(No Model.)

J. F. PACKER.

HUB.

No. 300,392. Patented June 17, 1884.

Fig. 1.

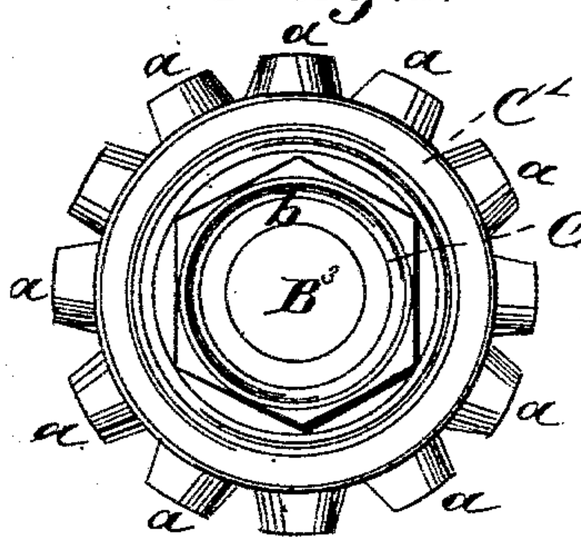


Fig. 2.

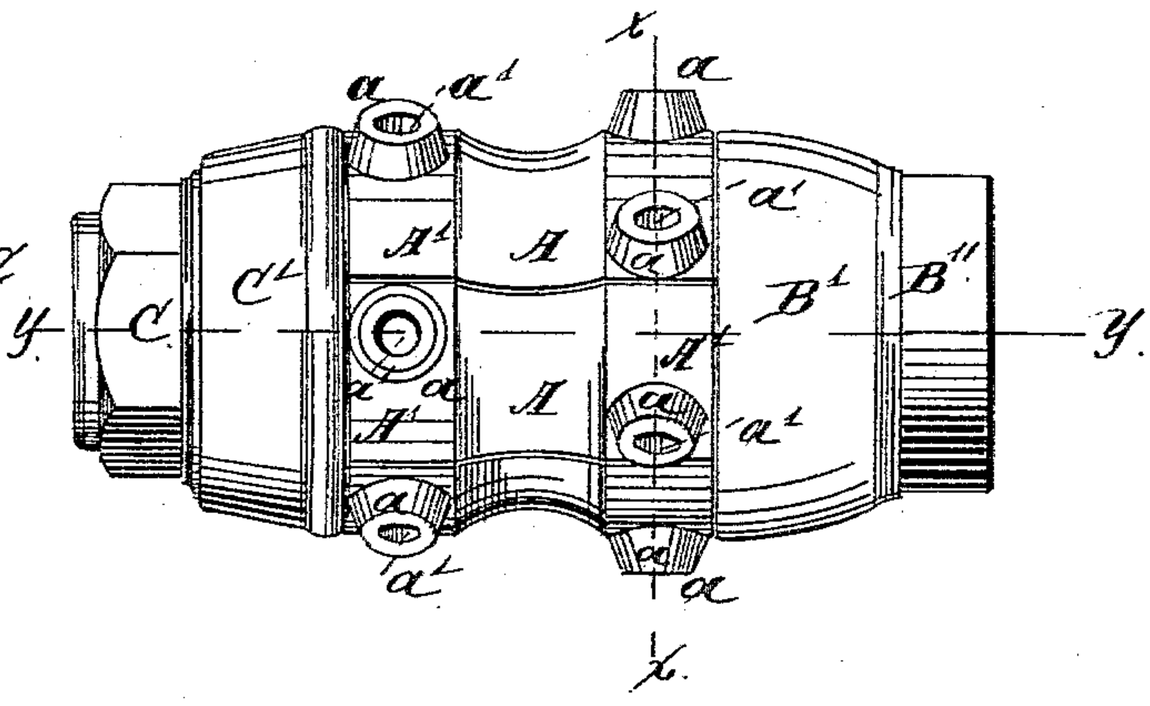


Fig. 3.

