

(No Model.)

J. WOOD, Jr. & A. J. PHILBRICK.

PEDAL FOR VELOCIPEDES.

No. 336,277.

Patented Feb. 16, 1886.

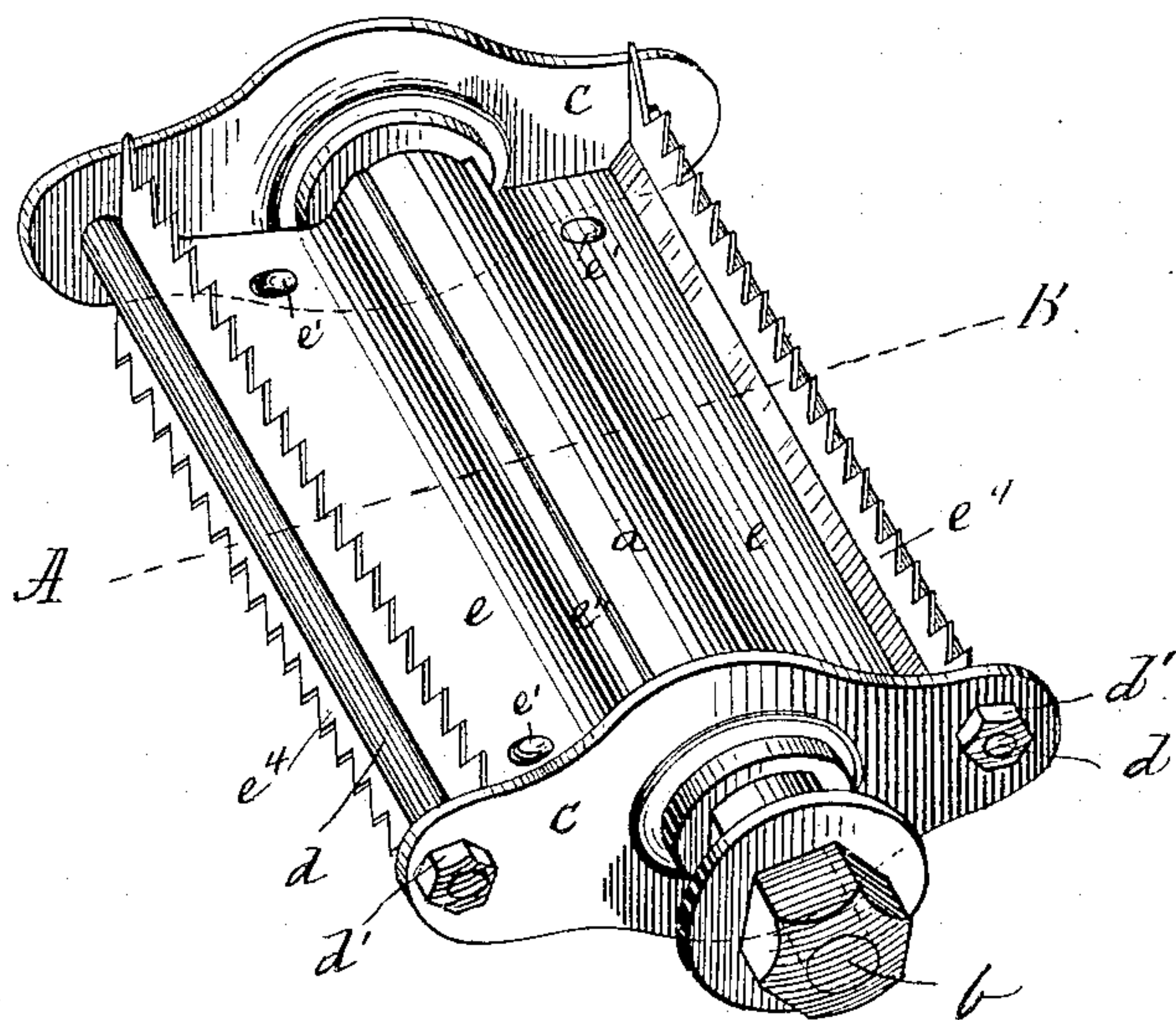


Fig. 1.

