M. E. BODDY.

AXLE BOX AND WASHER.

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929,189. Patented July 27, 1909.

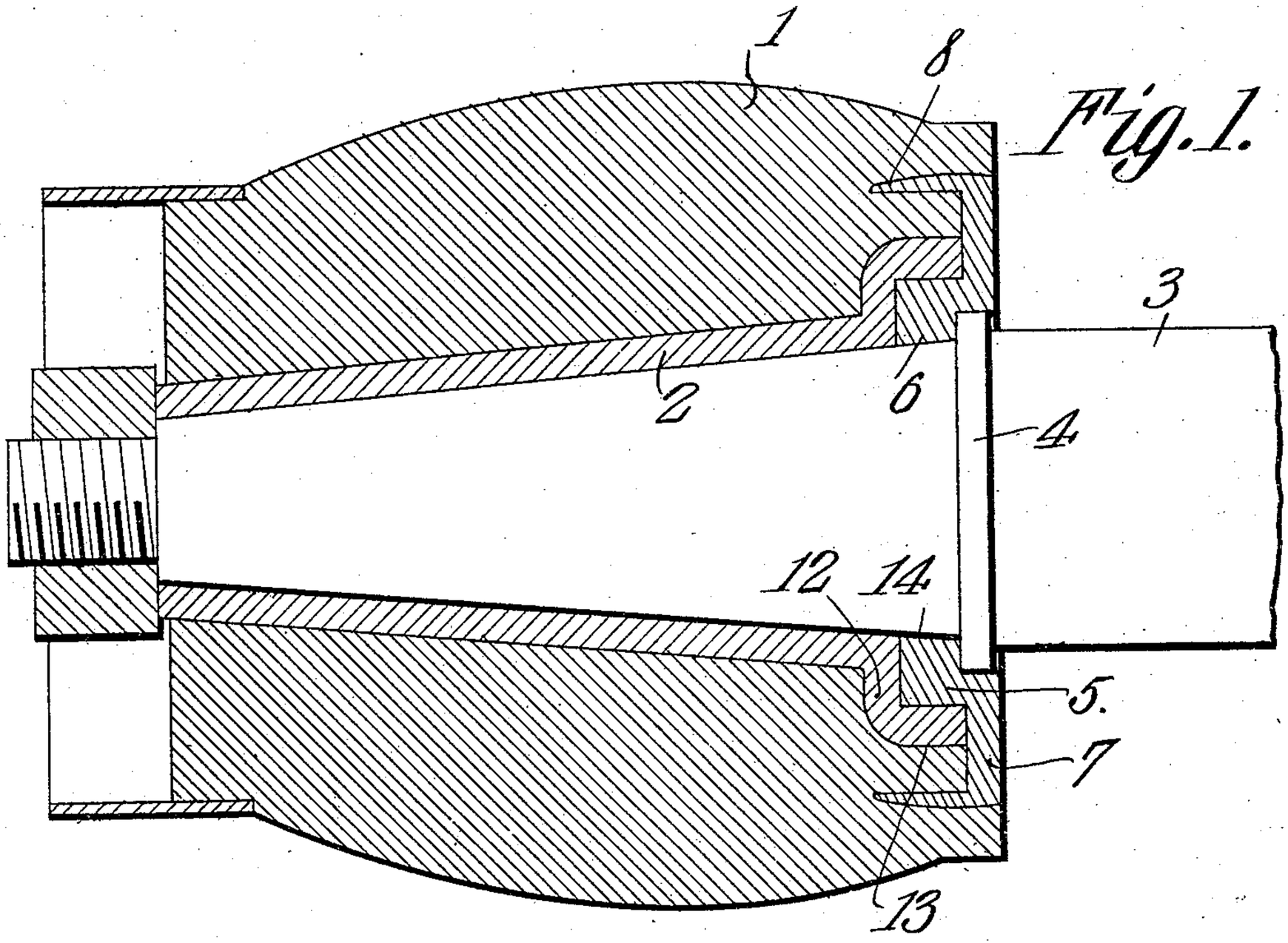

Fig. 1.