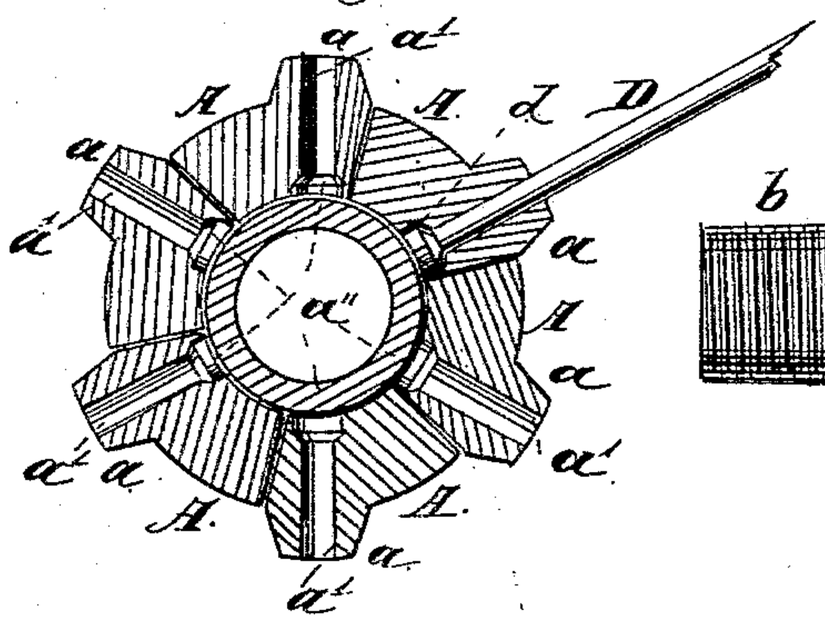


Fig. 4.

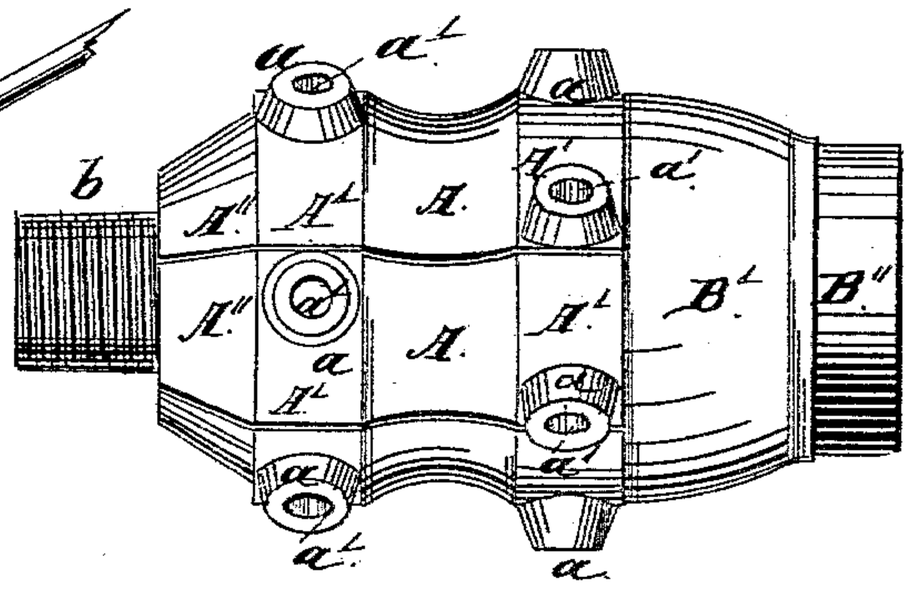
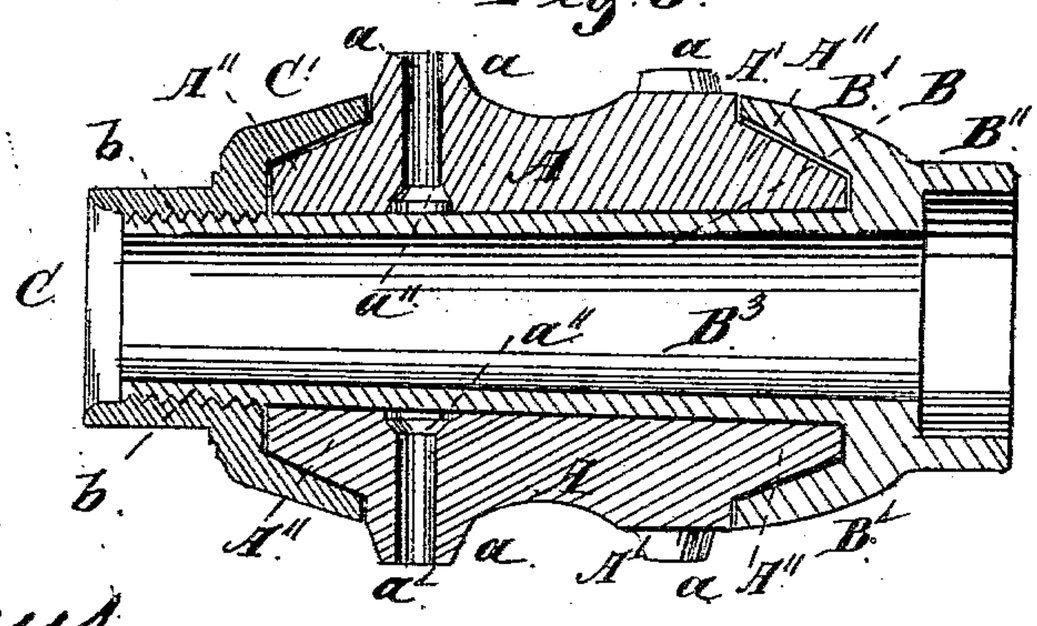


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN F. PACKER, OF CHICAGO, ILLINOIS.

