

No. 859,373.

PATENTED JULY 9, 1907.

W. P. DEVINE.
METAL COVERED BOX.
APPLICATION FILED JULY 7, 1906.

2 SHEETS—SHEET 1.

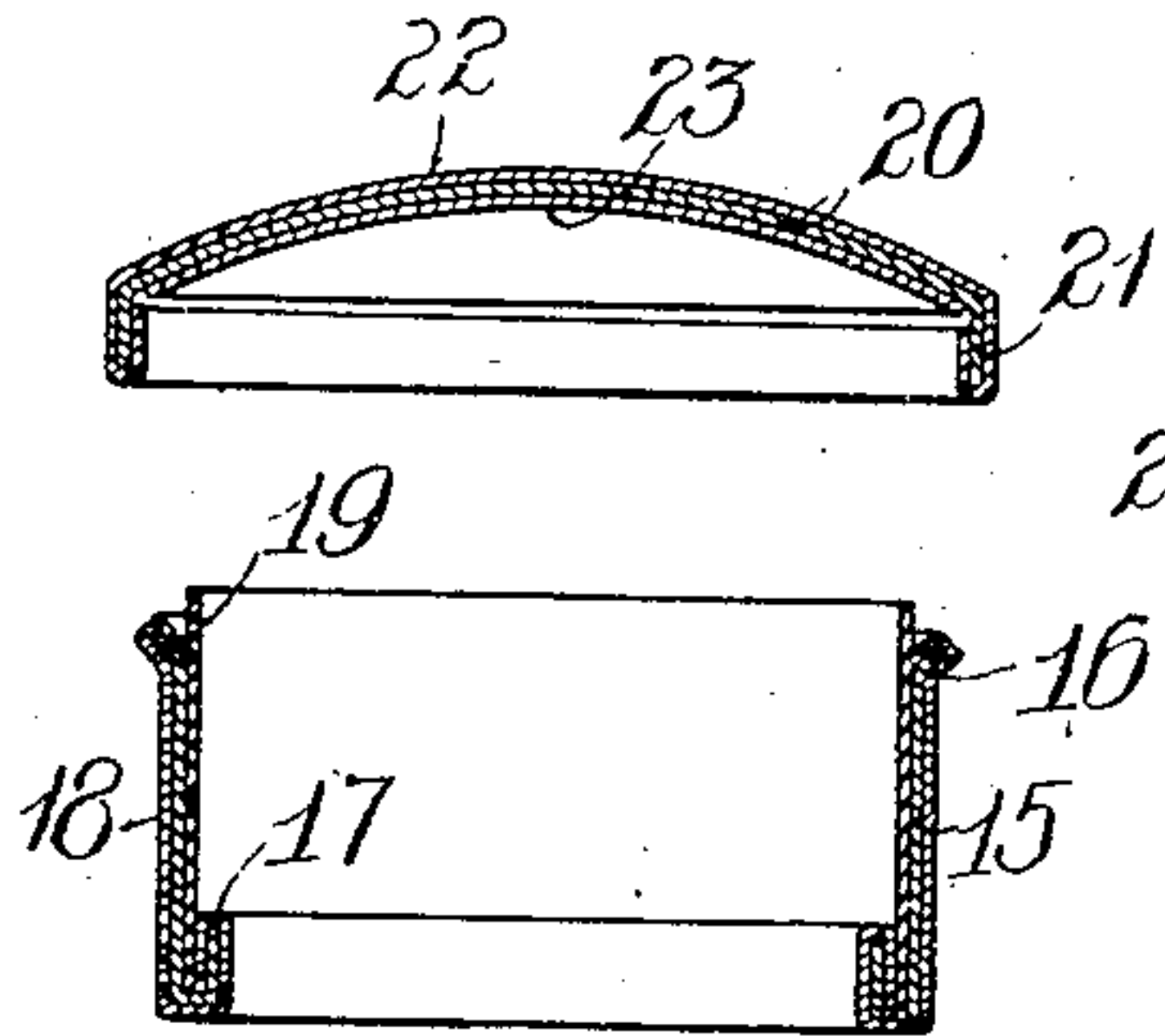


Fig. 1.

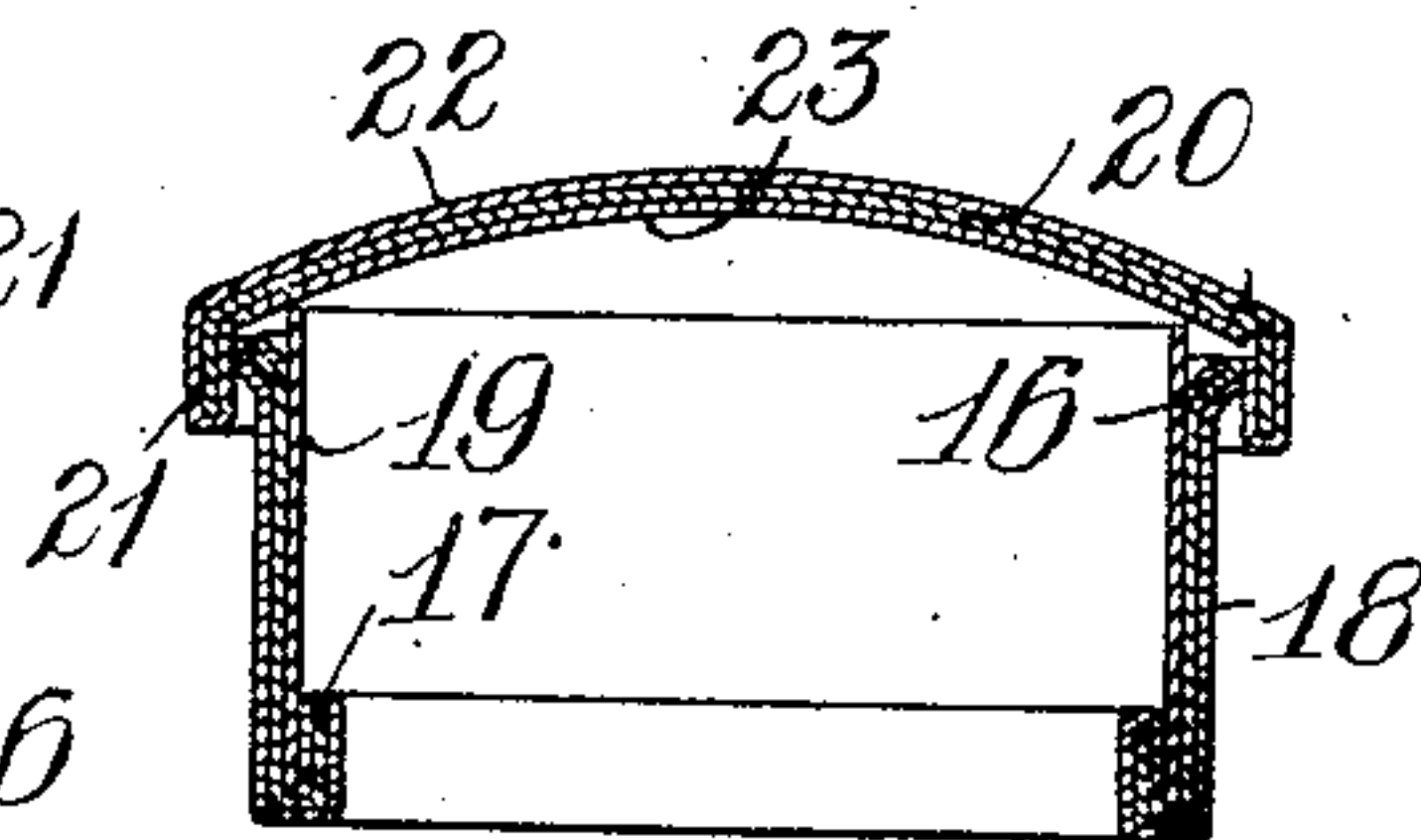


Fig. 2.

