

No. 607,356.

Patented July 12, 1898.

C. EICKMANN.
BUCKLE FOR TIRE CASES.

(Application filed Feb. 14, 1898.)

(No Model.)

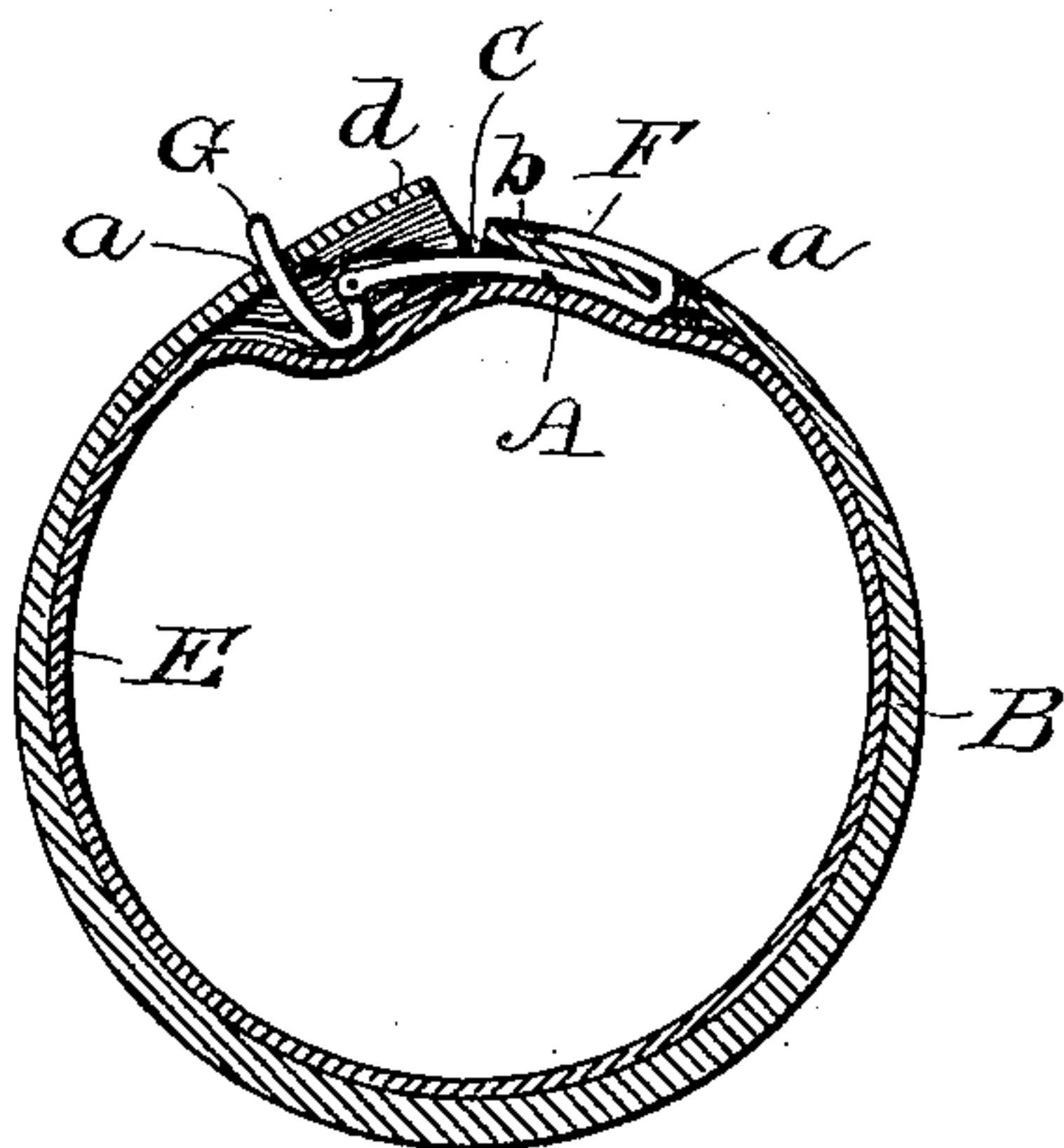
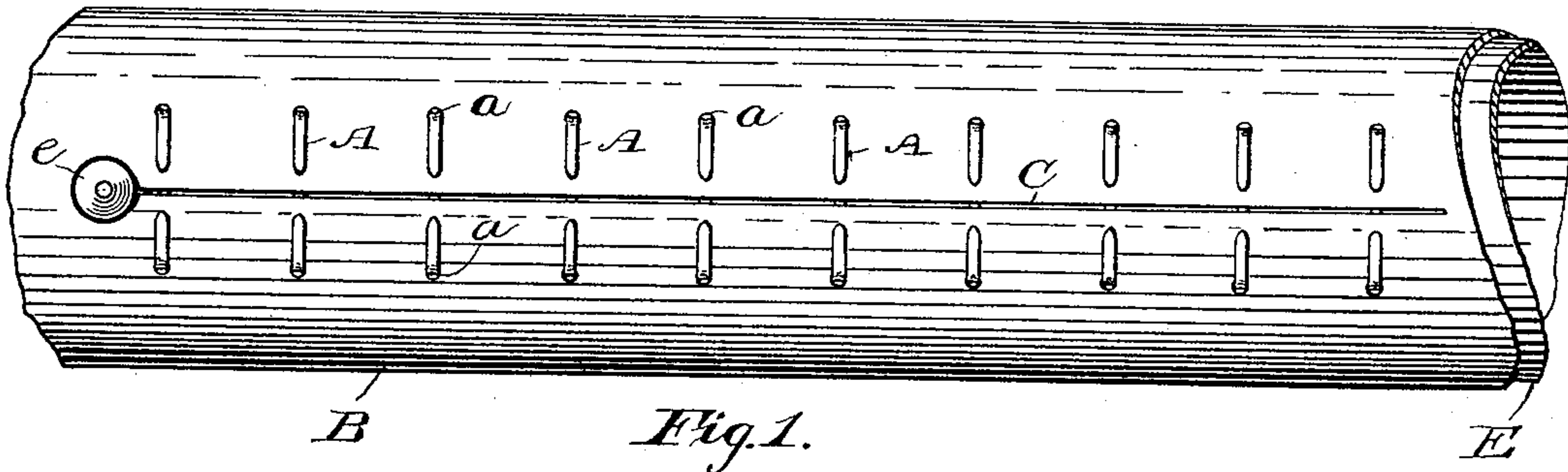


