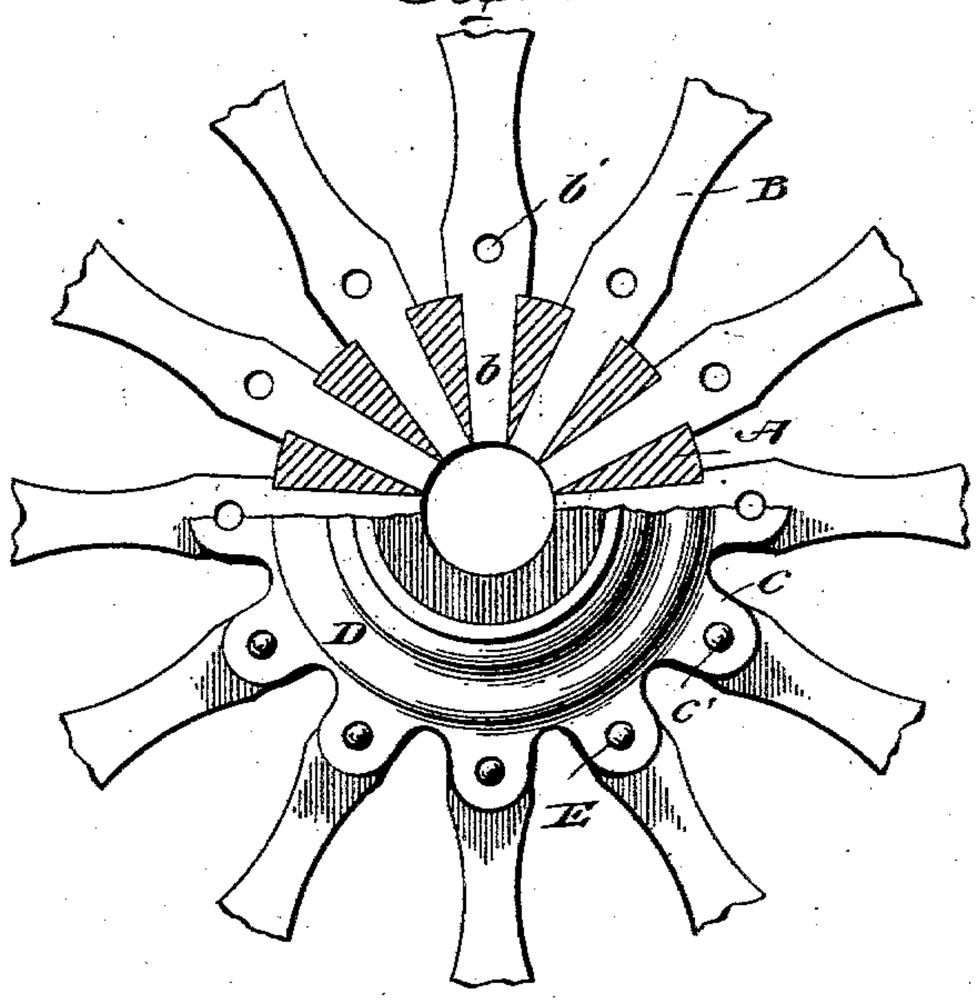

Fig. 2.