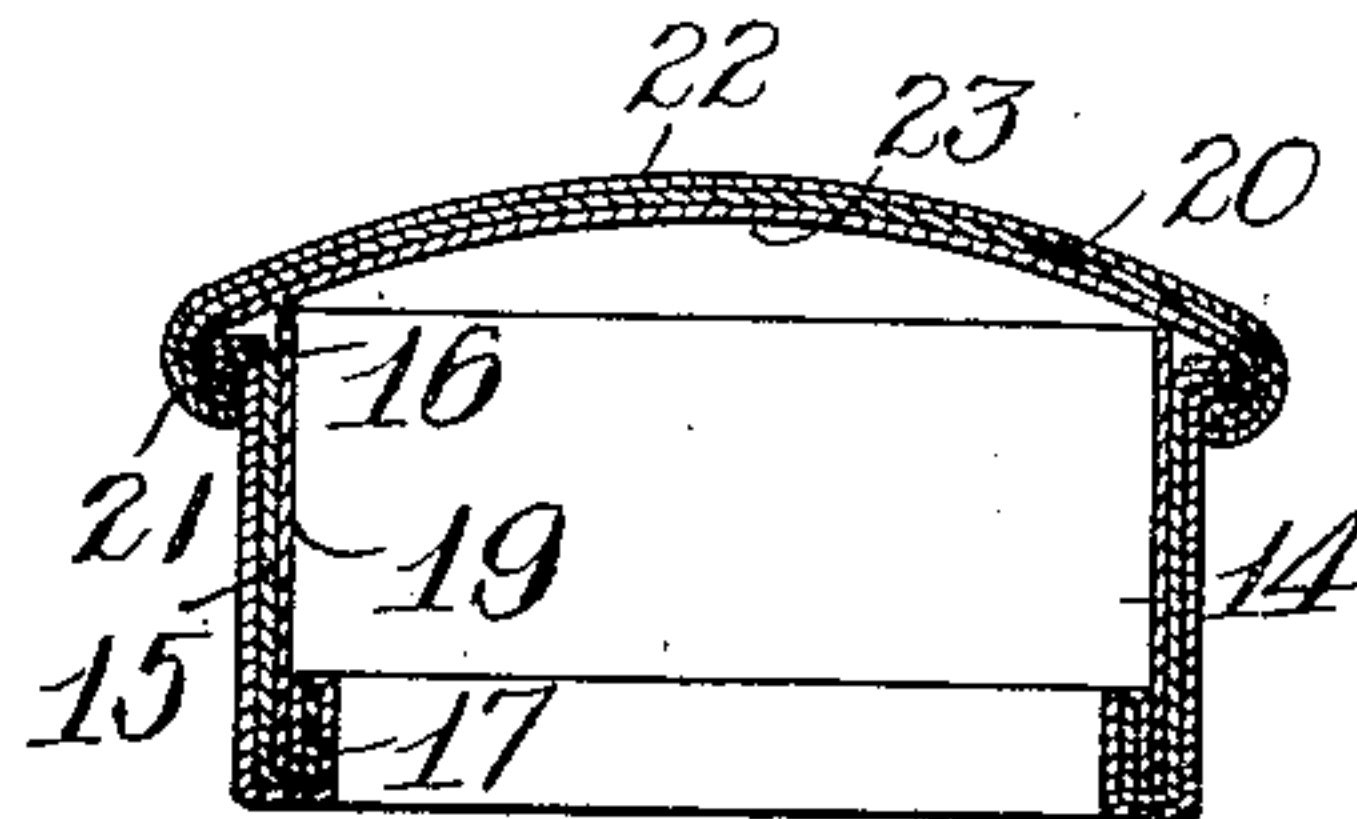


Fig. 3.

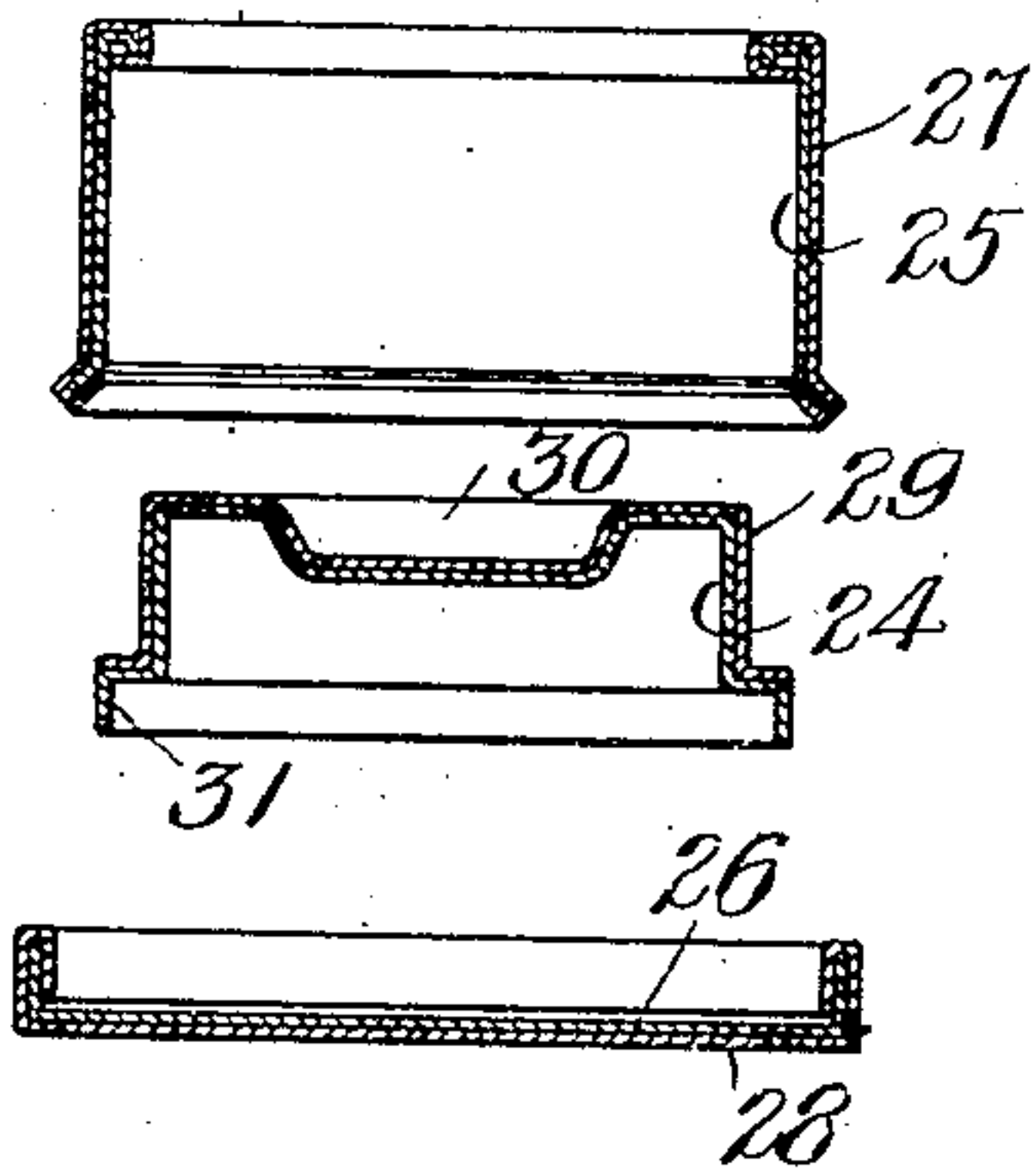


Fig. 4.

