

No. 626,861.

Patented June 13, 1899.

P. E. ERICKSON.

TOE CLIP.

(Application filed Aug. 9, 1898.)

(No Model.)

FIG. 1.

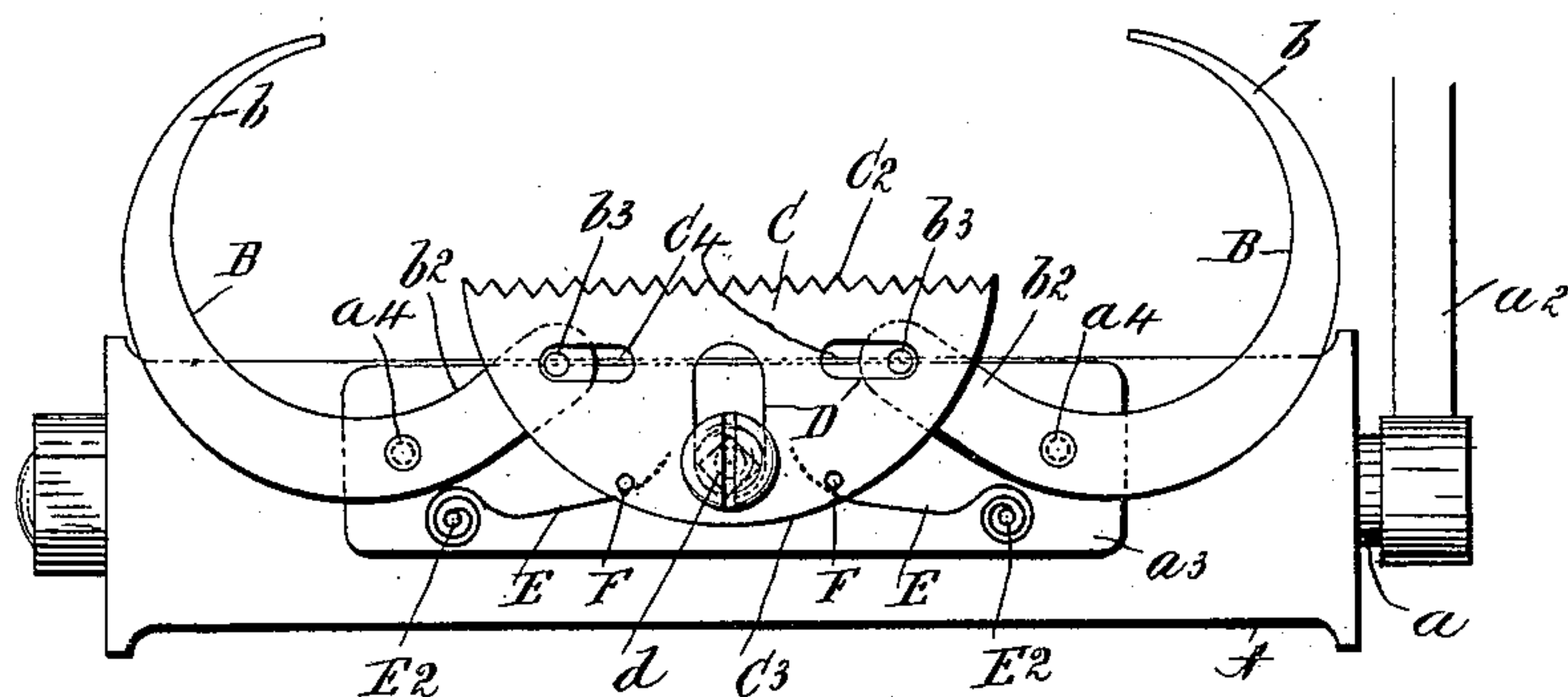


FIG. 2.

