

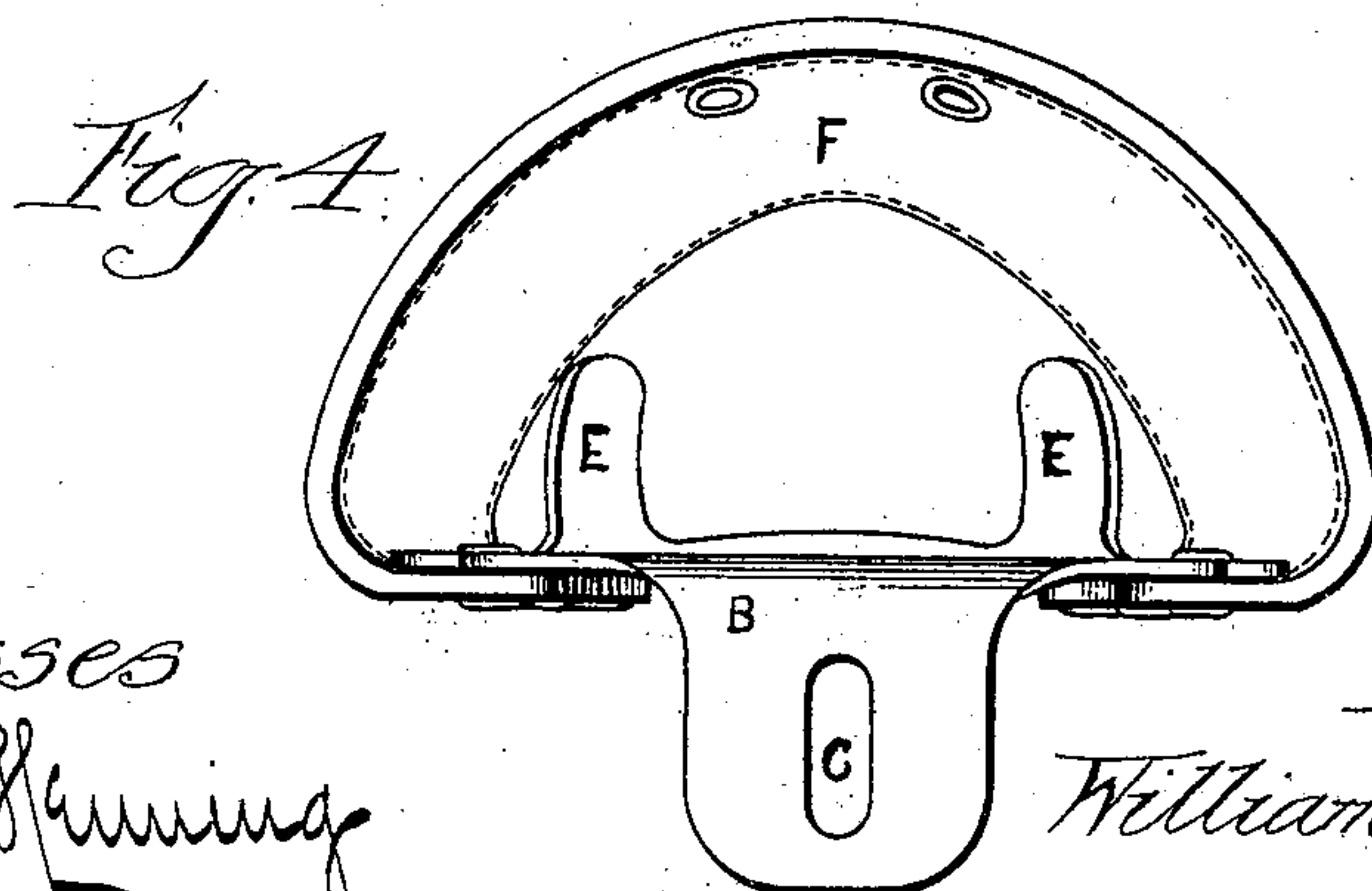