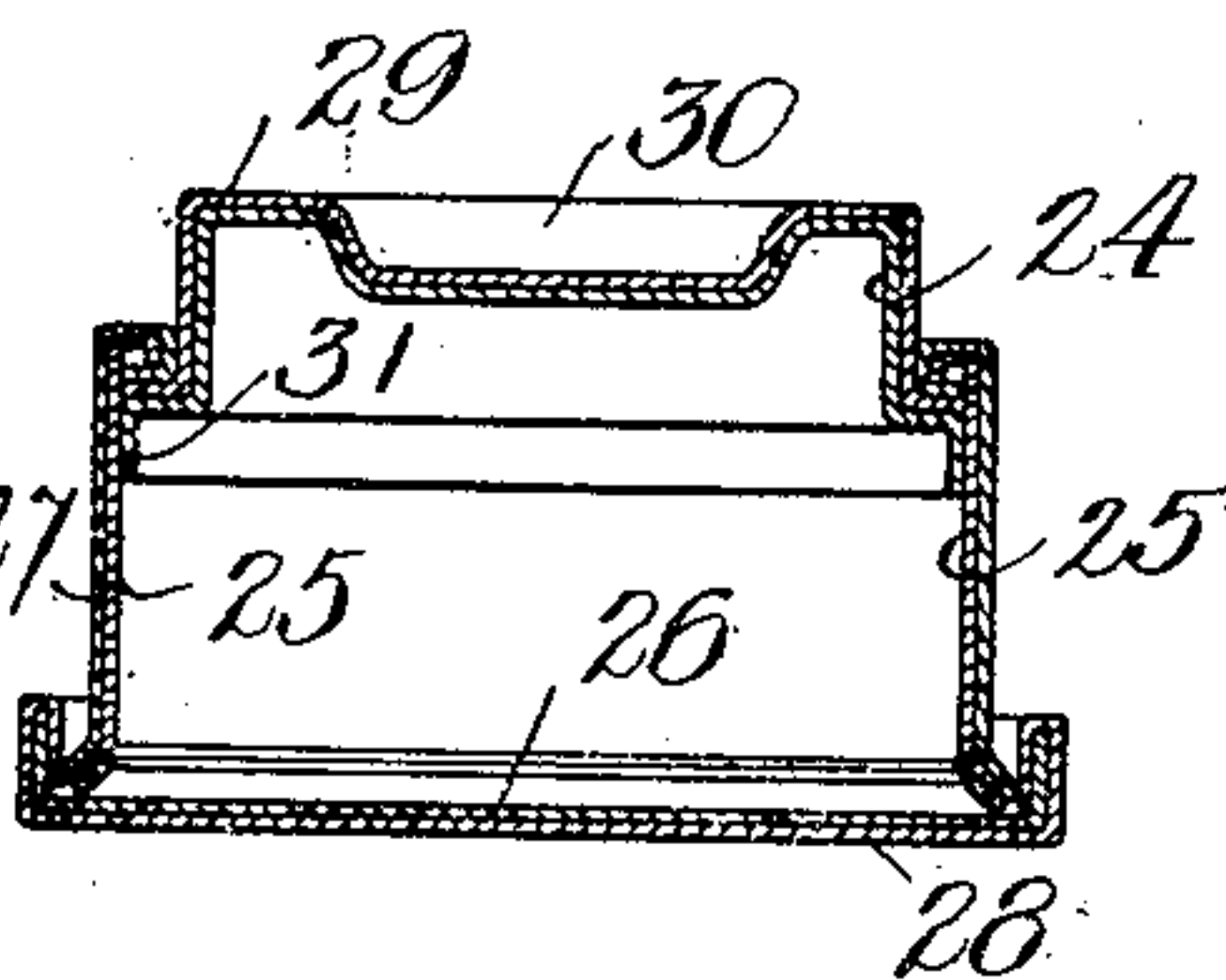


Fig. 5.

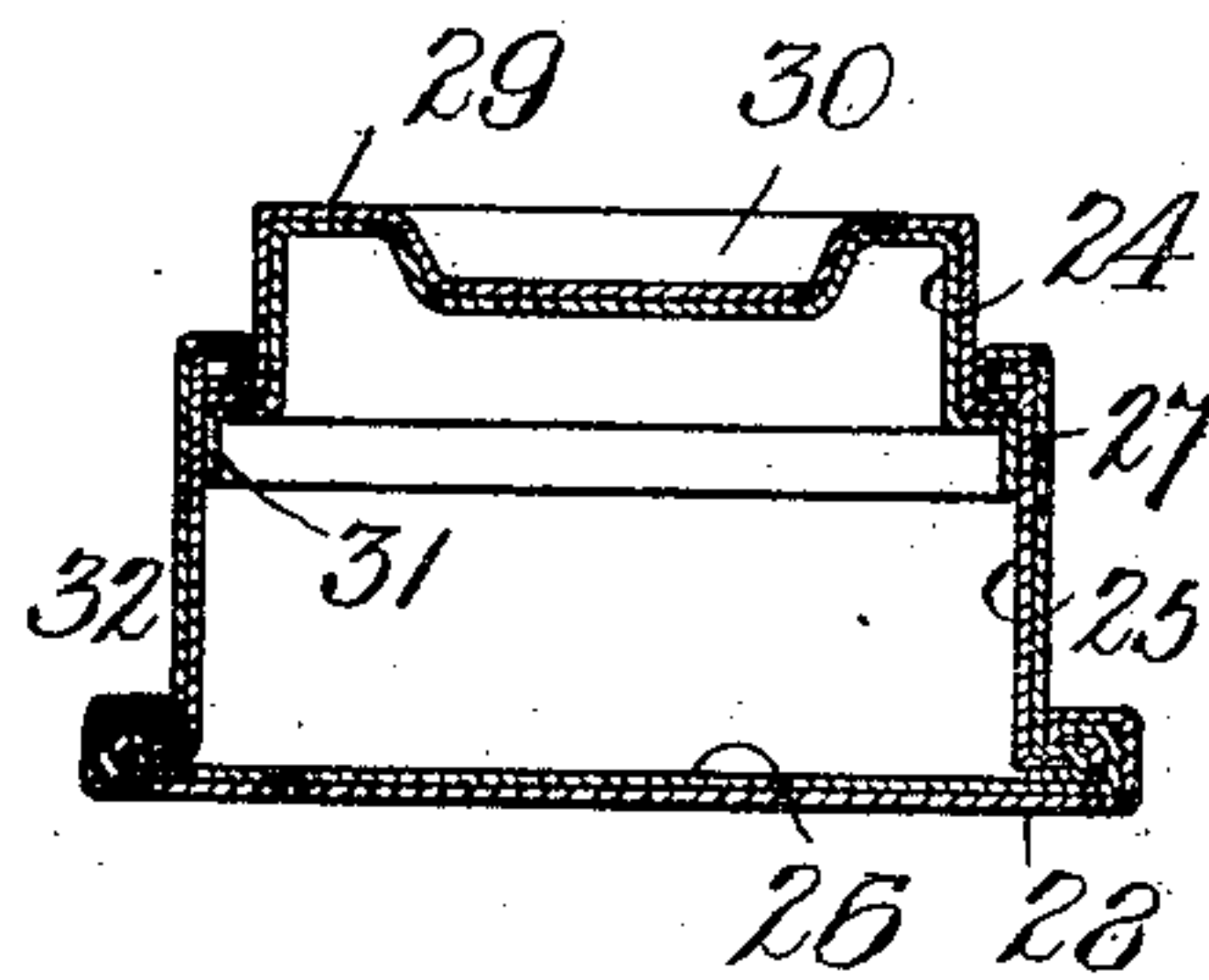


Fig. 6.

