

No. 826,703

PATENTED JULY 24, 1906.

O. F. ZAHN.
WINDOW SASH WEIGHT.
APPLICATION FILED NOV. 3, 1904.

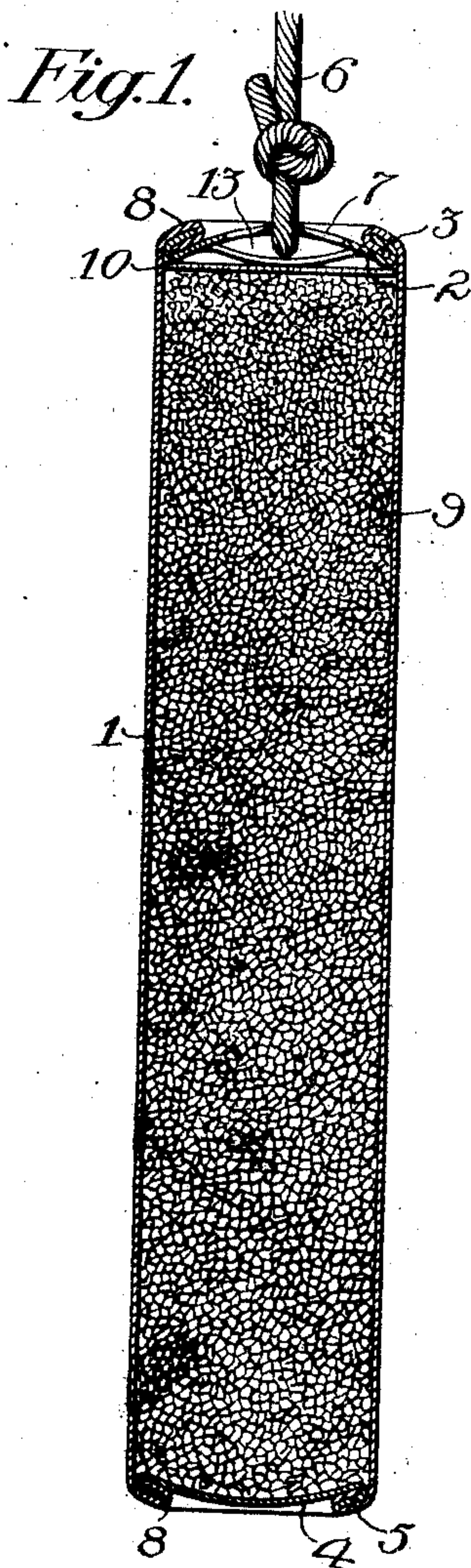


Fig. 2.



Fig. 3.

