

983,440.

O. K. HARRY.  
STORAGE TANK.  
APPLICATION FILED AUG. 7, 1909.

Patented Feb. 7, 1911.

2 SHEETS—SHEET 1.

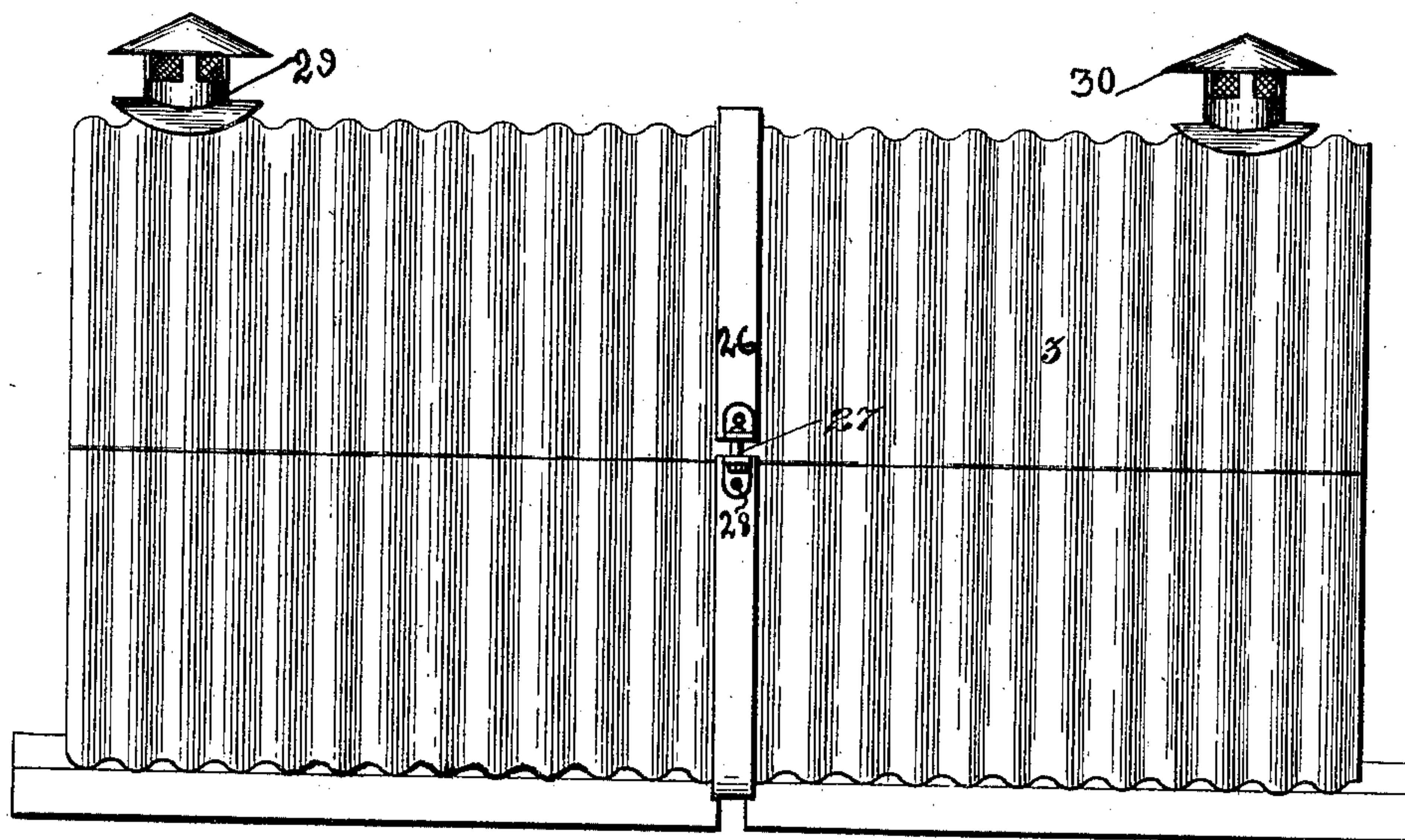


Fig 1.

