J. J. ANDERSON.

Hubs for Heavy-Wheeled Vehicles.

No. 137,874. Patented April 15, 1873.

Fig. 1.

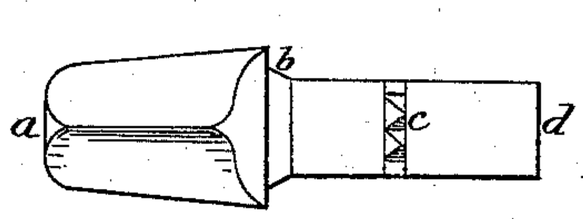


Fig. 2.

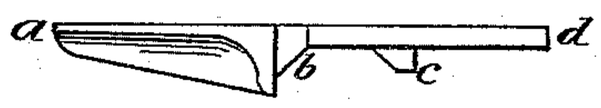
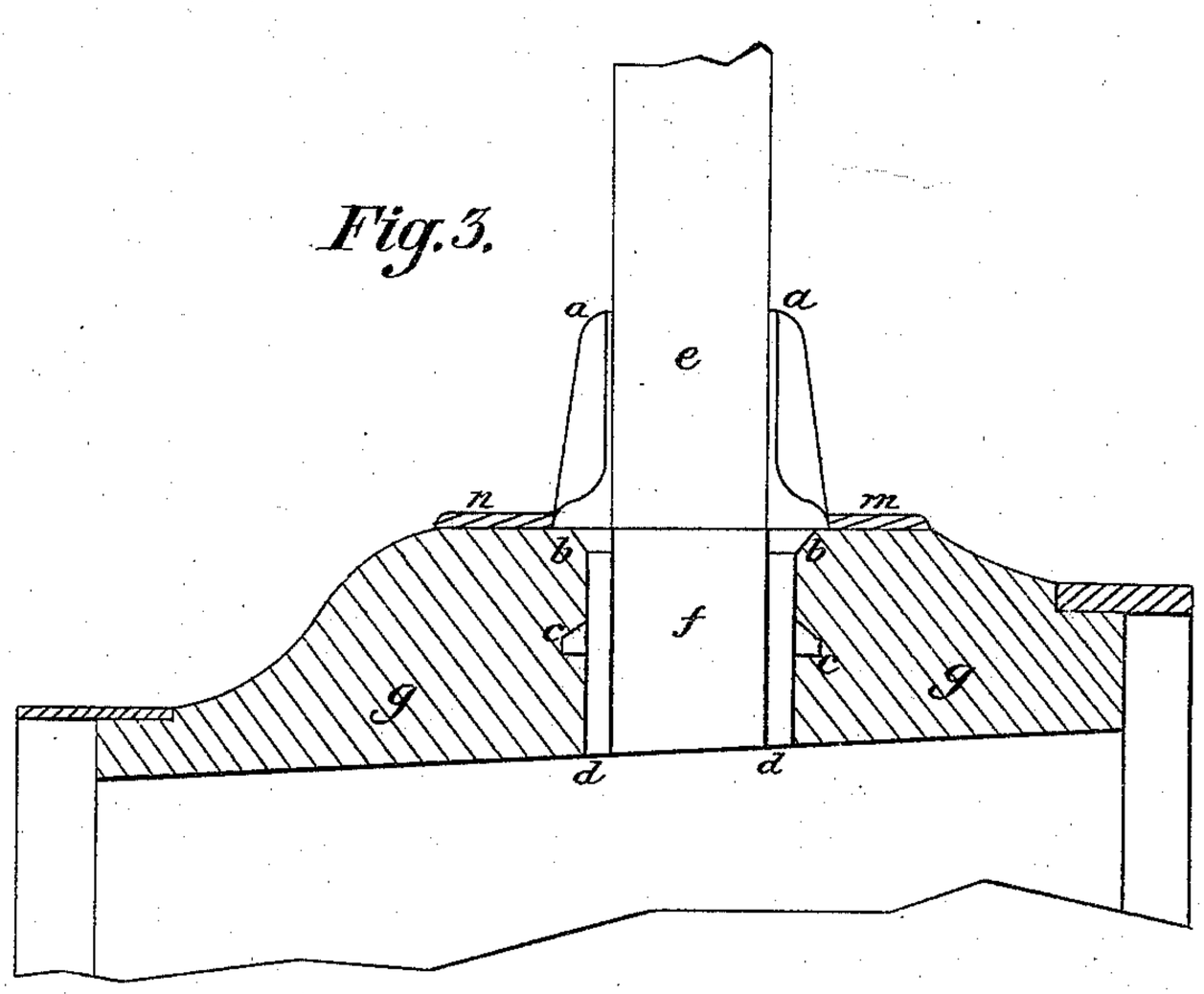


