

(No Model.)

W. C. WALDA.
SASH WEIGHT.

No. 571,813.

Patented Nov. 24, 1896.

Fig. 1

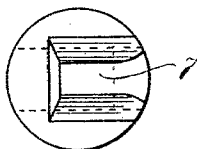


Fig. 2.

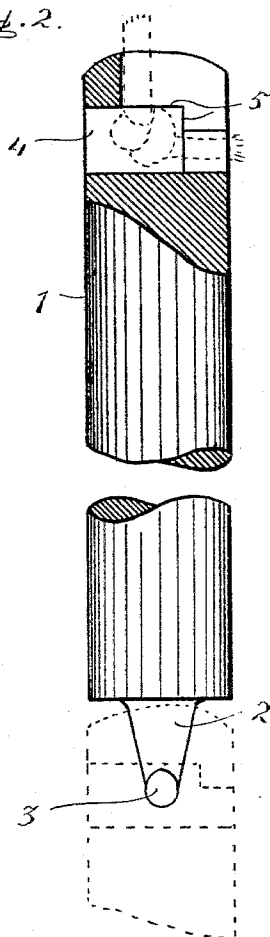


Fig. 3.

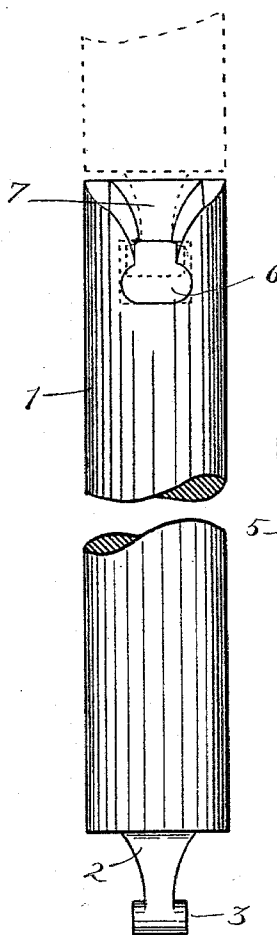
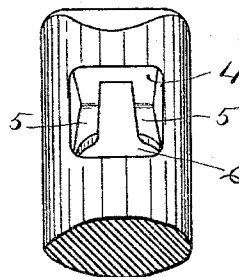


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM C. WALDA, OF FORT WAYNE, INDIANA.

SASH-WEIGHT.

SPECIFICATION forming part of Letters Patent No. 571,813, dated November 24, 1896.

Application filed July 29, 1895. Serial No. 557,503. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. WALDA, a citizen of the United States, residing at Fort Wayne, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Sash-Weights; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in sash-weights for window-sash.

It is well known to builders and dealers in building materials that sash in the same building, as well as in different buildings, vary greatly in weight by reason of difference in size and thickness of the glass used. The consequence is that dealers are obliged, in order to be ready to supply demands, to keep stocks on hand composed of very many different sizes and heft of sash-weights, thus increasing the amount of stock by weights that may not be called for but occasionally, and it not unfrequently happens that even in large stocks of assorted weights those cannot be found that are wanted and new ones have to be ordered, thereby increasing cost and resulting in delay and loss of time to the builder. The builder is also often obliged to weigh the sash before giving his order, and if with this precaution a weight happens to be too heavy or too light it is worthless for the purpose and another must be procured in its place. Short weights that can be easily united so as to form sections or series are also an advantage, as it is desirable to have the pocket through which the weight is admitted into the box as short as possible to preserve space for nailing the face-casings to the jam without interfering with the pocket.

My improvement practically, as will be seen from the description, obviates these disadvantages, and the weight is very simple, cheaply made, durable, and easily adapted to any window.

The novel features of my invention consist, first, in the manner of uniting the abutting interlocking ends without the use of a third part or intervening link, and, second, the con-

venience in molding and casting without the use of a core.

The following is a full and exact description of my invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

Figure 1 is a top view of the upper end of the weight. Fig. 2 is a side view of the weight when in position, with the upper part broken away, the dotted lines showing the position of the sash-cord and the anchor-head of the adjacent weight when attached, and the dotted lines at the lower end showing the relative arrangement of the interlocking parts of an adjacent suspended weight. Fig. 3 is a front perspective view at right angles to the view in Fig. 2, showing the weight when in position in the window-frame box. The dotted lines at the upper end show the relative arrangement when it is attached to an upper adjacent weight. Fig. 4 is a rear perspective view of the upper slotted end of the weight, showing a transverse opening for the insertion of the sash-cord and the anchor-lug 8, as hereinafter described, and also showing the anchor-ledges within said opening for the abutting interlocking end of the adjacent weight.

