

A. D. REID.

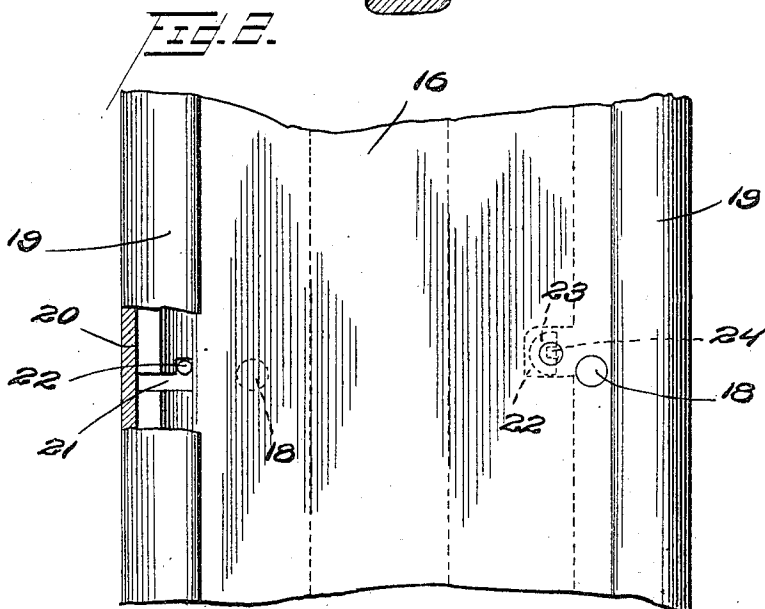
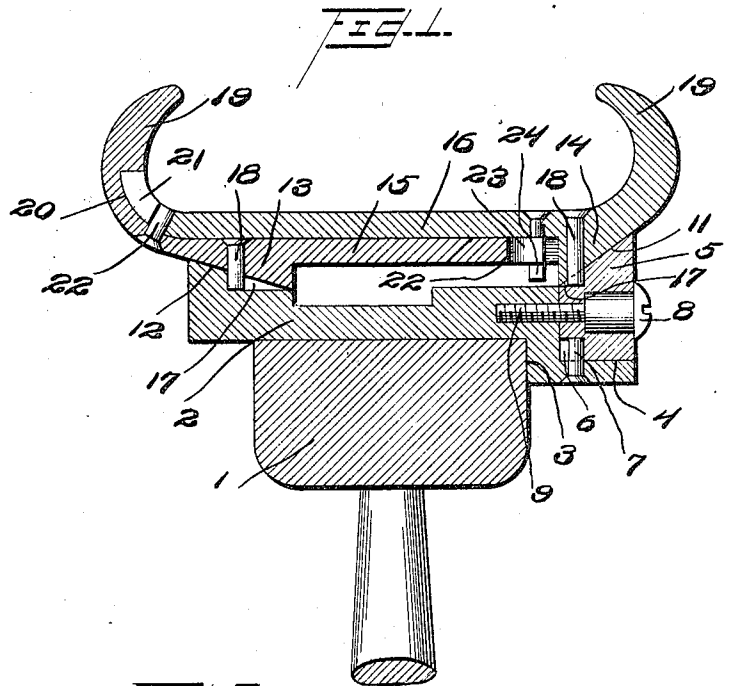
RIM.

APPLICATION FILED MAY 22, 1912.

1,042,478.

Patented Oct. 29, 1912.

