

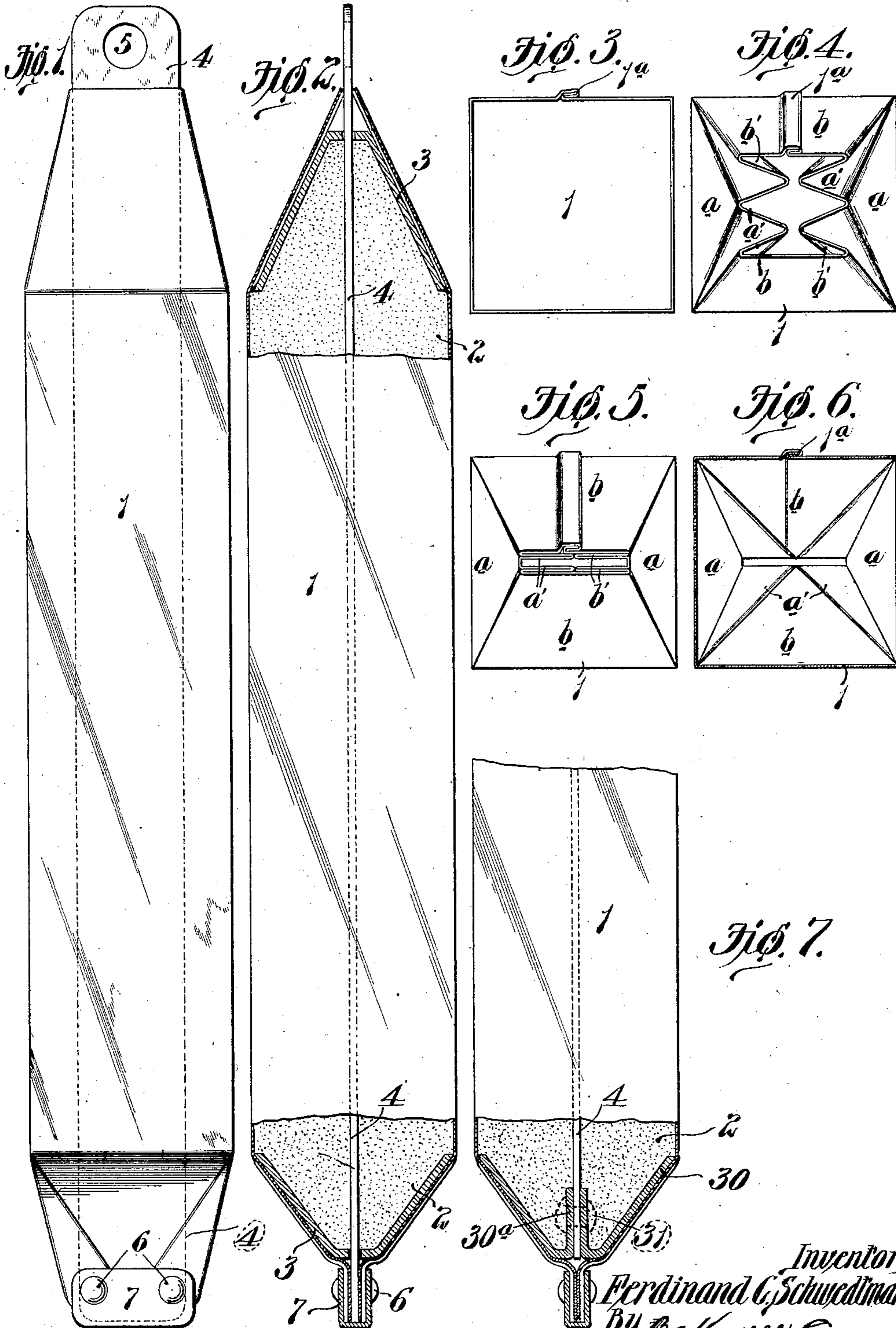
No. 883,978.

PATENTED APR. 7, 1908.

F. C. SCHWEDTMAN.

SASH WEIGHT.

APPLICATION FILED OCT. 26, 1907.