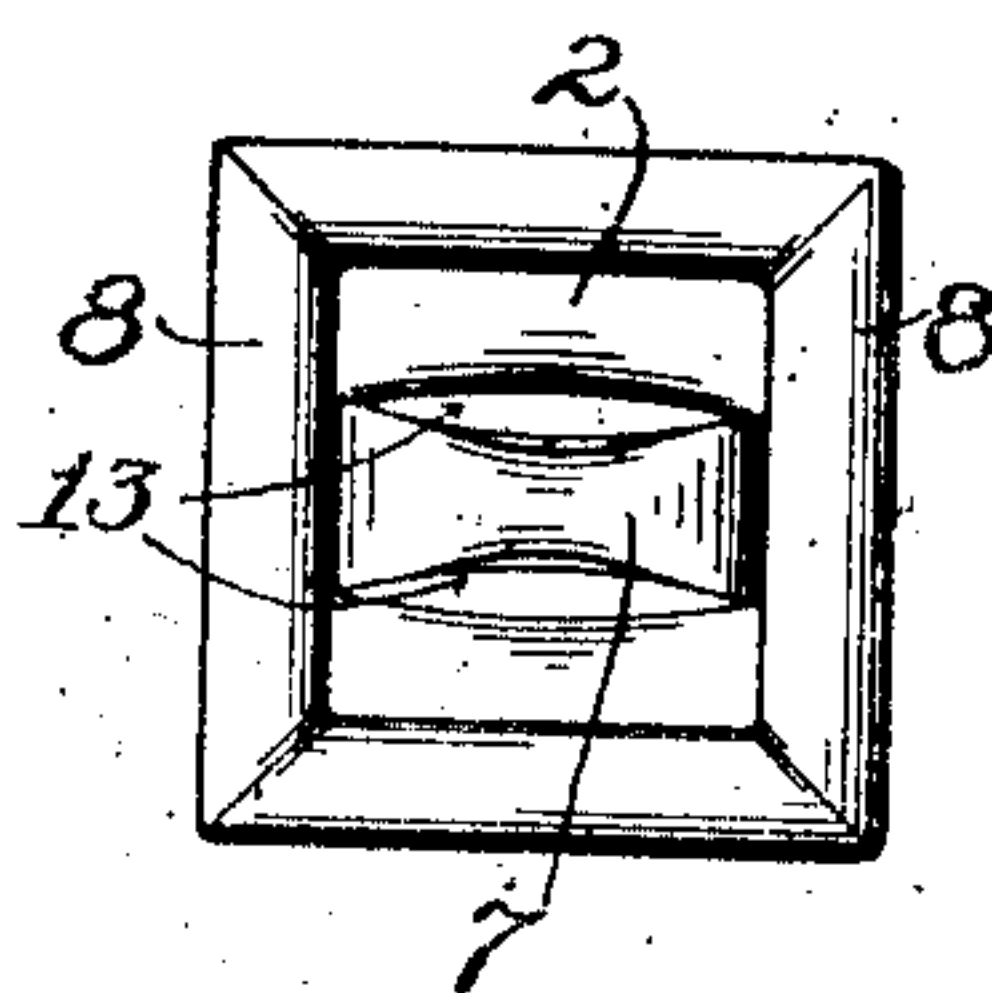


Fig. 4.

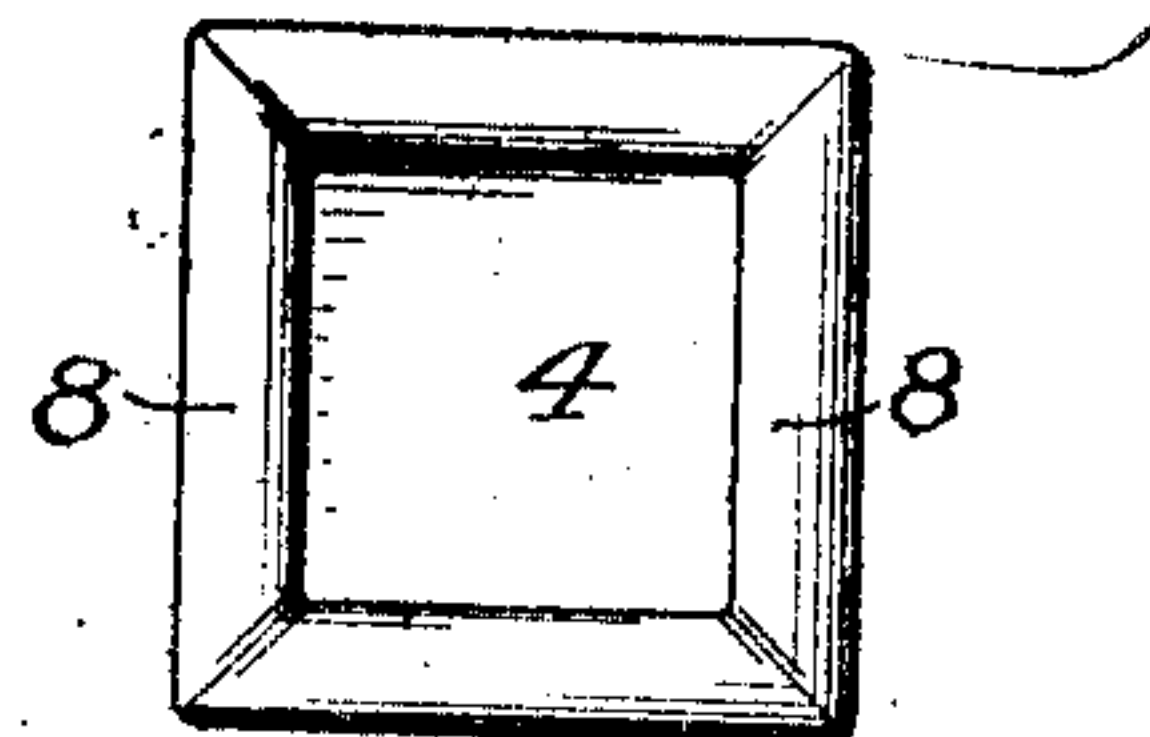


Fig. 5.