HUB.

SPECIFICATION forming part of Letters Patent No. 300,392, dated June 17, 1884.

Application filed March 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. PACKER, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Hubs, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is an end elevation; Fig. 2, a side elevation; Fig. 3, a transverse section on line *x x* of Fig. 2; Fig. 4, a side elevation with the screw retaining-cap removed; Fig. 5, a longitudinal section on line *y y* of Fig. 2.

This invention is designed, primarily, for use in connection with iron or steel wheels for use on the ground, but can be applied for other styles of wheels, and for other purposes. Its object is to enable the spokes to be readily secured in position, as hereinafter more particularly described; and its nature consists in making the main portion of the hub in sections, and combining such sections with a pipe-box having on one end a retaining-flange, and on the other end a screw-thread to receive a screw-threaded retaining-cap, by which the sections will be firmly held in place around the pipe-box, all as hereinafter more particularly described, and pointed out in the claims.

In the drawings, A represents the sections forming the main portion of the hub. Each section on its exterior face has a concavity or depression, so as to leave flat portions A′ at each end; and the interior face of each section is concaved, so that when the sections are in place around the pipe-box they will fit snugly to the exterior face of the box. Each section is provided with a boss or nipple on each of its flat faces, so arranged as to be diagonal on opposite sides of the section, and the ends A″ of the sections are each formed with an exterior face inclined or tapering, as shown in Figs. 4 and 5, so that when the several sections are together the end of the completed main portion of the hub will have a tapering or inclined exterior, and as many sections are to be used as required for the number of spokes. As shown, six sections are used, which provides for the use of twelve spokes, two spokes being used with each section.

B is the pipe-box, having an exterior of a cylindrical shape corresponding in diameter to the diameter of the opening in the hub-sections when together. This pipe-box has at its inner end a flange, B′, formed thereon, the exterior face of which is tapering or inclined to fit the taper or incline of the end of the hub-sections, and is also provided at its inner end with a flange, B″, which forms a sand-box for the end of the axle, the axle-spindle passing through a longitudinal opening, B^3, in the pipe-box. The outer end of the pipe-box is provided on its exterior face with a screw-thread, *b*.

C is a cap having a flange portion, C′, with an interior face formed tapering or inclined to fit the tapering or inclined ends of the hub-sections, and this cap has a screw-threaded opening to receive the screw-threaded end *b* of the pipe-box, so that by turning the cap down the hub-sections will be brought snugly together, and will be compressed between the flange B′ of the pipe-box and the flange C′ of the screw-cap.

D represents the spokes, the inner ends of which are provided with a head, *d*, which fits into a recess, *a″*, on the interior face of the pipe-sections and in line with the hole *a′*, passing through the hub-section, and the boss or nipple *a*, through which opening the body of the spoke is passed. The other end of the spoke is secured to the tire by riveting, or by set-nuts, or by being screw-threaded into the tire, or in any other suitable manner.

The parts are put together by passing the two spokes for each hub-section through the openings *a′* therein, and the hub-section is then placed on the pipe-box, each hub-section being filled with its spokes, and being placed on the pipe-box until the hub is completed, and each hub-section, as it is filled and placed in position, has its inner tapering end slipped under the flange B′, and when all the sections are in place the screw-caps are set down to place, bringing the flange C′ over the outer tapering ends of the sections, as shown in Figs. 2 and 5, Fig. 4 showing the sections in position without the spokes, and with the screw-caps removed, and Fig. 3 showing the sections in place with one spoke in one section in position. This construction of the hub enables the spokes to be easily slipped through the holes therefor in the hub-sections, and the sections with the spokes therein to be placed

in position, and when the parts are together the hub will be as strong and firm as if made of a single piece, and by making the hub in this manner it will be seen that in case of breakage of the spoke, or in case other repairs are needed any one section can be readily removed, leaving the others in position, and the repairs can be made and the sections again replaced in position, and the parts secured by the screw-cap, which acts as a clamp to draw the parts together and to compress the hub-sections endwise between the flanges B′ and C′.

The hub-sections, instead of having a depression between the flat faces, might be formed convex between the flat faces; or the entire exterior surface might be left in the same plane.

What I claim as new, and desire to secure by Letters Patent, is—

1. The hub-sections A, provided with openings for the passage of the spokes, in combination with the pipe-box B, having the flange B′, and screw-cap C, having the flange C′, substantially as and for the purpose specified.

2. The hub-sections A, provided with openings for the passage of the spokes, substantially as specified.

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