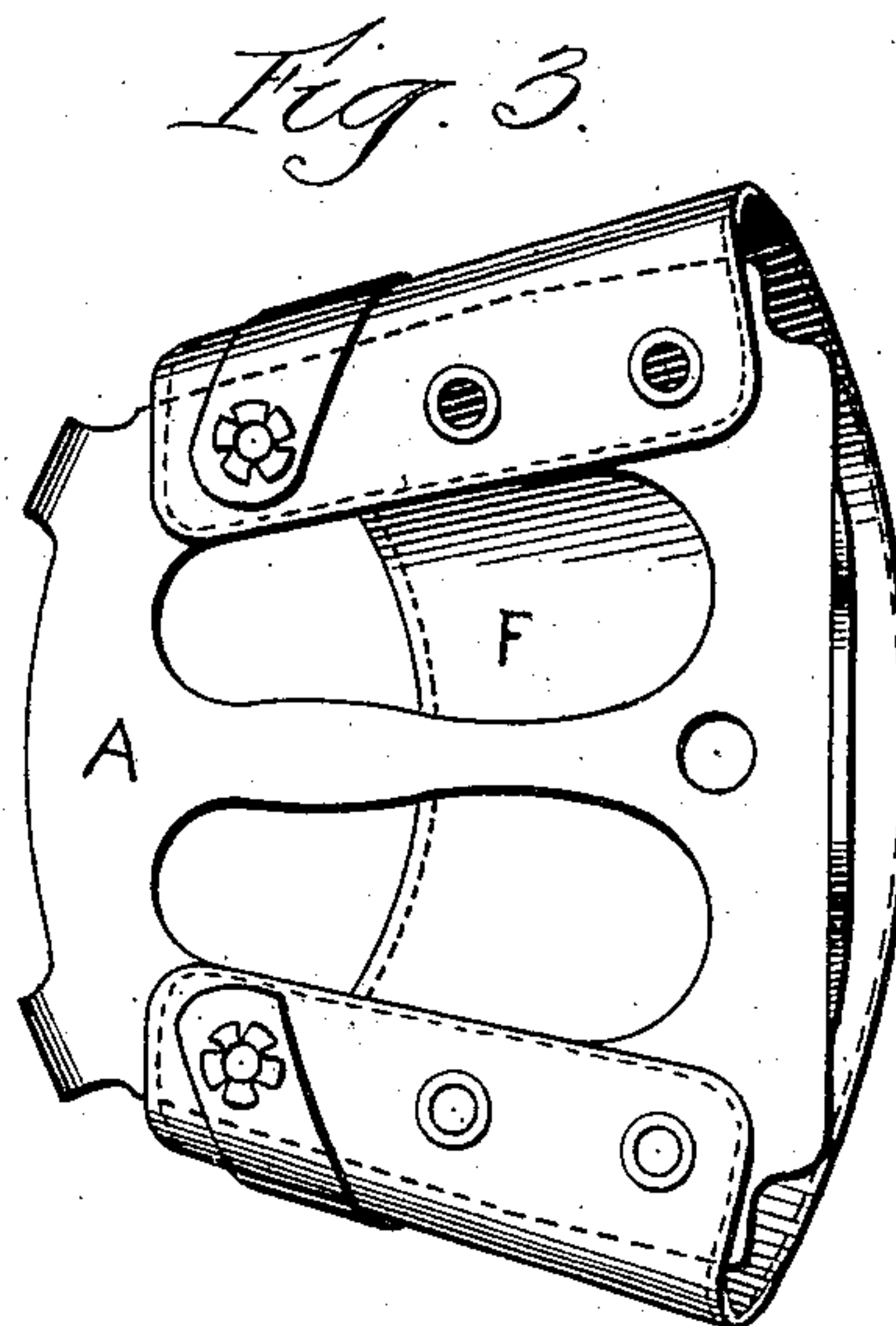
