

J. E. GOODMAN & E. S. RUFF.
 VEHICLE TIRE.
 APPLICATION FILED JAN. 22, 1912.

1,023,733.

Patented Apr. 16, 1912.

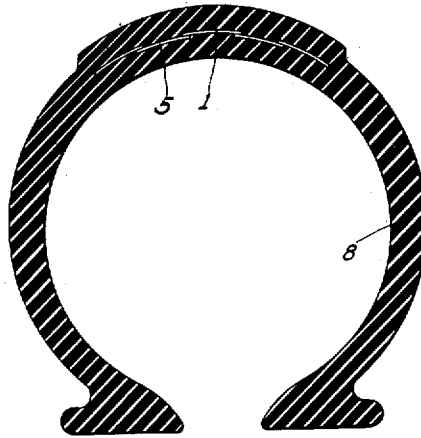


Fig. 1

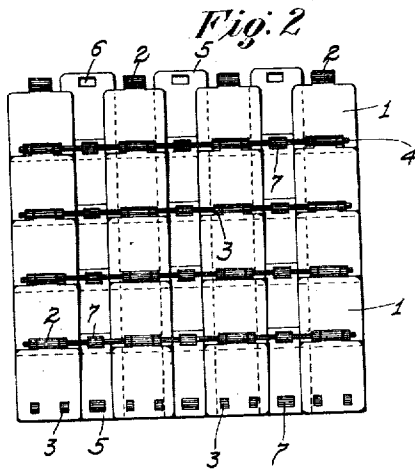


Fig. 2

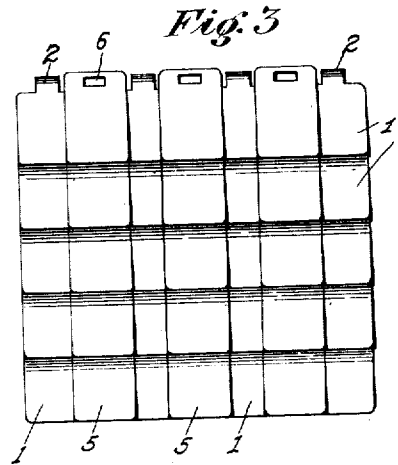


Fig. 3

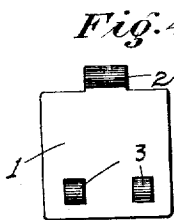


Fig. 4

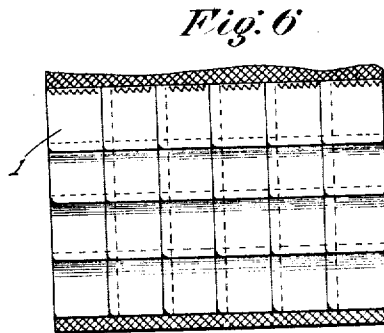


Fig. 6

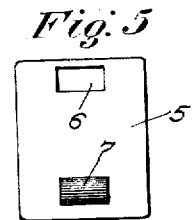


Fig. 5

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UNITED STATES PATENT OFFICE.

JOSEPH E. GOODMAN AND ELMUS S. RUFF, OF STOCKTON, CALIFORNIA; SAID ELMUS S. RUFF ASSIGNOR TO BESSIE S. GOODMAN, OF STOCKTON, CALIFORNIA.

VEHICLE-TIRE.

1,023,733.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JOSEPH E. GOODMAN and ELMUS S. RUFF, citizens of the United States, residing at Stockton, in the county of San Joaquin, State of California, have invented certain new and useful Improvements in Vehicle-Tires; and we do declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this application.

This invention relates to improvements in pneumatic tires and particularly to the outer casings therefor, the object of the invention being to produce a metallic armor to be embedded within the tread of the rubber casing, whereby such tread can not be punctured or blown out.

A further object is to produce such casing of such structure as to permit it to fully conform to the different positions rendered necessary by the flexibility of the casing.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purposes for which it is designed.

These objects we accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings similar characters of reference indicate corresponding parts in the several views.

Figure 1 is a sectional view of the outer casing showing our metallic structure therein. Fig. 2 is a top plan view of our metallic armor. Fig. 3 is a bottom plan view of our metallic armor. Fig. 4 is a top plan view of one plate of our improved armor. Fig. 5 is a top plan view of another plate of our improved armor. Fig. 6 is a view showing the complete armor embedded in the rubber casing.

Referring again more particularly to the

characters of reference on the drawings, our armor is composed of a plurality of plates arranged in two overlapping layers as follows: One set of plates 1 is provided with projecting eyes 2 at one end and projecting eyes 3 on its top surface at the other end, the eyes 2 being adapted to project between the eyes 3 and being secured in hinged relation thereto by pins 4. These plates are disposed in a plurality of series, as shown in Figs. 1, 2, 3, 6, each series being spaced apart. The next layer which overlaps upon the layer just described is comprised of plates 5 having slots 6 at one end and upwardly projecting eyes 7 at the other end, the eyes 7 being adapted to project through the slots 6 and the other adjacent members 5, the pins 4 projecting through such eyes 7, and the plates 5 overlapping plates 1, as shown clearly in Fig. 1, 2, 6.

From the foregoing description it will readily be seen that the armor is composed of such flexible structures as to easily bend with the flexibility of the outer casing 8 and still it will prevent the puncturing or blowing out of said casing.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention.

Having thus described our invention what we claim as new and useful and desire to secure by Letters Patent is:

A device of the character described comprising the combination with a pneumatic tire casing of an armor embedded in such casing, such armor being composed of two layers, one layer comprising a plurality of plates arranged in series, each plate having a projecting eye at one end and a pair of upwardly projecting eyes on its surface at the other end, the projecting eyes of one plate being adapted to project between the pair of eyes on its adjacent plate in each series, pins adapted to project through the aligned eyes of all the series, the next layer comprising plates

arranged in series adapted to overlap said first named series, such last named plates being each provided with a slot on one end and an upwardly projecting eye on the other end, and such eyes being adapted to project through said slots on their adjacent plates in each series, such pins also projecting through said last named eyes as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOSEPH E. GOODMAN.
ELMUS S. RUFF.

Witnesses:

JOSHUA B. WEBSTER,
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