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T. E. McLAUGHLIN

1,853,916

SASH WEIGHT

Filed Dec. 17, 1929

Fig. 1.

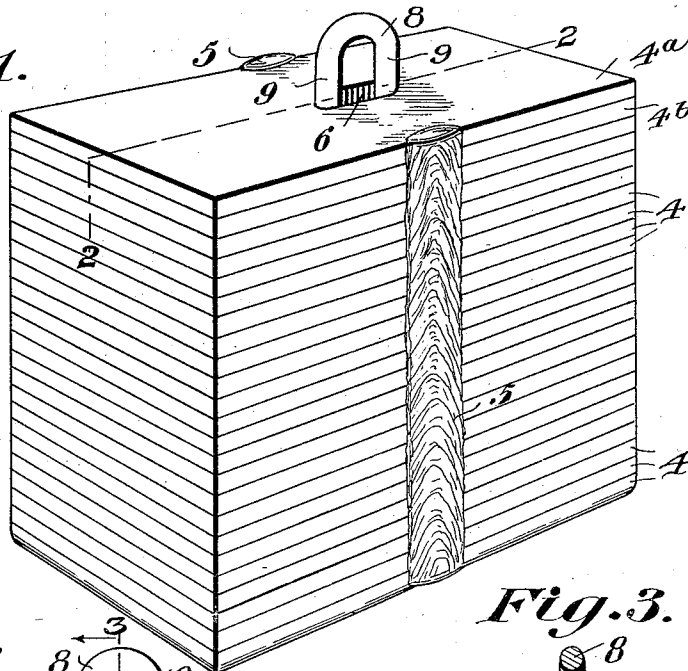


Fig. 2.

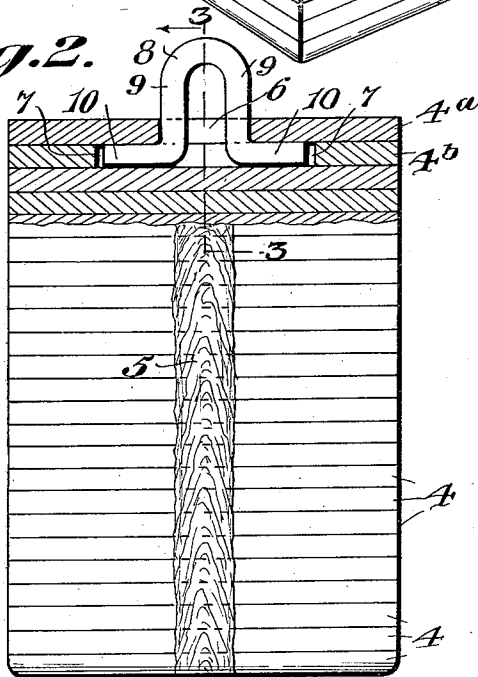
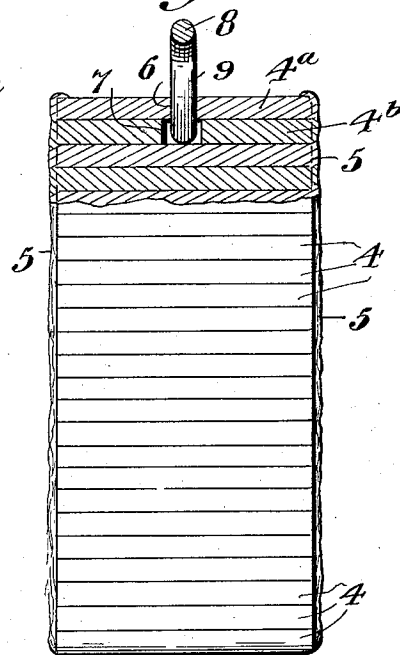


Fig. 3.



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SASH WEIGHT

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In the cutting, shearing, punching and forming of metal sheets and bars, particularly those of the heavier grades, there is considerable waste material, and one of the objects of the present invention is to provide a means for successfully using some of this waste and at the same time provide a counterweight for window sash and the like, which is not only practicable, but is actually advantageous over the well-known cast weights in that it is not apt to be broken and is relatively heavy in comparison to its size, or bulk.

A further and important object is to provide a novel structure in which portions or sections can be readily removed to vary the weight.

While the invention is primarily intended for use in counterweighting window sash, it is obviously not restricted to such employment.

In the accompanying drawings:

Figure 1 is a perspective view of a form of the invention that is at present considered preferable.

Figure 2 is a side elevation with the upper portion in section, on the line 2—2 of Figure 1.

Figure 3 is a sectional view on the line 3—3 of Figure 2.

The invention as disclosed consists of a stack of metal plates 4, which are shown as rectangular and of equal size. These plates may be cut from waste or scrap steel bars and are therefore relatively heavy. Though independent pieces, they are permanently held together by lines 5 of electric welding, the welding tools being passed along the opposite sides of the stack and causing the metal of the different plates to flow together and unite in a manner well understood. The topmost sheet of the pile, designated 4a, is provided with an opening 6 that is preferably elongated, and the plate below it, designated 4b, is provided with a slot 7 aligned with the opening or slot 6, but longer than the same so as to extend beneath the plate 4a at the opposite ends of the opening 6, as clearly shown in Figure 2. This affords an anchoring means for a hanger eye member which is preferably in the form of a staple 8, the closed or looped

end of which projects above the stack and has its shanks 9 extending downwardly through the opening 6 with the terminals 10 offset and lying in the end portions of the slot 7 beneath the plate 4a. A simple, but very effective eye is therefore provided in which the cable or other hanger can be engaged.

A trim and very compact counterweight is thus provided, the weight of which is relatively great for its size, making it particularly useful for metallic sash in metal window-frames. The structure furthermore permits a variation in weight. That is to say, by employing a cold chisel and hammer, one or more of the lowermost plates can be removed by cutting the welded portions.

From the foregoing, it is thought that the construction, operation and many advantages of the herein described invention will be apparent to those skilled in the art without further description and it will be understood that various changes in the size, shape, proportion and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim is:

1. A counterweight for sashes and the like comprising a stack of metal plates secured together, the uppermost plate having an opening therethrough and a plate beneath also having an opening, and an eye member projecting through the opening of the uppermost plate, and anchored in the opening of the lower plate.

2. A counterweight for sashes and the like comprising a stack of substantially flat metal plates secured together, the uppermost plate having an opening therethrough and a plate beneath having a slot longer than the opening, and an eye member projecting through the opening of the uppermost plate and having offset anchoring terminals in the slot and extending beneath the overlying plate.

3. A counterweight for sashes and the like comprising a stack of independent plates, the uppermost having an opening therethrough, and an underlying plate having a slot of greater length than the opening, an eye staple extending above the top of the stack and

having shanks passing downwardly through the opening with their terminals outstanding in the ends of the slots, and lines of welding connecting opposite edges of the plates
5 and securing them together.

4. A counterweight for sash and the like comprising a stack of plates, the uppermost having an opening therein, an underlying plate having a slot that aligns with the opening and extends on opposite sides of the same
10 beneath the overlying plate, an eye member for suspending the counterweight comprising a staple having shanks passing through the opening and offset terminals lying in the
15 end portions of the slot beneath the overlying plate, and means securing together the opposite sides of the plates.

In testimony whereof, I affix my signature.

THOMAS E. McLAUGHLIN.

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