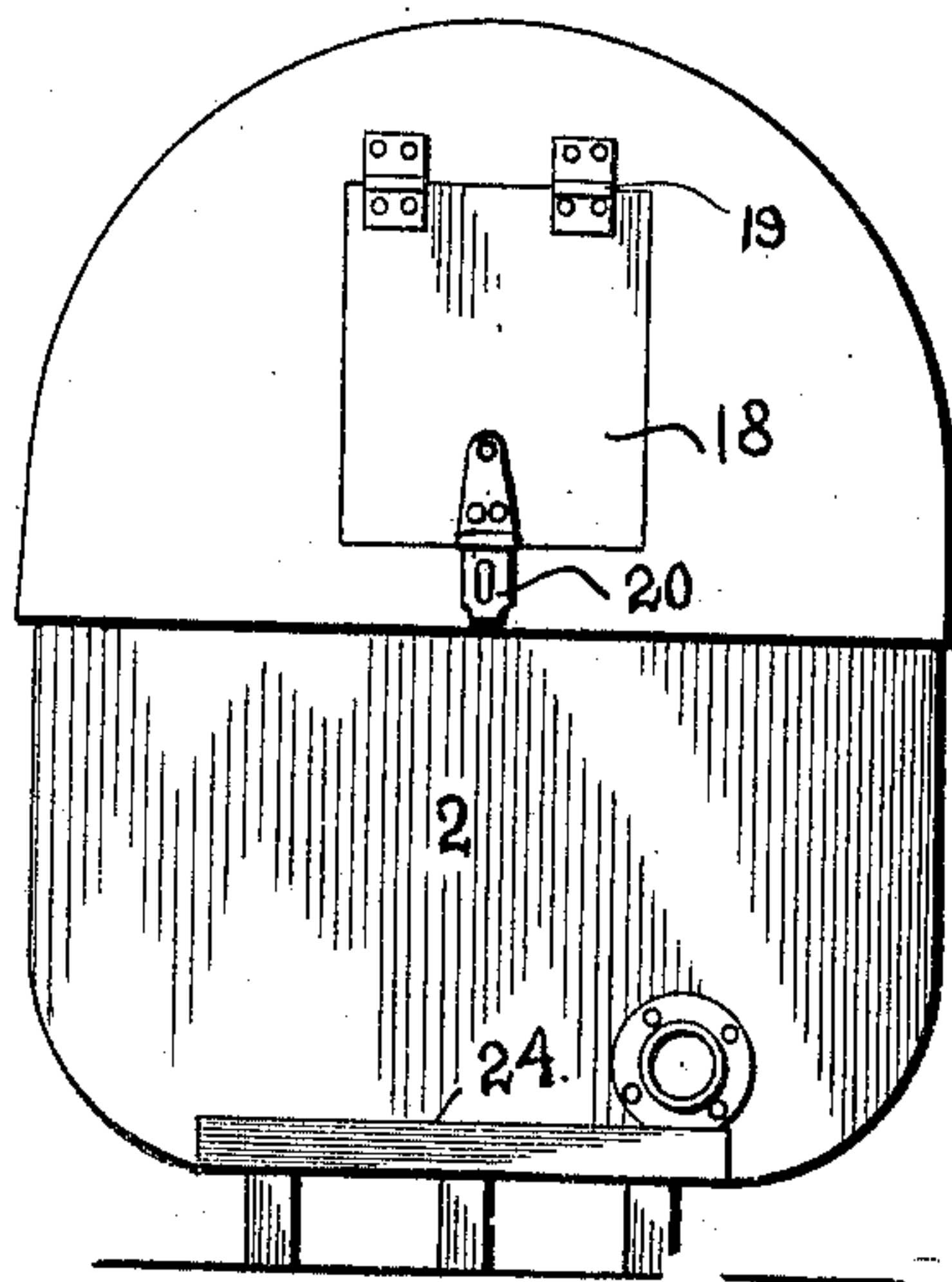


Fig 2