Witnesses: { *Geo. R. Johnson*  
*Nells L. Church*

Inventor,  
*Ferdinand C. Schwedtmann.*  
By *W. Kewell Kinnear*  
*Atty.*

# UNITED STATES PATENT OFFICE.

FERDINAND C. SCHWEDTMAN, OF ST. LOUIS, MISSOURI.

## SASH-WEIGHT.

No. 883,978.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed October 26, 1907. Serial No. 399,352.

*To all whom it may concern:*

Be it known that I, FERDINAND C. SCHWEDTMAN, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Sash-Weights, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

This invention relates to sash weights, and particularly to that type which consists of a metal shell or housing incasing a core formed by the material of which the weight is essentially composed.

The main object of my present invention is to provide a sash weight of the type referred to having a cord-securing means extending longitudinally through the core and provided with an incasing shell which has its lower end bent or folded inwardly to form a closure.

Another object of my invention is to provide a sash weight in which the metal shell that incases the core is bent or folded inwardly in a novel manner to produce a closure for one end of the shell.

Figure 1 is a side elevation of a sash weight constructed in accordance with my invention; Fig. 2 is a view at right angles to Fig. 1 and partly broken away to more clearly show the construction of the sash weight shown in Fig. 1; Fig. 3 is a cross sectional view of the shell which incases the core; Fig. 4 is a detail view illustrating the manner in which the upper end portion of the shell is bent or folded inwardly; Fig. 5 is a detail view showing how the upper end of the shell looks after the operation of folding in the side walls of same has been completed; Fig. 6 is an inside view of the upper end of the shell for the purpose of illustrating more clearly the manner in which the end portion of the shell is bent or folded inwardly; and Fig. 7 is a view partly in section of a modified form of my invention.

Referring to the drawings which illustrate the preferred form of my invention, 1 designates a metal shell or housing that incases the core 2 of which the sash weight is essentially composed, said core being formed of any suitable material. The shell 1 is preferably formed of sheet metal and may either consist of a seamless tube or a plate bent to the proper shape and having its edges secured together, as for example, by a seam 1<sup>a</sup>, as

shown in Figs. 3 to 6. The shell herein shown is of rectangular-shape in cross section and the end portions of the shell are bent or folded inwardly over cap pieces 3 arranged at the opposite ends of the core 2, said cap pieces being of approximately pyramidal shape and formed either solid or hollow, as shown in Fig. 2. A member 4 provided at its upper end with an opening or eye 5 for receiving the cord which supports the weight, extends longitudinally through the core 2 and is connected at its lower end to the lower end of the sash weight, the cap pieces 3 having openings through which said member passes.

In the preferred form of my invention, as shown in Fig. 2, the lower end of the member 4 is connected by rivets or fastening devices 6 to the folded-in portions of the shell 1 and to a clip 7 which embraces said folded portions, the folded or bent portions at the upper end of the shell having no positive connection with said member 4. The member 4 is preferably formed by a flat metal bar and as said bar is secured to the lower end of the weight it carries or supports the core 2 so that there is no liability of the closure at the lower end of the shell 1 being weakened or disrupted when the sash weight is subjected to a sudden jerk, said bar 4 also stiffening and strengthening the weight. The closure at the upper end of the shell 1 is produced by bending the end portions of the sides *a, a* of the shell inwardly so that they will lie snugly against two oppositely disposed sides of the pyramidal-shaped cap piece 3 and then bending the projecting parts *a'* of the portions *a* over the two other oppositely disposed sides of the cap piece 3, as shown in Fig. 4, the end portions of the sides *b, b* of the shell being bent inwardly to produce parts *b'* which lie over the parts *a'* of the shell and which cooperate therewith to form inwardly extending knife-plaits. The sides *b, b* are then subject to further inward pressure which causes the parts *a', a'* to lie snugly against the cap piece 3 and the parts *b', b'* to contact with the parts *a', a'*, as shown in Fig. 5, thus forming a rectangular-shaped opening through which the member 4 passes, as shown in Fig. 2. In this way I form a closure for one end of the shell without cutting the metal in the shell, by forming two single box-plaits of varying width, as shown clearly in Fig. 4, the oppositely disposed sides *b, b*, constituting most

