

(No Model.)

J. A. GOEBLER.
BICYCLE PEDAL.

No. 579,479.

Patented Mar. 23, 1897.

Fig. 1.

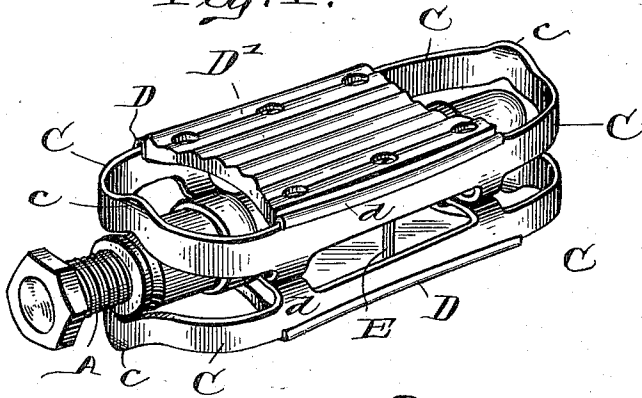


Fig. 2.

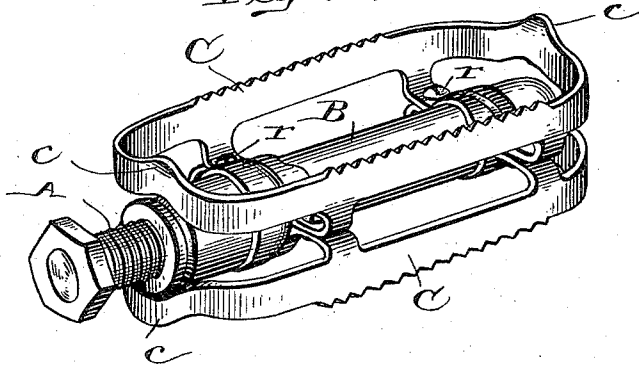


Fig. 3.

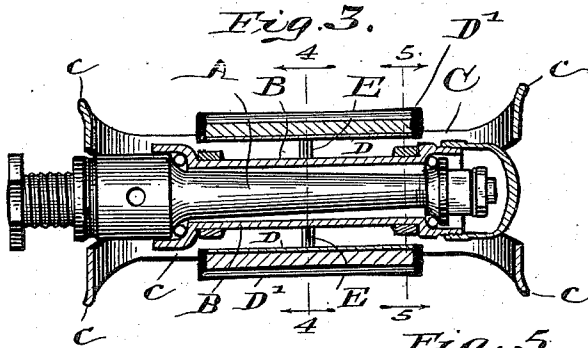


Fig. 4.

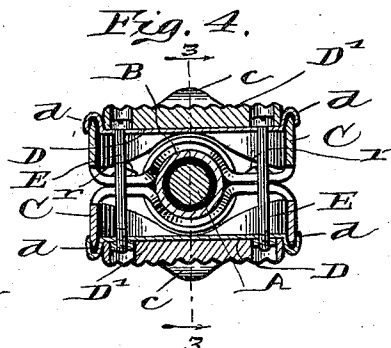
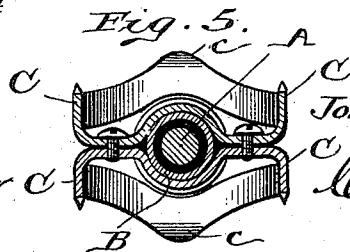


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN A. GOEBLER, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE INDIANA BICYCLE COMPANY, OF SAME PLACE.

BICYCLE-PEDAL.

SPECIFICATION forming part of Letters Patent No. 579,479, dated March 23, 1897.

Application filed September 16, 1895. Serial No. 562,690. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. GOEBLER, 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 Bicycle-Pedals, of which the following is a specification.