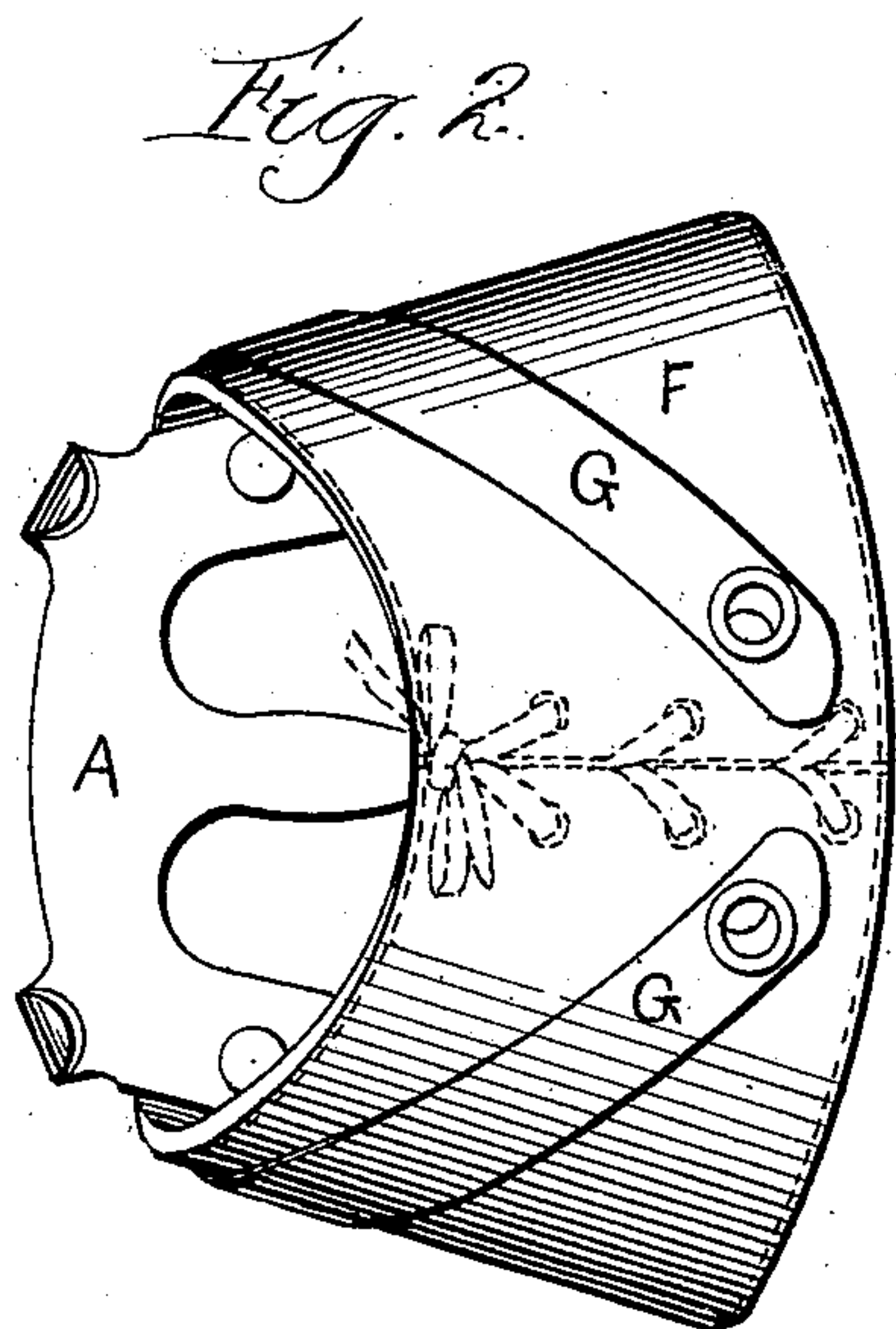
