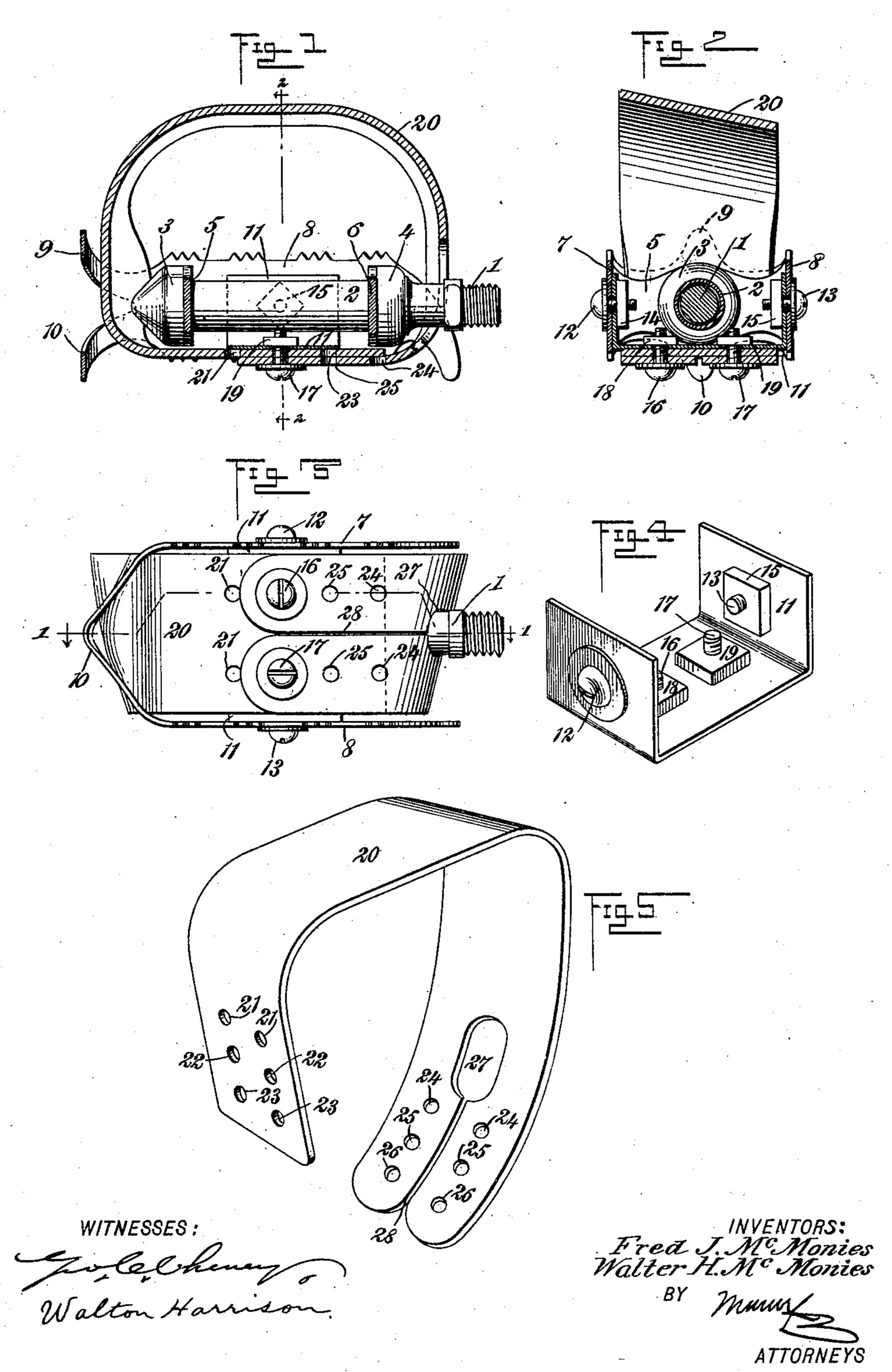
## F. J. & W. H. McMonies.

TOE CLIP.

(Application filed Mar. 7, 1902.)

(No Model.)



## United States Patent Office.

FRED J. McMONIES AND WALTER H. McMONIES, OF PORTLAND, OREGON.