2 SHEETS-SHEET 1.



Inventor

Albert D. Reid

Witnesses

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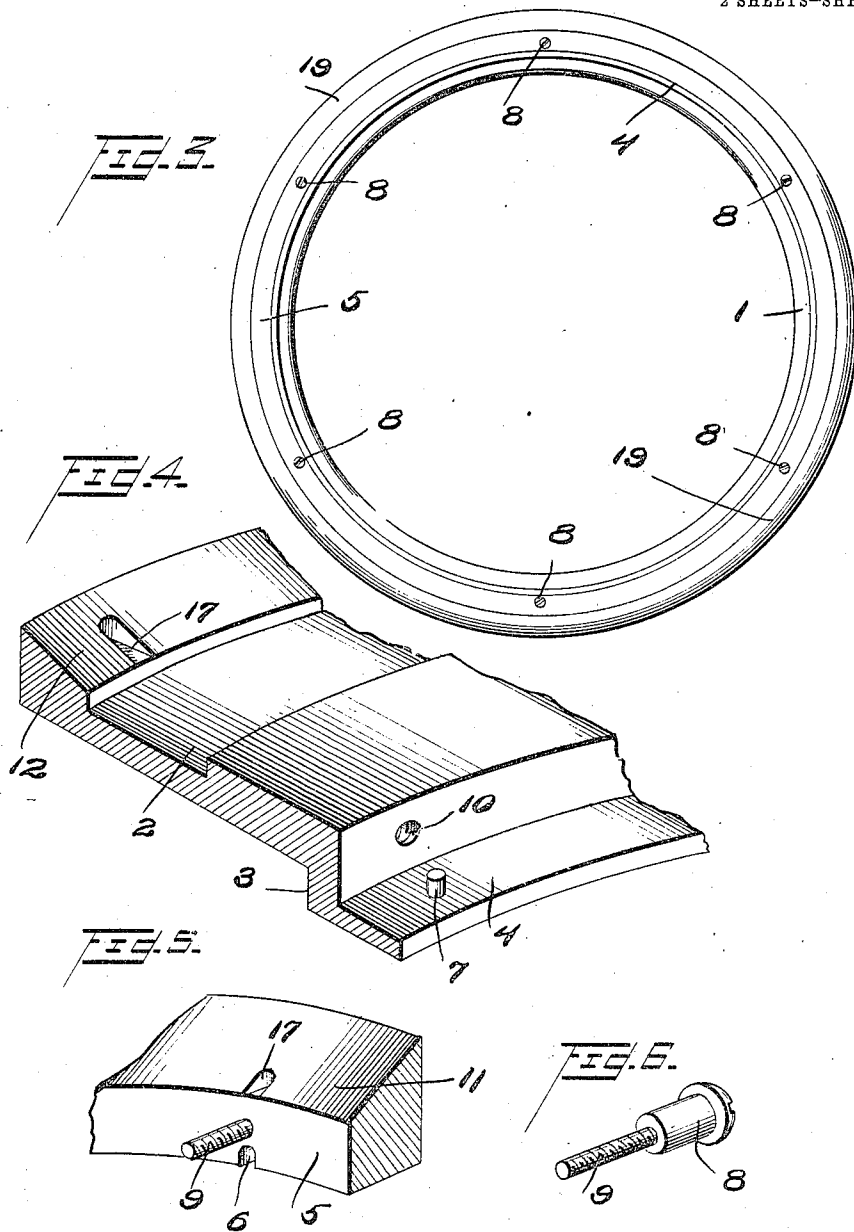
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UNITED STATES PATENT OFFICE.

ALBERT D. REID, OF WEST CHESTER, PENNSYLVANIA.

RIM.

1,042,478.

Specification of Letters Patent.

Patented Oct. 29, 1912.

Application filed May 22, 1912. Serial No. 698,885.

To all whom it may concern:

Be it known that I, ALBERT D. REID, a citizen of the United States, residing at West Chester, in the county of Chester and State of Pennsylvania, have invented certain new and useful Improvements in Rims, of which the following is a specification.

My invention relates to improvements in rims, and more particularly demountable rims having improved means for removably securing the same upon a wheel, and form the rim of two interlocking sections, whereby the sections may be disconnected to release an ordinary clencher tire.

A further object is to provide a rim of this character which will be securely held upon a wheel and locked against accidental turning movement.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a view in transverse section illustrating my improvements. Fig. 2, is a fragmentary plan view partly broken away. Fig. 3, is a view in side elevation illustrating my improved rim and its securing means. Fig. 4, is a fragmentary perspective view of the ring 2 which is secured to the felly of the wheel. Fig. 5, is a fragmentary perspective view of the locking ring 5, and Fig. 6, is a perspective view of one of the screws 4.

