No. 616,487. Patented Dec. 27, 1898.

W. H. PHELPS & J. F. BRENNER.

TOOL FOR LOOSENING INNER TUBES OF BICYCLE TIRES.

(Application filed June 28, 1897.)

(No Model.)

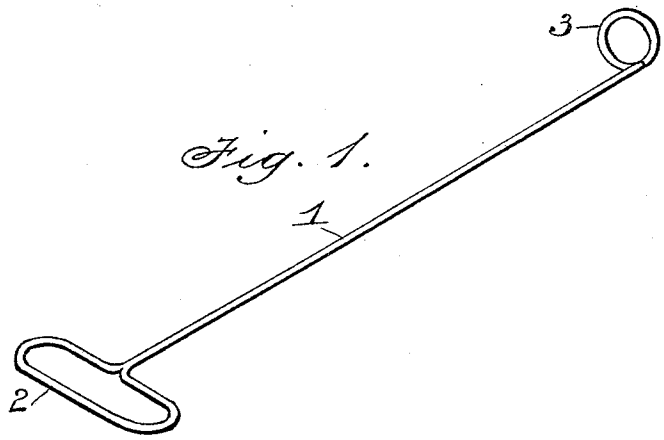


Fig. 1.

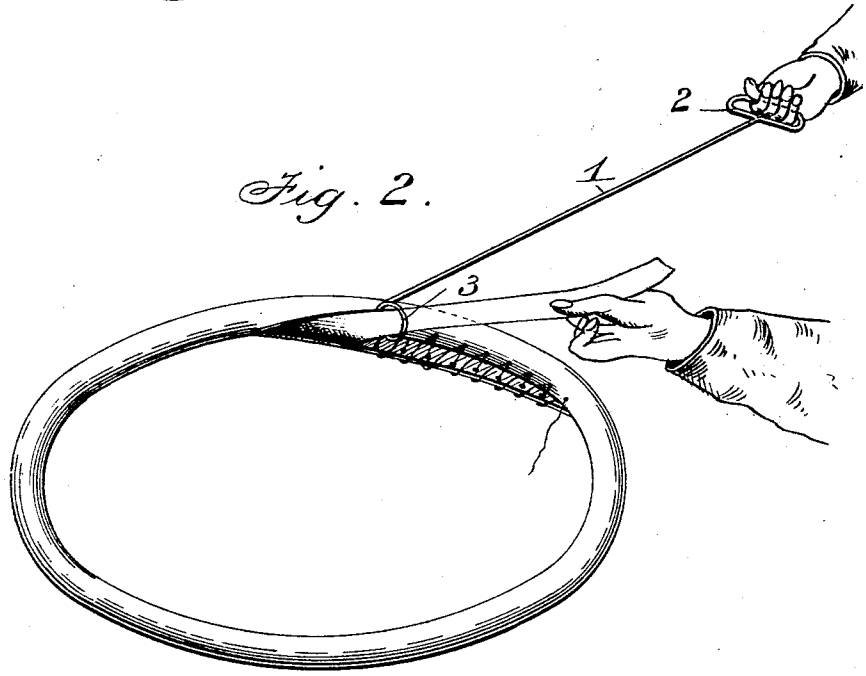


Fig. 2.

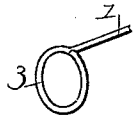


Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLIAM H. PHELPS AND JOHN F. BRENNER, OF QUINCY, ILLINOIS.

TOOL FOR LOOSENING INNER TUBES OF BICYCLE-TIRES.

SPECIFICATION forming part of Letters Patent No. 616,487, dated December 27, 1898.

Application filed June 28, 1897. Serial No. 642,686. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. PHELPS and JOHN F. BRENNER, citizens of the United States, and residents of Quincy, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Tools for Loosening the Inner and Outer Tubes of Bicycle-Tires; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to tools for loosening the inner or air tubes from the outer casings of double-tubed bicycle-tires, so as to allow the air-tubes to be taken out for repairs.

It frequently happens after a few weeks' or months' use of double-tubed tires that the inner tube becomes so firmly attached to the outer tube that in attempting to pull out or remove the same with the hand alone it becomes pulled in two or otherwise injured.

The object of this invention is to provide a tool by which the air or inner tube may be loosened or detached from the outer tube, so that it may be readily removed or pulled out.

The invention consists, essentially, in a metal rod having a handle at one end and the other end bent into a ring at an angle thereto, as hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a tool constructed in accordance with our invention. Fig. 2 is a view of a double-tubed bicycle-tire, showing the manner of using the tool to loosen the inner tube. Fig. 3 is a detail perspective view.

In the said drawings the reference-numeral 1 designates a metal tube formed at one end with a handle 2 and the other end bent into circular form, forming a ring 3, projecting at an angle to the rod. The end of the rod after being thus bent is then turned backwardly and welded to the rod.

In using the tool the outer tube is opened at the meeting edges and the end of the inner or air tube passed through the ring 3. The said end of the tube is then grasped by one hand and the ring pushed or forced half-way around the tire, which will loosen or detach said inner tube from the outer tube. The ring is then withdrawn and the operation repeated at the other end of the air-tube, detaching or loosening the other half of the air-tube, after which the latter tube can be readily pulled out or removed from the outer tube.

Having thus fully described our invention, what we claim is—

1. As an improved article, a tool for detaching the inner tube from the outer tube of a double-tubed bicycle-tire, consisting of the metal rod having one end bent into a ring at an angle thereto of a size sufficient to permit the passage of the inner tube of a bicycle-tire, substantially as described.

2. As an improved article a tool for detaching the inner or air tube from the outer tube of a double-tubed bicycle-tire, consisting of a metal rod having one end bent into circular form forming a ring at an angle to the rod and the extremity bent backward and soldered to the rod said ring being of a size sufficient to permit the passage therethrough of the inner tube of a bicycle-tire, substantially as described.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

WILLIAM H. PHELPS.
JOHN F. BRENNER.

Witnesses:
HARRY LUTENBERG,
THOMAS C. WHITE.