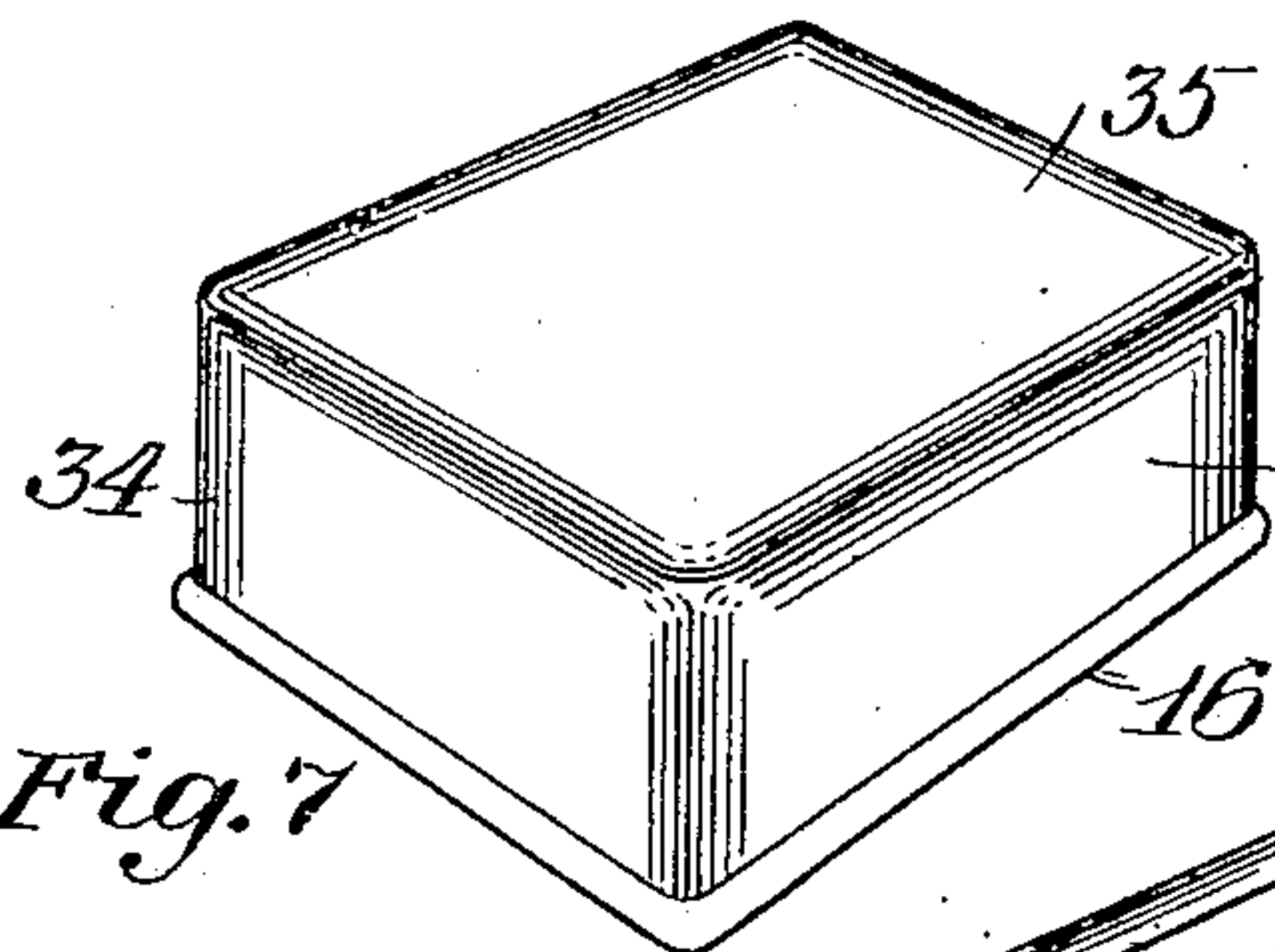


Fig. 7.

