

(No Model.)

C. W. CRANNELL.
TOE WEIGHT.

No. 513,005.

Patented Jan. 16, 1894.

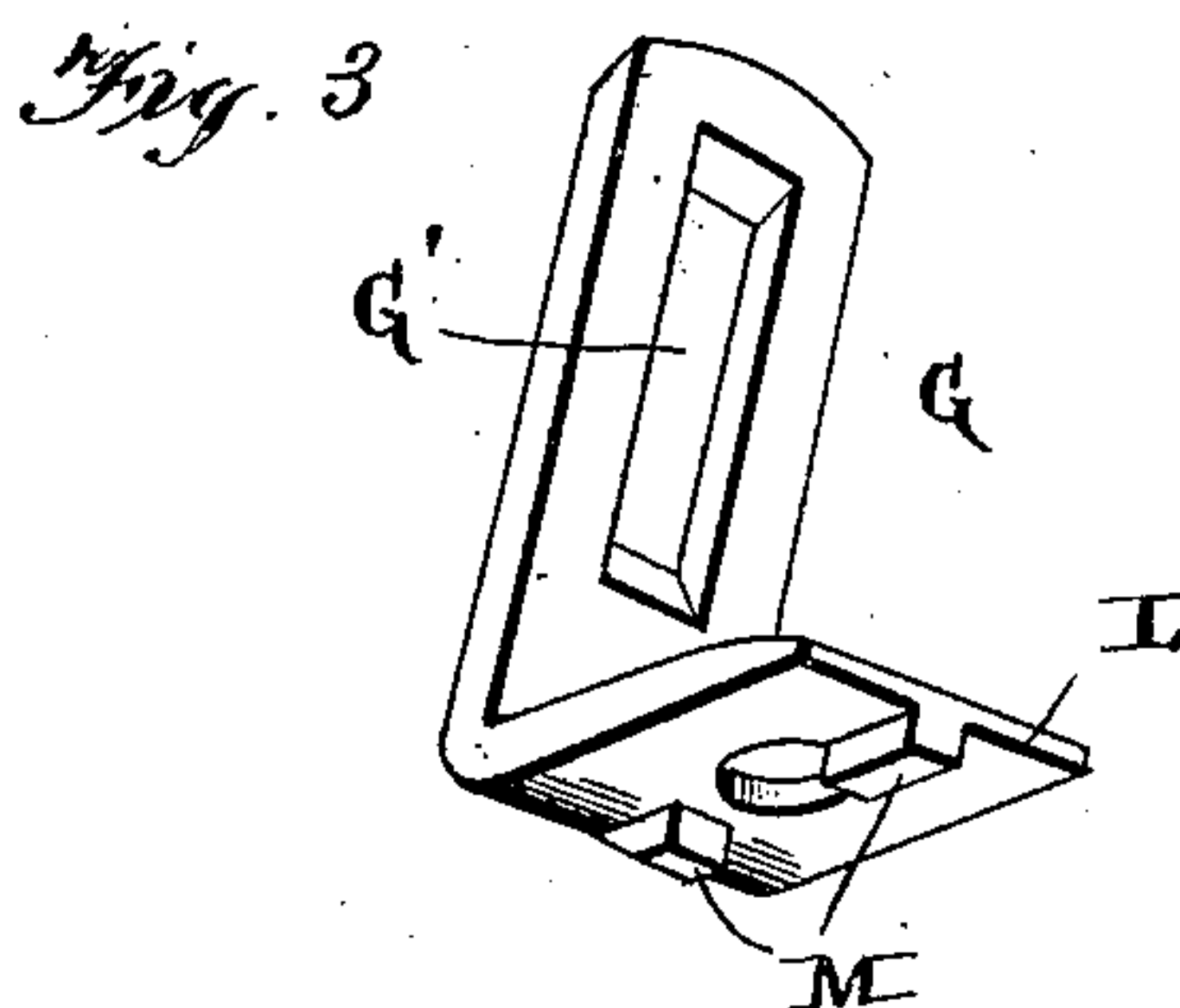
