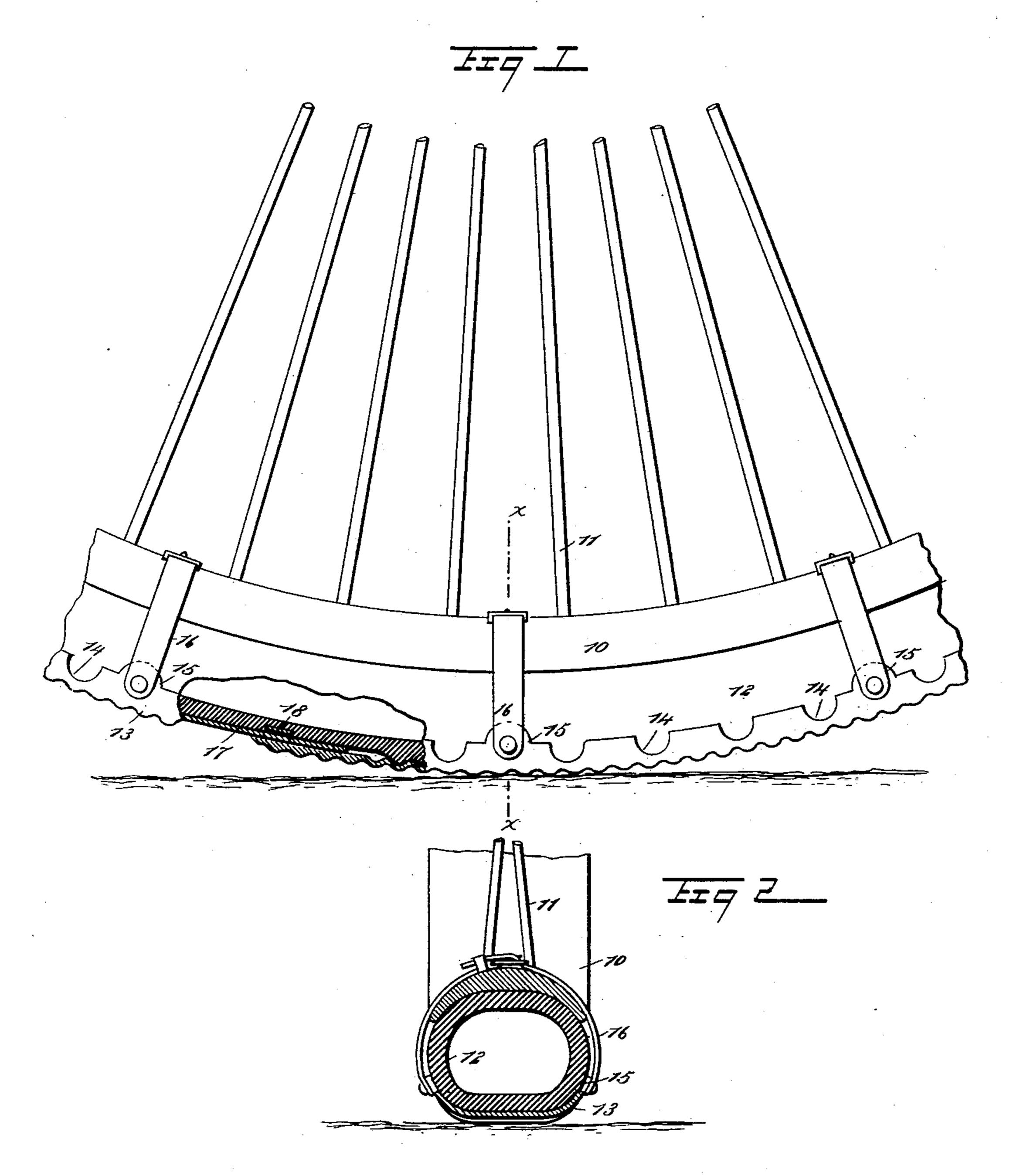
(No Model.)

## J. D. PARKER.

BICYCLE TIRE.

No. 591,787.

Patented Oct. 12, 1897.



WITNESSES: KWalker\_

INVENTOR

BY

ATTORNEYS.

## United States Patent Office.

JOHN D. PARKER, OF SAN DIEGO, CALIFORNIA.

## BICYCLE-TIRE.

SPECIFICATION forming part of Letters Patent No. 591,787, dated October 12, 1897.

Application filed June 22, 1895. Serial No. 553,684. (No model.)

To all whom it may concern:

Be it known that I, John D. Parker, of San Diego, in the county of San Diego and State of California, have invented a new and Improved Bicycle-Tire, of which the following is a full, clear, and exact description.

It is the principal object of this invention to provide a pneumatic cushion for bicycle-wheels which will be effectively protected from puncture and other injury and whereby every benefit of a cushion will be obtained and the usual disadvantages thereof avoided. This and other desirable objects I attain by means of the device illustrated in the accompanying drawings, and which will be more fully described hereinafter, and finally embodied in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation of a portion of a bicycle-wheel, showing my improvements applied thereto; and Fig. 2 is a cross-section thereof on the line x x of Fig. 1.

The reference-numeral 10 indicates the rim of the wheel and 11 the spokes thereof, the rim being of the usual concave form and secured to the spokes by any approved means. Seated in the concave of the rim 10 is the pneumatic cushion 12, which may also be of any known construction.

13 indicates a concave and circular strip or band of flexible steel which has a corrugated 35 and convex outer surface and which has its edges formed with notches 14, whereby it is possible to readily bend the otherwise rigid band, and whereby the same is given that pliability necessary to its effective operation. 40 Formed on the edges of the band 13 and at equidistant points throughout the extent thereof are the projections 15, which have the straps 16 attached thereto. By these means the band 13 is secured in place. I 15 have shown the straps 16 as the means for holding the band in place, but I desire it to be understood that I do not limit myself to the particular means shown, as the same may and indeed will be variously changed and 50 substituted in practice.

The end 17 of the band 13 is reduced in width and thickness and passed through a loop or band 18 on the inner side of the opposite end of the band 13, whereby the end 17 is slidably connected to the companion 55 end, as may be readily seen by reference to Fig. 1 of the drawings. By reason of this slidable connection at the ends of the band the band is allowed to give inwardly and to contract and expand with the tube 12. Thus 60 it will be seen that by means of the band 13 the tube 12 is protected from puncture and from all other injury and is permitted to operate solely in the capacity of a cushion. It will also be observed that by reason of the 65 peculiar construction of the band 13 the same is permitted to move freely and without hindrance to the operation of the tube. If so desired, the sides of the band may be provided with projections, which are to be ex- 70 tended up around the inner sides of the cushion, so as to prevent the displacement of the same.

Having thus fully described my invention, I claim as new and desire to secure by Let- 75 ters Patent—

1. A protector for wheel-tires, consisting of a band adapted to be applied to the outside of the tire and provided with longitudinal flanges having at their ends notches which 80 remain open when the protector is in position on the tire, the tread-surface of the protector being corrugated transversely, substantially as described.

2. A protector for wheel-tires, the protector 85 consisting of a flexible integral band curved to embrace the tire and corrugated transversely and provided with notches in its edges whereby it may freely bend, the band having means for slidably connecting its ends where- 90 by the ends may move freely on each other and accommodate the band to the varying positions of the tire, substantially as described.

JOHN D. PARKER.

Witnesses:

W. R. GUY, Ţ. A. RIPPEY.