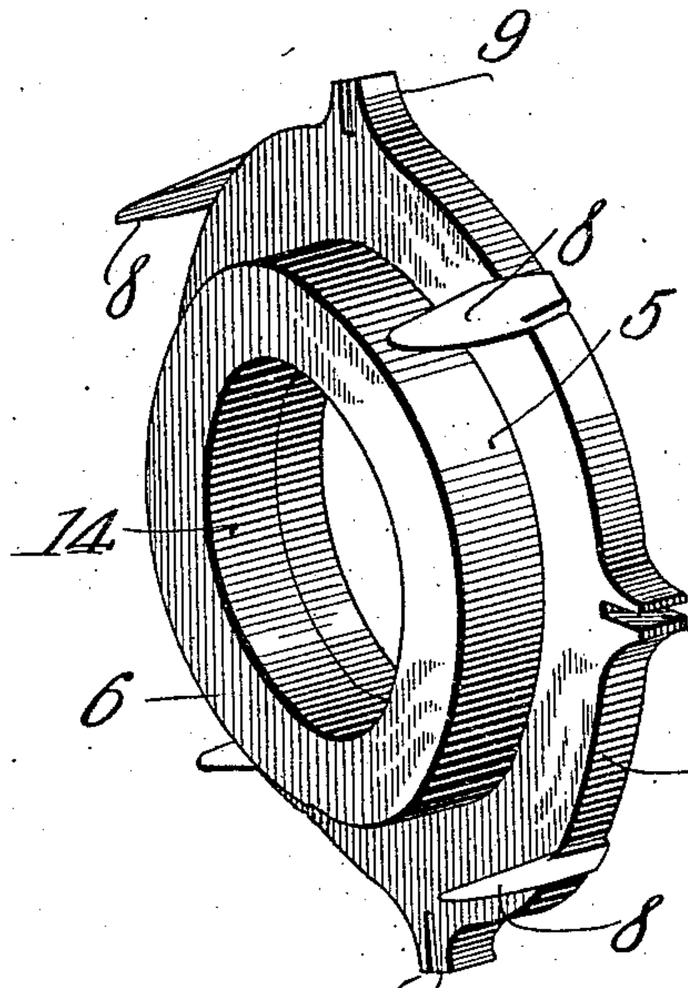

Fig. 2.

Witnesses

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MICHAEL E. BODDY, OF CARSONVILLE, MICHIGAN, ASSIGNOR OF ONE-HALF TO NORMAN P. FRASER, OF CARSONVILLE, MICHIGAN.

AXLE BOX AND WASHER.

No. 929,189. Specification of Letters Patent. Patented July 27, 1909.

Application filed November 17, 1908. Serial No. 463,064.

To all whom it may concern:

Be it known that I, MICHAEL E. BODDY, a citizen of the United States, residing at Carsonville, in the county of Sanilac and State of Michigan, have invented a new and useful Axle Box and Washer, of which the following is a specification.

The objects of the invention are, the provision, in a merchantable form, of a device of the above mentioned class, which shall be inexpensive to manufacture, facile in operation and devoid of complicated parts.

With these and other objects in view, as will hereinafter more fully appear, the invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that divers changes in the form, proportions, size, and minor details of the structure, may be made, without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 is a vertical longitudinal section, showing my invention attached to the hub of a vehicle; Fig. 2 is a detail perspective of my invention.

In the following description, I shall use the term "inner" to denote that side of the device which is toward the center of the hub, and the term "outer" to denote that end of the device which is remote from the center of the hub.

In the accompanying drawings, the numeral 1 denotes the hub of a vehicle; the boxing of the hub is denoted by the numeral 2; 3 is the axle; and 4 designates an annular shoulder projecting from the axle.

In carrying out my invention, I provide a sleeve 5, having at its inner end an annular rib 6 projecting into its interior. From the sleeve 5 at its outer end and from its exterior, a rib 7 projects outward. This rib 7 is provided with hub-engaging means which may be of any form; preferably, however, as shown, these hub-engaging means take the form of prongs 8 and lugs 9 arranged to receive screws, spikes, or other hub-engaging devices. The lugs 9 are disposed between the prongs 8, and, in their preferred form, comprise shoulders 10, having straight parallel faces 11, spaced apart.

When it is desired to mount my invention in the hub of a wheel, the sleeve 5 is introduced into the boxing 2 at the rear of the hub. The prongs 8 are introduced into the hub, and the shoulders 10 are forced into apertures in the rear face of the hub, arranged to receive them, nails, or screws being driven between the straight faces 11 into engagement with the hub.

I have made the lugs 9 to outstand beyond the periphery of the rib 7, and it will be seen that when these lugs 9 are seated in the apertures in the rear of the hub, arranged to receive them, they will hold the device against rotation, and reinforce the holding effect of the prongs 8. The prongs 8 may be variously formed. I prefer, however, that, as in the case of the lugs 9, they be made to outstand from the periphery of the rib 7, that they may engage the wood of the hub at their point of union with the rib 7, thus aiding the lugs 9 in preventing the device from moving or rotating in the hub.

When the device is mounted, as shown in Fig. 1, the inner ends of the sleeve 5 and the rib 6 will abut against the portion 12 of the boxing, and the exterior of the sleeve 5 will engage the portion 13 of the boxing, the inner face 14 of the rib 6 serving as a bearing upon which the axles rest.

My invention may be variously employed. It may be mounted in and form a component part of a new wheel. Again, it may be employed to repair old wheels and axles which have become worn through use. When employed for this latter purpose, I prefer that the rib 6 be made of slightly smaller interior diameter than was the axle when new. The axle being of an irregular or flattened shape, is filled or dressed to fit the rib 6, whereupon the device is mounted in the hub as hereinbefore described.

It will be seen that the sleeve 5 projects inward beneath the prongs 8, and that, when the device is mounted in a hub, a portion of the hub is included between the prongs 8 and the sleeve 5. When the portion 13 of the boxing is absent, the sleeve 5 will serve to uphold the wooden portion of the hub against the splitting effect of the prongs 8.

The inner face 14 of the rib 6 may be any shape; preferably, however, as shown, it is

conical in form, flaring outward, to conform to the cross section of the ordinary form of axle shown in Fig. 1 and designated by the numeral 3.

Having thus described my invention, what I claim as new, and desire to protect, by Letters Patent, is:—

1. In a device of the class described, a sleeve having an inwardly projecting annular rib at one of its extremities and an outwardly projecting annular rib at its other extremity, the outwardly projecting rib carrying upon its periphery hub-engaging means.

2. In a device of the class described, a sleeve having an inwardly projecting annular rib at one of its extremities and an outwardly projecting annular rib at its other extremity, the outwardly projecting rib being provided with outstanding slotted lugs and with integral prongs projecting over the sleeve and spaced therefrom.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

MICHAEL E. his × mark BODDY.

Witnesses:
W. J. McCaren,
F. C. Crarey.