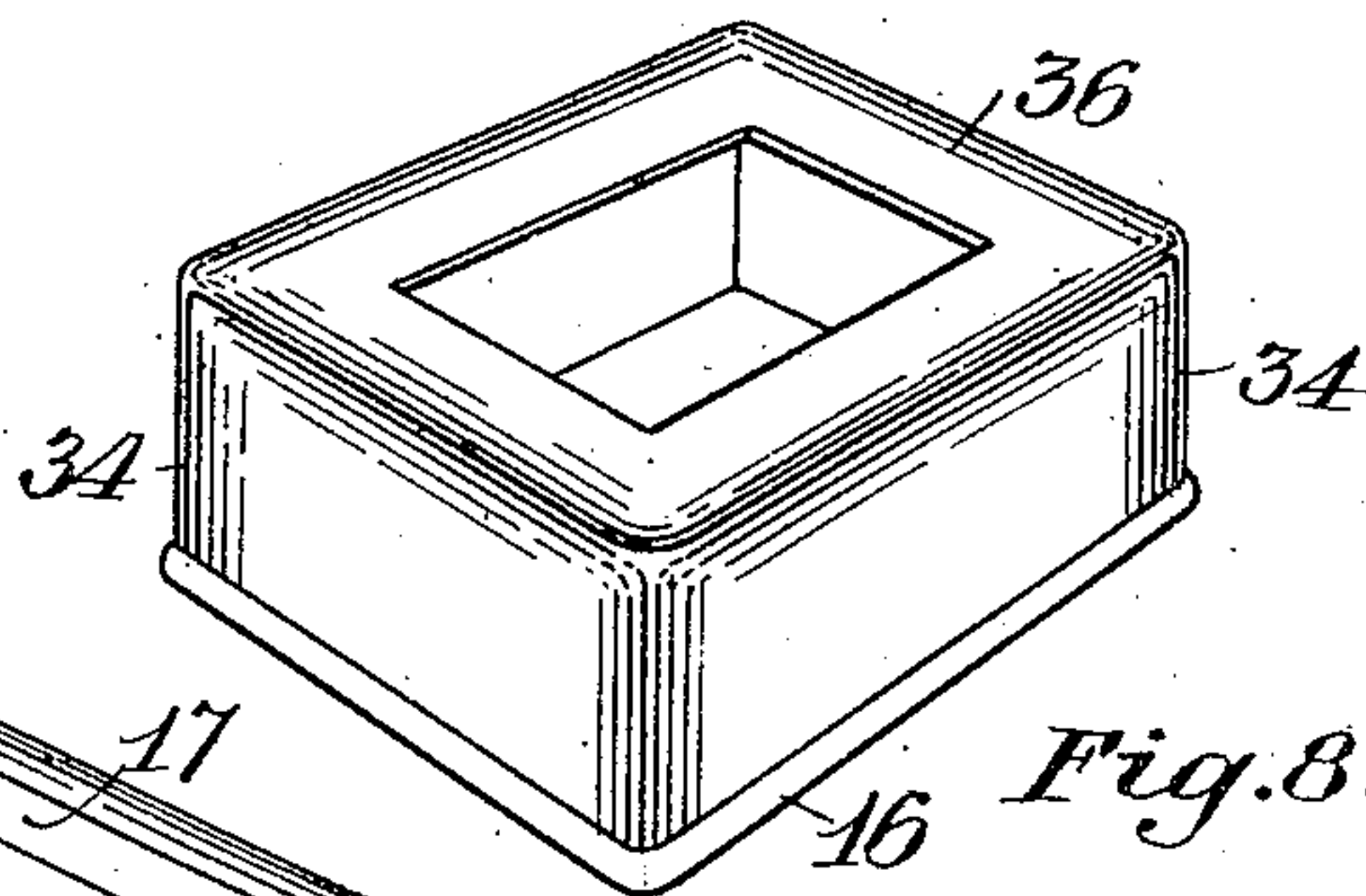


Fig. 8.

Witnesses:

Ernest A. Telfer

William C. Glass.

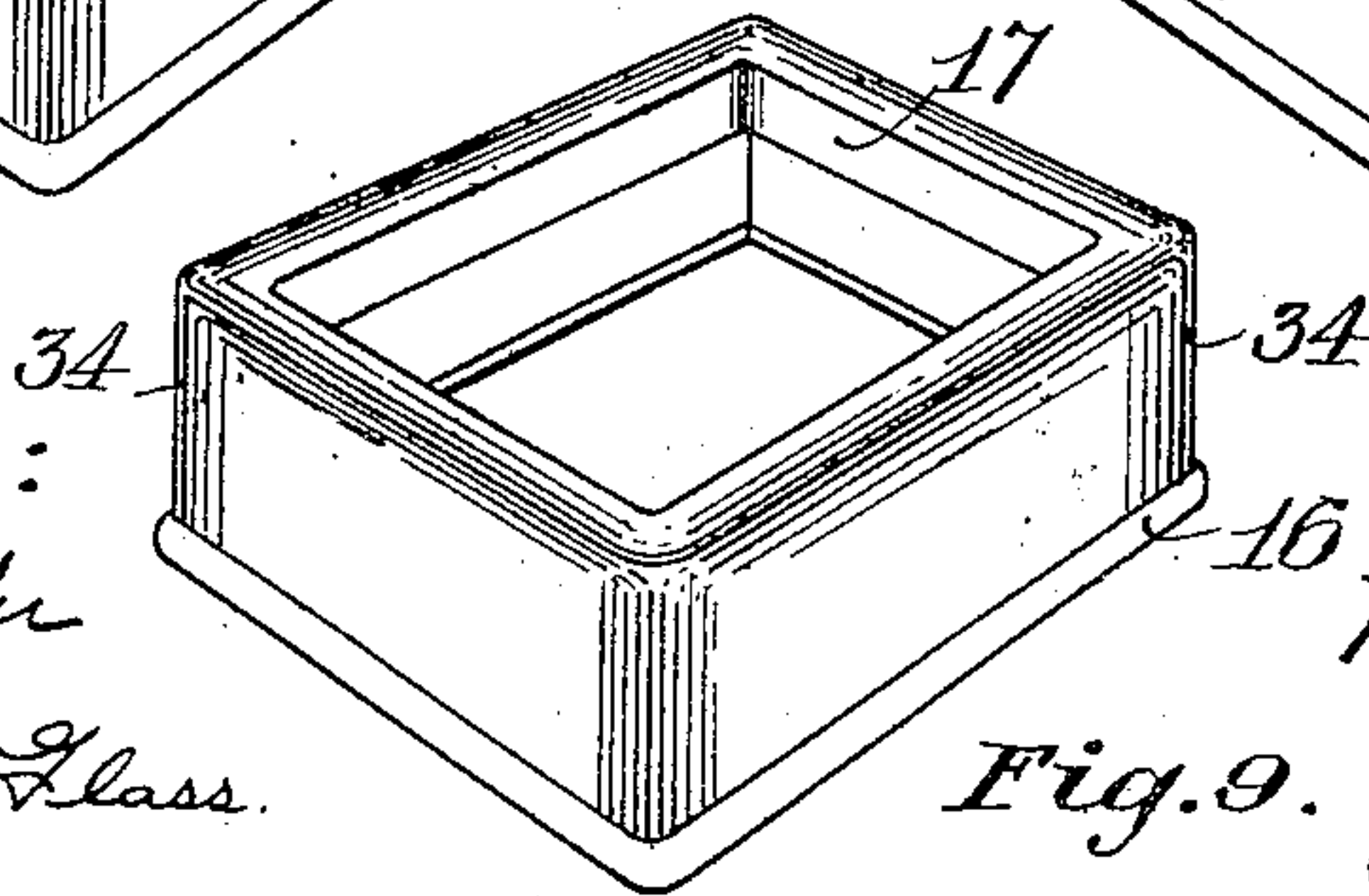


Fig. 9.

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William P. Devine

by his attorney

Charles S. Gooding

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2 SHEETS—SHEET 2.

