

No. 616,574.

Patented Dec. 27, 1898.

K. G. HILLER.
PNEUMATIC TIRE.

(Application filed July 29, 1898.)

(No Model.)

Fig. 1.

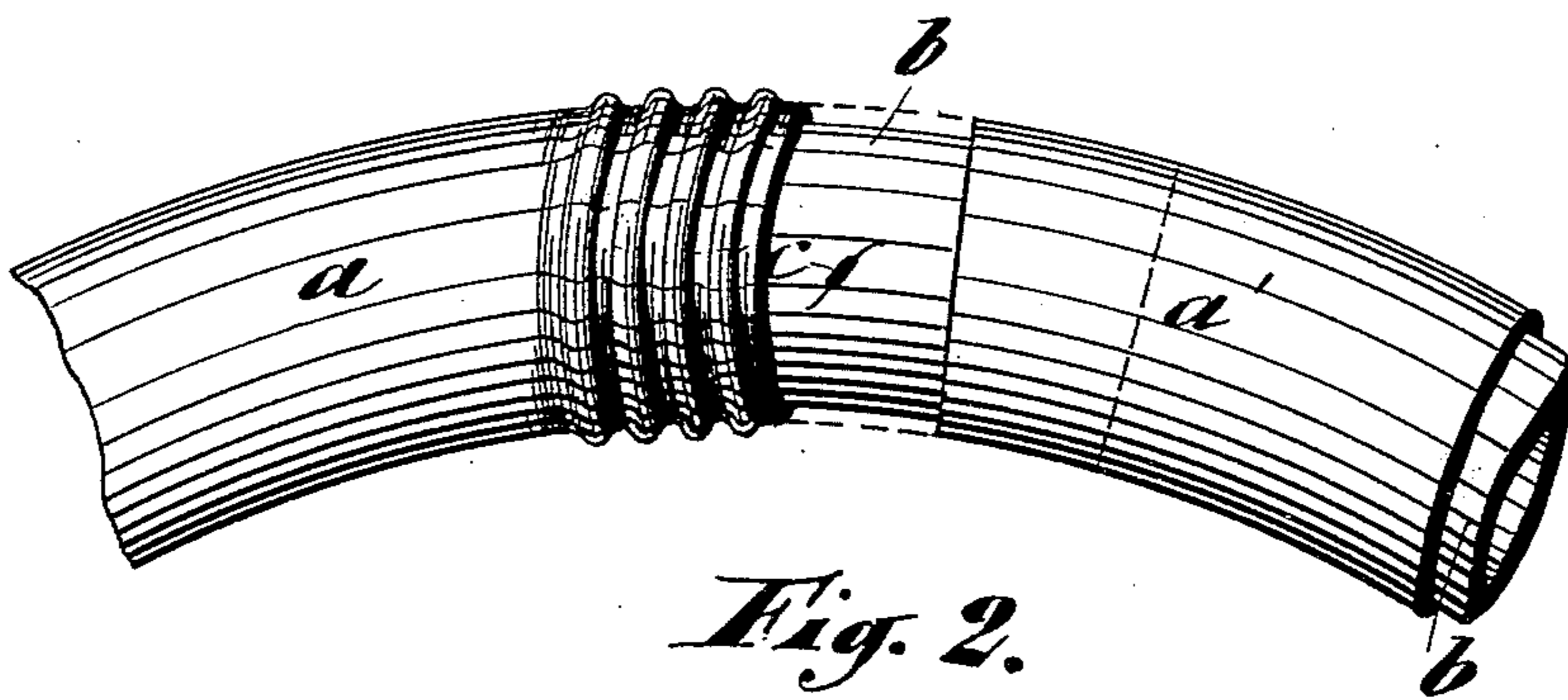
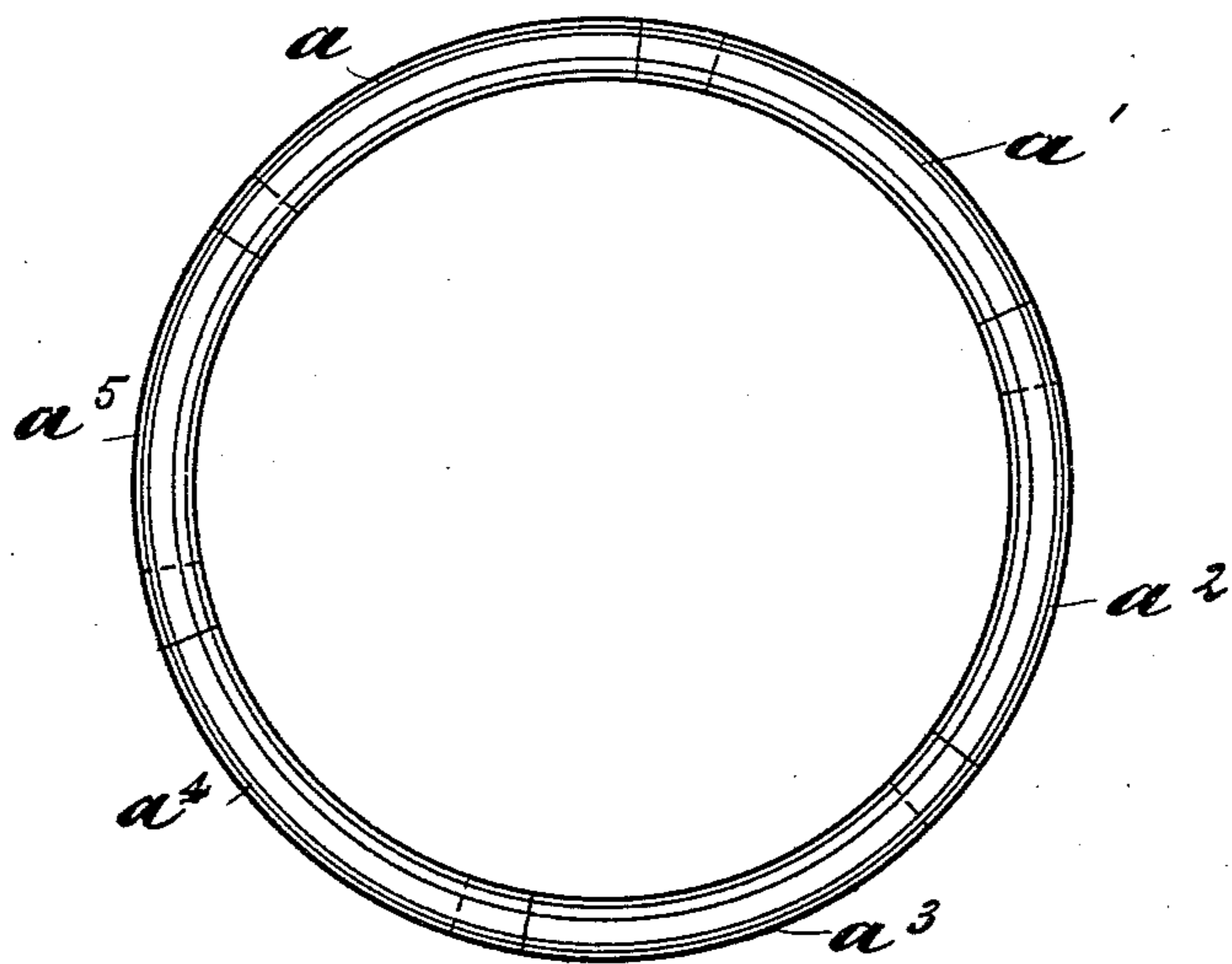


