

946,113.

Patented Jan. 11, 1910.

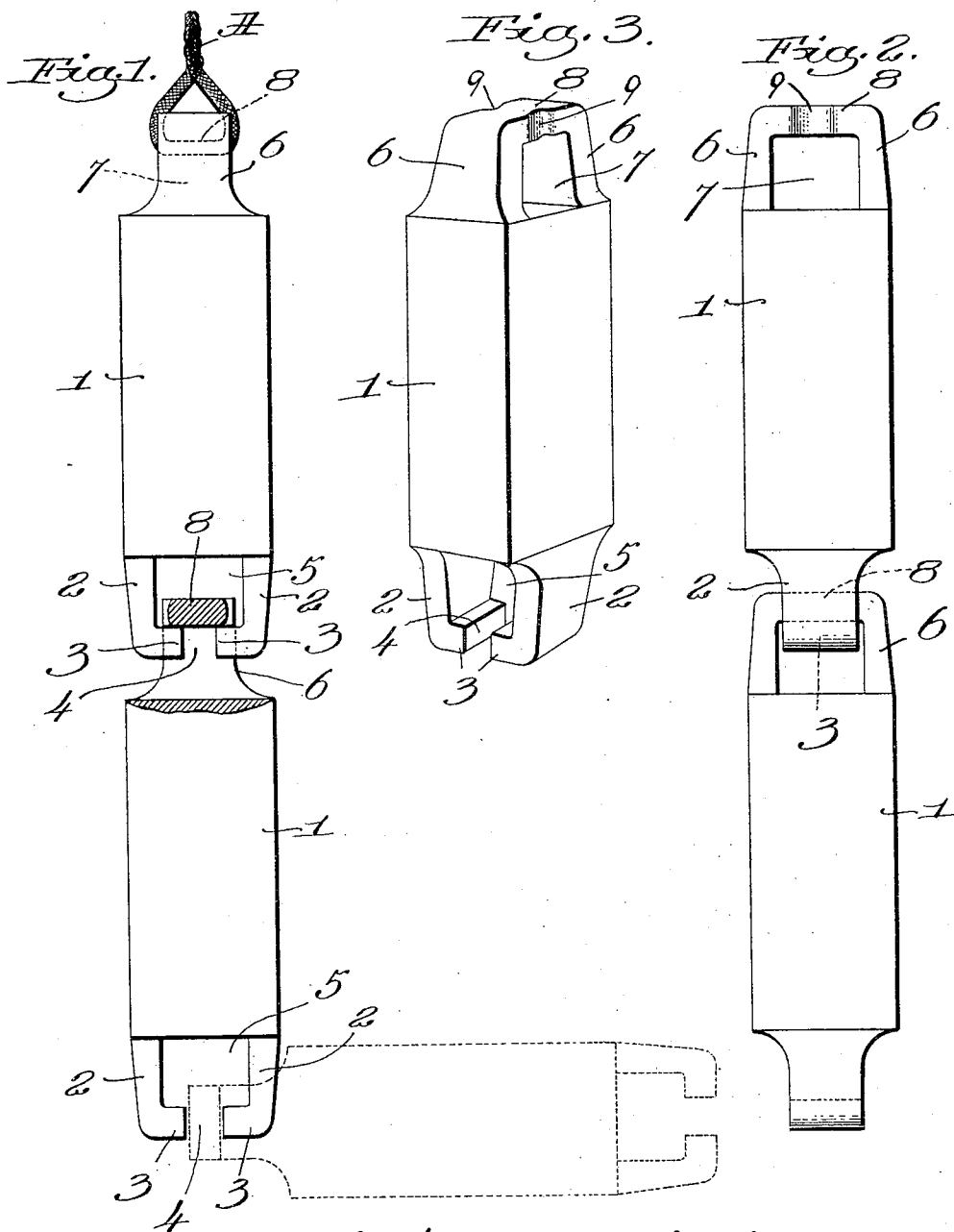


Fig. 4.
Witnesses:
Edw. S. Decker,
Joseph M. Ward,
6 1

Fig. 5.
Inventor,
Edwin S. Decker,
by Charles E. Gregory,
att'y.

UNITED STATES PATENT OFFICE.

EDWIN S. DECKER, OF MALDEN, MASSACHUSETTS, ASSIGNOR TO GIBBY FOUNDRY COMPANY, OF EAST BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

SASH-WEIGHT.

946,113.

Specification of Letters Patent.

Patented Jan. 11, 1910.

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To all whom it may concern:

Be it known that I, EDWIN S. DECKER, a subject of the King of Great Britain, and resident of Malden, county of Middlesex, State of Massachusetts, have invented an Improvement in Sash-Weights, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to sash-weights of the type wherein a plurality of units or sections can be detachably connected to make up the weight requisite to counter-balance a given window-sash.