Fig. 2.

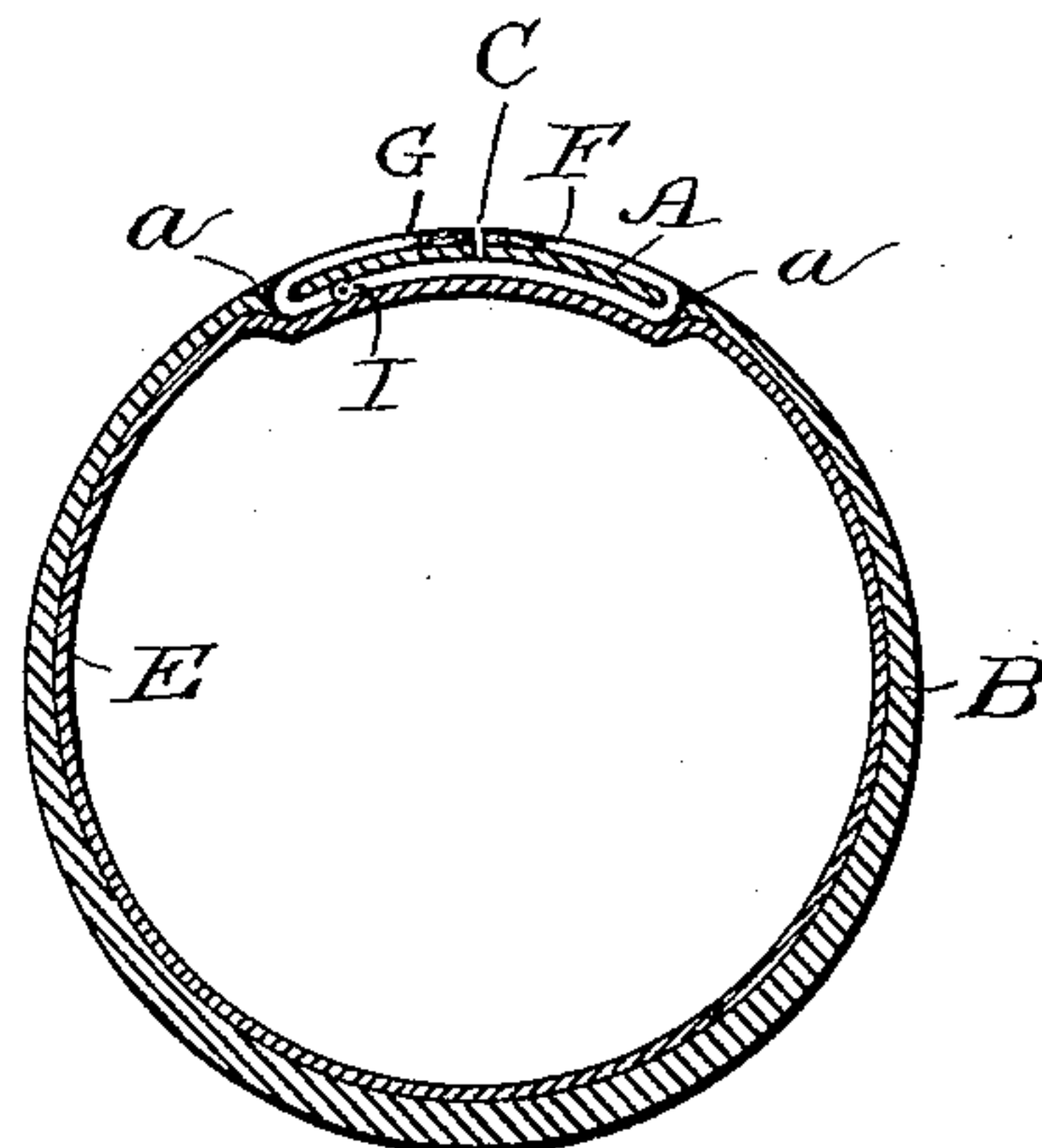


Fig. 3.