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

KARL GUSTAV HILLER, OF ZITTAU, GERMANY.

PNEUMATIC TIRE.

SPECIFICATION forming part of Letters Patent No. 616,574, dated December 27, 1898.

Application filed July 29, 1898. Serial No. 687,223. (No model.)

To all whom it may concern:

Be it known that I, KARL GUSTAV HILLER, a citizen of the Empire of Germany, residing at Zittau, Germany, have invented certain
5 new and useful Improvements in Pneumatic Tires, of which the following is a specification.

The present invention relates to a tubular protecting-cover of cotton or linen tissue or any other hardly extensible material, the
10 object of which is to limit the dilatation of the air-tube when inflated, the said protecting-cover being arranged between the air-tube and the outer covering, forming the rolling surface of the tire of the bicycle-wheel.

15 In order to enable one to reach easily the air-tube *b* in case of puncture, the improved protecting-cover is made of several parts *a a' a''*, overlapping each other and capable to slide the one upon the other, respectively, to enter
20 telescopically the one into the other, so that the air-tube can thus be uncovered at the point to be repaired.

In the annexed drawings, Figure 1 shows a portion of the air-tube provided with the
25 protecting-cover. Fig. 2 is a view of the complete air-tube provided with the protecting-cover.

30 The tube not being inflated, the several parts of the protecting-cover can easily slide the one upon the other, the diameter thereof being larger than the diameter of the air-tube.

If a tearing of the air-tube *b* occurs at the junction-point of two portions of the protecting-cover, as represented at *c*, Fig. 1, it suffices to slide backward one of the said two
35 portions (*a* in the drawings) and to proceed with the repairing in the usual way.

In order to avoid the formation of pads at the junction of two portions of the protecting-cover, the ends of said portions, overlapping each other, can be made of half the thick-
40 ness of the remaining part of the cover. The air-tube being inclosed in the protecting-cover forms, in combination with an outer covering, a tire which will especially be suited for fit-
45 ting on wooden rims.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a pneumatic tire the combination of a
50 protecting-cover of hardly extensible tissue or other suitable material arranged between the air-tube and the outer covering and formed of several portions, the ends of which overlap each other and are capable of sliding
55 the one upon the other to uncover the air-tube, substantially as and for the purpose set forth.

KARL GUSTAV HILLER.

Witnesses:

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