H. H. HOWELL.

TANK.

APPLICATION FILED JAN. 29, 1921.

1,434,897.

Patented Nov. 7, 1922.

3 SHEETS—SHEET 1.

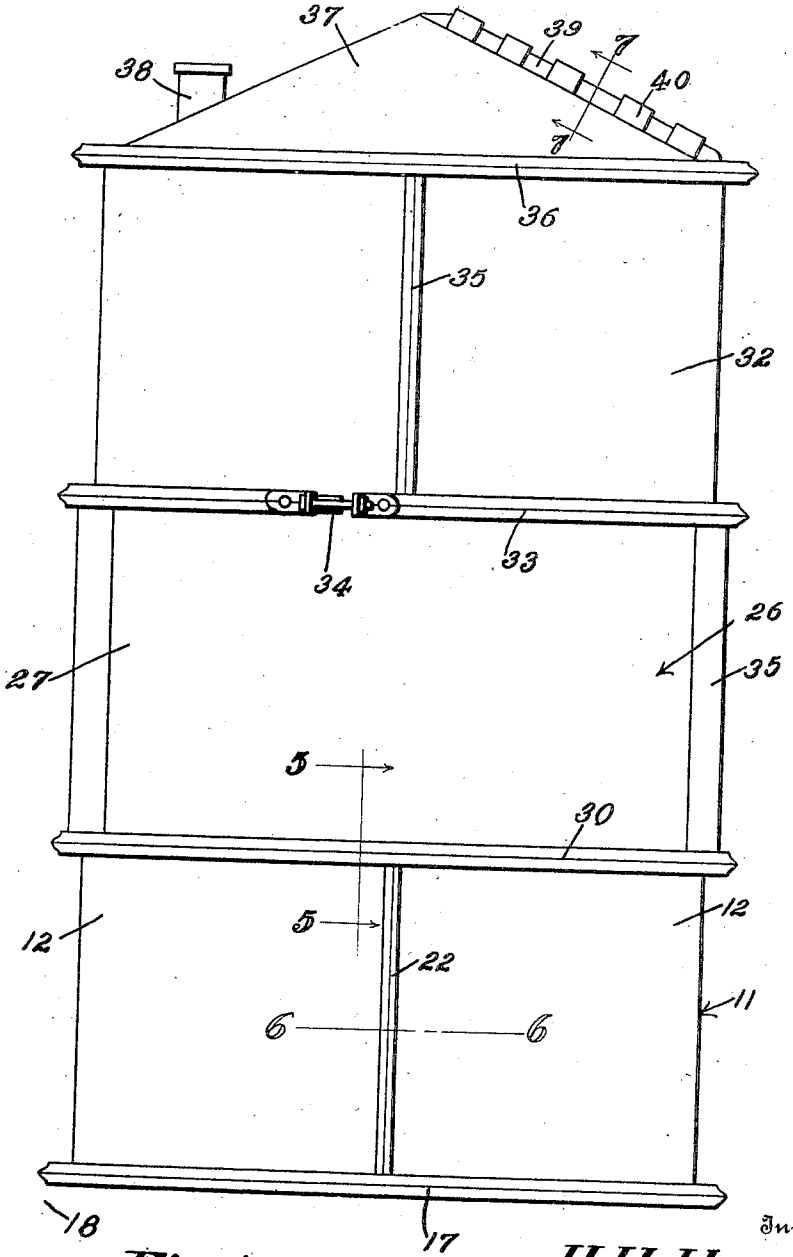


Fig. 1.

Inventor

H. H. Howell.

By Cachow & Co.

Attorneys

H. H. HOWELL.

TANK.

APPLICATION FILED JAN. 29, 1921.

1,434,897. Patented Nov. 7, 1922.

3 SHEETS—SHEET 2.

Fig. 2.

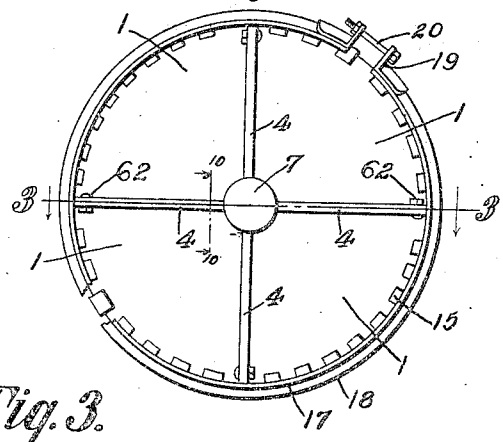


Fig. 3.

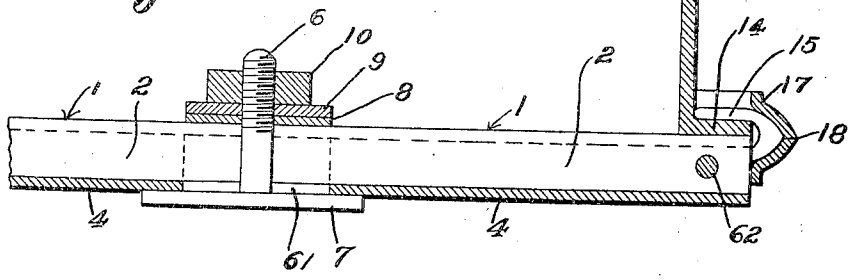


Fig. 9.