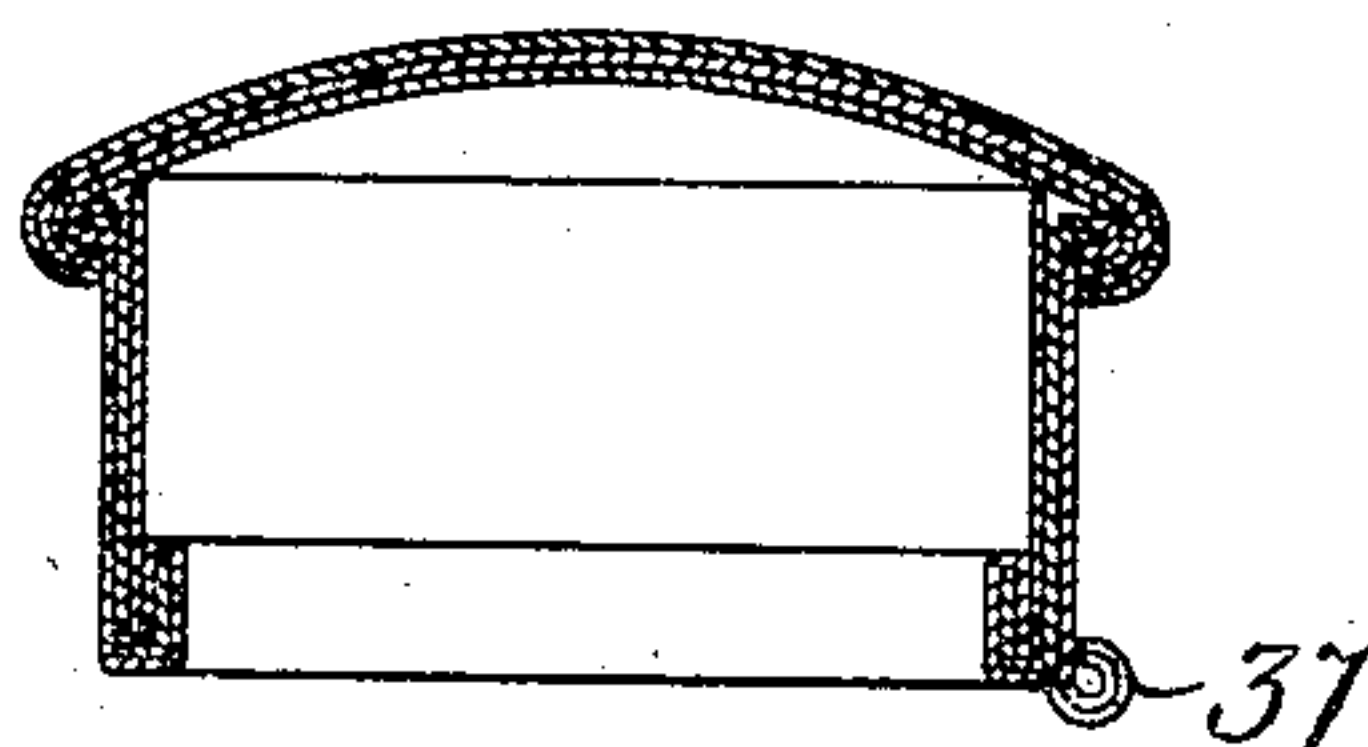


Fig. 10.

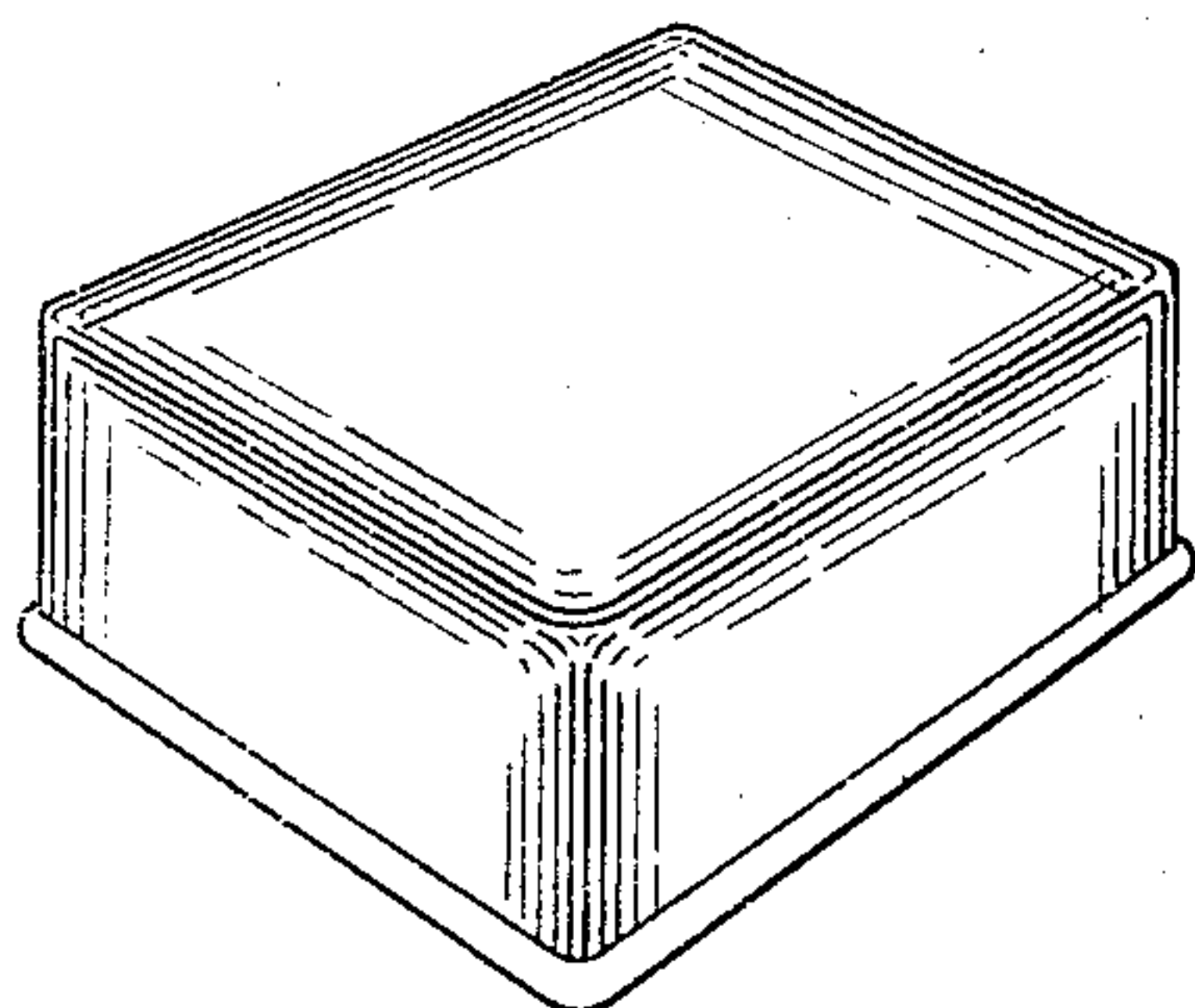


Fig. 11.