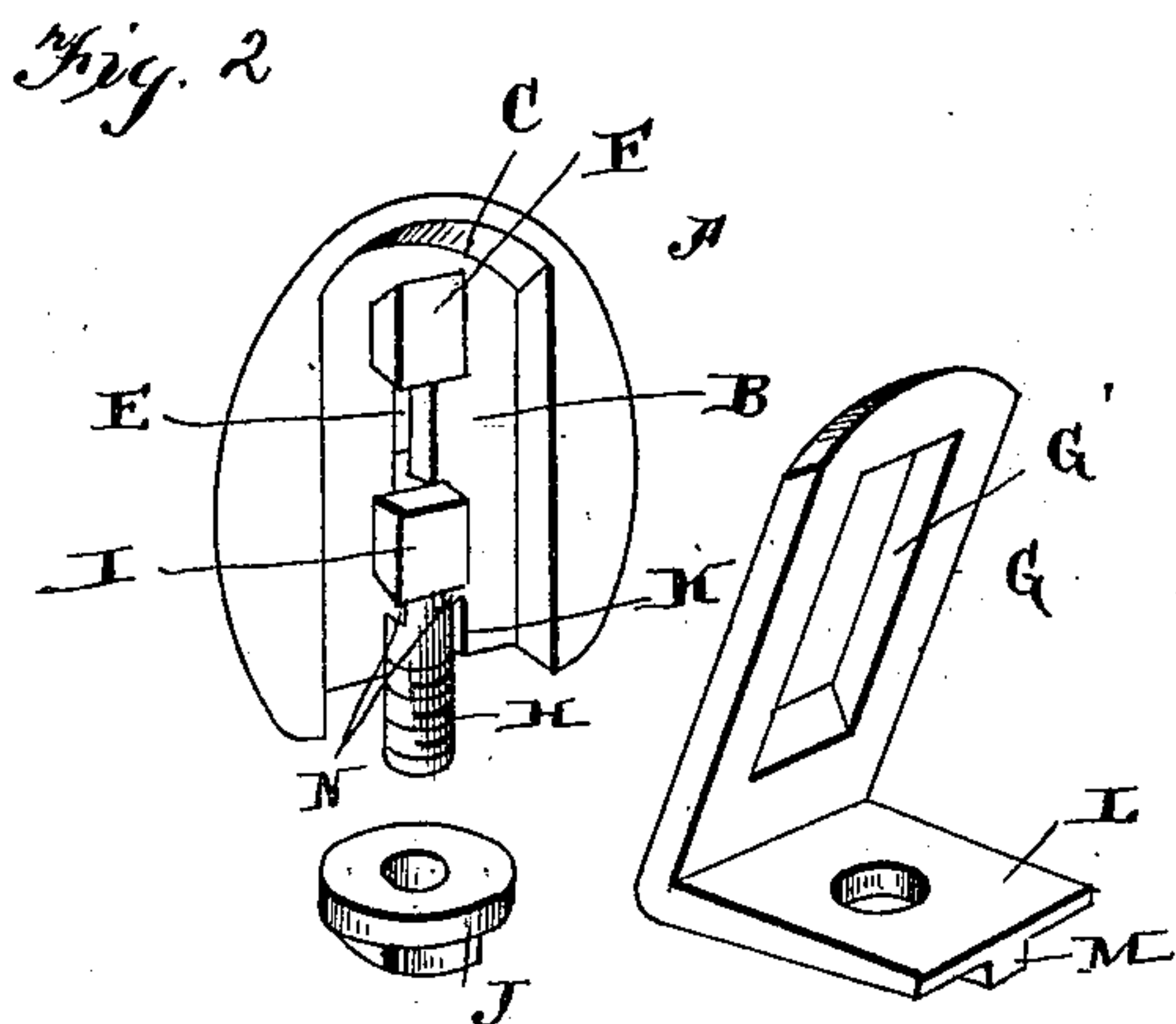
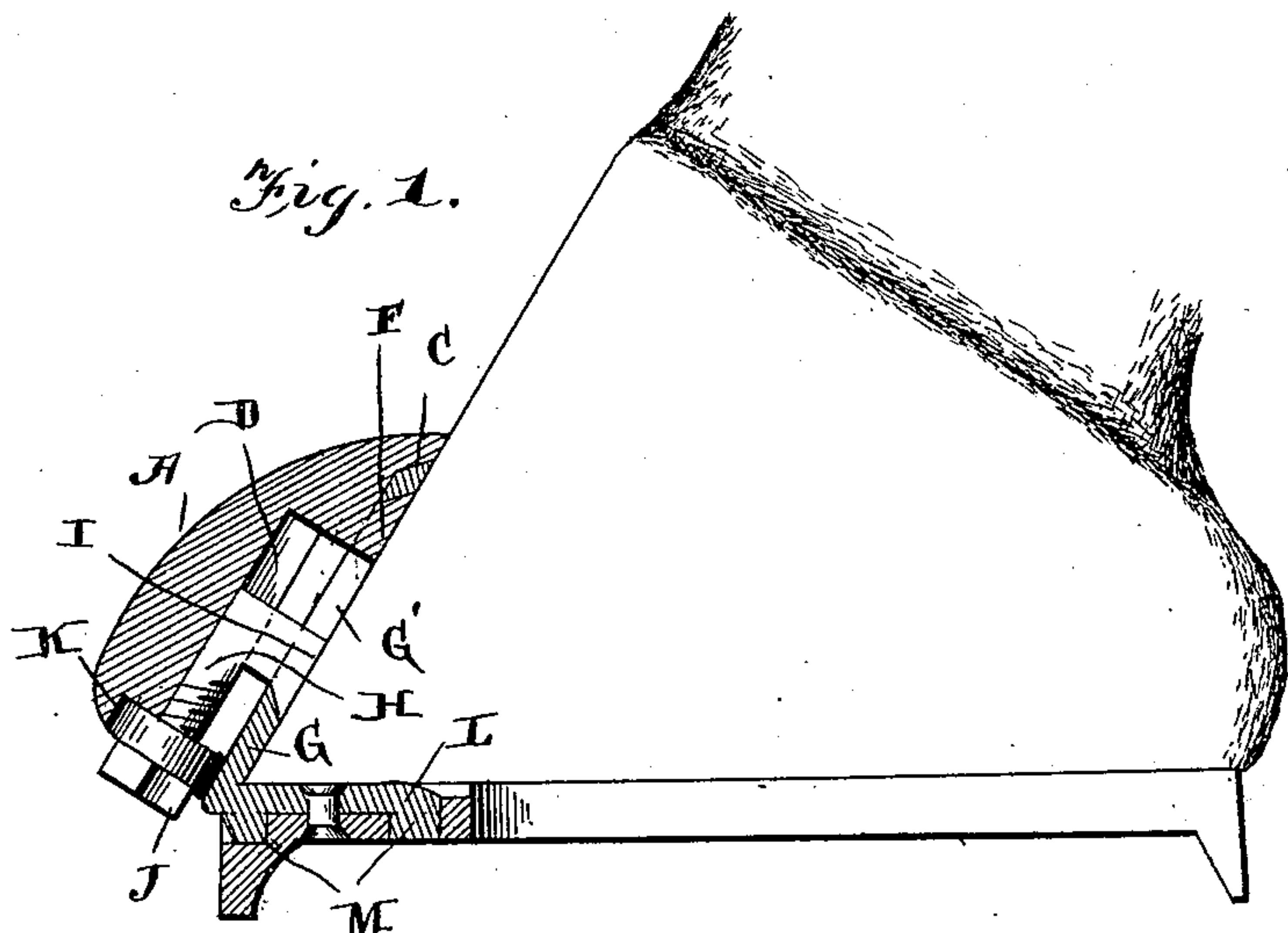