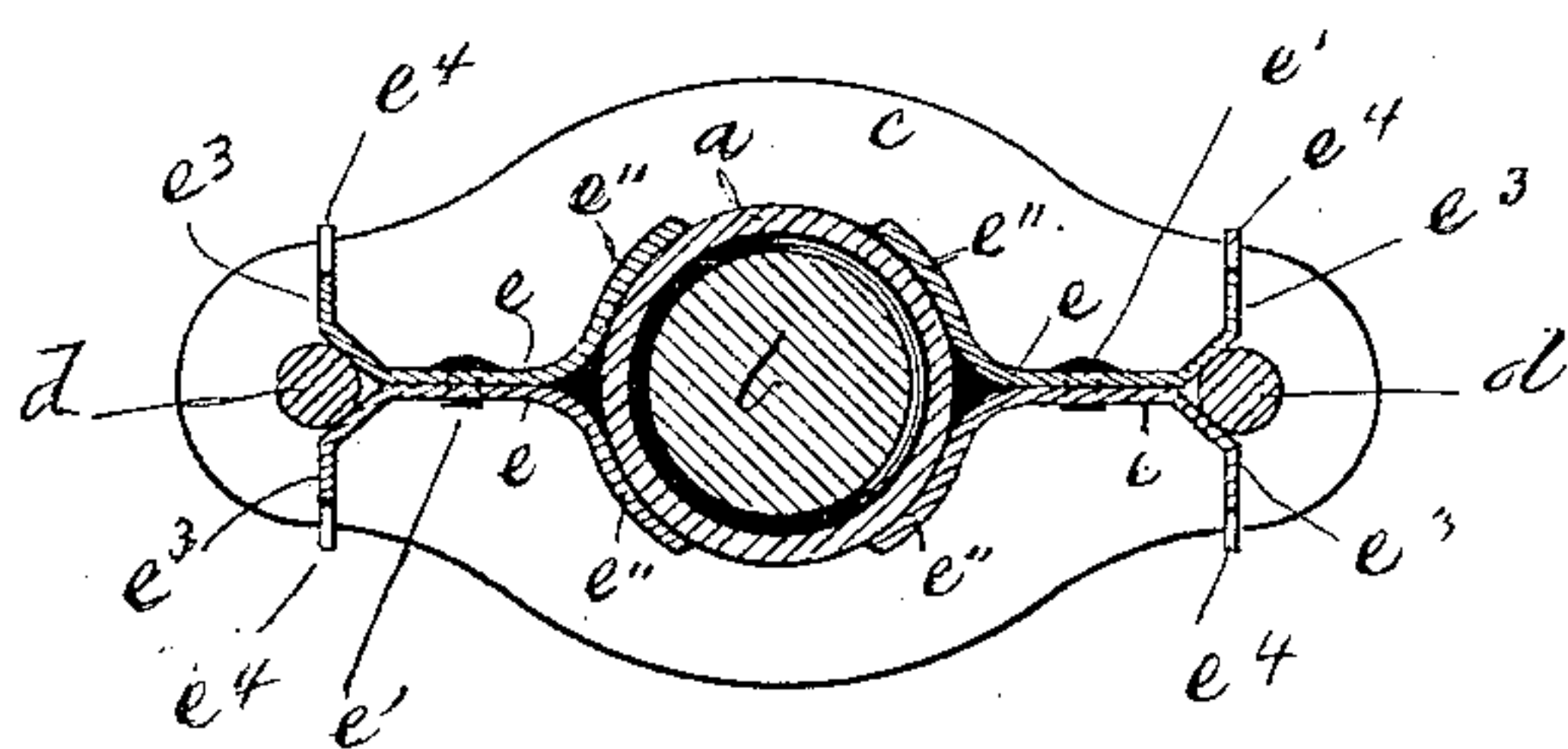


Fig. 2.