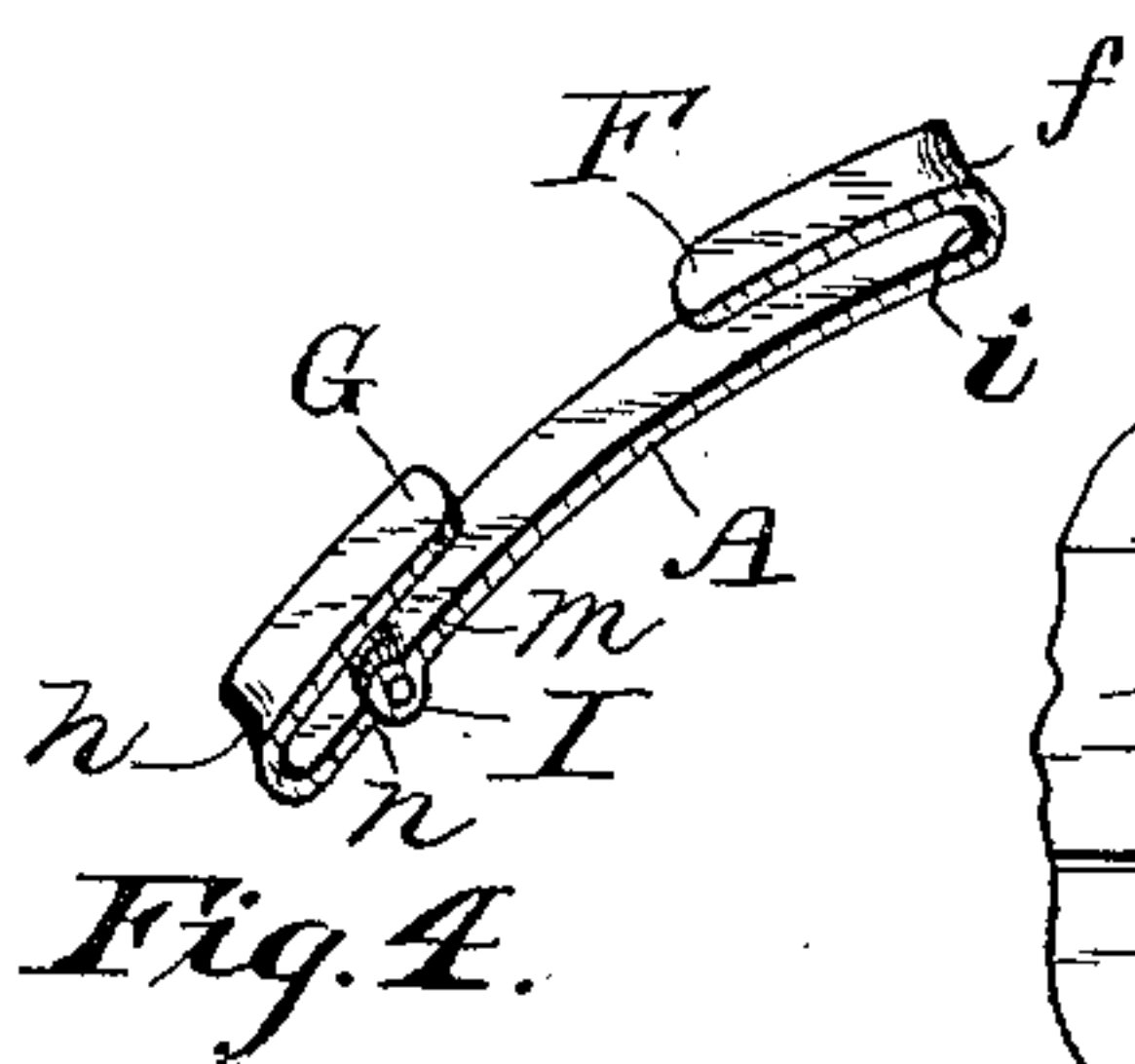


Fig. 4.