1, represents a wheel felly around which my improved rim supporting ring 2 is secured in any approved manner. This ring 2 is of two internal diameters, forming a shoulder 3 abutting against one side of the felly and properly positioning the ring thereon. This small internal diameter of the ring 2 is recessed as shown at 4 to accommodate a clamping ring 5, and this clamping ring at intervals is provided with notches 6 to receive fixed pins 7 and prevent any rotary movement of the ring 5 on ring 2. This ring 5 is secured to ring 2 by screws 8 having their smaller screw-threaded ends 9 screwed into threaded sockets 10 in ring 2. The outer face of ring 5 is beveled as shown at 11, and the outer face of ring 2 at its edge opposite ring 5 is beveled as shown at 12. These beveled faces 11 and 12 are constructed to snugly fit similarly beveled enlargements 13 and 14 on my improved rim

sections 15 and 16 respectively, so as to hold the rim against any possibility of lateral displacement on the ring 2. The rings 2, and 5, in their beveled faces 11 and 12 respectively, have notches 17 to receive fixed pins 18 on the rim members, so as to hold the rim against any possibility of independent rotary movement. The rim members 15 and 16, at their edges, curve inwardly as shown at 19 to form an ordinary clencher rim, while the intermediate portions of said rim sections overlap. Rim section 16 lies on the outside of rim section 15, and one edge of rim section 16 is positioned in the grooved inner face 20 of section 15, and is provided at intervals with L-shaped slots 21 to receive pins 22 on section 15. These L-shaped slots and pins constitute bayonet joints, so that when the ring sections are moved together and turned one relative to the other, they will be securely locked against possibility of accidental separation. To effect this locking movement and hold the rim sections in locking relation to each other, the section 15 at its inner edge is recessed as shown at 22 to accommodate a cam 23 pivotally connected to section 16. This cam 22 has an angular wrench receiving enlargement 24, so that by the application of an ordinary wrench, the cam may be turned to move the rim sections relative to each other, causing the bayonet joints to lock and securely holding the sections in this position. When it is desired to separate the sections, it is necessary to turn the cam to present its flat face to the end wall of the recess, when the sections may be manually turned one relative to the other to release.

In operation, the rim sections are locked together by reason of their bayonet joint connection as above described, and clench the tire. When ring 5 is removed, the rim with its tire may be slid onto ring 2, and when ring 5 is secured by screws 8, the rim will be securely held against lateral movement by reason of the beveled contacting faces 11 and 12, and enlargements 13, and 14. The rotary movement is prevented by the engagement of the several pins in the recesses or pockets, and separation of the rim sections is prevented by the bayonet joints as above described.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the

precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

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

1. The combination with a fixed ring having an annular recess at one side, a removable ring constructed to fit said recess, screws projected through said movable ring and screwed into the fixed ring, said movable ring having notches therein, pins in the fixed ring entering said notches and guiding the movable ring into place, said fixed ring at one edge beveled inwardly from its outer to its inner edge, said removable ring beveled inwardly from its outer to its inner edge, and a rim held between said beveled portions of the rings, substantially as described.

2. The combination with a fixed ring hav-

ing an annular recess at one side, a removable ring constructed to fit said recess, screws projected through said movable ring and 25 screwed into the fixed ring, said movable ring having notches therein, pins in the fixed ring entering said notches and guiding the movable ring into place, said fixed ring at one edge beveled inwardly from its outer 30 to its inner edge, said removable ring beveled inwardly from its outer to its inner edge, a rim held between said beveled portions of the rings, said rim having beveled enlargements on its inner face engaging the 35 beveled surfaces of the rings and clamped between them, substantially as described.

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

ALBERT D. REID.

Witnesses:

R. H. KRENKEL,
CHAS. E. POTTS.