Corresponding parts in the several views are denoted by like figures.

1 is the oblong sash-weight, of cast metal, preferably formed as an elongated cylinder.

2 is an anchor, an integral part of the weight 1 with a shoulder and tapering downwardly from its base and having at its lower end a T-headed lug 3. Both the anchor and its said head are adapted to be readily inserted into the slotted opening 7 and the aperture or opening 6, as hereinafter described.

In Fig. 2 is a side view of the anchor and head and in Fig. 3 is a front view of the same.

The upper part of the weight has a slot 7, open to the front and at the top, as shown in Figs. 1 and 3, and extending rearwardly about two-thirds of the transverse diameter of the weight-body. The sides of this slot taper downwardly and inwardly, as shown in Fig. 3, and in front preferably have a slight bevel, as shown in Fig. 1. The rear wall of

the slot also tapers downwardly and inwardly, as shown in Fig. 2.

The slot 7 at its lower end terminates in an elliptical or circular transverse aperture or eye 6, which extends from the front rearward about one-third of the diameter of the weight-body where it communicates with the opening 4. This opening 4 extends transversely from the rear to the interior end of the aperture 6, it having the same length as the slot 7, and by its connection with the opening 6 there is a continuous opening through the weight from front to rear, as shown in Fig. 2. The lower end of the opening is coincident with and in the same horizontal line with the lower edge of the opening 6, and its width the same as the horizontal diameter of said opening 6, but its height is greater than the vertical diameter of the opening, so that its upper part cuts into the side walls of the slot 7, thereby forming horizontal and vertical ledges 5 in the side walls of the slot 7, as shown in Fig. 2. By this construction the open space between the side walls of the slot 7 at the intersection with the upper part of the aperture 4 is a very little wider than the lower end of the anchor 2 at its intersection with the head 3, it being intended that the tapering sides of the said anchor will freely enter the slot 7, as shown by the dotted lines at the upper part of Fig. 3.

The upper end of the weight is rounded at front and rear, as shown in Fig. 2. The ends of the head 3 are rounded, as shown in the end view at the lower part of Fig. 2. The length of the anchor from its base to the head 3 is equal to the depth of the slot 7 from the apex of the top part of the weight to the edge of the horizontal ledges 5 5, as shown by the dotted lines in Fig. 3.

The manner of using my invention is as follows: The sash-cord, having its lower end knotted, is inserted into the opening 4 from the rear and drawn into the slot 7, bringing the knot against the ledges 5 5, as shown in Fig. 2. The ledges will prevent the knot from pulling through and the weight can be suspended by the cord from the sash and placed in the sash-box in the usual way.

To attach another weight, it is held at right angles with the suspended weight, and the anchor-head of the suspended weight is inserted in the opening 6 of the weight to be attached until the head passes the vertical ledges on the side walls of the slot 7. Then dropping the other end of the attaching weight the anchor of the suspended weight will pass into the slot of the attaching weight, which will be suspended, as shown in Fig. 3, within a line vertical with the upper weight. These weights can then be elevated in the box and any number of weights be successively attached in the same way. By having weights of three and four pounds each combinations can be made of any desired weight of even pounds from three pounds upward except five pounds.

It will be seen that the dealer need only keep three and four pounds weight in stock and which will be what may be called "standard" goods. The builder can use what are needed and return the remainder.

The weight can be molded without any core and the attachments will not wear out in a lifetime, and a very short pocket can be used, as will be readily understood by any mechanic.

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

1. A cast-metal oblong sash-weight having upon its lower end an axially-arranged T anchor-lug 2, flaring at its base as shown, and provided at its upper end with the transverse opening 4, extending to and beyond the center of the weight, for the purpose described, a laterally-elongated aperture or eye 6, upon the reverse side thereof communicating with the lower part of said aperture 4, and adapted to loosely admit the head 3 of the anchor 2, a centrally-located vertical slot 7, of a length equal to that of the said opening 4, but extending from the reverse side and having beveled sides flaring from the interior outwardly and contracted from the top downward and forming thereby the ledges 5, 5, adapted to secure the anchor-lugs of the adjacent interlocking sash-weight all as shown and for the purpose described.