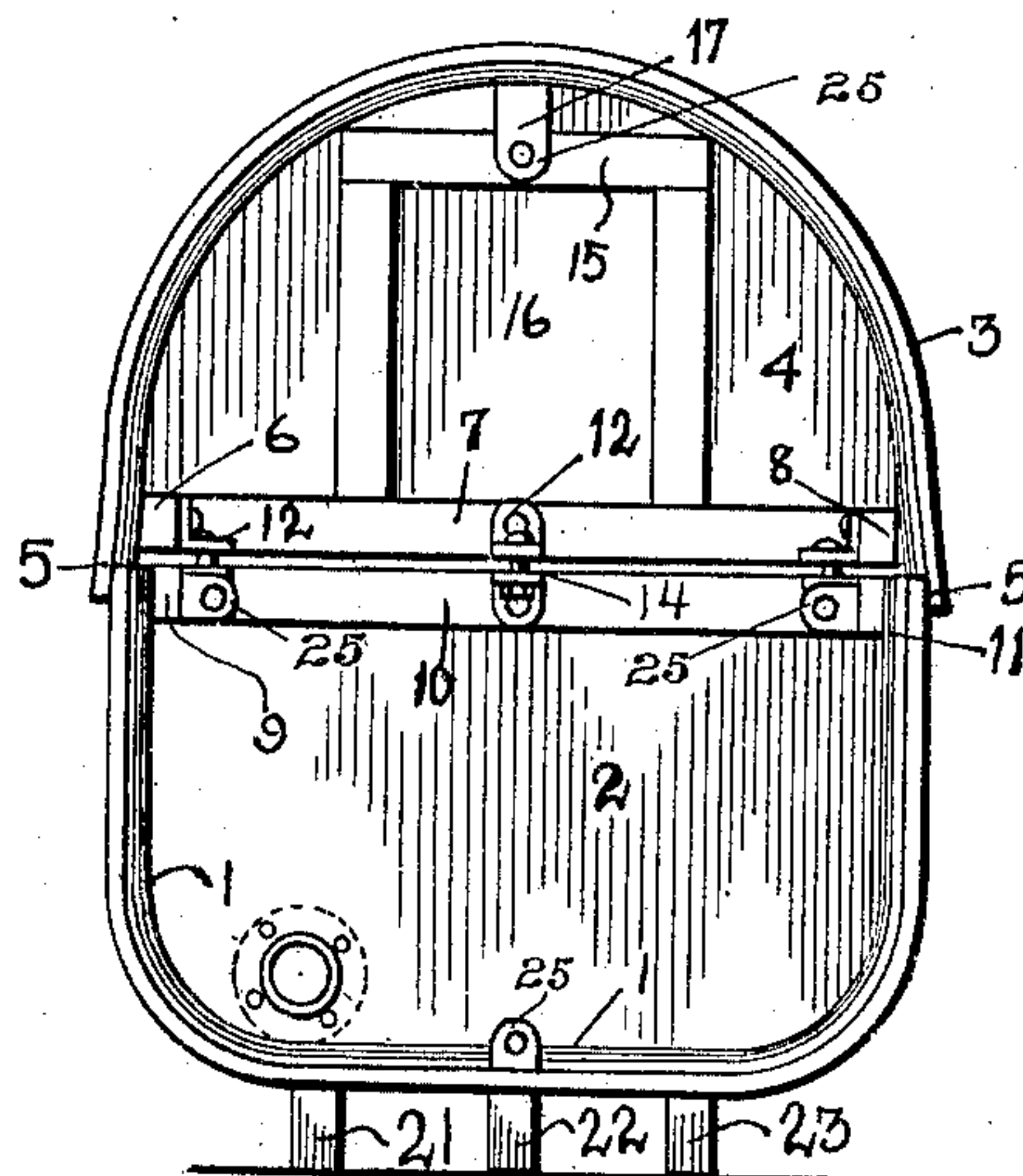


Fig 3

WITNESSES:

E. C. Davis Jr.  
Eugene Taylor

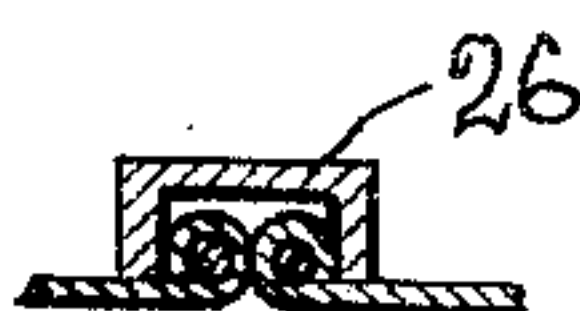


Fig 4

INVENTOR

Owen K Harry

BY

*Shley & Davis*  
ATTORNEY

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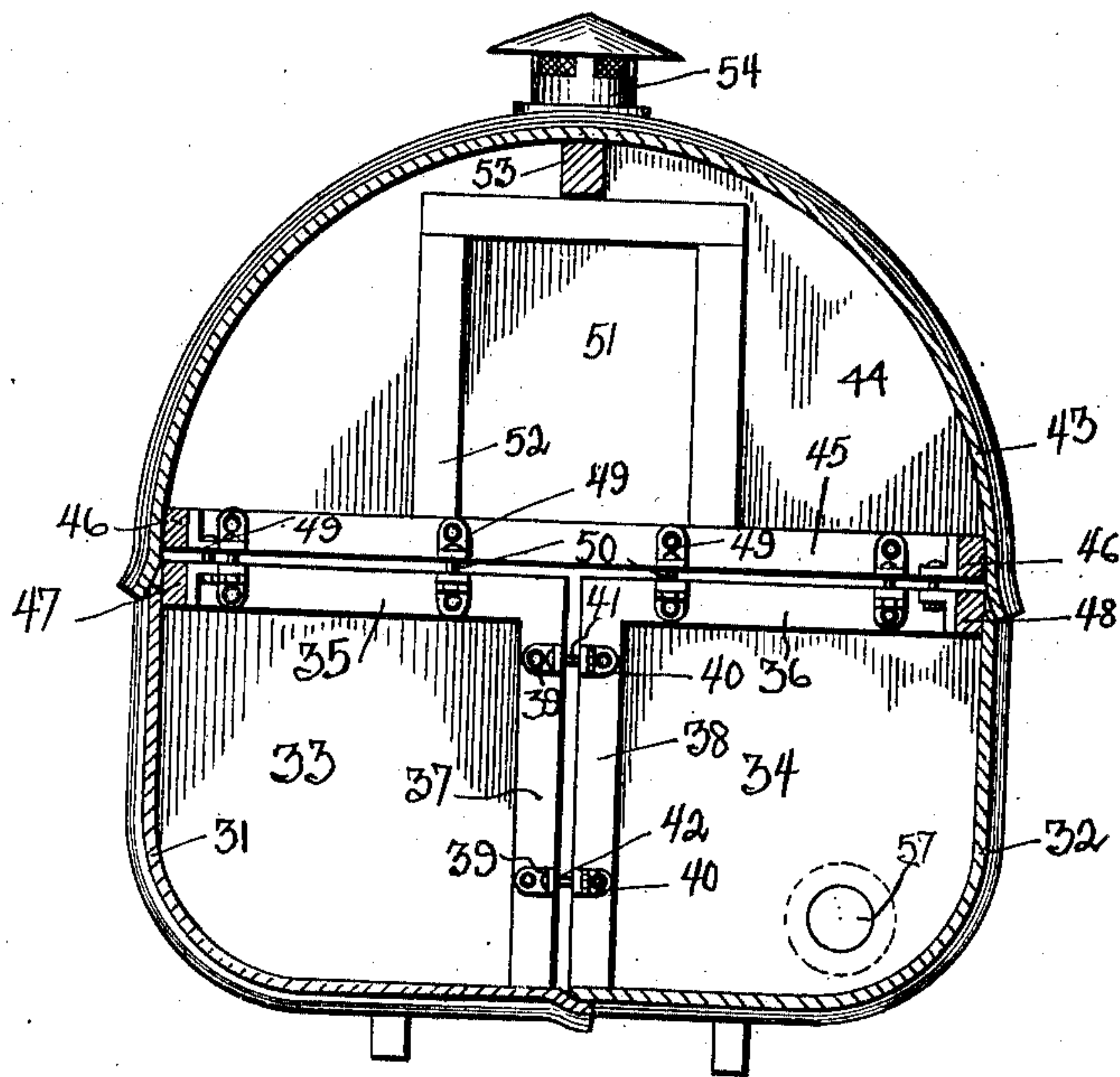