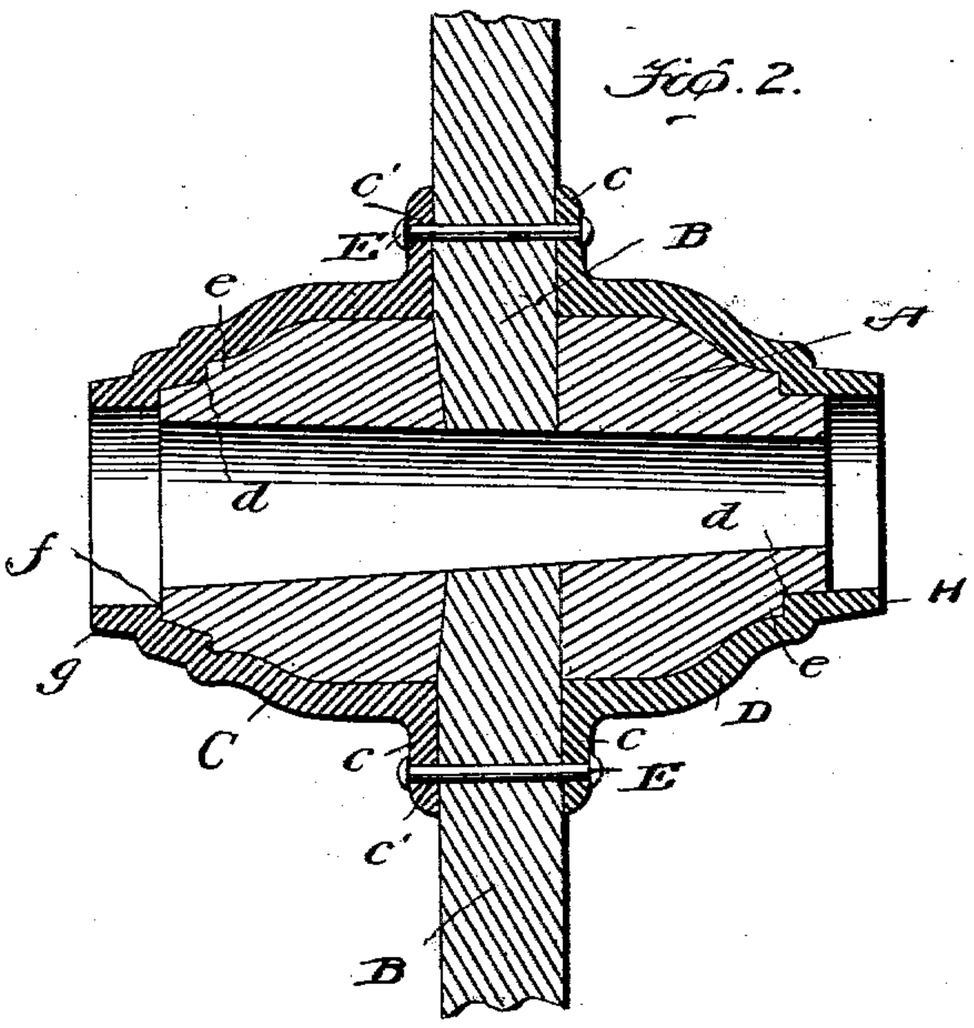

Fig. 3.

Witnesses

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No. 743,734. Patented November 10, 1903.

UNITED STATES PATENT OFFICE.

WILLIAM LAATSCH, OF EFFINGHAM, ILLINOIS.

WHEEL FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 743,734, dated November 10, 1903.

Application filed April 9, 1903. Serial No. 151,815. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LAATSCH, a citizen of the United States, and a resident of Effingham, in the county of Effingham and State of Illinois, have invented new and useful Improvements in Wheels for Vehicles, of which the following is a specification.

My invention relates to an improvement in vehicle-wheels.

The primary object is to provide a strong wheel which will effectually withstand the severe strain and usage to which wagon-wheels are subjected.

A further object is to provide a compact wheel of few parts capable of construction at a small initial expense and one in which the hub-caps terminate in a sand-band at the inside and a nut-band at the other.

With the foregoing objects in view my invention consists in a hub, the core of which is preferably of wood, spokes fastened therein, and a pair of metal caps which inclose the core of the hub from opposite ends, terminating at their inner ends in the scalloped flanges which embrace the spokes from opposite sides and are bolted or riveted thereto and terminating at their opposite ends in annular flanges which project sufficiently beyond the wooden core to constitute sand and nut bands at the inner and outer ends of the hub, respectively.

My invention further consists in certain novel features of construction and combinations of parts, which will be hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is an end view with portions in elevation and portions in section, the tire and outer ends of the spokes not showing. Fig. 2 is a longitudinal section through the hub, and Fig. 3 is a view of one of the spokes.

A represents the core of the hub, which latter is preferably turned from a block of wood, although it might of course be made of other material, into the desired form, and B B are the spokes, provided with the usual tenons *b b*, which are mortised into the core A.

C and D are metal caps which are spun or otherwise fashioned to conform to the external surface of the hub-core, which they are adapted to snugly embrace, entirely inclosing the core. Each cap is provided with a scalloped flange *c*, one of which is provided for each spoke, whereby to embrace the spokes from opposite sides. Each scallop *c* has a hole *c'* therein which corresponds to a hole *b'* in the spokes, through which a bolt or rivet E passes, whereby to secure the flanges rigidly to the several spokes at a point as far as possible or as far as the scallops will admit from the inner ends of the spokes, thereby affording lateral support for the spokes and preventing a tendency of the spokes to become loosened or of the wheel to collapse. The angle of these flanges or scallops may be varied to suit the dish to be given to the wheel, and of course it is obvious that the caps might be cast as well as spun or otherwise constructed. These caps C and D are substantially the same and not only taper, but also have the ridged interiors *d d*, adapted to embrace shoulders *e* on the core, so that the tendency is to compress the core inwardly toward the spokes, thus securely holding them in place, and, if desired, they may be shrunk on, whereby to effect a still more rigid connection and produce a solid wheel. The inner cap is flanged, preferably, to embrace the inner end of the hub, as at *f*, and the annular flange *g* extends inwardly some distance beyond the core, constituting a sand-band which embraces the axle and prevents sand and grit from working into the bearing. The outer cap terminates in a flange H, which forms a nut guard or band for the protection of the latter, it terminating about as far beyond the core as does the band *g*. In this manner a very compact and rigid wheel is constructed composed of few parts and capable of manufacture at a comparatively small initial cost.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the exact construction herein set forth; but,

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

A vehicle-wheel comprising a core, caps conforming to and inclosing the core from opposite ends, the caps provided with scalloped

flanges at their inner adjacent ends, spokes, the sockets of which are tapered in two directions at right angles to each other, the spokes inserted into the core between the scalloped flanges, the scallops each provided with an aperture therein, the scallops and apertures on the opposite caps registering with each other, the spokes each provided with a corresponding aperture adapted to receive bolts or rivets whereby the scallops of the flanges are secured to the spokes.

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

WILLIAM LAATSCH.

Witnesses:
G. F. TAYLOR,
GUY CAMPBELL.