2. A series of cast-metal oblong sash-weights of three and four pounds weight each, and each weight having upon its lower end an axially-arranged T anchor-lug 2, flaring at its base as shown, and provided at its upper end with a transverse opening 4 extending to and beyond the center of the weight for the purpose described, a laterally-elongated aperture or eye 6 upon the reverse side thereof, communicating with the lower part of said aperture 4 and adapted to loosely admit the head 3 of the anchor 2 as shown; a centrally-located vertical slot 7, of a length equal to that of the said opening 4 but extending from the reverse side and having beveled sides flaring from the interior outward and contracted from the top downwardly and forming thereby ledges 5, adapted to secure the anchor-lug of the adjacent interlocking sash-weight and for securing within said ledges a sash-cord all as shown and for the purpose described.

3. A cast-metal elongated cylindrical sash-weight having at its upper end an elongated slot open in front with its walls or sides and rear tapering and contracted downwardly from the top, and terminating in a transverse elliptical opening 6, as shown, having its longer diameter at right angles with the longitudinal axis of the weight-body, and its shorter diameter vertical and at right angles to its greater diameter, and having on the reverse side a transverse rectangular aperture 4, with its lower edge coincident with the lower edge of the said elliptical opening 6, and its sides coincident with the circumference of the opening 6 at its greatest diameter;

the said openings communicating at a point about one-third of the diameter from the front of the opening 6, and the said opening 4 by the intersection of the overhanging walls of the slot 7, and the meeting of the interior end with the opening 6, forming ledges 5 and 5, as shown and described, and the upper slotted end of said weight being rounded on the front and rear as shown, and the said slotted opening and the opening 6 being adapted to admit the anchor end of a like weight, and the lower end of said weight having an anchor with a T-head, the said anchor being flaring at its base as shown, and adapted to be inserted in the elliptical orifice 6 of a like weight, and which being so inserted will securely hold the attached weight suspended and thereby forming a series as described and for the purpose stated.

4. A metallic oblong sash-weight made to be cast in a single piece without the use of a core in molding and casting, having at its lower end an anchor T-lug, and at its upper end a centrally-slotted vertical opening extending from the front rearward, to and beyond the center of the weight, and opening at its lower end into a square or oblong aperture or opening extending from the rear to and beyond the longitudinal center of the weight, said described transverse opening having a greater width than the side walls of the slotted opening at the point of intersection and thereby forming horizontal ledges in said side walls and also communicating with another transverse opening extending from the reverse side rearward to the interior end of the first-described transverse opening, and intersecting the side walls of the slotted opening at a point below that of the intersection of the first-described transverse opening with said side walls and thereby forming vertical

ledges in said side walls at right angles to the said horizontal ledges and adjacent to the same, and the said slotted and transverse openings being adapted and arranged to receive the anchor-lug T of another like weight, and by the interlocking of the parts within the central part of said weight, upon said ledges, to securely but loosely connect the weights for use in a series for the purpose described and set forth.

5. An elongated cylindrical sash-weight, having at its upper end near the top a transverse opening extending about two-thirds of the diameter of the weight, as shown, and upon the diametrically opposite side an elliptical transverse opening; having its longer diameter at right angles with the longitudinal axis of the weight and terminating in the said opposite transverse opening; a longitudinal slot extending downwardly from the top of the weight and tapering inwardly and terminating in said opening; the said slot extending from the front backward about two-thirds the diameter of the cylinder, and at its lower end forming by its communication with the said transverse openings, ledges for the retention of the sash-cord in the longitudinal center of the cylinder, and at the lower end of said weight having a centrally-located anchor-lug as shown, adapted to engage centrally in the slotted upper end of a like weight, and by interlocking parts to securely but loosely connect the weights together, substantially as shown and for the purpose stated.

Signed by me at Fort Wayne, Indiana, this 26th day of July, 1895.

WILLIAM C. WALDA.

Witnesses:

JOEL WELTY,
AUGUSTUS A. CHAPIN.