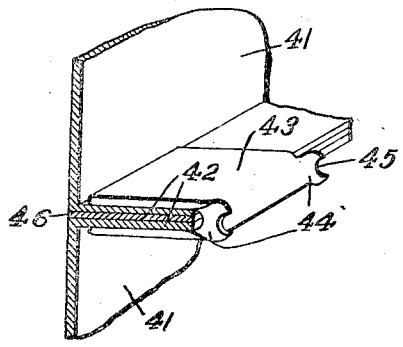
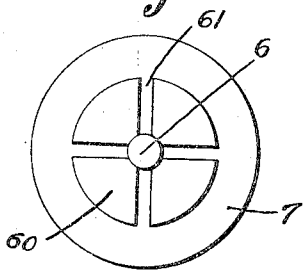


Fig. 8.



Inventor

H.H.Howell.

By C. A. Snow & Co.

Attorneys

H. H. HOWELL.

TANK.

APPLICATION FILED JAN. 29, 1921.

1,434,897. Patented Nov. 7, 1922.

3 SHEETS—SHEET 3.

Fig. 4.

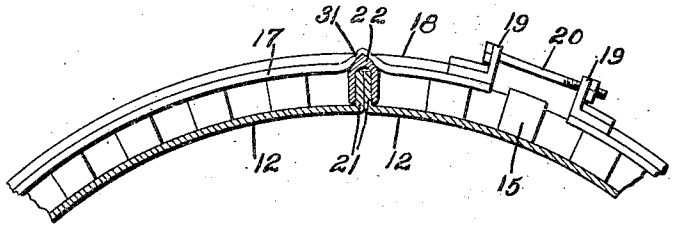


Fig. 5.

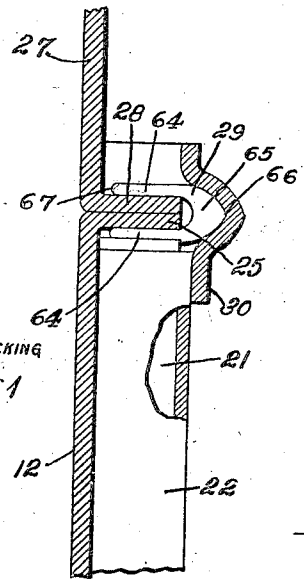


Fig. 10.

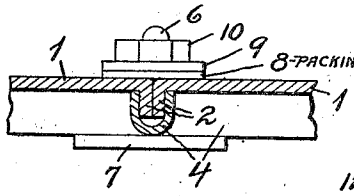


Fig. 6.

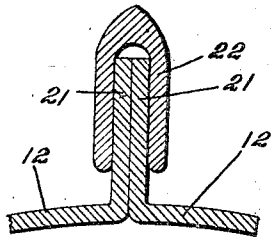
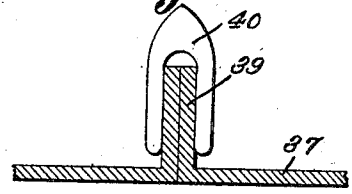


Fig. 7.



Inventor.

H.H.Howell.

By C.A. Snow & Co.

Attorneys

Patented Nov. 7, 1922. 1,434,897

UNITED STATES PATENT OFFICE.

HARRY HAMOND HOWELL, OF HOPE, ARKANSAS, ASSIGNOR OF ONE-HALF TO ECLIPSE MFG. CO., OF HOPE, ARKANSAS.

TANK.

Application filed January 29, 1921. Serial No. 440,922.

To all whom it may concern:

Be it known that I, HARRY H. HOWELL, a citizen of the United States, residing at Hope, in the county of Hempstead and State of Arkansas, have invented a new and useful Tank, of which the following is a specification.

It is one object of this invention to provide a tank which may be knocked down and set up readily. Another object of the invention is to provide novel means for connecting the constituent parts of the tank at their joints. A further object is to improve the clip which binds certain parts of the tank together. Another object of the invention is to improve the bottom of the tank and to improve the connection between the bottom of the tank and the side wall thereof.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that within the scope of what is claimed, changes in the precise embodiment of the invention shown can be made without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 shows in side elevation a tank constructed in accordance with the invention; Figure 2 is a bottom plan of the tank; Figure 3 is a fragmental section taken on the line 3—3 of Figure 2; Figure 4 is a section taken horizontally on a plane located adjacent to the bottom of the tank; Figure 5 is a fragmental vertical section on the line 5—5 of Figure 1; Figure 6 is a fragmental section on the line 6—6 of Figure 1; Figure 7 is a section on the line 7—7 of Figure 1; Figure 8 is a plan of the bottom bolt; Figure 9 is a fragmental perspective showing a slight modification in the invention. Figure 10 is a section on the line 10—10 of Figure 2.