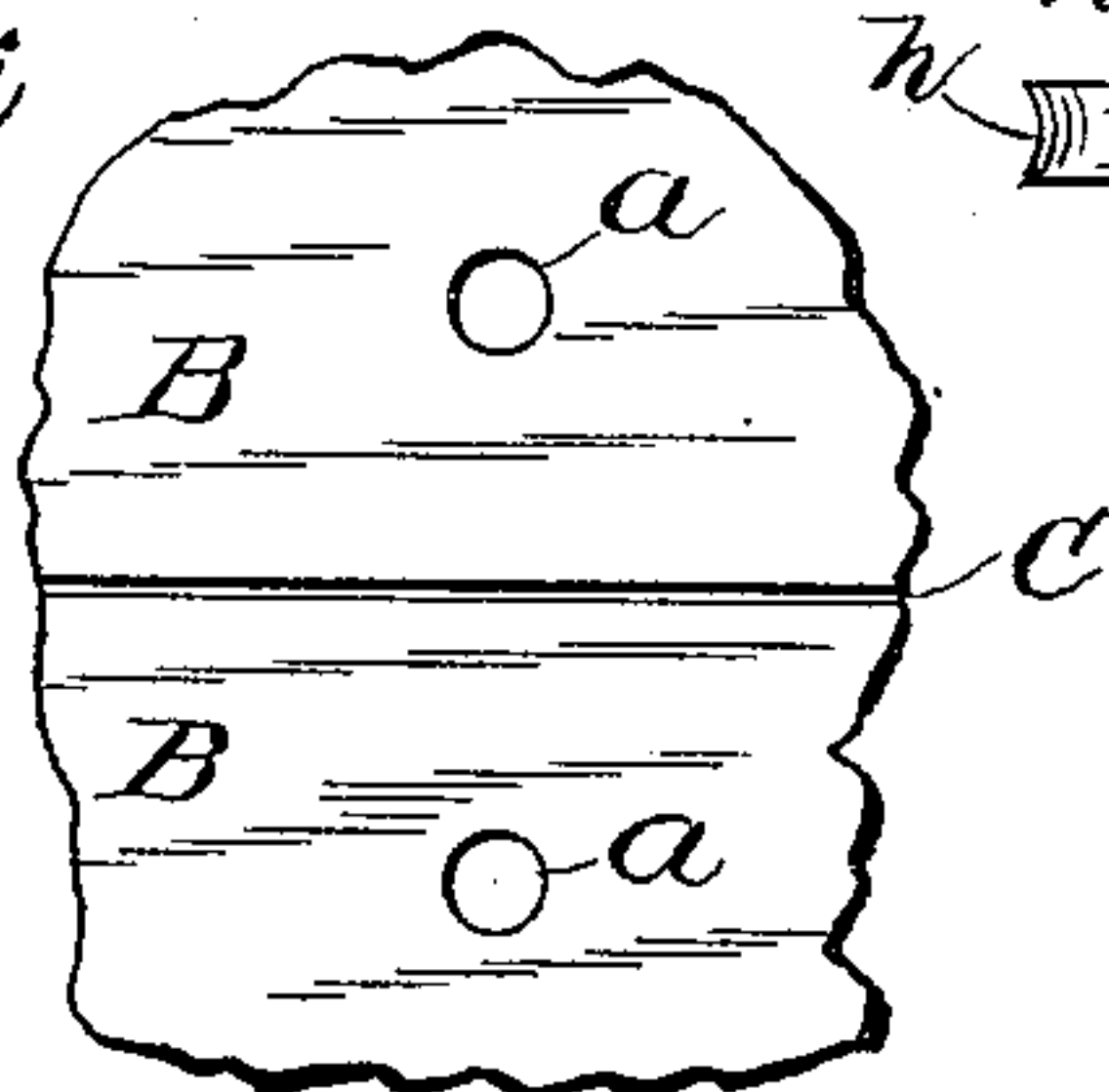


Fig. 5.

