(No Model.)

F. P. CIRCLE.

VEHICLE HUB.

No. 315,242. Patented Apr. 7, 1885.

Fig 1

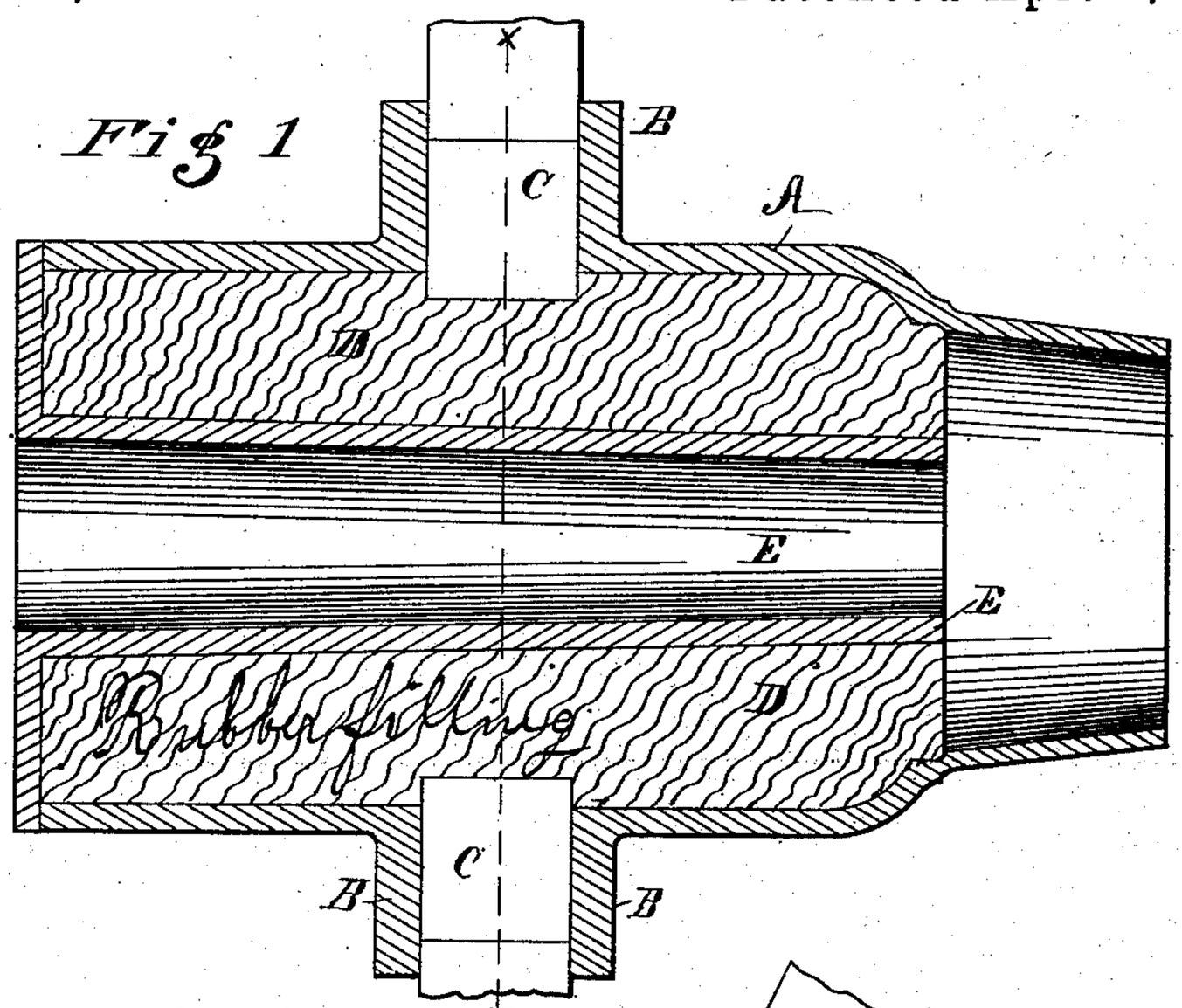
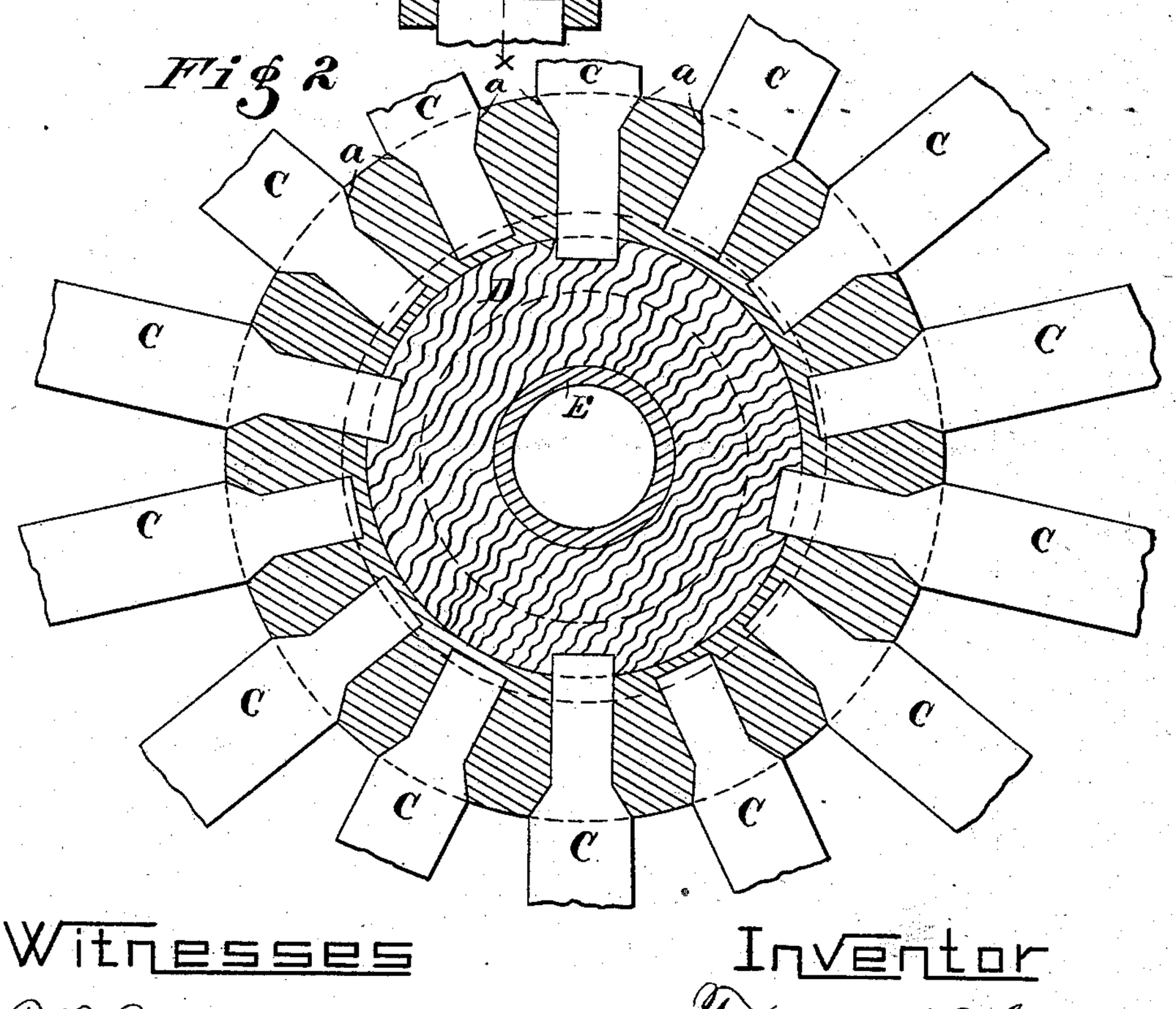