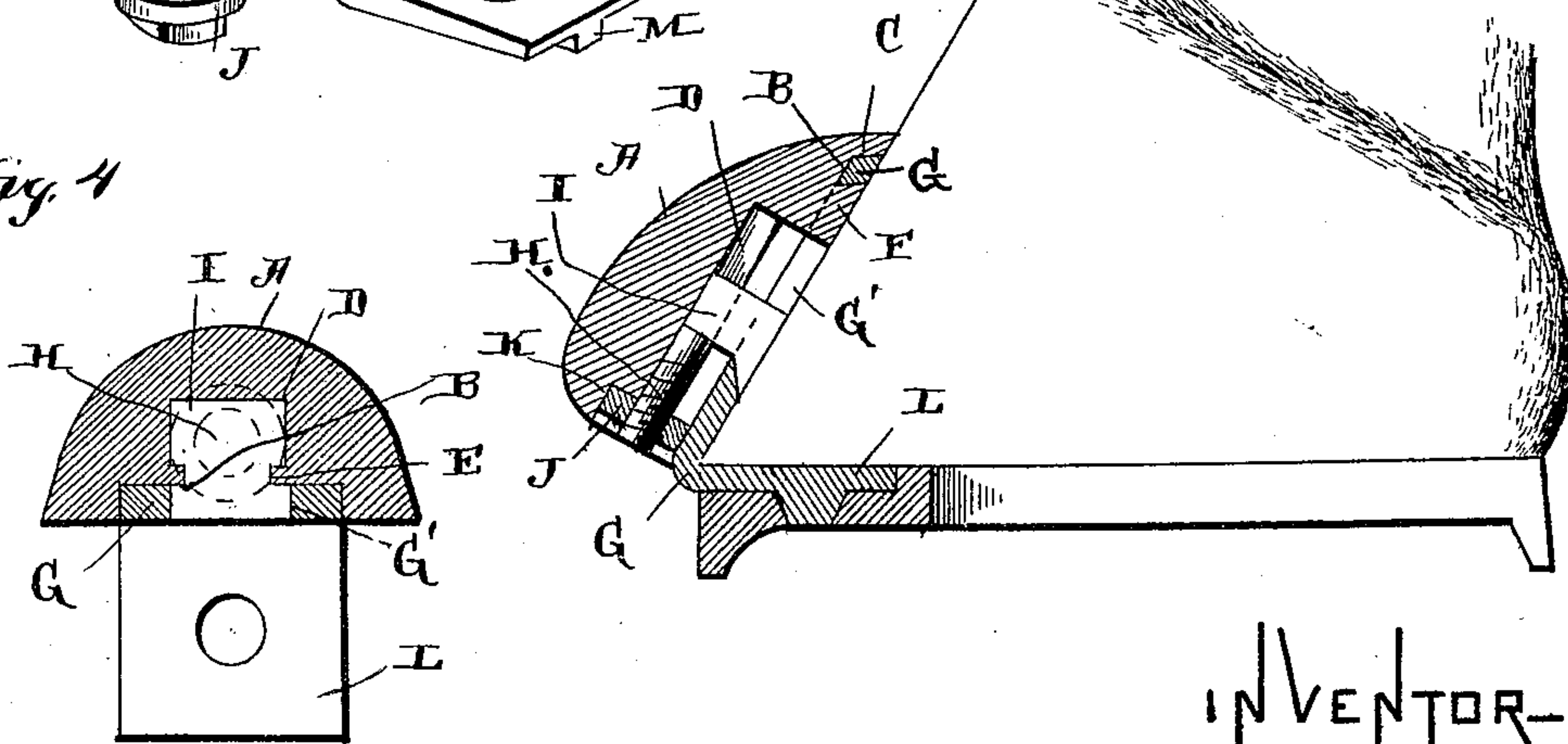