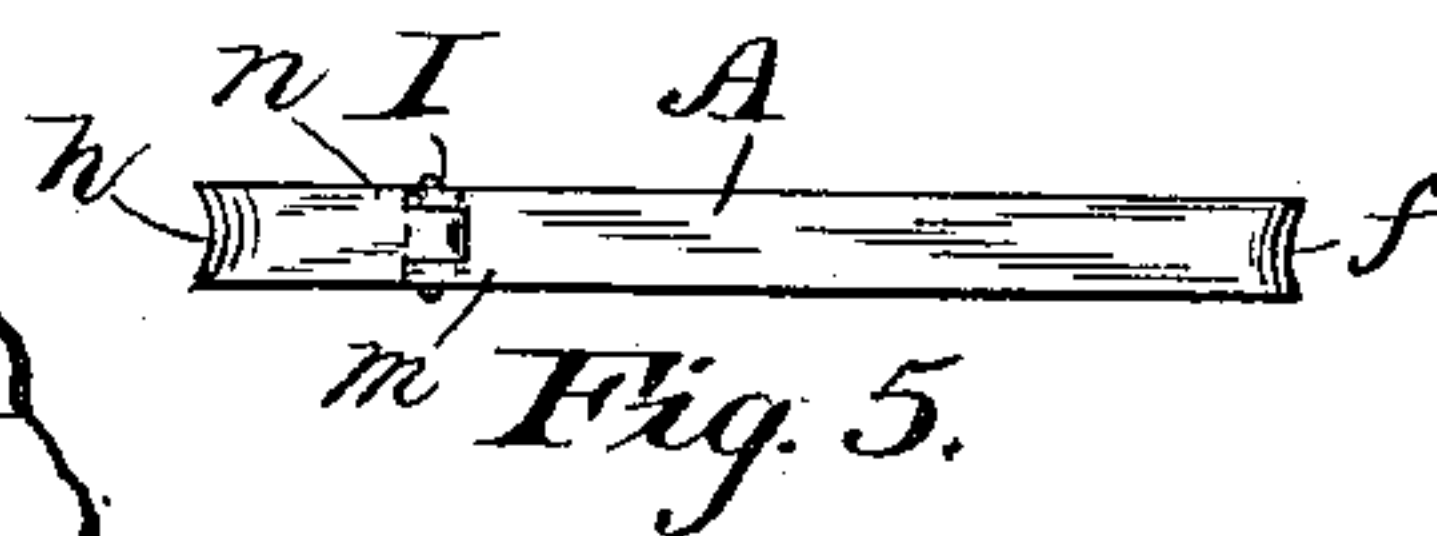


Fig. 6.

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BUCKLE FOR TIRE-CASES.

SPECIFICATION forming part of Letters Patent No. 607,356, dated July 12, 1898.

Application filed February 14, 1898. Serial No. 670,196. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN EICKMANN, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Buckles for Tire-Cases; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to a device for closing and securing or lacing the case or outer tube of pneumatic or similar tires which require a slit for admitting the inner tube or equivalent springs; and it consists in a buckle or clasp of new and novel form whereby the two abutting edges of the case at the slit are drawn together and firmly retained, as will be more fully described hereinafter and claimed.

My object is to provide means whereby the case may be effectually closed and by which it may be opened readily at will for gaining access to the inner tube when making repairs thereto and which shall be of such simple and inexpensive design that it may be universally applicable and be operated by the most inexperienced without the aid of tools or special appliances, and this is attained in my invention, which may be cheaply manufactured and is durable and economical in use.

Referring to the drawings, Figure 1 represents a plan view of the slitted portion of a tire-case having an inner tube therein and showing my devices applied; Figs. 2 and 3, transverse sectional views through the lacing-holes; Fig. 4, a perspective view of my buckle; Fig. 5, a bottom view of my buckle; Fig. 6, detail views of fragmentary parts of my buckle, and Fig. 7 an exaggerated plan view of a portion of the case at the slit.