Fig 2



Witnesses

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UNITED STATES PATENT OFFICE.

FRANKLIN P. CIRCLE, OF SPRINGFIELD, OHIO.

VEHICLE-HUB.

SPECIFICATION forming part of Letters Patent No. 315,242, dated April 7, 1885.

Application filed December 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN P. CIRCLE, of the city of Springfield, county of Clark, and State of Ohio, have invented certain new and useful Improvements in Hubs for Vehicles, of which the following is a specification.

This invention relates to hubs for vehicles, &c., the object of the invention being to construct a metallic hub having a spoke-flange in one piece, and to provide the same with an elastic "filling" or core extending from a point near one end to and flush with the opposite end of the hub, the said filling having a tapered opening corresponding to the taper of the "box" for the axle-spindle. Another object of the invention is to extend the spoke-receiving mortises, or a portion of them, entirely through the hub metal, whereby all or a portion of the said spokes may bear against the elastic filling of the hub.

The invention consists in a metallic hub for vehicles, constructed in one piece and having a central spoke-receiving flange, the mortises of which have slightly-beveled edges, the said hub being provided with an elastic filling or core extending from a point near one end to and flush with the opposite end of said hub, substantially as and for the purpose hereinafter described.

It also consists in certain details of construction, hereinafter described.

Figure 1 of the drawings represents in central longitudinal section a vehicle-hub as constructed in accordance with my invention; and Fig. 2, a vertical cross-section on dotted line *x x*, Fig. 1, of the same.

The hub A, which may be of any usual shape and metal, will be cast in one piece with the flange B, which extends entirely around it, the said flange projecting from the main body of the hub, as usual with "patent hubs" having a central flange for receiving the spokes. The flange B is provided with mortises to receive the spokes C, said mortises being slightly beveled at their upper end, as shown at *a*, Fig. 2, to obviate the entrance of water, and, as shown, some of said spoke-receiving mortises extend entirely through the metal to allow one or more of the spokes to be driven through and into an elastic filling, D. This filling, which is made of rubber, is in one piece, and extends from the forward shoulder of the hub back to and flush with the opposite end, the said filling being provided with a central hole corresponding to the shape of the box E, in which the spindle of the axle revolves. The rubber filling D will be in practice made slightly of larger diameter than the internal diameter of the hub, the said filling being forced into the hub by any suitable means. By providing the hub with a rubber filling extending the entire length of the axle-box it will be noticed that any strain or twists which might otherwise be exerted upon the axle would be compensated for by said filling and removed from the axle; and it also obviates jars to the wheel, therefore allowing the vehicle to run easily and without jar.

The "box" E for the axle-spindle is and may be of any usual construction.

By driving a portion of the spokes C into the elastic filling D it prevents any possibility of the filling turning.

I claim—

The metallic hub A, cast in one piece and provided with the flanges B, having bevel-edged mortises, as described, a portion of said mortises preferably extending entirely through the metal of the hub, in combination with the rubber filling D, (provided with the axle-box opening,) located upon the inside of the hub, and extending substantially from one to the other end of the hub, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand and seal, at Springfield, Ohio, this 1st day of December, A. D. 1884.

FRANKLIN P. CIRCLE. [L. S.]

In presence of—
N. E. C. WHITNEY,
P. J. CLEVENGER.