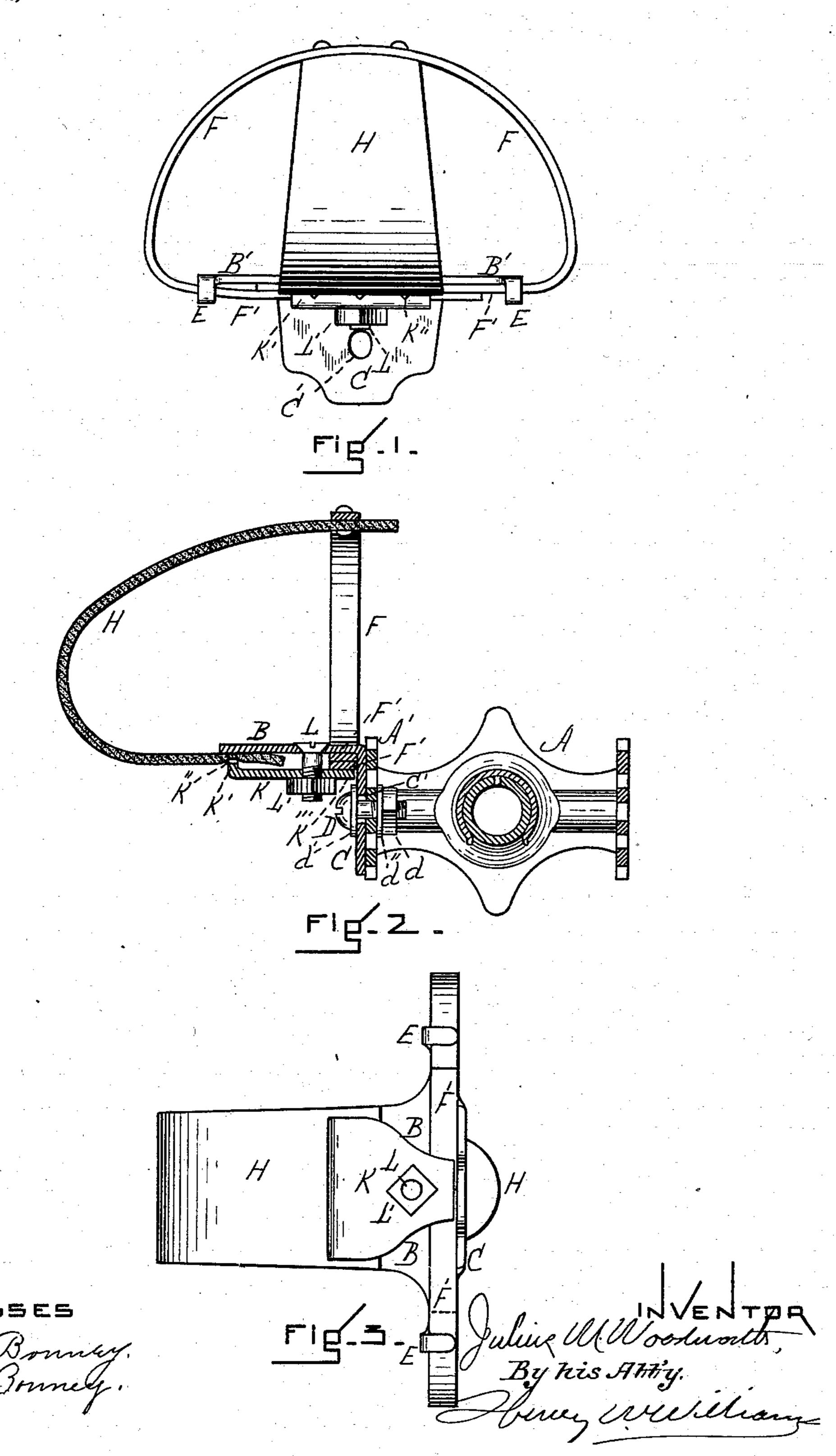
J. M. WOODWORTH. TOE CLIP.

(Application filed Dec. 8, 1899.)

(No Model.)



United States Patent Office.

JULIUS M. WOODWORTH, OF NEWTON, MASSACHUSETTS.

TOE-CLIP.

SPECIFICATION forming part of Letters Patent No. 651,913, dated June 19, 1900.

Application filed December 8, 1899. Serial No. 739,623. (No model.)

To all whom it may concern:

Be it known that I, Julius M. Woodworth, a citizen of the United States, residing in Newton, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Toe-Clips for Pedals of Bicycles and other Velocipedes, of which the following is a specification.

This invention relates to toe-clips, particularly to that class of toe-clips adapted to be applied to racing or rat-trap pedals of bicycles.

The invention consists in the peculiar construction below described, whereby the toe-clip is rendered easily and quickly adjustable vertically on the pedal and extensible as to width and length, with much simplicity of construction.

The nature of my invention is fully described below and illustrated in the accom-

20 panying drawings, in which—

Figure 1 is a front elevation of my improved toe-clip. Fig. 2 is a vertical section of the same applied to a pedal, which is illustrated in cross-section. Fig. 3 is a plan of the under side of the toe-clip.

Similar letters of reference indicate corre-

sponding parts.

A represents an ordinary rat-trap pedal, of

which A' is one of the guards.

30 B C represent an angle-shaped supporting frame or bracket, the portion B being horizontal and provided with the wings B', and the portion C, which is integral with the portion B, being formed with a vertically-elon-35 gated slot C'. This slot is adapted to receive a screw D, which extends through a suitable hole in the guard A' of the pedal, whereby by means of a nut d and suitable washers d' $d^{\prime\prime}$ the toe-clip is secured adjustably as to 40 height to the pedal. The wings B' are provided at their outer ends with integral horizontal under hooks E, through which extend inward the overlapping ends F' of the archshaped metallic strip F, which constitutes 45 the mouth or socket through which the toe of the rider is pushed.

H is a non-metallic flexible guard made,

preferably, of leather and with its upper end riveted to the metallic strip F.

K is a clamp or jaw whose forward edge is 50 turned up at K' and formed into teeth K'', while its rear edge K''' underlaps the ends F', above described. The clamp K and portion B of the supporting-bracket are coincidently perforated to receive a screw L, provided 55 with a nut L', which is adapted to be set against the under side of the clamp K.

The lower end of the leather guard H lies between the teeth K" and the part B and is held firmly in place by the nut and screw L'L. 60 Said nut and screw not only hold the end of the strap H in engagement, but by means of the portion K''' of the clamp prevent the ends F' from sliding with relation to each other. It will be seen, therefore, that whether it is 65 desired to lengthen the toe-clip by elongating the guard H or to broaden the toe-clip by spreading the portion F F' all that is necessary is to loosen the nut L'. Thus all the adjustment of the parts of the toe-clip which 70 can be required—that is, an adjustment for lengthening it and one for broadening it—is provided in a very simple manner by the construction and arrangement of the clampingjaw K.

Having thus fully described my invention, what I claim, and desire to secure by Letters

Patent, is—

In a toe-clip of the character described, the combination with the flexible guard H and 80 mouth or strip F; of the angle-shaped frame or bracket B, C, and the clamp or jaw K provided with the upwardly-turned forward end K' having a toothed edge, and the rearward extension K'' underlapping the ends of said 85 strip F, said parts B and K being provided with coincident openings, and an adjusting screw and nut, substantially as and for the purpose set forth.

JULIUS M. WOODWORTH.

Witnesses:

HENRY W. WILLIAMS, A. N. BONNEY.