Fig. 3.



Attest:

Alfred Wagner.

H. C. Phillips.

Inventor:

James J. Anderson

By Johnson, Klauske & Co.

His Attorneys.

UNITED STATES PATENT OFFICE.

JAMES J. ANDERSON, OF INDIANAPOLIS, IND., ASSIGNOR OF TWO-THIRDS HIS RIGHT TO GARRETT H. SHOVER AND GEORGE W. MILLER.

IMPROVEMENT IN HUBS FOR HEAVY-WHEELED VEHICLES.

Specification forming part of Letters Patent No. **137,874**, dated April 15, 1873; application filed January 16, 1873.

To all whom it may concern:

Be it known that I, JAMES J. ANDERSON, of the city of Indianapolis, Marion county, State of Indiana, have invented a new and useful Improvement in Hubs for Heavy-Wheeled Vehicles, of which the following is a specification:

My invention relates to that class of wagons commonly known as heavy-wheeled vehicles, such as road-wagons, carts, drays, and the like. The nature and object of the invention will be fully understood from the following general description.

Figure 1 of the accompanying drawing is a side view of the device; Fig. 2, an edge view of the same. Fig. 3 is a sectional view of a hub and spoke with my device in the hub.

a d of Figs. 1 and 2 is a piece of malleable cast-iron, or any other suitable metal, of the shape represented. At *b* there is a shoulder, as represented, and at *c* is a serrated edge, such as is also represented, the whole device to be as represented in said drawing. The mortise in the hub *g* is to be cut a little larger than is necessary to accommodate the tenon *f* of the spoke *e*, so that it will also accommodate the tines *d* of the device *a d*, as shown in Fig. 3. The tines *d* of *a d* of said Fig. 3 are first put in the mortise, with the serrated edges *c* and *c* resting against the walls of the mortise. The spoke is then driven between them. As the spoke goes in it will force *a d* and *a d* further and further apart. This will cause the serrated edges *c* and *c* to bury themselves more and more in the hub, until, when the spoke is home, they will be entirely in, and the sides of tines *d* and *d* will rest upon the wooden walls of mortise. The hub-bands *n* and *m* are now put on, so that they will rest against the shoulders *b* and *b*, and so form a bearing to support them, as shown in said Fig. 3.

It will now be found not only that the spoke is securely held in position in the hub, but that it is supported at the hub, where it most needs support. It will also be found that this device greatly facilitates the driving of the spoke.

It will be observed that the clamping-bands *m n* for the spoke-supports *a d* serve a very important purpose in bracing and holding the double arms *d* firmly against the sides of the spokes, and thereby avoid the necessity of securing said arms by screws screwing into the spokes, and which would be constantly liable to work out, and thus leave the arms and spokes loose to a greater or less degree. These clamping-bands *m n* are braced against the base *b b* of the arms, so that the latter cannot give way, but are held closely and firmly against the spokes outside of the hub.

I claim—

The combination, with the arms *a d* arranged on both sides of the spokes *e f*, of the clamping-bands *m n*, arranged to clamp the arms at the bases thereof, as shown and described.

In testimony that I claim the foregoing specification I have hereunto set my hand this 10th day of January, 1873.

J. J. ANDERSON.

Attest:

CH. ZONVADER,

GEORGE W. MILLER.