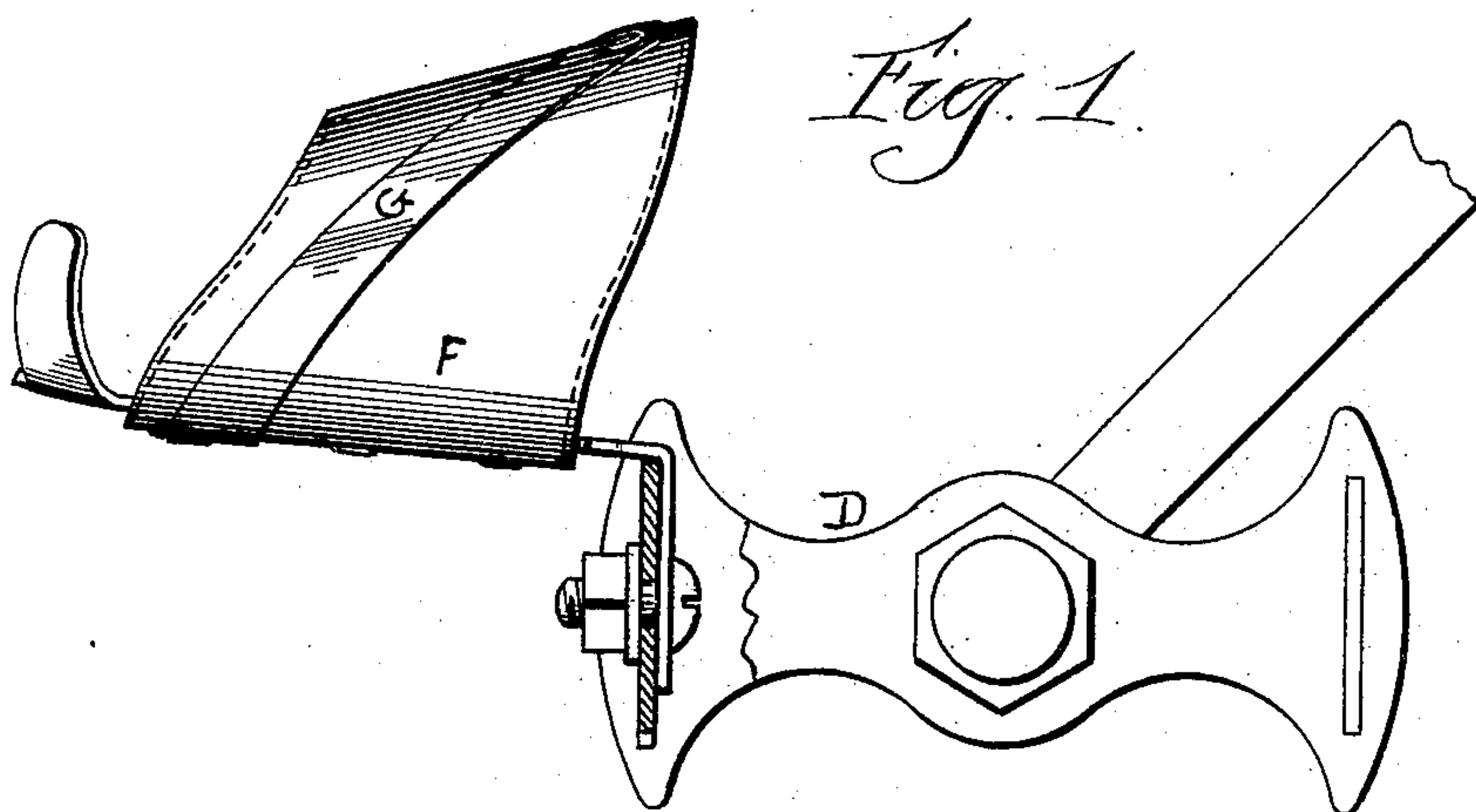
No. 618,937.