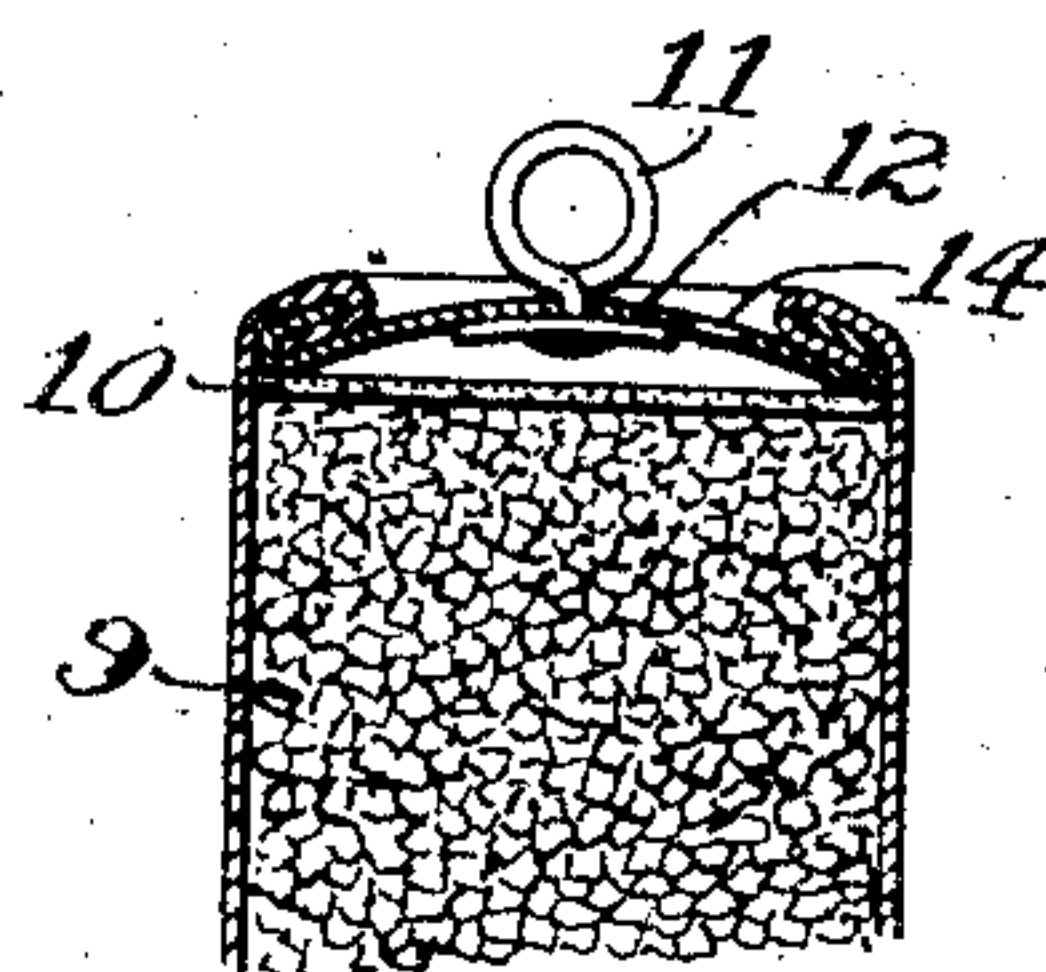
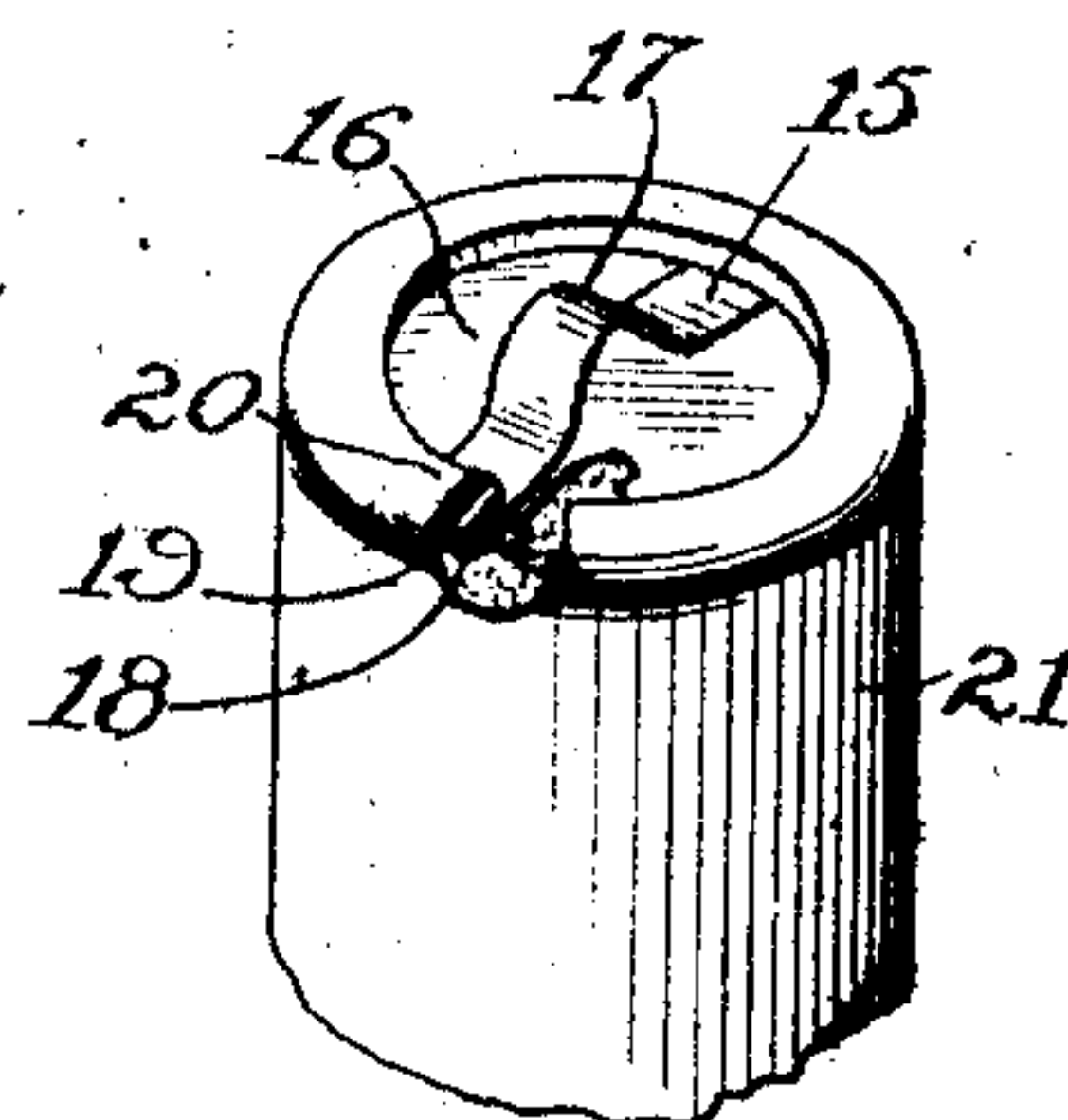