Fig. 5.

Fig. 4.



WITNESSES.

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UNITED STATES PATENT OFFICE.

CHARLES W. CRANNELL, OF HOLTON, KANSAS.

TOE-WEIGHT.

SPECIFICATION forming part of Letters Patent No. 513,005, dated January 16, 1894.

Application filed June 22, 1893. Serial No. 478,503. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. CRANNELL, of Holton, in the county of Jackson and State of Kansas, have invented certain new and useful Improvements in Toe-Weights; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in toe weights, and it consists in the novel means for securing the same to the horse shoe, which will be fully described hereinafter and especially designated in the claims.

The object of my invention is to provide a simple and effectual means for securing the weight in its proper position, and also a convenient means for attaching and detaching the several parts so that as much weight as possible will be concentrated at the base of the toe weight, the same being the point where it is most desired.

Referring to the accompanying drawings: Figure 1, is a vertical sectional view of my improved weight in position. Fig. 2, is a detached perspective view of the same. Fig. 3, is a similar view of the clamping iron. Fig. 4, is a cross sectional view. Fig. 5, is a vertical sectional view showing a slight modification in the clamping device.

A designates the weight proper having the vertical depression B upon its inner side which extends to the bottom of the weight and the wall of which depression is beveled upward and outward at its upper end, as shown at C. Beneath this depression B is a cavity D extending longitudinally as shown, and connected with the said depression by the slot E, and at the upper end of this slot is the outwardly projecting lug F, which is adjacent to the wall C and which has its upper side beveled in a manner similar to the said wall. G is the clamping plate having a longitudinal opening G' in its upper end where it fits around said lug and which plate is beveled downward at its upper end to properly fit the beveled wall C of depression B, as is also the upper end of opening G', in order to fit tightly around the upper beveled portion of lug F.

Movable longitudinally in cavity D is bolt H, and projecting therefrom outward through slot E into depression B and in line with lug F is the head I, which is beveled upon its under side as shown. This head extends into opening G' of plate G, when the latter is in position, so that when bolt H is drawn downward by nut J, being run thereon, the said beveled portion of the head engages the correspondingly formed termination of opening G', while the upper end of said opening is drawn positively upon the beveled lug F as shown, and thereby a most secure and effectual union of the weight and its clamping device is effected. The lower end of the weight is counter sunk as shown at K, to receive the nut J, thereby forming a casing for the same from which it cannot work. The lower end of plate G is turned to form wing L, through which a rivet is passed in securing it to the shoe, as illustrated in Fig. 1. On each side of the rivet opening in said wing depend the lugs M which lugs fit depressions formed in the upper surface of the shoe, thus preventing the securing plate from turning.

N are stops projecting inward over the lower end of slot E, which prevent the entire withdrawal of the bolt and head from the toe weight in case the latter should become accidentally detached. Thus the requisite parts are held together at all times.

In Fig. 5, a slight modification is shown in which the rivet is omitted and the plate is held merely by a depending lug.

Satisfactory results attend the use of both fastening devices and either one may be employed that may be desired.

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

1. The combination of a toe weight having a depression upon its inner side, a lug in the said depression, a slotted clamping plate adapted to fit over the lug and within the depression, and a means for clamping together the plate and lug, substantially as shown and described.

2. The combination of a toe weight having a depression in its rear side, a lug projecting from the depression, a slotted clamping plate adapted to fit within the depression and over the lug, a longitudinal movable bolt, and a

head thereon which projects into the slot of said clamping plate, for the purpose, substantially as shown and described.

3. The combination of a toe weight having
5 a depression in its rear side which extends to its lower end, upwardly beveled walls terminating at the upper end of the depression, a beveled lug projecting from the depression,
10 a slotted clamping plate adapted to fit the depression and over the said lug, the upper end of the said plate being beveled to fit the wall C, and the upper end of the slot of the plate being beveled to positively engage said
15 beveled lug, a longitudinally movable bolt, and a head projecting therefrom into the slot of the plate, for the purpose, substantially as shown and described.

4. The combination of a toe weight having a depression in its rear side, a beveled lug
20 projecting from the said depression, a slotted clamping plate adapted to fit the depression and over the said lug, the respective ends of the slot in the plate being beveled in oppo-

site directions, a longitudinally movable bolt and a beveled head projecting therefrom into
25 the said slot, for the purpose substantially as shown and described.

5. The combination of a toe weight having a depression in its rear side, a cavity behind the depression which is in communication
30 with the same by means of a longitudinal slot, a clamping plate which fits within the depression, a bolt movable longitudinally in said cavity, a head projected therefrom through said slot which is adapted to engage the
35 clamping plate and lock the same in position, and stops projecting inward from opposite sides of said slot for preventing the withdrawal of the bolt and head, substantially as shown and described.

30
In testimony whereof I affix my signature in presence of two witnesses.

CHARLES W. CRANNELL.

Witnesses:

W. E. BAILER,
E. T. ELLIS.