## TOE-CLIP.

SPECIFICATION forming part of Letters Patent No. 712,953, dated November 4, 1902.

Application filed March 7, 1902. Serial No. 97,071. (No model.)

To all whom it may concern:

Be it known that we, FRED J. McMonies and Walter H. McMonies, citizens of the United States, and residents of Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Toe-Clip, of which the following is a full, clear, and exact description.

Our invention relates to toe-clips, more parto ticularly to the kind used in connection with

bicycle-pedals.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional view of the toe-clip as applied to a bicycle-pedal, taken on the line 1 1 of Fig. 3. Fig. 2 is a section taken at right angles to that shown in Fig. 1 upon line 2 2 of Fig. 1. Fig. 3 is an inverted plan or bottom view showing the means of adjustment. Fig. 4 is a perspective view of the bridge-piece, and Fig. 5 is a perspective view of the adjustable strap.

The crank-pin 1 is surrounded by a sleeve 30 2, which is mounted upon ball-bearings 3 and 4 in the usual manner. End pieces 5 and 6 are secured to this sleeve and are revoluble upon the crank-pin. The rat-trap tread, composed of the two members 7 and 8, inte-35 grally united by the loops 9 and 10, is of the usual kind. Secured to the members 7 and 8 is the U-shaped bridge-piece 11. Screws 12 and 13, provided with nuts 14 and 15, are used for the purpose of temporarily securing 40 the bridge-piece in position, as indicated more particularly in Figs. 2 and 4. The screws 16 and 17 are fitted with nuts 18 and 19 for the purpose of adjusting the length of the leather strap 20. This strap is of the 45 general form shown in Fig. 5 and is provided with separate groups of holes 21 21, 22 22, 23 23, 24 24, 25 25; and 26 26. One end of the strap is provided with a slot 27 and is bifurcated, as shown at 28. This arrangement is 50 to allow the bifurcated ends to pass over the

crank when the strap is being placed in position. Normally the crank 1 is engaged in the slot 27.

The operation of our toe-clip is as follows: Supposing the parts to be in the position indicated in Figs. 1, 2, and 3 and that it is desired to enlarge the space immediately above the pedal, so that the clip will be suited for a larger foot, the screws 16 and 17 are taken out, the ends of the strap are so adjusted that 60 different groups of holes will be in alinement with the holes in the bridge-piece, and the screws are again placed in position. It will be observed that the strap can be taken up or let out from either end independently of 65 the other or from both ends at the same time, as desired.

This toe-clip admits of a variety of uses and may be constructed at a nominal cost. It can readily be applied to pedals already in 70 use by merely furnishing the same with the bridge-piece shown in Fig. 4 and with the flexible strap, which is made preferably of leather.

Having thus described our invention, we 75 claim as new and desire to secure by Letters Patent—

1. A toe-clip comprising a substantially U-shaped bridge-piece provided with a group of holes, means for detachably securing said 80 bridge-piece upon the pedal, a flexible strap provided with a plurality of groups of holes, each group being adapted to mate said group of holes in said bridge-piece, and fastenings for detachably engaging said holes in said 85 strap and said holes in said bridge-piece.

2. A toe-clip, comprising a bridge-piece provided with a group of holes, means for detachably securing said bridge-piece upon a pedal, a longitudinal strap provided at each 90 of its ends with separate groups of holes adapted to mate said group of holes in said bridge-piece, and fastenings for detachably engaging said holes in said bridge-piece and said holes in said ends of said strap, the arrange-95 ment being such that the ends of said strap may be lapped together in different relative positions for purposes of adjustment and secured in said positions by said fastenings.

3. A toe-clip comprising a bridge-piece pro- 100

vided with a group of holes, means for detachably securing said bridge-piece upon a pedal, a longitudinal flexible strap provided at each of its ends with a plurality of groups of holes, adapted to mate said groups of holes in said bridge-piece, one end of said strap being bifurcated for the purpose of straddling a crank-pin, and screw-bolts for engaging said holes in said bridge-piece and said holes in said strap, the arrangement being such that the

length of said strap may be altered from either of the ends of said strap.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

FRED J. McMONIES. WALTER H. McMONIES.

Witnesses:

FRANK C. WASSERMAN, BIRDIE G. VAUGHN.