The object of my said invention is to improve the construction of that class of devices known as "bicycle-pedals," whereby lightness, inexpensiveness, convenience, and efficiency are secured in a marked degree. It resembles in some of its features that shown and described in Letters Patent No. 539,865, issued upon a former application of mine, but has certain notably superior features. Said invention will be first fully described, and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of a bicycle-pedal embodying my present invention when the bearing-plates are attached, whereby a flat surface is provided for the feet of the rider; Fig. 2, a similar view when said bearing-plates are removed and the pedal is thus converted into what is known as a "rat-trap" pedal; Fig. 3, a longitudinal vertical sectional view of the pedal on the dotted line 3 3 in Fig. 4 in the condition shown in Figs. 1 and 4; Fig. 4, a transverse sectional view as seen when looking in the direction indicated by the arrows from the dotted line 4 4 in Fig. 3; and Fig. 5, a transverse sectional view as seen from the dotted line 5 5 in Fig. 3, but when the pedal is in the condition shown in Fig. 2 or with the bearing-plates removed.

In said drawings the portions marked A represent the pedal-pin; B, the pedal-pin sleeve; C, the arms or wings or pedal sides; D D', the bearing or foot plates, and E the bolts, whereby the bearing-plates are secured to the pedal.

The pedal-pin A and pedal-pin sleeve B are or may be of any ordinary or desired form and need no special description. The pedal-pin is attached to the pedal-crank (not shown) of a bicycle in any usual or desired manner. The form which I have employed

as relating to the interior construction is illustrated in the drawings, especially Fig. 3, but this form or construction has no special relation to my present invention and will not therefore be further described herein except incidentally in describing said invention.

The pedal sides C are, as in my patent No. 539,865, above referred to, formed of sheet metal. They are, however, different in several particulars. In said former patent the edges of the two sheet-metal parts were separated by the ends, leaving points which were comparatively easily bent and forced out of place, while the bearing-plates were connected by clamps secured over said ends. In my present invention these ends are joined together, and each entire pedal side is preferably made of a single piece of metal struck up or drawn to the shape shown, said ends being curved upwardly and terminating in a preferably rounded point, as at c, which points form guards to prevent the slipping of the rider's foot sidewise and also mutually strengthen and support each other and also strengthen the serrated sides upon which the rider's foot directly bears when the pedal is used as a rat-trap pedal or upon which the bearing or foot plates are secured when the pedal is in the position shown in Fig. 1. By this construction I secure not only greater strength in proportion to the weight of metal used, but efficient side guards for the weight of the user. These pedal sides are held upon the pedal-pin sleeve by bolts or rivets r, as shown.

The foot-plates consist, preferably, of thin-metal plates D, having overhanging edges d, which cover the serrated edges of the parts C, and surface-plates D', secured to the upper surfaces of said thin-metal plates by suitable rivets or other fastenings. These surface-plates D' may be of rubber or any other desired material, being, however, preferably of a material having less density than metal, for the well-known reasons that the parts should be light and reasonably adhesive. The latter quality is improved, as is well known, by making the bearing-surface ribbed or corrugated, as shown.

The bearing-plates are held onto the pedal sides by the bolts E, which pass from one to the other, as shown most plainly in Fig. 4,

said bolts being provided with suitable heads at one end and nuts on the other end, as shown in Fig. 4. In attaching these bearing or foot plates to the pedal it is only necessary to loosen and screw up these bolts, which brings the grooves at the edges of said plates tightly onto the serrated edges of the pedal sides; and in removing them it is only necessary to unscrew the bolts, when the plates are readily detached.

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

1. The combination, in a bicycle-pedal, with the pedal-pin and pedal-center, of pedal sides formed of two parts of sheet metal struck up and bent to the required form and clamped to said pedal-center, the ends of said sides being bent up and in to meet and then united, whereby they are enabled to mutually support each other and form sides for the foot of the rider, substantially as shown and described.

2. In a bicycle-pedal, the combination, with the pedal pin and center, of pedal sides each of which is cut in skeleton form from a single

piece of metal and consists of side pieces with extended ends, connected by cross-pieces, said cross-pieces being bent to embrace said pedal-center, and said side pieces being bent up to present their edges for foot-supports and having their ends bent in to meet and then united, substantially as set forth.

3. In a bicycle-pedal, the combination, of the pedal-pin and pedal-center, the side pieces of the foot-support, foot-plates formed to extend across the width of the pedal and provided with a groove near each edge on their under sides, which fit over the edges of said side pieces and connect them, rubber or surface plates secured on said foot-plates, and fastening devices for securing said plates in position, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 12th day of September, A. D. 1895.

JOHN A. GOEBLER. [L. s.]

Witnesses:

JAMES A. WALSH,
H. D. NEALY.