FIG. 5.

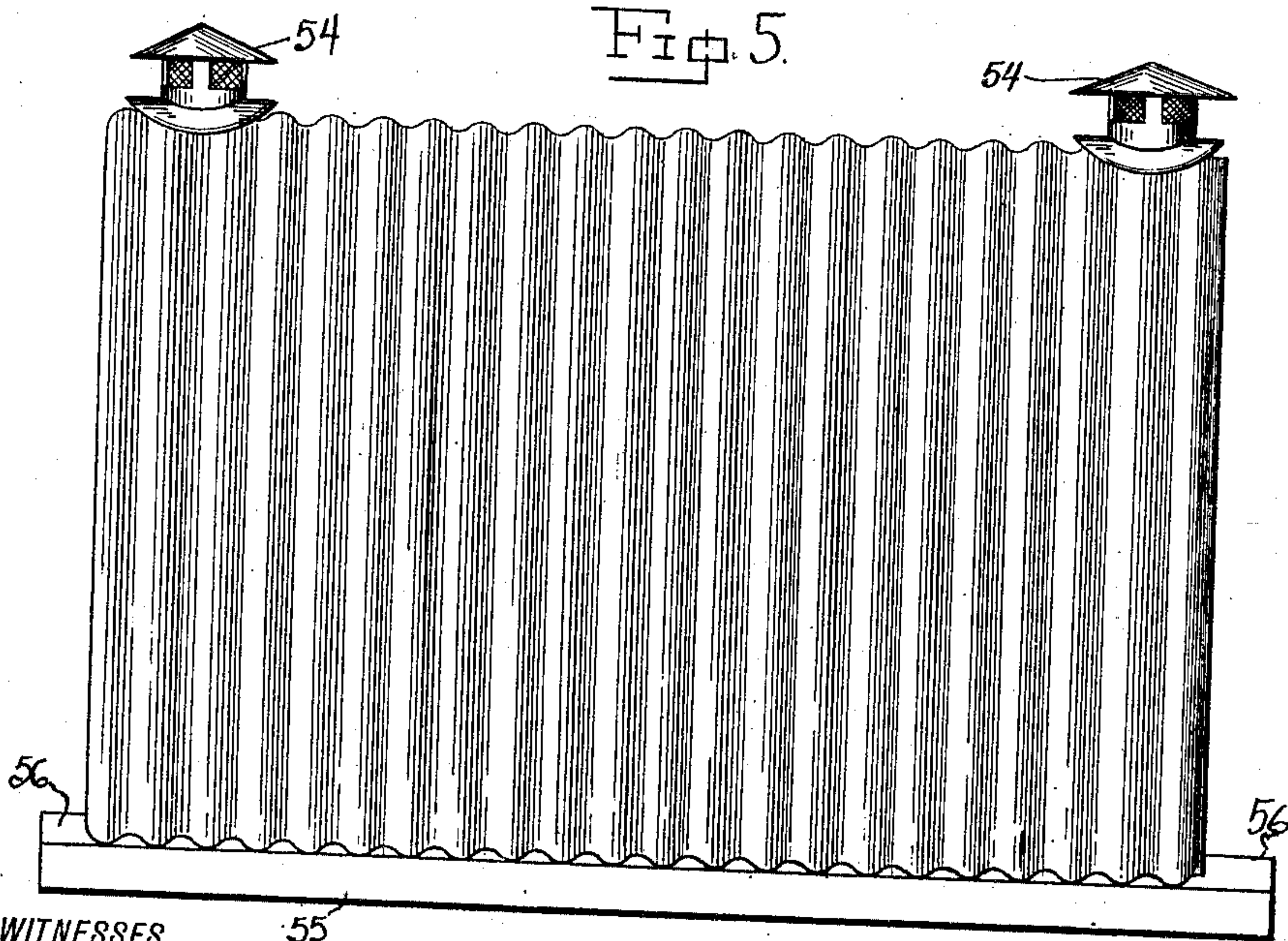


FIG. 6.

WITNESSES  
E. C. Davis Jr.  
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# UNITED STATES PATENT OFFICE.

OWEN K. HARRY, OF DALLAS, TEXAS.

## STORAGE-TANK.

983,440.

Specification of Letters Patent.

Patented Feb. 7, 1911.

Application filed August 7, 1909. Serial No. 511,766.

*To all whom it may concern:*

Be it known that I, OWEN K. HARRY, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented a new and useful Improvement in Storage-Tanks, of which the following is a specification.

My invention relates to new and useful improvements in storage tanks.

10 The object of my invention is to provide a storage tank which can be easily taken apart for transporting.

15 Another object of my invention is to provide a sheet metal knock down storage tank suitable for grain or other food stuff as well as materials of all kinds.

20 Still another object of my invention is to provide a tank of the character described which will be moisture proof and one which will at the same time afford proper ventilation.

25 A still further object of my invention is to provide a storage tank of the character described which will be strong, durable, efficient and comparatively, inexpensive to construct and one which can be made in many different sizes to meet the demands of the public without weakening its construction or decreasing its efficiency.

30 Finally the object of my invention is to provide a tank which can be made in sections that can be easily taken apart and assembled in a short time by a novice.

35 With the above and other objects in view my invention has relation to certain novel features of construction and operation an example of which is described in the following specification and illustrated in the accompanying drawing, wherein:

40 Figure 1 is a side elevation of my storage tank, Fig. 2 is an end elevation of the same, Fig. 3 is an interior view of a section of my device, Fig. 4 is a detail sectional view of the connection made between the sections of my device, Fig. 5 is an interior view of a section of a modified form, Fig. 6 is a side elevation of the same.