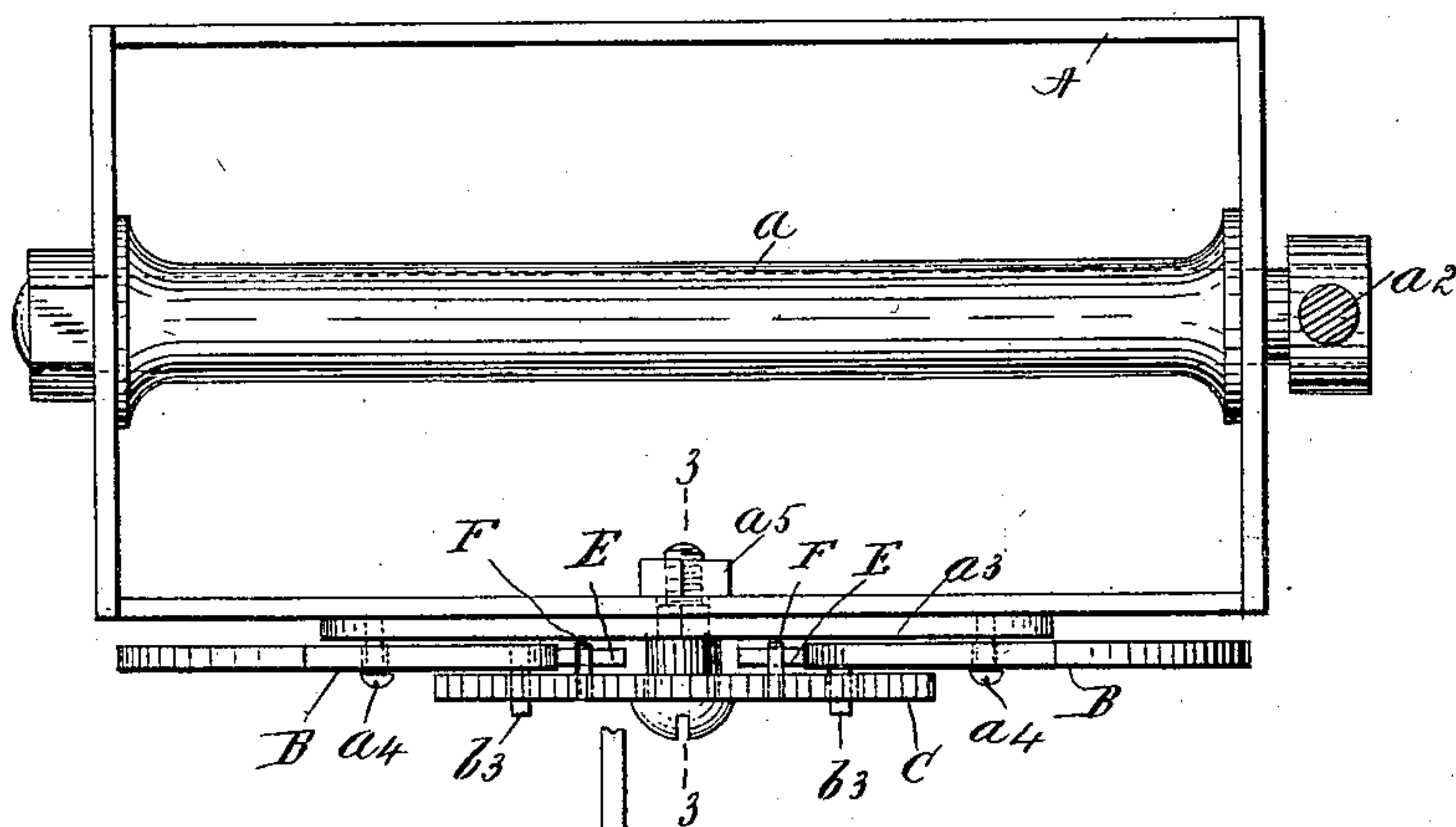
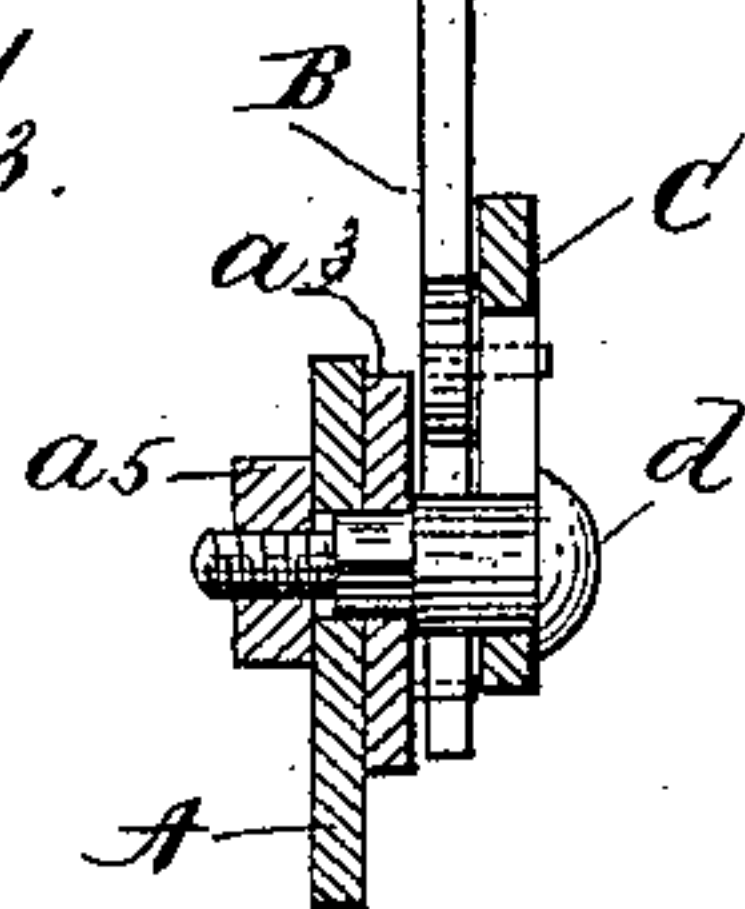


FIG. 3.