Patented Feb. 7, 1899.

W. J. GROTENHUIS.
TOE CLIP FOR VELOCIPEDE PEDALS.

(Application filed Sept. 7, 1897.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM J. GROTENHUIS, OF CHICAGO, ILLINOIS.

TOE-CLIP FOR VELOCIPED-PEDALS.

SPECIFICATION forming part of Letters Patent No. 618,937, dated February 7, 1899.

Application filed September 7, 1897. Serial No. 650,736. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. GROTENHUIS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Toe-Clips for Velocipede-Pedals, of which the following is a specification.

My invention relates to that class of toe-clips which are used in connection with the pedals of bicycles, tricycles, and similar vehicles, and has for its object the providing of a simple, economical, and efficient toe-clip.

The invention consists principally in the combination of a metal plate adapted to be secured to a pedal and a cover portion formed of leather or similar material held in position by means of elastic strips of metal.

The invention consists, further, in the combination of a metal plate adapted to be adjustably secured to a pedal and a cover portion formed of leather or similar material and held in position by elastic strips of metal, the free ends of which are secured to the leather cover and the other ends to the metal plate.

The invention consists, further and finally, in the features, combinations, and details of construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an elevation of a complete toe-clip embodying my improvements; Fig. 2, a plan view of the same, looking at it from the top; Fig. 3, a plan view looking at it from the bottom, and Fig. 4 an end view.

In the art to which this invention relates it is well known that the rider of a bicycle, tricycle, or similar vehicle experiences considerable difficulty in keeping his or her feet on the pedals, especially when riding over small obstructions, such as pebbles and loose dirt roads. In order to overcome this objection, various styles of toe-clips have been designed, the majority of which are composed of metal, and which are objectionable in that they bear on the tender part of the feet, much to the annoyance and discomfort of the rider, as well as the destruction of his shoes. There is another class of toe-clips in which leather has been used, but which is objectionable in that it is liable to stretch during the lifting motion of the feet and during damp weather

sags to such an extent as to make it objectionable in that the feet cannot be readily inserted in the pedals.

The principal object of my invention, therefore, is to remove the objections existing in the prior art and to provide a toe-clip, preferably an adjustable one, that may be taken off or placed on an ordinary pedal and which will be economical to construct and repair and efficient in operation.

In constructing a toe-clip in accordance with my improvements I make a plate A, which is intended to be arranged in a flat plane and which is provided with a bracket or lug portion B, bent at right angles to the plate. This lug portion is provided with a slot C, through which a screw may be passed for the purpose of adjustably securing the plate to the pedal portion D, as shown in Fig. 1.

In order to limit the position of the foot on the pedal and prevent its slipping forward too far, the front end of the plate is provided with two upturned lips E, against which the toe of the shoe may impinge and prevent the shoe from coming too far forward.

In order to form a lifting portion for the clip, as well as to assist keeping the foot in position from lateral movement, a cover portion F is provided of suitable leather or similar yielding material, such as felt or rubber. This yielding cover is preferably slitted longitudinally, one end of each piece being riveted or otherwise secured to the metal plate, while the free ends are perforated and provided with eyelets, so that a lace may be passed therethrough for the purpose of adjusting the cover to any sized foot.

The leather cover, if used alone, would be objectionable in that it would soon stretch, become limp, and in damp weather sag to such an extent as to render it practically useless. In order to overcome this objection, I prefer to provide two elastic strips of metal G, which have one end preferably secured to the metal plate through the leather and the opposite or free ends bent backwardly and secured to the cover at or near the free ends of the cover by means of rivets or eyelets.

The advantages of a toe-clip constructed in accordance with my improvements are apparent in that efficient means is provided for securely holding the foot on the pedal and

which permits it at all times to be easily withdrawn and at the same time protecting the foot from injury and the rider's shoe from being impaired.

5 While I have described my invention with more or less minuteness as regards details of construction and arrangement and as being embodied in certain precise forms, I do not
10 desire to be limited thereto unduly or any more than is pointed out in the claims. On the contrary, I contemplate all proper changes in form, construction, and arrangement, the omission of immaterial elements, and the substitution of equivalents, as circumstances may
15 suggest or necessity render expedient.

I claim—

1. A toe-clip for velocipede-pedals consisting of a metal base-plate, a cover portion secured thereto and formed of leather or similar yielding material, and a metal strip or
20 strips secured to the base-plate bent upwardly and over the cover portion and secured thereto near its upper edge to assist in maintaining it in operative position, substantially as
25 described.

2. A toe-clip for velocipede-pedals consist-

ing of a metal base-plate, a cover portion secured thereto and formed of leather or similar yielding material, and elastic strips of metal secured at one end to the base-plate
30 bent upward and over the cover portion and secured at their free ends to the cover portion to assist in maintaining it in operative position, substantially as described.

3. A toe-clip for velocipede-pedals consisting of a metal base-plate adapted to be adjustably secured to a pedal, a cover portion divided longitudinally and each piece secured at one end to the base-plate and provided with perforations at or near their free ends, a lace
40 passed through such perforations to secure the free ends of the cover together and an elastic strip of metal for each half of the cover secured at one end to the base-plate and passed up and over the cover and secured at their
45 free ends to the cover near its rear edge, substantially as described.

WILLIAM J. GROTENHUIS.

Witnesses:

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