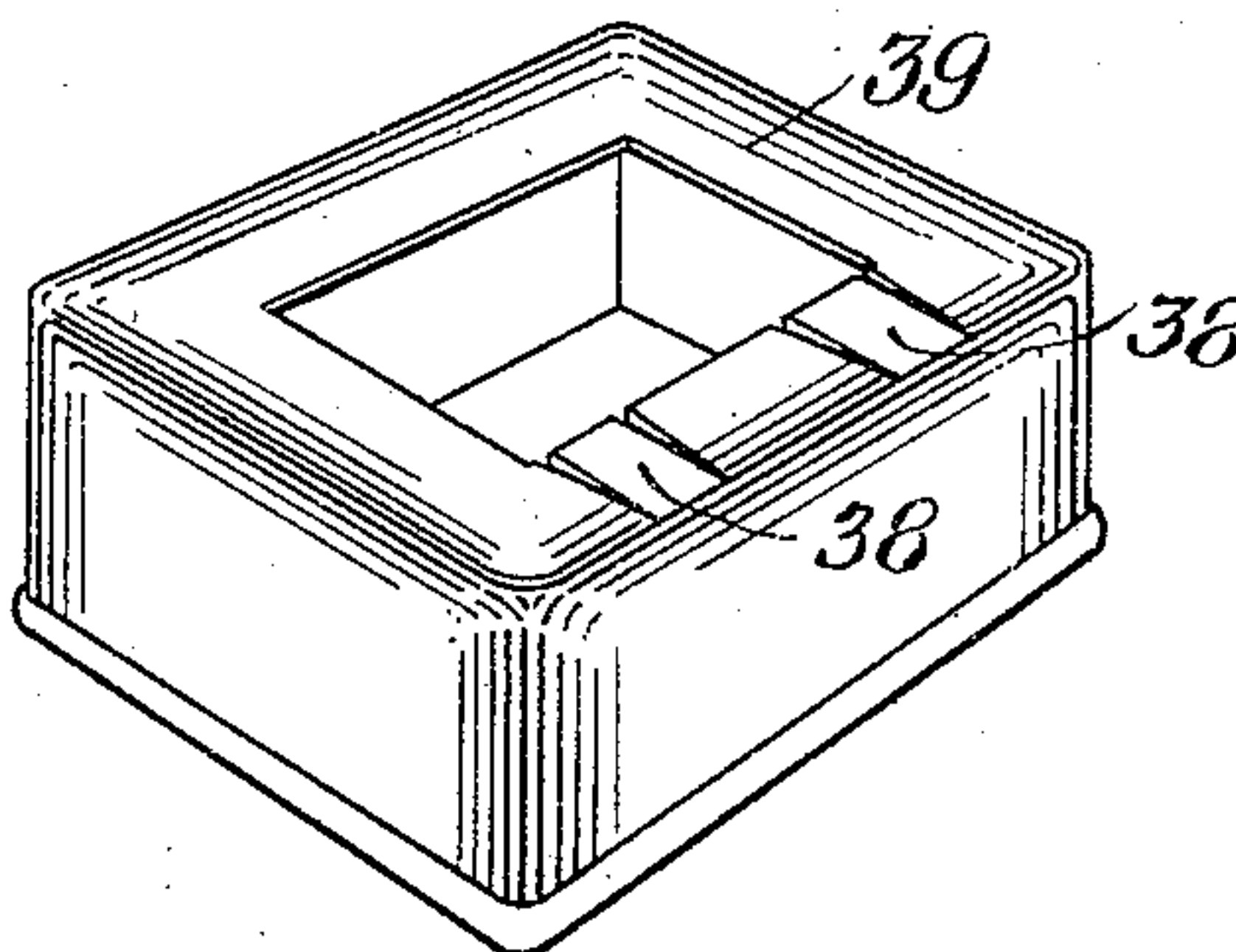


Fig. 12.

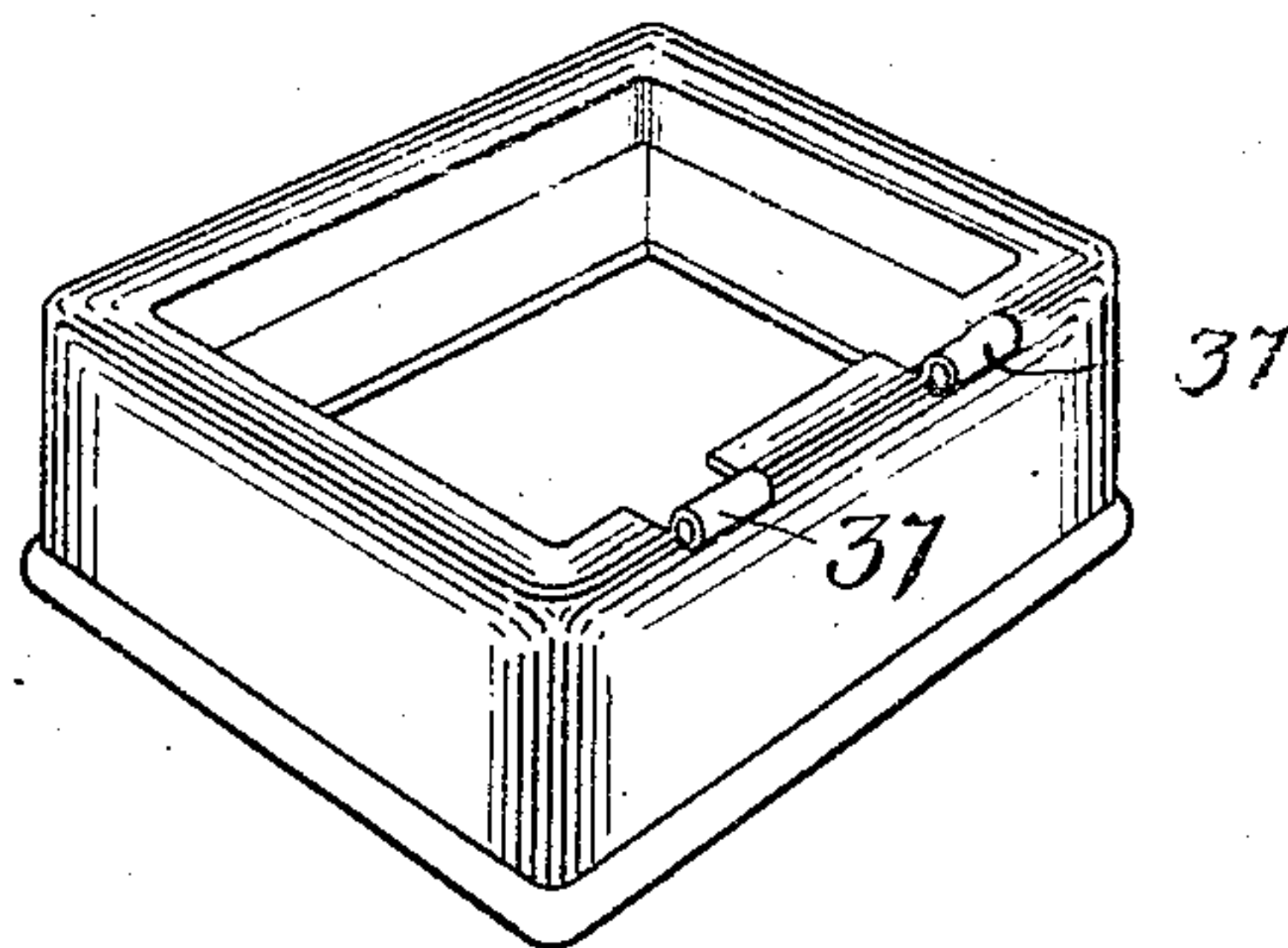


Fig. 13.

Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM P. DEVINE, OF DORCHESTER, MASSACHUSETTS.

METAL COVERED BOX.

No. 859,373.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed July 7, 1906. Serial No. 325,146.

To all whom it may concern:

Be it known that I, WILLIAM P. DEVINE, a citizen of the United States, residing at Dorchester, in the county of Suffolk and State of Massachusetts, have invented
5 new and useful Improvements in Metal Covered Boxes, of which the following is a specification.

This invention relates to a covered metal box, and the object is to produce a metal covered box and lined
10 with leather, fabric, or any other suitable material so constructed as to be light in weight, inexpensive to manufacture, and constructed in such a manner that no raw edges of the covering or lining material are visible.

A still further object is to produce a box of the character described so constructed that the covering material may be applied to the same without puckering or unduly stretching said covering material, which in
15 case said covering material is a grain leather, tends to spoil the appearance of the grain of said leather.

The invention consists in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings: Figure 1 is a vertical section of the cap and body portion of the upper member
25 or cover of my improved box before said cap and body portion are joined together. Fig. 2 is a vertical section of the same placed together ready for clenching. Fig. 3 is a vertical section of the same after clenching. Fig. 4 is a vertical section of the cap, body portion, and
30 header or thimble which go to make up the lower member of my improved box. Fig. 5 is a vertical section of the same assembled ready for clenching. Fig. 6 is a vertical section of the same clenched. Fig. 7 is a perspective view of the body portion blank before
35 punching. Fig. 8 is a perspective view of the same after a portion of the bottom has been punched out leaving a flange extending therearound. Fig. 9 is a perspective view of the finished body portion. Fig. 10 is a vertical section of a modified form of box member. Fig. 11 is a perspective view of a blank to be
40 used in forming a modified form of body portion. Fig. 12 is a perspective view of the same with a portion of the bottom punched out leaving two tabs and an inwardly turned flange. Fig. 13 is a perspective view
45 of the completed body portion with the two tabs rolled up to form hinge ears.

