

O. M. THOMAS.
TIRE PROTECTOR.
APPLICATION FILED SEPT. 29, 1913.

1,138,911.

Patented May 11, 1915.

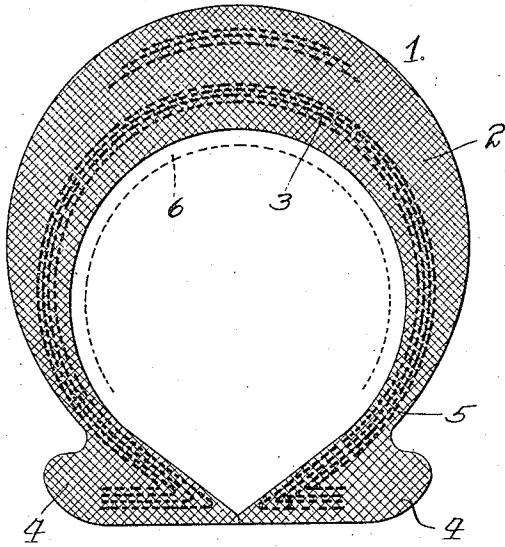


Fig. 3.

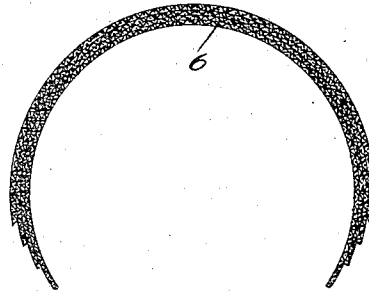


Fig. 2.

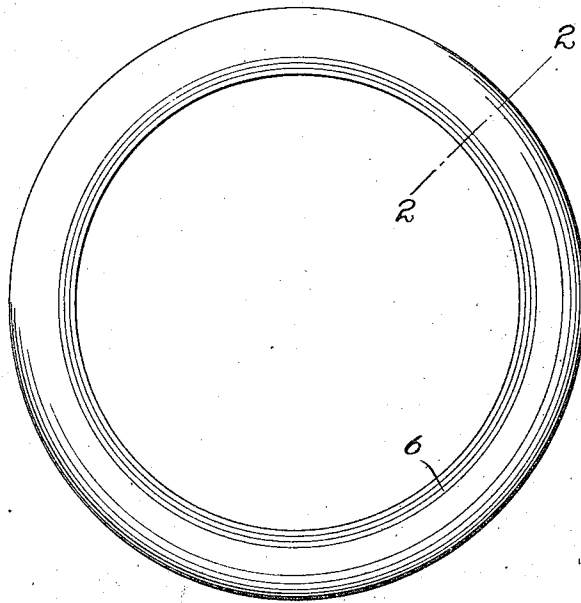


Fig. 1.

WITNESSES:

Chas. A. Stock
F. P. Schroeder

INVENTOR

Orrin M. Thomas
BY *Harry C. Schroeder*
ATTORNEY

UNITED STATES PATENT OFFICE.

ORIN M. THOMAS, OF OAKLAND, CALIFORNIA.

TIRE-PROTECTOR.

1,138,911.

Specification of Letters Patent.

Patented May 11, 1915.

Application filed September 29, 1913. Serial No. 792,281.

To all whom it may concern:

Be it known that I, ORIN THOMAS, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Tire-Pro-
5 tectors, of which the following is a specification.

This invention relates to pneumatic tires for automobiles, and has to do more particularly with a protective means for the inner tubes of said tires, the principal object of the invention being to provide an efficient endless enveloping protective armor
10 for the said inner tube, and one which will be inexpensive and easy to manufacture and prepare, and which will utilize old and worn-out tires and put them to a new and practical use.

This object I accomplish by means of the process of recovery and utilization of worn-out casings of pneumatic tires as hereinafter described and shown in the accompanying drawings, in which,
20 Figure 1 shows the complete endless protector in elevation. Fig 2 is a section on a line 2—2 of Fig. 1. Fig. 3 is a cross section of an outer casing showing the location of the said protector within the same.

Figure 1 shows the complete endless protector in elevation. Fig 2 is a section on a line 2—2 of Fig. 1. Fig. 3 is a cross section of an outer casing showing the location of the said protector within the same.

Describing now more particularly the device and the process of obtaining the same, and referring to the numerals of reference on the drawings, 1 represents an outer casing comprising the tread portion 2, inner
30 fabric layer 3, and bead or clencher members 4.

To obtain and manufacture one of my improved protectors in the most economical

manner, I obtain an outer casing which has been worn down through service till the inner fabric portion 3 is on the surface. I then cut the bead members 4 off around the entire periphery at a point as indicated by 5, and turn off all rubber which may still remain on the fabric member, thus producing a substantial yet sufficiently flexible endless
45 liner or protector such as 6. I have found that by this process and after removing the bead portions 4, the remaining member 6 shrinks sufficiently to allow it to be placed within a casing of the same size as said protector was originally constructed, thus forming an efficient protection for the inner tube against blowouts or punctures. As these wornout casings as such are readily
55 obtainable at a low cost, and as the product obtained therefrom is better by reason of its having stretched its limit, it will be seen that I have thus provided a protective means for inner tubes of greater efficiency than if the protector were constructed from new material at a much greater cost.

I claim:—

The combination with a tire comprising an outer casing and a pneumatic inner tube of an annular liner removably seated there-
65 between and consisting of the continuous, service-stretched fabric portion of a used outer casing.

In testimony whereof I affix my signature in presence of two witnesses.

ORIN M. THOMAS.

Witnesses:

F. P. SCHRÖEDER,
R. M. OYARZO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."