45 In the drawings the numeral 1 designates the lower side walls and bottom of a section of my storage tank which is made of sheet metal preferably corrugated. A wall 2 is joined to the bottom 1 making the lower section in the form of a trough. The joints between the side walls 1 and the end walls are made waterproof.

The upper section of the storage tank con-

sists of a curved roof 3 and end wall 4 which are adapted to fit over the side walls 1 and the end walls 2. The edge 5 of the upper section is flared out so as to fit over the lower section and to act as a water shed. But in order to insure a water tight joint I have provided reinforcing strips 6, 7 and 8 around the lower edge of the upper section and strips 9, 10 and 11 around the upper edge of the lower section. To these strips at regular intervals I have attached clamps 12 through which a bolt 14 may be passed and the two sections drawn together. A facing strip 15 surrounds an opening 16 in the end wall 4 and supports a ridge pole 17 to which the roof 3 is fastened. A door 18 adapted to close the opening 16 is hinged at 19 so as to swing upward and may be provided with a lock or hasp 20. Beams 21, 22 and 23 extend under the bottom 1 and are fastened to it while a cross beam 24 carried on the end of the beams just mentioned fits snugly to the end wall 2.

50 In order that two sections like the one just described may be joined I have fixed clamps 25 similar to the clamps 12 on the strips 9 and 11 and on the ridge pole 17 and one in the bottom of the tank just over beam 22. Two sections may be drawn together by bolts inserted in these clamps but the ends being rolled as shown in Fig. 4 will not overlap as the upper and lower sections do. So to make a water tight joint I have provided a circular band of channel irons 26 made in two sections that may be clamped over the joint and made tight by the bolts 27 which pass through suitable projections 28 in the ends of the band 26.