Referring to Figure 2 of the drawings, the bottom of the tank is composed of any desired number of segments or parts 1, four parts being depicted. The parts 1 of the bottom of the tank have depending flanges 2. Retainers 4, which are U-shaped in cross section, receive the depending flanges 2 of the bottom parts 1. Between the depending flanges 2 of the parts 1 of the bottom, a packing (not shown) may be placed if desired. The packing is not a mandatory element, but it may be used at the place indicated, or wherever necessary.

A securing element 6 extends upwardly through the bottom of the tank at the central portion of the bottom, the securing element having at its lower end a head 7 which overlaps and engages the inner ends of the retainers 4. The element 6 has a boss 60, provided with slots 61 which receive the inner ends of the retainers 4. Bolts 62 connect the outer ends of the retainers 4 with the flanges 2 of the bottom parts 1. A packing 8 surrounds the securing element 6 and rests on the central portion of the bottom, the packing serving to prevent leakage about the securing element 6. A washer 9 is superposed on the packing 8 and compresses the same under the effort of a nut 10 threaded on the upper or inner end of the securing element 6.

The side wall of the tank includes a lower member, denoted generally by the numeral 11 and made of any number of parts 12, each part 12 having an outstanding lip 14 resting on the bottom 1. U-shaped clips 15 receive the lip 14 and the edge of the bottom, as shown in Figure 3.

The clips 15 are received within and held by a band 17 which may be bulged outwardly to form a seat 18 cooperating with the angles of the clips. The band 17 has outstanding ears 19 (Figure 4) connected by a tightening device 20 of any desired sort, such as a bolt and a nut.

The clip 15 is an important feature of the invention. It comprises parallel arms 64 merging into a thickened head 65, the outer surfaces of which converge to define a prominent angle 66, the seat 18 of the band 17 being shaped accordingly. The clip 15, owing to its specific construction has great strength and may be made cheaply. The angle at 66, coacting with the seat 18 in the band 17, renders it practically impossible for the band to slip off the clips 15. The arms 64 may be rounded at their ends, as shown at 67, to facilitate the mounting of the clips on the parts which it retains.

The parts 12 of the lower member 11 are supplied with vertical outstanding wings 21

(Figures 6 and 5) the wings 21 are received within a vertical retainer 22 which is of U-shape in cross section. At its upper end, each of the parts 12 of the lower member 11 is supplied with an outstanding lip 25 (Figure 5).

The numeral 26 denotes an intermediate section constructed like the lower member 12 and including parts 27, each part having a lip 28 (Figure 5), corresponding to the part 14 but cooperating with the lip 25 of the lower member 11. Clips 29, like the parts 15 receive the elements 28 and 25, and are held by a band 30 of the sort hereinbefore described. The band 30 and the band 17 (Figure 4) may be bulged outwardly, transversely, as shown at 31, to receive the ends of the retainers 22.

The numeral 32 marks a top section constructed like the sections 26 and 11, and in this connection it should be observed that there may be as many of the intermediate sections 26 as is desired, depending upon the height of the tank. A band 33 connects the sections 32 and 26 and carries a tightening device 34 of the sort hereinbefore alluded to. The constituent parts of the sections 26 and 32 are connected by vertical retainers 35, corresponding to the retainers 22.

A band 36 connects the top section 32 with a conical cap 37. The cap 37 has an inlet 38 and, preferably is formed from a single piece of metal having upstanding flanges 39 whereon U-shaped clips 40 are straddled.

The construction of the device, obviously, is such that it can be taken down and set up without difficulty, water-tight joints being afforded.

The parts which form the side walls of the tank are denoted by the numeral 41 in Figure 9, the lips 42 corresponding to the parts 28 and 25 of Figure 5. The clip is shown at 43 and is represented in Figure 5 by the element 29. The clip 43 is provided at its ends with outstanding ears 44 having seats 45 adapted to receive a band having the function of the part 30, but of circular cross section. A packing 46 may be interposed between the lips 42, if considered expedient.

Having thus described the invention, what is claimed is:

1. A tank comprising a bottom made up of parts having depending flanges; U-shaped retainers receiving the flanges; a securing element passing through the bottom and forming an abutment for the inner ends of the retainers; a side wall having an outstanding lip superposed on the bottom; clips receiving the lip and the periphery of the bottom; and a band circumscribing the clips.

2. A tank comprising a bottom made up of parts having depending flanges; U-shaped retainers receiving the flanges; a securing element passing through the bottom and forming an abutment for the inner ends of the retainers, the securing element including a head engaged beneath the inner ends of the retainers; a packing on the securing element and cooperating with the bottom; tightening means on the securing element and cooperating with the packing; a side wall; means for securing the side wall to the periphery of the bottom; and means for securing the outer ends of the retainers to the flanges.

3. A tank comprising superposed sections each including parts provided at their upper and lower ends with transverse outstanding lips, and provided with longitudinal outstanding wings; clips receiving the lips; bands circumscribing the clips; and retainers receiving the wings, the ends of the retainers being engaged beneath the bands.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

HARRY HAMOND HOWELL.

Witnesses:
A. B. GORDON,
R. E. RUTLEDGE.