Fig. 6.



Witnesses:-
Frank H. Gahane
A. P. Knight.

Inventor,
Oswald F. Zahn.
by
Townsend Bros.
Attys

UNITED STATES PATENT OFFICE.

OSWALD F. ZAHN, OF LOS ANGELES, CALIFORNIA.

WINDOW-SASH WEIGHT.

No. 826,703.

Specification of Letters Patent.

Patented July 24, 1906.

Application filed November 3, 1904. Serial No. 231,179.

To all whom it may concern:

Be it known that I, OSWALD F. ZAHN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Window-Sash Weights, of which the following is a specification.

One object of this invention is to provide a window-sash weight which will be of cheap construction.

Another object of this invention is to provide a window-sash weight the weight of which can be readily adjusted.

Another object of the invention is to provide a sash-weight which will conform approximately to the shape of the recess in the casing, so as to take advantage of the room therein to the greatest possible extent.

The accompanying drawings illustrate the invention.

Referring to the drawings, Figure 1 is a vertical section of the sash-weight. Fig. 2 is a detail section of the cap-plate before application to the main tubular weight member. Fig. 3 is a plan. Fig. 4 is an inverted plan of the sash-weight. Fig. 5 is a partial vertical section showing a different form of sash-weight. Fig. 6 is a perspective view showing another form.

The device comprises a casing or shell preferably formed of a square or rectangular tube 1, of sheet metal, in each end of which tube is placed a sheet-metal end plate which is square or rectangular and conforms to the interior of the tubular member 1. The top end plate or cap (indicated at 2) is shown in Fig. 2 and is provided with an upwardly-extending flange or rim 3 around its edge. The end plate 4 at the bottom or lower end of the tubular member 1 is similarly formed with a downwardly-extending flange 5. These end plates are secured in the tubular member 1 in any suitable manner, preferably by upsetting or crimping the walls of the tubular member 1 at the ends thereof over the longitudinally-extending flanges 3 and 5 of the plates 2 and 4, respectively, as shown at 8. Each end plate is bent outwardly, so as to give it an outwardly-convex shape, and the flange member consisting of the flange element 3 or 5 is bent over to conform to the convexity of the ends, thus giving rounded or oblique corners that will prevent interference with the walls of the containing-recess. The rounded or convex ends are stronger than a flat end would be.