In the drawings, referring now to Fig. 1, 15 is a body portion, preferably formed of thin sheet metal, provided with an outwardly turned flange 16 and an inwardly turned return-bend flange 17. A covering 18
50 formed of any suitable material such as leather, velvet, or the like is cemented to the exterior surfaces of the body portion 15 and extends on to the interior surfaces of the flange 16 and the interior surfaces of the return bend 17. A lining 19 formed of any suitable material

covers the interior surfaces of the sides of the body portion 15. A cap 20 preferably formed of thin sheet metal is provided with a lip 21 extending therearound. A covering 22 formed of any suitable material is united
60 to the exterior surfaces of the cap 20 by means of adhesive material and extends onto the interior surfaces of the lip 21. The cap 20 is provided with a lining 23 formed of any suitable material. Said cap 20 and the body portion 15 are first assembled as shown in Fig. 2 and then by means of suitable dies the lip 21 is clenched
65 onto the flange 16, thereby flattening out said flange as shown in Fig. 3 and permanently uniting said cap and said body portion. The return-bend flange 17 is then forced outwardly by means of suitable dies until it firmly grips the lining 19 to hold it in place, thus completing the box member. 70

The box member hereinbefore described may be rectangular, circular, or any other shape desired in plan view. In Fig. 6 I have illustrated the bottom member 32 which differs from the top member hereinbefore described in that it is provided with a header or thimble 24 which is forced into the body portion 25 and the cap 26 is flat instead of curved. The body portion 25 is provided with a covering 27 and the cap 26 is provided with a covering 28 identical with
80 the coverings 18 and 22, respectively, hereinbefore described.

The header 24 which has a covering 29 is provided with a depression 30 adapted to receive articles such, for instance, as jewelry. Said header has a flange
85 31 which closely fits the interior surfaces of the body portion 25. The upper member 14 is adapted to slide onto the exterior periphery of the header 24 and form a cover for the lower member 32, the sides of both members thus presenting a flush exterior surface. 90

It will be noted that the construction hereinbefore described does away with all raw edges and thus makes a neat appearing box. It will also be noted that each of the members being formed of separate pieces it is possible to apply the covering material to the same
95 without unduly stretching or puckering said covering material. This is particularly advantageous in covering a box with grain leather as excessive stretching of the leather such as is necessary in a one piece member spoils the appearance of the grain of said
100 leather.

Figs. 7 to 9, inclusive, represent briefly the method of making the body portion 15 or the body portion 25 as the case may be. Referring to Fig. 7, 33 is a seamless body portion blank, preferably formed from a
105 flat sheet of metal and having sides 34 and a bottom 35. In Fig. 8, a portion of the bottom 35 has been punched out leaving an inwardly turned flange 36. In Fig. 9, the complete body portion is shown with a portion of the flange 36 drawn inwardly parallel to the 110

sides 34, thus forming the return bend flange 17, the same being accomplished by means of suitable dies. The flange 16 may be formed either before or after the bottom 35 has been punched out.

5 In Fig. 10, I have illustrated a modified form of box member identical in construction with the box member 14 with the exception that it is provided with hinge-ears 37, the forming of which is illustrated in Figs. 11 to 13, inclusive, Fig. 11 showing the blank, 10 Fig. 12 showing the blank with a portion of the bottom punched out leaving two tabs 38 from which to form the hinge-ears and leaving also a flange 39 similar to the flange 36 hereinbefore described. In Fig. 13, I have illustrated the completed body portion in which 15 the tabs 38 have been rolled up to form hinge-ears 37. With the exception of the hinge-ears 37, the modified form of box member shown in Figs. 10 to 13, inclusive, is similar to the box member shown in Fig. 3. The advantages of this method of forming the hinge-ears 20 37 integral with the body portion are strength, simplicity of construction, light weight, and low cost of manufacture.

The flanges 16 and 17, and the lip 21 add greatly to the strength and stiffness of the box, preventing the 25 same from being distorted by accident or careless handling.

The covering material 18 of the body portion 15 may consist of a strip or band of material wound around said body portion and having its ends either lapped 30 or butted together, or said covering material may be in the form of an endless band.

Having thus described my invention what I claim and desire by Letters Patent to secure is:

35 1. A box of the character described comprising in its construction a metal cap, provided with an inwardly turned lip extending therearound, said cap having a covering material on the exterior surfaces thereof and extending onto the interior surfaces of said lip, a metal body portion provided with an outwardly turned flange over which said 40 lip is clenched, whereby said cap and said body portion are permanently united, said body portion also provided with a return-bend flange, said body portion having a covering material on the exterior surfaces thereof extending onto the interior surfaces of said first-named flange and onto 45 the interior surfaces of said return-bend flange, and a lining for said cap and body portion.

2. A box of the character described comprising in its construction a metal cap provided with a lip extending therearound, a covering on the exterior surfaces of said 50 cap extending onto the interior surfaces of said lip, a metal body portion provided with a flange over which said lip is clenched, whereby said cap and body portion are permanently united, said body portion also provided with a return-bend flange, a covering on the exterior surfaces of 55 said body portion extending onto the interior surfaces of

said first-named flange and said return-bend flange, a lining for said cap and a lining for said body portion.

3. A box of the character described comprising in its construction a metal cap provided with an inwardly 60 turned lip extending therearound, a covering on the exterior surfaces of said cap extending onto the interior surfaces of said lip, a metal body portion provided with an outwardly turned flange over which said lip is clenched, whereby said body portion and said cap are permanently 65 united, said body portion also provided with a return bend flange, a covering on the exterior surfaces of said body portion extending onto the interior surfaces of said first-named flange and said return-bend flange, and a lining for 70 said body portion, said body portion lining extending between the interior surfaces of said return-bend flange and the interior surfaces of said body portion.

4. A box of the character described comprising in its construction a metal cap provided with a lip extending 75 therearound, a covering on the exterior surfaces of said cap extending onto the interior surfaces of said lip, a metal body portion provided with a flange over which said lip is clenched, whereby said cap and body portion are permanently united, said body portion also provided with a return-bend flange, a covering on the exterior surfaces of 80 said body portion extending onto the interior surfaces of said first-named flange and said return-bend flange, a thimble or header closely fitting the interior of said body portion, and a covering for said thimble, a portion of said thimble covering extending between said thimble and the 85 interior periphery of said body portion.

5. A box member of the character described comprising in its construction a metal cap provided with an inwardly 90 turned lip extending therearound, said cap having a covering material on the exterior surfaces thereof and extending onto the interior surfaces of said lip, a metal body portion provided with an outwardly turned flange over which said 95 lip is clenched, whereby said cap and said body portion are permanently united, said body portion also provided with a return-bend flange and a plurality of hinge-ears formed integral with said body portion and located adjacent to said return-bend flange, said body portion having a covering 100 material on the exterior surfaces thereof extending onto the interior surfaces of said return-bend flange, and a lining for said cap and said body portion.

6. A box of the character described, comprising in its 105 construction a metal cap provided with a lip extending therearound, a covering on the exterior surfaces of said cap extending into the interior surfaces of said lip, a metal body portion provided with a flange over which said lip is clenched, whereby said cap and body portion are permanently 110 united, a covering on the exterior surfaces of said body portion extending onto the interior surfaces of said flange, a thimble or header closely fitting the interior of said body portion, and a covering for said thimble, a portion of said thimble covering extending between said thimble and the interior periphery of said body portion.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM P. DEVINE.

Witnesses:

LOUIS A. JONES,
THOMAS V. JONES.