One of the objects of my present invention is the production of a sash-weight which can be constructed easily at practically a nominal cost yet which is so arranged that as much metal as possible is present in each unit or section.

Another object of my invention is the production of a sash-weight whereof the separate members, units or sections thereof can be connected and disconnected rapidly and easily, bearing in mind the narrow or contracted spaces in which the sash-weights must operate, and the units or sections are so constructed that when locked together they can be handled with safety and in a convenient manner.

Inasmuch as the members or sections must frequently be coupled together when two adjacent sections are substantially at right angles to each other I have constructed my novel sash-weight accordingly, so that when adjacent sections are substantially aligned they cannot by any possibility become uncoupled or disconnected.

The novel features of my invention will be fully described in the subjoined specification and particularly pointed out in the following claim.

Figure 1 is a front elevation and part section of a sash-weight embodying my invention, two members, units or sections being coupled together; Fig. 2 is a side elevation of the device shown in Fig. 1; Fig. 3 is a perspective view of one of the weight members or sections; Fig. 4 is a top plan view of one of the members; Fig. 5 is a bottom plan view thereof, Figs. 4 and 5 being taken in the position of the weight shown in Fig. 2.

The sash-weight member, unit or section (the terms being used synonymously) is made as a casting comprising a body 1 of suitable length and preferably rectangular in cross-section, its lower end being of reduced width to form two substantially central and longitudinally extended lugs 2, 2, having opposite inturned ends 3, forming hooks having an entrance slot 4 communicating with the open space or recess 5 between the lugs 2.

In practice the lower ends of the hooks so formed are preferably slightly rounded or convex, as best shown in Fig. 1.

At its opposite end the body has longitudinally extended ears 6, 6, the outer faces of which are slightly convergent and form continuations of the opposite sides or faces of the body, the opposite sides of said ears being tapered from the body to their outer ends, as clearly shown in Figs. 1 and 3. These ears are at right angles to the entrance slot 4, but their parallel inner faces are parallel to the opposite side edges of the lugs 2, and said ears are laterally separated to form a substantially rectangular opening 7 for the reception of the hooks of a connected member, as shown. A cross-bar 8 joins the outer or smaller ends of the ears and as shown said bar is of greater width than thickness, the width being almost as great as the distance between the inner faces of the lugs 2 while the thickness of the bar is slightly less than the width of the entrance slot 4.

When two members are coupled together the inturned ends 3 of the lugs 2 of one member extend beneath the cross-bar 8 of the next member into the opening 7, while the said cross-bar lies within the open space or recess 5 of the first-named member, this being very clearly illustrated in Fig. 1.

So long as coupled members are in substantial alinement it is impossible for them to become uncoupled, for they are practically locked together while articulated so that the members can have a slight relative swinging movement within the weight-box of the window casing.

To couple or uncouple the weight members it is necessary to bring the two adjacent members into position substantially at right angles to each other, as illustrated by dotted lines, Fig. 1. This movement brings the

cross-bar of one member, with its thickness opposite the slot 4 between the hooks of the other member, so that by moving the two members toward or from each other, maintaining the right-angle position, the cross-bar will slip through slot 4 into the opening 5, when assembling, or the cross-bar will slip out of the slot when uncoupling.

When assembling two members, after the cross-bar of one passes through the slot into the opening 5 of the other member the members are brought into alinement and they are then completely coupled together.

As many of the members are coupled together as may be necessary to provide the proper counter-balance for the window-sash, the uppermost member of the series being attached to the sash-cord A, Fig. 1, by looping the latter around the cross-bar 8.

For convenience in centering the cord or other suspending member I may provide slight depressions 9 on opposite sides of the cross-bar, midway between its ends, to receive and position the engaging part of the suspending member A.

It is customary in assembling the weight members to attach one to the sash-cord, couple another member to the lower end of the first member, and proceed in like manner until the required number have been coupled together, the additions being made

through the opening at the lower end of the weight-box usually provided.

The castings can be made very cheaply, they require practically no polishing, and successive members hang plumb and true from the adjacent ones above.

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

A sash-weight member comprising a body provided at one end with substantially central and longitudinally extended lugs, having opposite inturned ends, to form hooks having an entrance slot therebetween, the opposite end of the body having longitudinally extended ears at right angles to such slot and laterally separated to form an opening for the reception of the hooks of a connected member, and a cross-bar joining the ears and adapted to pass through the entrance slot of an adjacent member when the two members are substantially at right angles to each other.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

EDWIN S. DECKER.

Witnesses:

JOHN C. EDWARDS,
FREDERICK S. GREENLEAF.