May 22, 1923. 1,455,857

A. BENNETT ET AL

SECTIONAL RIM

Filed March 11, 1922

Fig. 1.

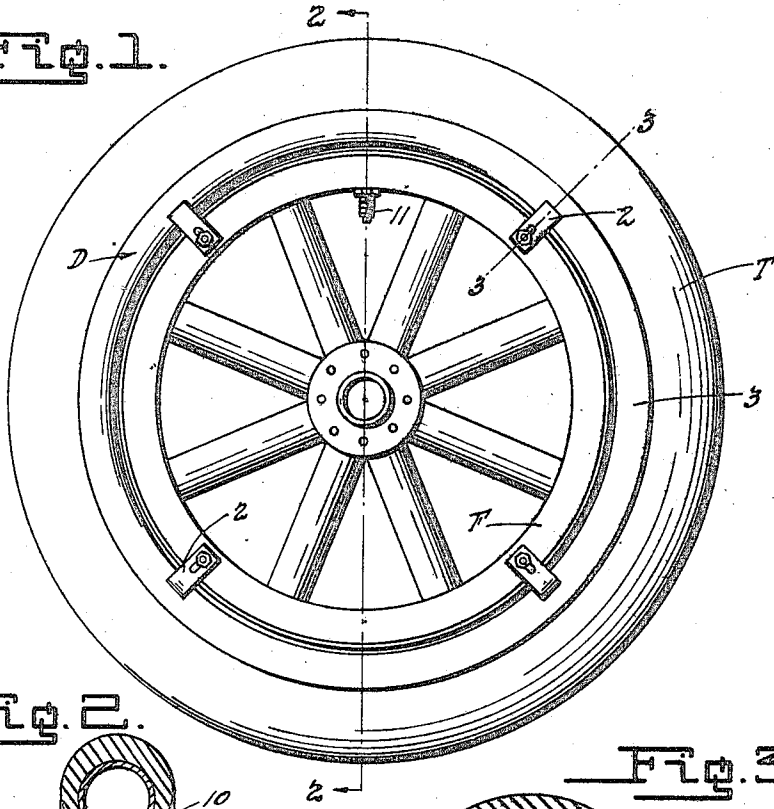


Fig. 2.

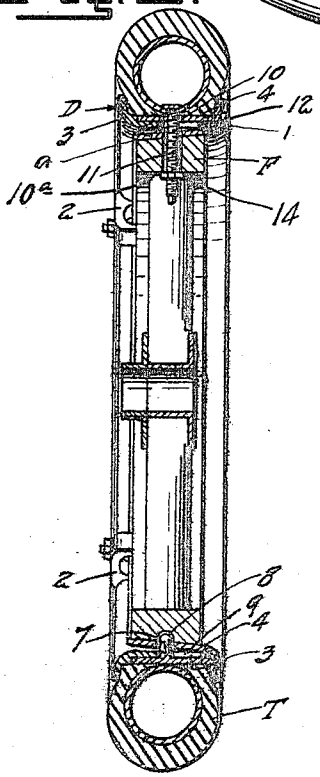
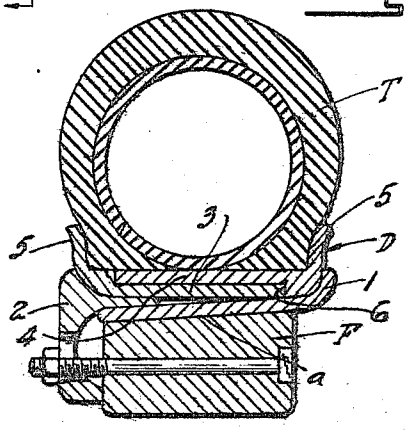


Fig. 3.



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UNITED STATES PATENT OFFICE.

AMOS BENNETT, OF CHESAPEAKE, OHIO, AND JAMES H. HATCHETT, OF HUNTINGTON, WEST VIRGINIA.

SECTIONAL RIM.

Application filed March 11, 1922. Serial No. 543,029.

