(No Model.)

W. DRIESBACH.

PNEUMATIC TIRE.

No. 543,337. Patented July 23, 1895.

Fig. 1.

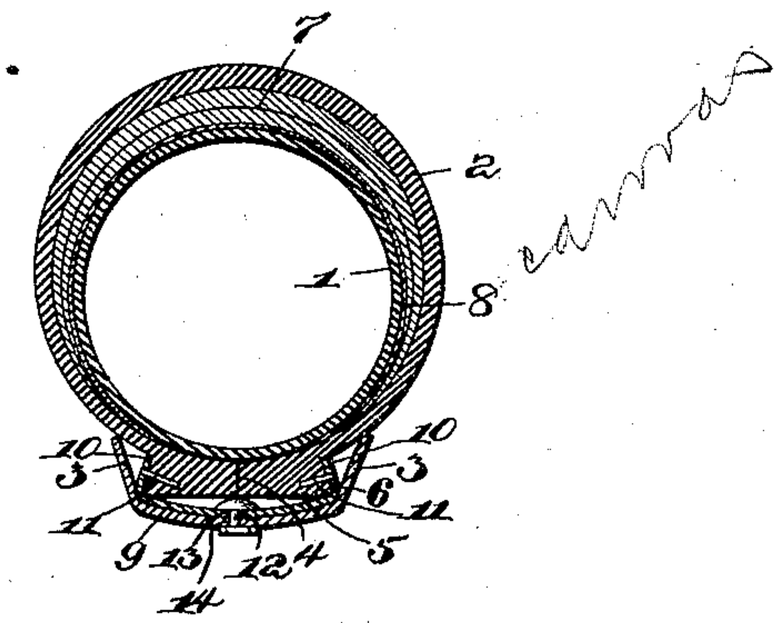


Fig. 2.

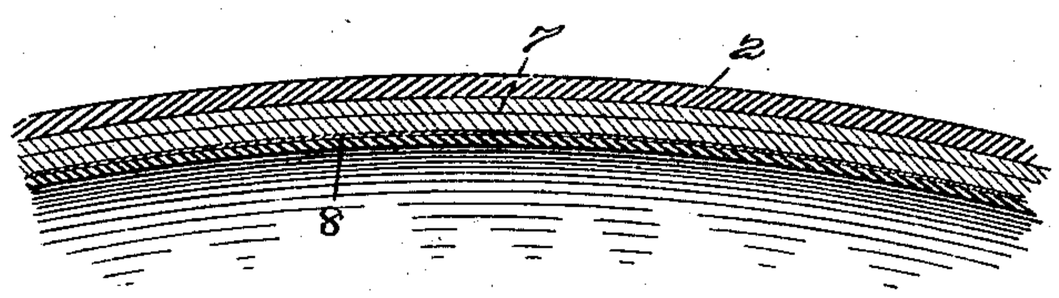
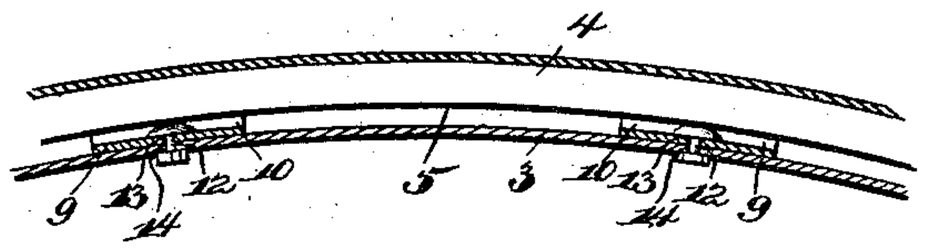


Fig. 3.



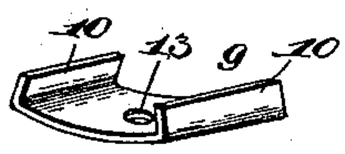


Fig. 4.

Witnesses

Inventor

William Driesbach.

By his Attorneys,

UNITED STATES PATENT OFFICE.

WILLIAM DRIESBACH, OF WILLIAMSPORT, PENNSYLVANIA.

PNEUMATIC TIRE.

SPECIFICATION forming part of Letters Patent No. 543,337, dated July 23, 1895.

Application filed September 18, 1894. Serial No. 523,400. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DRIESBACH, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented a new and useful Pneumatic Tire, of which the following is a specification.

My invention relates to pneumatic tires, and particularly to the shoes for use in connection therewith for protecting the inflatable tube; and the objects in view are to provide simple and efficient means for strengthening or reinforcing the shoe to prevent puncturing by sharp objects or instruments, to provide simple means for securing the shoe to the rim of a wheel, and to provide means whereby the inflatable tube may be exposed at any desired point when the same is necessary to facilitate repair.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a transverse sectional view of a tire embodying my invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a detail view of one of the clips.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates the inflatable tube, inclosed within the shoe 2, and 3 represents the rim (a portion thereof only being shown) to which the shoe is attached.

The shoe is constructed cylindrical in cross-section and is divided or split at its inner side to form the abutting edges 4, and the said edges of the shoe are thickened to form the flat bearing-surface 5 and the opposite shoulders 6, which are spaced from the edges and are slightly undercut or beveled.

Attached to the inner surface of the tread portion of the shoe is one layer or more of leather, forming a shield 7, the edges thereof being thinned or beveled to avoid forming abrupt shoulders or edges for contact with the surface of the inflatable tube. These strips, which are disposed longitudinally or parallel with the length of the shoe, may be held in place in any suitable or approved manner, one manner of accomplishing the object being illustrated in the drawings, in which is shown a pocket formed of canvas or other fabric or flexible material, as at 8, which is glued or cemented or otherwise secured at its edges to the inner surface of the shoe at opposite sides of the shield.

The means for securing the shoe to a rim consist of small clips 9, preferably formed of sheet metal and having upturned terminal flanges or lips 10, which bear against and engage the shoulders 6 at the outer sides of the thickened edges of the shoe. These clips are secured to the shoe by means of small pins 11 passing through said flanges or lips and engaging the shoulders, and the clips are secured to the rim of a wheel by means of bolts 12 engaging registering perforations 13 and 14, formed, respectively, in said clip and rim. When it is desired to repair the rim the tire may be removed by loosening said bolts, and when it is necessary to gain access at any point to the interior of the shoe it may be accomplished by removing one or more of the clips and separating the edges of the shoe.

The above construction provides for the ready attachment and detachment of a tire and for the repair or replacement of an inflatable tube; but it will be obvious that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having described my invention, I claim—

1. The combination with an inflatable tube, of a protective inclosing shoe having its separable edges arranged at the inner side of the tube, clips detachably secured to said edges to hold them in their proper relative positions, and means for detachably securing the clips to the outer surface of the rim of a wheel, substantially as described.

2. The combination with an inflatable tube, of an inclosing shoe having abutting inner edges thickened to form spaced shoulders, clips having upstruck flanges or lips secured to said shoulders, and means for attaching the clips to a rim, substantially as specified.

3. The combination with an inflatable tube, of an inclosing shoe having thickened abutting edges provided with spaced beveled or under-cut shoulders, clips extending trans-

versely across the meeting edges of the shoe and provided with upturned flanges or lips lying against and engaging said beveled or under-cut shoulders, and means for securing the clips, detachably, to a wheel-rim, substantially as specified.

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

WILLIAM DRIESBACH.

Witnesses:
GEORGE R. ZERCHER,
JNO. BUDD.