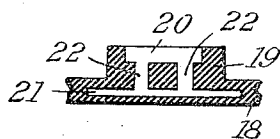
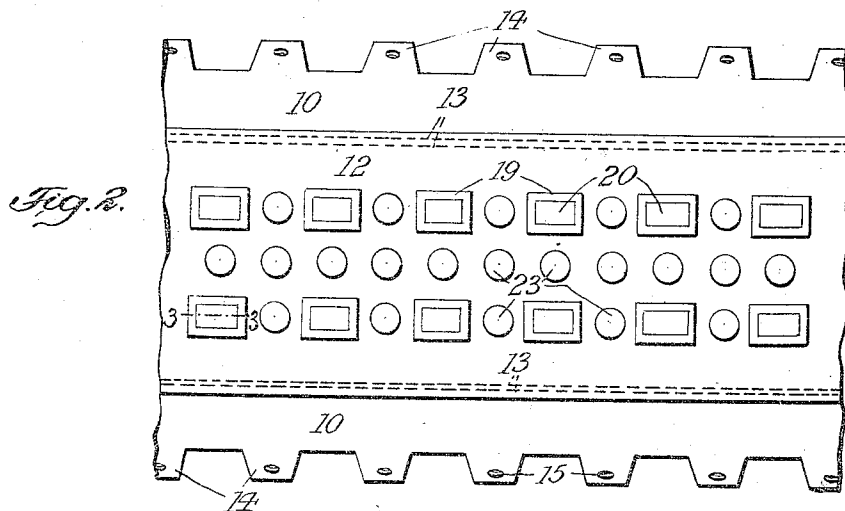
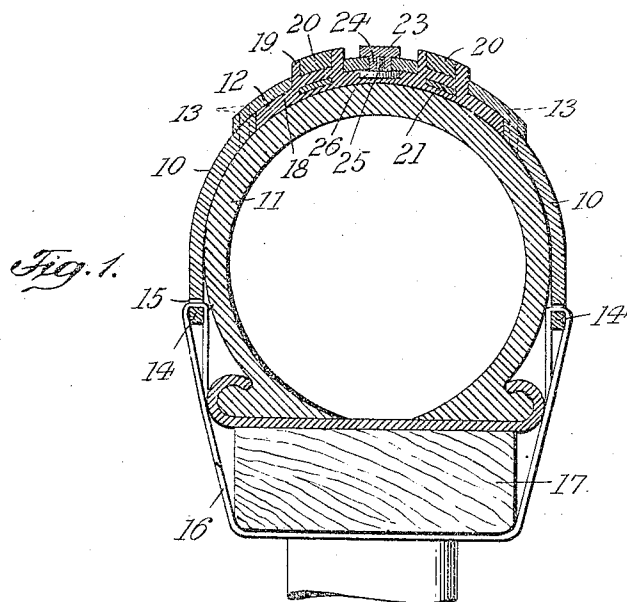


H. J. VON DER LIETH.
TIRE ARMOR.
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1,005,377.

Patented Oct. 10, 1911.



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TIRE-ARMOR.

1,005,377.

Specification of Letters Patent.

Patented Oct. 10, 1911.

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To all whom it may concern:

Be it known that I, HENRY J. VON DER LIETH, a citizen of the United States, residing at New York city, county and State of New York, have invented a new and Improved Tire-Armor, of which the following is a specification.

This invention relates to a tire armor of novel construction which effectively reinforces the tread, checks skidding and may be readily removed, renewed or refitted without disturbing the tire.

In the accompanying drawing: Figure 1 is a cross section of a tire embodying my invention; Fig. 2 a plan of a part of the armor detached, and Fig. 3 an enlarged section on line 3—3, Fig. 2.

The tire armor comprises essentially a leather covering composed of two flanking leather strips 10, adapted to overlies the sides of the case tube 11, and of a central leather strip 12, which overlaps the inner edges of strips 10, and extends over the wheel-tread. Strip 12 is connected throughout its length to strips 10 by two lines of stitching as at 13, so that in this way there is formed a continuous tripartite covering encompassing the tire. Along their outer edges, strips 10 are provided with spaced flaps 14, so that the covering may lie snugly against the case tube, and these flaps are perforated as at 15 for the accommodation of a lace string 16. This string is passed repeatedly under the wheel rim 17 along its entire circumference, so that in this way the covering may be quickly applied and may be as quickly removed without unseating the tire.

By the construction described, there is formed intermediate the two strips 10 and beneath strip 12, a shallow recess or pocket which extends completely around the tread. Within this pocket is accommodated a continuous flexible rubber sheet 18, the thickness of which corresponds to that of strips 10, so that the lower face of the sheet is flush with the faces of the strips. Sheet 18, is provided with a plurality of integral flexible knobs or protuberances 19 extending outwardly through corresponding apertures of central strip 12 and of a height to project a distance beyond said strip. Within each knob 19 is embedded a metal runner which is more fully illustrated in Fig. 3. This runner is composed of a head 20, a base 21, and two parallel connecting webs 22. Head

20 is flush with the outer face of knob 19 to present a wearing surface, while the length of base 21 is considerably greater than the diameter of the knob. In this way the base extends at both sides laterally beyond the knob into the body of sheet 18, so that the runner is securely anchored and prevented from tearing out under strain.

Interposed between knobs 19, are a number of metallic buttons 23, which have tubular threaded shanks 24 extending inward through corresponding apertures of strip 12. Shanks 24 are engaged by outwardly extending screws 25, the heads 26 of which are embedded in sheet 18 and are overlapped by strip 12. Buttons 23 supplement runners 20 to reinforce the tread and to constitute anti-skidding devices.

It will be seen that my tire armor can be readily applied and removed, and that being entirely separable from the case tube, it may be separately marketed, while any damage which it may suffer in no wise affects the serviceableness of the tire itself.

I claim:

1. A tire armor comprising a pair of spaced side strips, a central strip that overlaps the side strips and is secured thereto along its edges, a flexible sheet pocketed below the central strip and between the side strips, said sheet having a plurality of integral knobs that extend outwardly through the apertures of the central strip, and metallic runners embedded in said knobs, each runner being composed of a head and an integral base extending lengthwise of the covering beyond the knob into the body of the flexible sheet, thereby protecting said sheet and central strip against excessive tearing strain in proximity to the knobs.

2. In a tire armor, a flexible sheet adapted to encircle the tread of a tire and having a plurality of outwardly projecting oblong knobs, a metallic runner embedded within each knob, said runner being composed of a head, a base and a pair of connecting webs, the base extending lengthwise of the covering beyond the knob into the body of the flexible sheet, thereby preventing a tearing of the latter at its junctions with the knob.

HENRY J. VON DER LIETH.

Witnesses:

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