of the material in the plaits and the parts *a'* of the sides *a* forming the underneath folds of the plaits. Instead of securing the lower end of the member 4 to the folded portions of the shell and to the clip 7 which embraces said folded portions, as shown in Figs. 1 and 2, said member 4 can be secured to upwardly projecting wings 30<sup>a</sup> on the lower cap piece 30 by fastening devices 31, as shown in Fig. 7. A sash weight of this construction will be practically as strong as one of the construction shown in Figs. 1 and 2 as the lower cap piece on which the core rests is connected positively to the lower end of the member 4. Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A sash weight comprising a body formed by a core and a metal shell incasing same and having its lower end portion folded or bent inwardly to produce a closure, and a metal member extending longitudinally through the core and having its lower end connected to the parts which form a closure for the lower end of said body; substantially as described.
2. A sash weight comprising a core, a cap piece arranged at the lower end of the core, a shell surrounding said core and bent into intimate engagement with said cap piece so as to completely incase same, a metallic cord-securing member extending longitudinally through said core, and means for securing said member in position; substantially as described.
3. A sash weight comprising an elongated body consisting of a core and a metal shell incasing same and having its lower end bent or folded inwardly to form a closure, and a flat metal bar extending longitudinally through said body and having portions of the shell bent into engagement with its side faces and secured thereto; substantially as described.
4. A sash weight comprising a core, cap pieces arranged at the upper and lower ends of said core, a metal shell incasing said core and having its ends bent or folded inwardly over said cap pieces, a cord-securing member extending longitudinally through said core and also passing through said cap pieces, and means for securing said member in position; substantially as described.
5. A sash weight comprising a core, cap pieces at the upper and lower ends of said core, a metal shell incasing said core and having its end portions bent or folded inwardly over said cap pieces, and a metal bar extending longitudinally through said core and cap pieces and secured at its lower ends to the folded-in portions of the shell; substantially as described.
6. A sash weight comprising a core, cap pieces at the upper and lower ends of said core, a metal shell incasing said core and

having its end portions bent or folded inwardly over said cap pieces so as to completely incase same, a cord-securing member extending longitudinally through said core and projecting through the top cap piece, and means for securing said member in position; substantially as described.

7. A sash weight comprising a core, and a rectangular-shaped metal shell incasing said core, the corner portions of the shell at one end thereof being folded or bent inwardly in such a manner that the end of the shell will be completely closed and of pyramidal shape with four closed seams or joints at the junction of the sides of the pyramid; substantially as described.

8. A sash weight comprising a core, a pyramidal-shaped cap piece at one end of said core and a rectangular-shaped shell incasing said core, two of the oppositely disposed side walls at one end of said shell being bent inwardly into engagement with two of the sides of the cap piece and also extending partially over the other two sides of said cap piece and the other two oppositely disposed side walls of the shell having their corner portions folded inwardly so that they will lie upon the portions of the shell that extend only partially over the sides of the cap piece; substantially as described.

9. A sash weight provided with a shell which is closed at one end by bending oppositely disposed portions of the shell inwardly and forming box-plaits in the remaining edge portions of the shell; substantially as described.

10. A sash weight provided with a shell having a rectangular-shaped end portion which is closed by forming single box-plaits in two of the oppositely disposed walls of the shell; substantially as described.

11. A sash weight provided with a rectangular-shaped shell having a pyramidal-shaped end produced by forming inwardly extending knife-plaits in the corner portions of said shell and then bending two of the oppositely disposed side walls of the shell into engagement with said plaited portions; substantially as described.

12. A sash weight provided with a shell which is closed at one end by forming oppositely disposed single box-plaits in the edge portion of said shell and bending the intermediate edge portions of the shell toward each other, said box-plaits diminishing gradually in width so that a pyramidal-shaped end closure will be produced; substantially as described.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this twenty second day of October 1907.

FERDINAND C. SCHWEDTMAN.

Witnesses:

WELLS L. CHURCH,  
GEORGE BAKEWELL.