55 The ventilators 29 and 30 arranged in the roof 3 allow air to circulate through the tank but will not admit water, and are also adapted to be removed to permit loading of the tank from the top.

It is obvious that this tank may be taken apart when it is desired to ship the same.

60 In Figs. 5 and 6 I have shown a modification of my invention in which the tank is divided longitudinally. The lower section is made in two parts 31 and 32 each part forming a side wall and one half of the bottom. End walls 33 and 34 are fixed to the walls 31 and 32 so as to make weather proof joints. Along the top of the end walls 33 and 34 strips 35 and 36 are fixed while similar strips 37 and 38 are arranged along the edge farthest from the side walls 31 and



32. Clamps 39 and 40 are fixed on the strips 37 and 38 in such a manner as to allow the sections 31 and 32 to be drawn together by bolts 41 and 42. A semi-circular roof 43 having end walls 44 at its ends will cover both sections 31 and 32 and a strip 45 at lower edge of the end wall 44 will be made set parallel with the strips 35 and 36. Strip 46 extending along the lower edges of the side walls of the roof 43 is also made to come in close proximity with strips 47 and 48 carried by the lower sections 31 and 32. Clamps 49 are arranged on these strips and bolt 50 is used to draw the sections together until the lower edge of the roof 43 overlaps the lower sections and a weather proof joint is formed. An opening 51 in the end wall 44 is surrounded by a facing strip 52 which serves to reinforce the end wall and support a ridge pole 53.

Suitable ventilators 54 may be placed in the roof and the whole tank may rest on beams 55 bound together by cross beams 56 making a strong, well ventilated storage tank. These ventilators may also be removed to permit loading of the tank from the top.

For unloading the tank a flanged opening 57 is provided in one end of one of the lower sections and is suitably closed when the material is being stored in the tank.

What I claim is—

1. In a knock-down storage tank, a lower section, an upper section, the sections having sides and ends, the meeting edges of the sections overlapping, internal reinforcing members secured horizontally to the sections at their meeting edges, and internal clamps secured to the members and arranged to fasten the sections together.

2. In a knock-down storage tank, a plurality of sections, reinforcing members secured along the inner sides of the sections at the meeting edges, clamp members secured to the reinforcing members in opposed relation, and means for fastening opposed clamp members together whereby the sections are fastened together.

3. In a knock-down storage tank, a plurality of sections, some of said sections having their edges meeting the edges of the other sections, a reinforcing member secured near each edge of each section on the inside of the section so that the reinforcing members of one section are opposed to those

of the section with which it is matched, and means for drawing the opposed members together and fastening the sections together, the said means being connected directly with the members.

4. In a knock-down storage tank, a plurality of horizontally elongated sections, the edges of one section overlapping vertically the section with which it matches, a horizontal reinforcing member adjacent each horizontal edge of each section and fastened to the inside of the section, and means secured to the members inside of the tank for fastening the sections together.

5. In a knock-down storage tank, a plurality of sections, reinforcing members secured to the inside of the sections, a member being disposed at each edge of each section, the members of some of the sections being set inward from the edges thereof whereby the edge portions of said sections overlap vertically the edge portions of adjacent sections, and means for fastening adjacent sections together.

6. In a knock-down storage tank, a plurality of separate sections, reinforcing members disposed along all the free edges of each section, the members of one section being set inward whereby the edge portions of said section overlap the adjacent edge portion of the other section, and means extending from the members of one section to the members of the other section for fastening the sections together.

7. In a knock-down storage tank, a lower section elongated horizontally and having flat vertical ends, an upper section elongated horizontally and having flat vertical ends, horizontal reinforcing members, a member secured to each side and end of each section at each edge, the members of the upper section being set upward from the edges of the section whereby the edge portions of the upper section overlap the edge portions of the lower section, and means extending from the members of one section to those of the other section for fastening the sections together.

In testimony whereof I have signed my name in the presence of two witnesses.

OWEN K. HARRY.

Witnesses:

J. D. DAY,  
JACK A. SCHLEY.