To all whom it may concern:

Be it known that we, AMOS BENNETT, a citizen of the United States, residing at Chesapeake, in the county of Lawrence and State of Ohio, and JAMES H. HATCHETT, a citizen of the United States, residing at Huntington, in the county of Cabell and State of West Virginia, have invented certain new and useful Improvements in Sectional Rims, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in sectional rims and it is an object of the invention to provide a device of this general character constructed in a novel and improved manner whereby the tire may be readily and conveniently applied to or removed from the rim.

Another object of the invention is to provide a novel and improved device of this general character which may be effectively held to the felly of a wheel and which at the same time possesses a miximum of strength.

The invention consists in the details of constructon and in the combination and arrangement of the several parts of our improved sectional rim whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of our invention will hereinafter be definitely claimed.

In order that our invention may be the better understood, we will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in side elevation illustrating a wheel structure having applied thereto a sectional rim constructed in accordance with an embodiment of our invention;

Figure 2 is a sectional view taken substantially on the line 2—2 of Figure 1; and

Figure 3 is an enlarged sectional view taken substantially on the line 3—3 of Figure 1.

As disclosed in the accompanying drawings, F denotes a wheel felly of a well known type upon which is adapted to be arranged our improved sectional rim denoted in its entirety as D. The rim D coacts in a well known manner with an outstanding flange 1 of the felly band *a* and associated with the opposite side portion of said sectional rim D are the holding lugs 2 of any ordinary or preferred type.

The rim D comprises two annular sections 3 and 4 which, when assembled, are in overlying relation, the outer marginal portions of both of said sections being defined by the outstanding flanges 5 which coact with the applied tire T in a conventional manner. The outer section 3 at a point in relative close proximity to its flange 5 is provided at its under side with an annular shoulder 6 with which the inner edge of the second or inner section 4 abuts when the sections of the rim are in assembled relation.

The outer section 3 at substantially its transverse center is provided with an inwardly directed lug 7 adapted to seat within a pocket or recess 8 provided in the felly F and which provides means whereby the applied rim D and the felly F are held against relative circumferential movement. The inner section 4 is provided with a laterally disposed open slot 9 to receive the lug 7 when the sections 3 and 4 are in assembled relation.

The outer section 3 at a point diametrically opposed to the lug 7 is provided with an opening 10 through which the inflating valve 11 is adapted to be disposed and the inner section 4 in diametric relation to the open slot 9 is provided with a second open slot 12 to receive said valve 11.

When it is desired to remove the tire T, the lugs 2 are displaced and the rim section 4 withdrawn, such operation being readily permitted by the slots 9 and 12. The clamping nut 14 mounted upon the valve stem 11 is then removed. The tire T is swung off of the section 3 by pressure being imposed upon the tire at a point substantially diametrically opposed to the valve stem 11. After the tire has been moved or swung a sufficient distance, the same may be moved inwardly of the wheel structure sufficiently to cause the valve stem 11 to pass outwardly through the opening 10 of the rim section 3 and outwardly through the opening 10^a in the felly F which is in register with the opening 10 when the structure is assembled. When desired, the felly F and the rim section 3 can then be separated by relative swinging movement being imparted to such elements with the lugs 7 serving as a fulcrum.

The assembly of the felly F and the rim section 3 is accomplished by a reverse operation which is also true with respect to the mounting of the tire T.

From the foregoing description it is thought to be obvious that a demountable rim constructed in accordance with our invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that our invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason we do not wish to be understood as limiting ourselves to the precise arrangement and formation of the several parts herein shown in carrying out our invention in practice except as hereinafter claimed.

We claim:

In combination with the felly of a wheel, a sectional rim mounted thereon, said rim comprising two separable circular sections each having tire engaging means, said sections when applied overlapping, the inner section having a pair of substantially diametrically opposed open slots, said slots being directed transversely of the section and having their open ends at the same side of the section; the outer section being provided with an inwardly directed pin disposed through one of said slots when the sections are assembled, the felly being provided with a recess into which said pin extends, the outer section being also provided with an opening registering with the second open slot of the inner section, the stem of the inflating valve of a tire being insertible through said registering opening and slot when the tire is mounted upon the rim, and means carried by the felly for holding the sections of the rim against lateral separating movement.

In testimony whereof we hereunto affix our signatures.

AMOS BENNETT.
JAMES H. HATCHETT.