WITNESSES  
John Buckler,  
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# UNITED STATES PATENT OFFICE.

PETER ERICK ERICKSON, OF PORT CHESTER, NEW YORK, ASSIGNOR OF  
ONE-HALF TO JOHN W. CZERMAK, OF SAME PLACE.

## TOE-CLIP.

SPECIFICATION forming part of Letters Patent No. 626,861, dated June 13, 1899.

Original application filed February 2, 1898, Serial No. 668,876. Divided and this application filed August 9, 1898. Serial No. 688,154. (No model.)

*To all whom it may concern:*

Be it known that I, PETER ERICK ERICKSON, a citizen of the United States, residing at Port Chester, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Toe-Clips, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This application is a divisional application based on application Serial No. 668,876, filed by me February 2, 1898; and the invention relates to toe-clips for use in connection with the pedals of bicycles and similar vehicles; and the object thereof is to provide an improved device of this class which will automatically clasp the toe of the shoe when the foot bears upon the pedal and will automatically release the foot when the pressure is removed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same letters of reference in each of the views, and in which—

Figure 1 is a side view of a pedal provided with my improvement, and Fig. 2 a plan view thereof; Fig. 3, a cross-section on the line 3 3 of Fig. 2.

In the drawings forming part of this specification I have shown at A an ordinary pedal provided with the usual shaft  $a$ , one end of which is provided with a crank  $a^2$ , and in the practice of my invention I provide a toe-clip which comprises two separate members B, which are semicircular in form and which are pivotally connected with a plate  $a^3$ , secured to one side of the pedal A, as shown at  $a^4$ . The separate members B of the toe-clip are curved upwardly and inwardly to form arms  $b$ , and the shanks of said members project inwardly to a predetermined point, as indicated at  $b^2$ , and said shanks are each provided with an outwardly-directed pin  $b^3$ . I also provide a plate C, which is preferably straight on its upper edge and preferably provided with serrations or teeth  $C^2$ , and said plate is preferably

circular in form at its lower edge, as shown at  $C^3$ , and the plate C is also provided adjacent to each end thereof with a horizontal slot  $C^4$ , through which the pins  $b^3$  pass. The plate C is also provided centrally thereof with a vertical slot D, through which is passed a headed pin  $d$ , which passes through the plate  $a^3$  and through the side of the pedal and is provided at its inner end with a screw-thread and a nut  $a^5$ . That portion of the headed pin  $d$  which passes through the plate  $a^3$  and the side of the pedal is preferably angular in cross-section to prevent the plate  $a^3$  from turning.

It will be seen that the shanks of the separate members B of the clip pass between the plate C and the plate  $a^3$ , and the ends of the springs E also project between said plates, and the pins F project inwardly from the plate C to or approximately to the plate  $a^3$ .

The operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

The normal position of the parts is that shown in Fig. 1, and when the foot is placed on the pedal the pressure is applied to the plate C, which is forced downwardly, and the arms  $b$  of the separate members of the clip are forced inwardly over the foot, as will be readily understood, and when the foot is removed the springs E force the plate C upwardly and the arms  $b$  outwardly and the foot is released.

The arms  $b$  of the clip may be so weighted as to render the springs E unnecessary, and the said springs E are not therefore an absolutely essential feature of the invention; but I prefer to employ said springs, as by reason thereof the arms  $b$  of the clip may be made lighter than otherwise.

My improvement is simple in construction and operation and perfectly adapted to accomplish the result for which it is intended, and it will be apparent that changes in and modifications of the construction herein described may be made without departing from the spirit of my invention or sacrificing its advantages.

Having fully described my invention, I



claim as new and desire to secure by Letters Patent—

1. The combination with the pedal of a bicycle or similar vehicle, of a toe-clip, comprising two separate members B, which are pivotally supported, and which comprise shanks which project toward the middle of the pedal, and upwardly and inwardly curved arms, said shanks being provided with outwardly-directed pins, and a vertically-movable plate provided with slots through which said pins pass, substantially as shown and described.

2. The combination with the pedal of a bicycle or similar vehicle, of a toe-clip, comprising two separate members B, which are pivotally supported at one side of the pedal, and which comprise shanks which project toward

the middle of the pedal, and upwardly and inwardly curved arms, said shanks being provided with outwardly-directed pins, and a vertically-movable plate provided with slots through which said pins pass, said vertically-movable plate being connected with the side of the pedal by a pin which passes through a vertical slot formed therein, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 6th day of August, 1898.

PETER ERICK ERICKSON.

Witnesses:

JOHN W. CZERMAK,  
JOHN LEONARD.