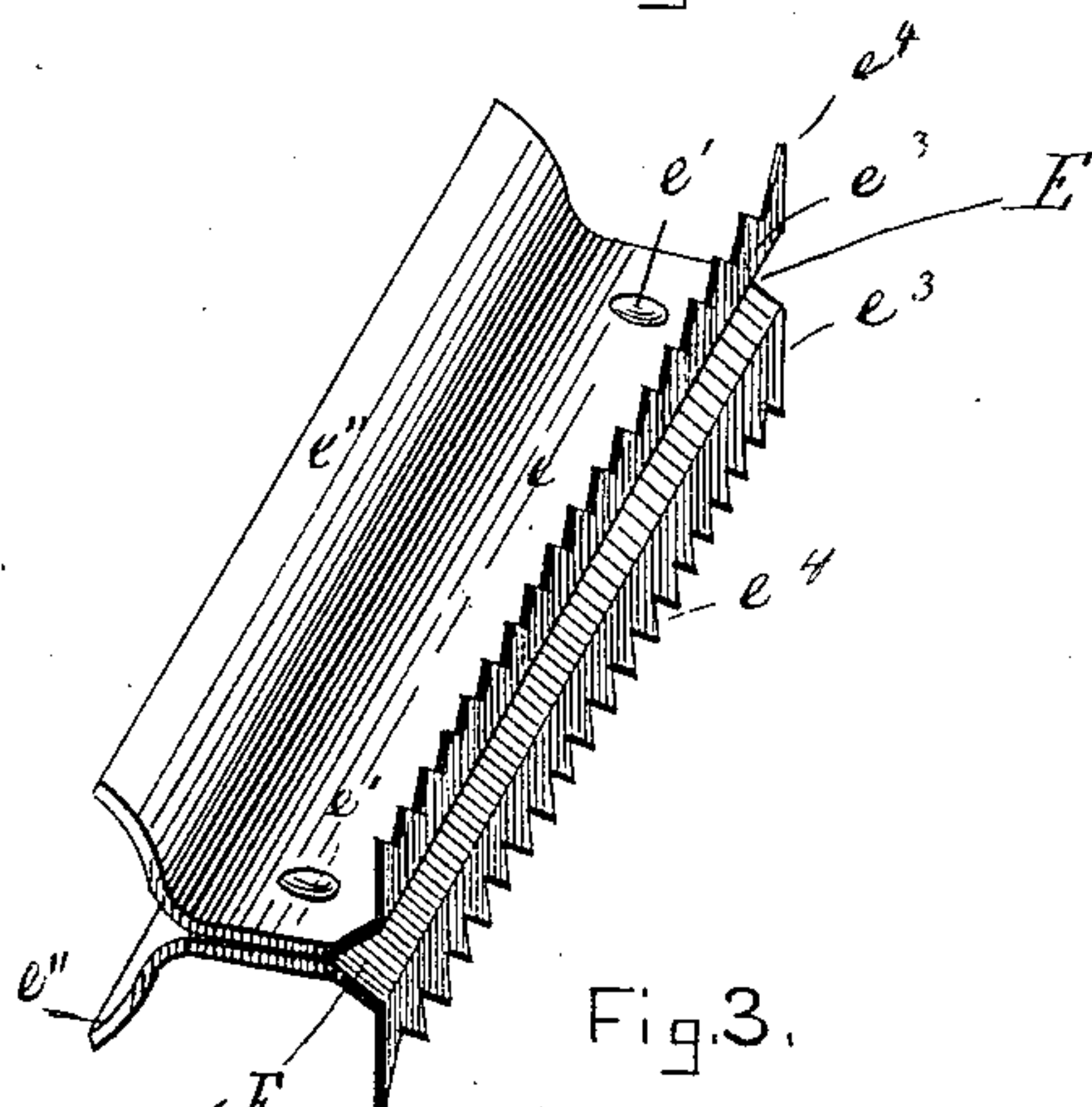


Fig. 3.

Witnesses:
Ellis T. Blandin.
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UNITED STATES PATENT OFFICE.

JOHN WOOD, JR., OF BEVERLY, AND ANDREW J. PHILBRICK, OF SALEM,
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PEDAL FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 336,277, dated February 16, 1886.