The upper end cap 2 is provided with means for the attachment of the suspending or operating cord, (indicated at 6.) For this purpose the said end plate is preferably slitted transversely and the portion 7 between the slits bent up to form a bail or strap to receive the rope or cord 6, which is passed under the said bail and looped around and then tied. The portions of the plate 2 adjacent to and on the outer side of the said slits are preferably bent down to facilitate the passage of the rope under the bail, and the edges of the bail are bent up for the same purpose and to give a rounded bearing for the rope.

The interior of the shell or tubular member 1 is filled or packed with any suitable weighting material or filling, (indicated at 9,)—for example, iron ore, sand, or other cheap substance of the requisite specific gravity and suitable state of division. This filling may be inserted in the tubular shell 1 after the bottom end plate 4 is put in place and while the upper end of the shell is still open.

A washer or packing-plate 10, preferably of pasteboard or similar puncturable material, is placed on top of the filling or packing 9, said plate substantially fitting the interior of the tubular shell 1, so as to prevent the filling from escaping through the slitted upper end plate 2. The rectangular or square shape of the sash-weight above described is of advantage in utilizing to the full the space within the window-casing recess. The fastening of the end plates by the above-described expedient of turning in the walls thereof over the flanges of the end plates forms a strong and cheap fastening for said plates, and, moreover, gives a smooth external surface.

In applying the sash-weight if it is found to be too heavy a screw-driver or other instrument can be inserted through one of the slits or openings 13 in the cap or end plate 2 and forced through the plate 10 to puncture same. The weight is then inverted and the filling material is allowed to run out through the puncture until the weight of the device is sufficiently reduced.

The device may be variously modified. For example, as shown in Fig. 5, the means for attachment of the suspending or operating rope may consist of an eye 11, fastened to the top plate, (indicated at 12,) said plate being in this case similar to the cap-plate above described, but without the bail. No specific claim is made in this application to the form

of suspension shown in Fig. 5, the same being claimed in my application, Serial No. 260,941, filed May 18, 1905. A hole 14 may be provided in this plate to give access to the puncturable plate 10.

In the form shown in Fig. 6 the attaching means consists of a strip 15, bent to conform to the top end plate 16 and further bent at its center, as shown at 17, to receive the rope, the ends being bent up or flanged, as at 18, and extending within the flanges 19 of the top end plate and the ends 20 of the shell 21, being bent over these flange parts to fasten the whole together. The end plate 16 is of metal sufficiently thin to be punctured, as by a screw-driver, for the purpose set forth.

My invention is not limited to the use of a rectangular shell, as it may be round, if desired, as shown in Fig. 6.

What I claim is—

1. A sash-weight comprising a shell formed of a tube and end plates in said tube, the ends of the tube being bent over said end plates to fasten the plates in the tube, and filling material in said shell.

2. A sash-weight comprising a shell having an opening at its upper end, filling in said shell, and a plate of puncturable material within the shell over said filling.

3. A sash-weight comprising a sheet-metal shell formed of a tube with end plates and

having one end plate slitted and bent to form an attaching-bail, and filling within said shell.

4. A sash-weight comprising a sheet-metal shell, filling within said shell, and a puncturable plate above said filling, said shell having its end slitted and bent to form an attaching-bail and also to form openings for access to said puncturable plate.

5. A sash-weight comprising a sheet-metal shell formed of a tube, closed at the lower end, a puncturable closure-plate at the upper end of said tube, a filling in said tube, and a bail over said plate.

6. A sash-weight comprising a sheet-metal shell closed at the lower end and having a slitted plate at the upper end, a bail at the upper end of said shell and a filling in the shell.

7. A shell having inbent ends, a filling in the shell, means retained by the inbent ends for holding the filling, and means held by one of the inbent ends for holding a cord.

In testimony whereof I have hereunto set my hand, at Los Angeles, California, this 27th day of October, 1904.

OSWALD F. ZAHN.

In presence of—

ARTHUR P. KNIGHT,
JULIA TOWNSEND.