

G. A. V. LONGUEMARE.
UNPERFORABLE METALLIC BAND FOR TIRES.
APPLICATION FILED JULY 22, 1911.

1,064,661.

Patented June 10, 1913.

Fig. 1.

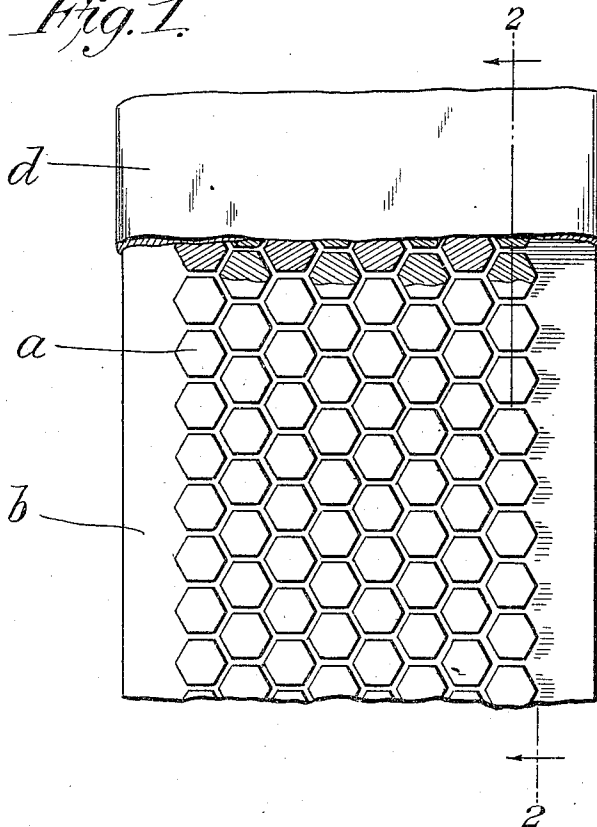


Fig. 2.

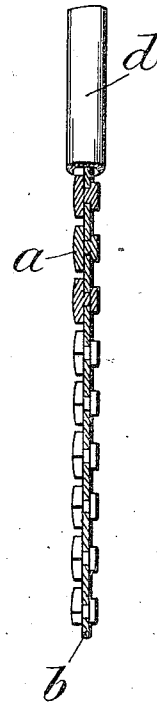
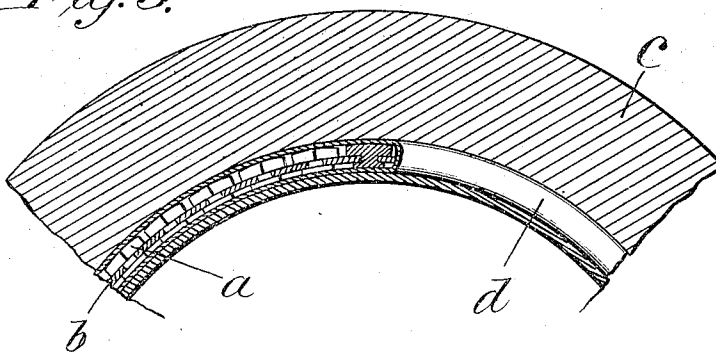


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGES AUGUSTE VICTOR LONGUEMARE, OF STE. ADRESS, FRANCE.

UNPERFORABLE METALLIC BAND FOR TIRES.

1,064,661.

Specification of Letters Patent.

Patented June 10, 1913.

Application filed July 22, 1911. Serial No. 639,877.

To all whom it may concern:

Be it known that I, GEORGES AUGUSTE VICTOR LONGUEMARE, a citizen of France, residing at Ste. Adress, France, have invented certain new and useful Improvements in Unperforable Metallic Bands for Tires, of which the following is a specification.

The present invention relates to improvements in pneumatic tires and has for its object to provide a band to which are connected a plurality of closely grouped but not overlapping small metal plates for preventing the air tube or chamber of such tires from being perforated, the said band with metal plates being inclosed in an india rubber sheath which is then located between the air tube or chamber and the inner side of the pneumatic tire.

In the annexed drawing: Figure 1 is a plan view. Fig. 2 is a sectional view of a band or protector embodying the invention. Fig. 3 is a section of a portion of a tire equipped with my invention.

The protector consists of a plurality of small metal plates *a*, preferably hexagonal in shape, which are placed side by side on a band *b* made of suitable flexible material. The plates are spaced slightly apart, preferably about half a millimeter from each other. They are fastened to the band by riveting or in any suitable manner, preferably by passing an integral stem through a hole in the band and heading down the end of said stem upon the opposite side of said band, as shown in Fig. 2. This figure also shows that the surfaces of the plates or studs are slightly convex, so that when the protector is curved to conform to the shape

of the interior of a casing *c*, there will be no projecting sharp edges to cut or chafe the fabric of said casing, but the entire surface of the protector will present a smooth curved surface to the interior of the casing. In order to further guard against injury to the fabric of the casing the band with its studs is preferably inclosed in a sheath or covering *d*, preferably of rubber.

Having now described and ascertained the nature of my invention and in what manner it is to be performed, what I claim is.

1. A protector for pneumatic tires, consisting of a band of flexible material, a plurality of closely grouped small hexagonal metallic plates riveted to said band and spaced regularly apart so as not to overlap and provided with convex surfaces, and a sheath or cover of india rubber enveloping said band and plates.

2. The combination with the outer casing or shoe of a pneumatic tire and an inner tube therefor, of a protector for said inner tube consisting of a band of suitable material provided with a plurality of closely grouped but not overlapping small metallic plates suitably secured thereto and provided with convex surfaces, and a sheath or covering of rubber inclosing said band and plates, said protector being located freely between said shoe and inner tube with said plates bearing against said shoe.

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

GEORGES AUGUSTE VICTOR LONGUEMARE.

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