In common practice the case B has a slit C extending from the inflating-nipple *e* a suitable distance, which may be opened to insert or withdraw the inner or air tube E, and it is provided with a series of holes *a*, through which twine is interlaced by the use of a needle and tied at the ends for closing the slit.

The disadvantages of this crude appliance are obvious and well known. My device therefore obviates the necessity for the use of a twine or similar lacing.

The buckle A is made of such metal as may best be adapted for the purpose and is preferably non-corrosive, and it is formed in suitable dies in a press. It comprises a body portion having two parts with abutting ends *m* and *n*, which are hinged together in a suitable manner. It is comparatively thin and only broad enough to provide sufficient strength and surface to bear in the holes *a* and is adapted to conform to the curvature of the case. The hinge I may be of any design, but is preferably made as shown in Fig. 6, in which the end J is split to form the hinge-pins *s*, and the end K is split and spread out to form the jaw-fingers *t*, which are turned over the pins *s* as an eye and forming the hinge. The end of the body portion opposite the end *m* has a hook F, and at the bend *f* it is curved in cross-section, so as to present a convex face at the inner part *i*, adapted to the semicircular side of the hole *a*. The other part has the end opposite the end *n* provided with a hook G, and the bend *h* is formed as that at *f*. In finishing my buckle all sharp or acute edges are removed by suitable means, so that the rubber may not be cut or injured.

In applying my buckle the hook F is first inserted in a hole *a*, entering from the inner side of the case, which is readily accomplished, attaching it to the side *b* of the slit. The hinged end *h* is then pressed downward or toward the interior of the case until the point of the hook G enters the hole at the under side of the side *d* of the slit, and this being pressed down over the hook the point of the latter is forced by the thumb or finger over toward the hook F, thus drawing the two edges *b d* together, and the hook G being closed down entirely against the outside of the case the latter is firmly secured and the two edges of the slit are held closely together, being thus locked more firmly when the tire is inflated, as the pressure acting upon the ends or hook-bends *f* and *h* by reason of the location of the hinge I tends to prevent disengagement of the hooks; neither can the buckle become accidentally disconnected when the tire is deflated, as the hook

G must be thrown back manually in order to withdraw it.

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

1. A buckle or clasp for the outer casing of flexible tires having a slit through the wall thereof and by which the two edges at the slit are drawn together and retained, and consisting of a body member curved to conform to the case and having at one end a rigid hook and at the opposite end a hook hinged to said body member, substantially as shown and described.

2. A buckle for flexible-tire cases, said buckle comprising a body member, a hook formed integrally at one end of said body member, a hook at the opposite end of said body member and hinged thereto, said hooks being adapted to enter suitable holes in said case, and said hinged hook being adapted to be opened at its point and closed, substantially as and for the purposes shown and described.

3. The combination with a case for pneumatic tires having a slit through which to insert the inner tube and having lacing-holes, of a buckle or metallic clasp consisting of a body member provided at one end with a rigid hook and at the opposite end with a hinged hook, said hinged hook being adapted to draw the two abutting edges of said slit together and retain them, substantially as shown and described.

4. The combination with the case provided with the slit and lacing-holes, of a metallic buckle or clasp provided at one end with a rigid hook engaging one of said lacing-holes and at the opposite end with a hinged hook engaging a lacing-hole at the opposite side of said slit, said hinged hook being adapted to draw the two edges of said slit together and

retain them, substantially as shown and described.

5. The combination with a tire-case having a slit for inserting the inner tube and having the lacing-holes at each side of the slit, of a metallic buckle or clasp consisting of a body member adapted to extend between two opposite lacing-holes, a rigid hook at one end of said body member and engaging one of said lacing-holes, a rigid hook at the opposite end of said body member but hinged thereto near the bend of the hook so that the point of said hinged hook may be thrown outward to enter the opposing lacing-hole and be used as a lever to draw the opposing edges of said slit together and whereby said edges are retained in close connection, substantially as shown and described.

6. In a device for connecting or lacing the opposing edges of the slitted case, the combination with the lacing-holes, of the metallic buckle or clasp consisting of the body member, the rigid hook at one end engaging a lacing-hole, and the rigid hook hinged to the opposite end of said body member and engaging a lacing-hole at the opposite side of said slit, substantially as shown and described.

7. In a tire-case, the combination with the holes *a a* of the buckle A provided at one end with the hook F and at the opposite end with the hook G, and the hinge I adapted to permit the opening and closing of the said hook G substantially as and for the purposes shown and described.

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

CHRISTIAN EICKMANN.

Witnesses:

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