Application filed July 6, 1885. Serial No. 170,705. (No model.)

To all whom it may concern:

Be it known that we, JOHN WOOD, Jr., a citizen of the United States, residing at Beverly, in the county of Essex and State of Massachusetts, and ANDREW J. PHILBRICK, a citizen of the United States, residing at Salem, in the county of Essex, State of Massachusetts, have jointly invented certain new and useful Improvements in Pedals for Bicycles and Tri-
cycles; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

This invention relates to improvements in pedals for bicycles, tricycles, and velocipedes; and it consists of a "rat-trap" attachment to be applied to pedals for racing purposes, so as to prevent the foot of the rider from slipping when actuating the pedal at high speed.

The invention is carried out as follows, reference being had to the accompanying drawings, where—

Figure 1 represents a perspective view of a pedal provided with our rat-trap attachment; and Fig. 2 represents a cross-section on the line A B, shown in Fig. 1. Fig. 3 represents a perspective view of the rat-trap attachment as removed from the pedal.

Similar letters refer to similar parts wherever they occur on the different parts of the drawings.

In Figs. 1 and 2, *a* is the central sleeve-bearing, and *b* is the crank-pin or spindle journaled therein, as usual. *c c* are the end plates of the pedal, as usual, secured to opposite ends of the sleeve-bearing *a*, and provided in their outer ends with screw-bolts *d d*, having fastening-nuts *d' d'*, as ordinarily used on bicycle or tricycle pedals, such bolts having usually journaled to them the square, round, or polygonal rubber treadle-blocks employed for ordinary road-driving.

In connection with such above-described treadle we have constructed a simple all-metal detachable rat-trap attachment to be used especially for racing purposes, and it is composed of a pair of sheet-steel plates, *e e*, riveted together by means of rivets *e' e'*, the inner end of each plate being bent in the form of a concave lip, *e''*, adapted to embrace a portion of the circumference of the central sleeve-bearing, *a*, as shown in the drawings. The outer end, *e³*, of each plate *e* is curved at or

about a right angle to the main part, and its outer edge provided with a number of teeth or serrations, *e⁴ e⁴*. (Shown in the drawings.) Where the curved portions *e³ e³* of the plates *e e* come together is produced, as it were, a V-shaped channel or groove, *E*, (shown in Fig. 3,) in which the holding-bolt *d* is inserted and adapted to serve as a rest and firm support for the outer end of the rat-trap attachment. It will thus be seen that the concave inner ends *e'' e''* of the riveted plates *e e* are made to rest firmly on the central bearing-sleeve *a*, and that the bolt *d* serves as a support for the outer end of the attachment.

To put our improved attachment on a pedal in place of the usual rubber block, it is only necessary to remove the bolts *d d* and the usual rubber blocks, after which we put our attachment on the pedal in position as shown in Fig. 2 and replace the bolts *d d* in their original positions in the end plates, *c c*.

Our improved rat-trap attachment is symmetrical—that is, alike on top and bottom—so that it matters not which side of it is to be used, and consequently it can be put in place and secured to the pedal with the greatest ease by any ordinary mechanic or the bicycle-rider in a manner as above described.

The attachment is very light and strong, and one of its greatest advantages is that when once put in place and secured to the pedal it cannot become accidentally detached by the hardest usage.

Having thus fully described the nature, construction, and operation of our invention, we wish to secure by Letters Patent and claim—

In a pedal, the central bearing-sleeve, *a*, having end pieces, *c c*, and holding-bolts *d d*, combined with the rat-trap attachment, as described, composed of metal plates *e e*, riveted together and having concave inner lips, *e'' e''*, adapted to rest on and embrace the bearing-sleeve *a*, and outer curved and serrated portions *e³ e⁴*, with intermediate V-shaped groove or channel, *E*, adapted to receive the holding-bolt *d*, substantially as and for the purpose set forth.

In testimony whereof we have affixed our signatures in presence of two witnesses.

JOHN WOOD, JR.

Witnesses: ANDREW J. PHILBRICK.

ALBAN ANDRÉN,
J. ELMER WOOD.