May 26, 1959 T. A. SMITH 2,887,975

FLOATING PREFABRICATED BOAT HOUSE

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Fig. 1

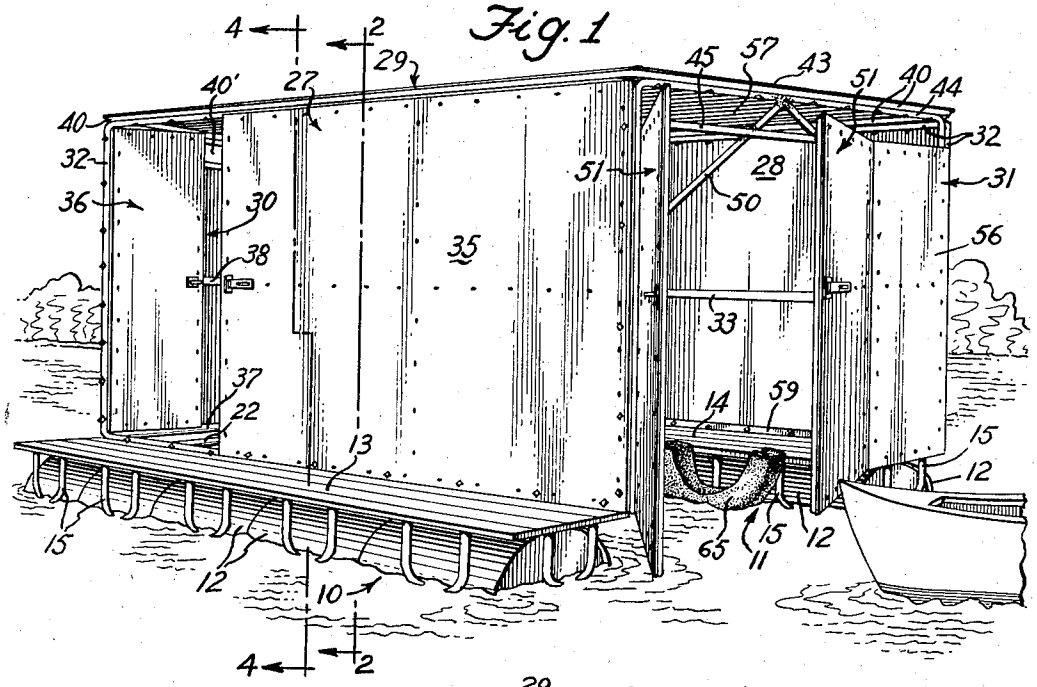
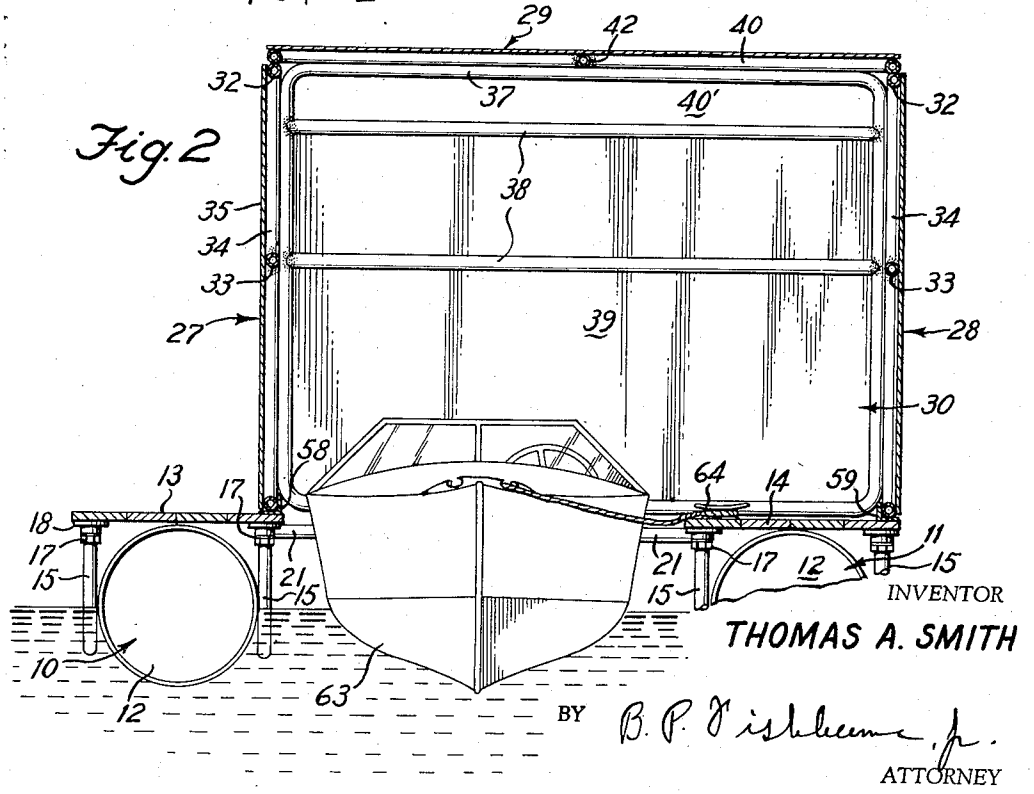



Fig. 2




INVENTOR

THOMAS A. SMITH

BY B. P. Fishburne, Jr.

ATTORNEY

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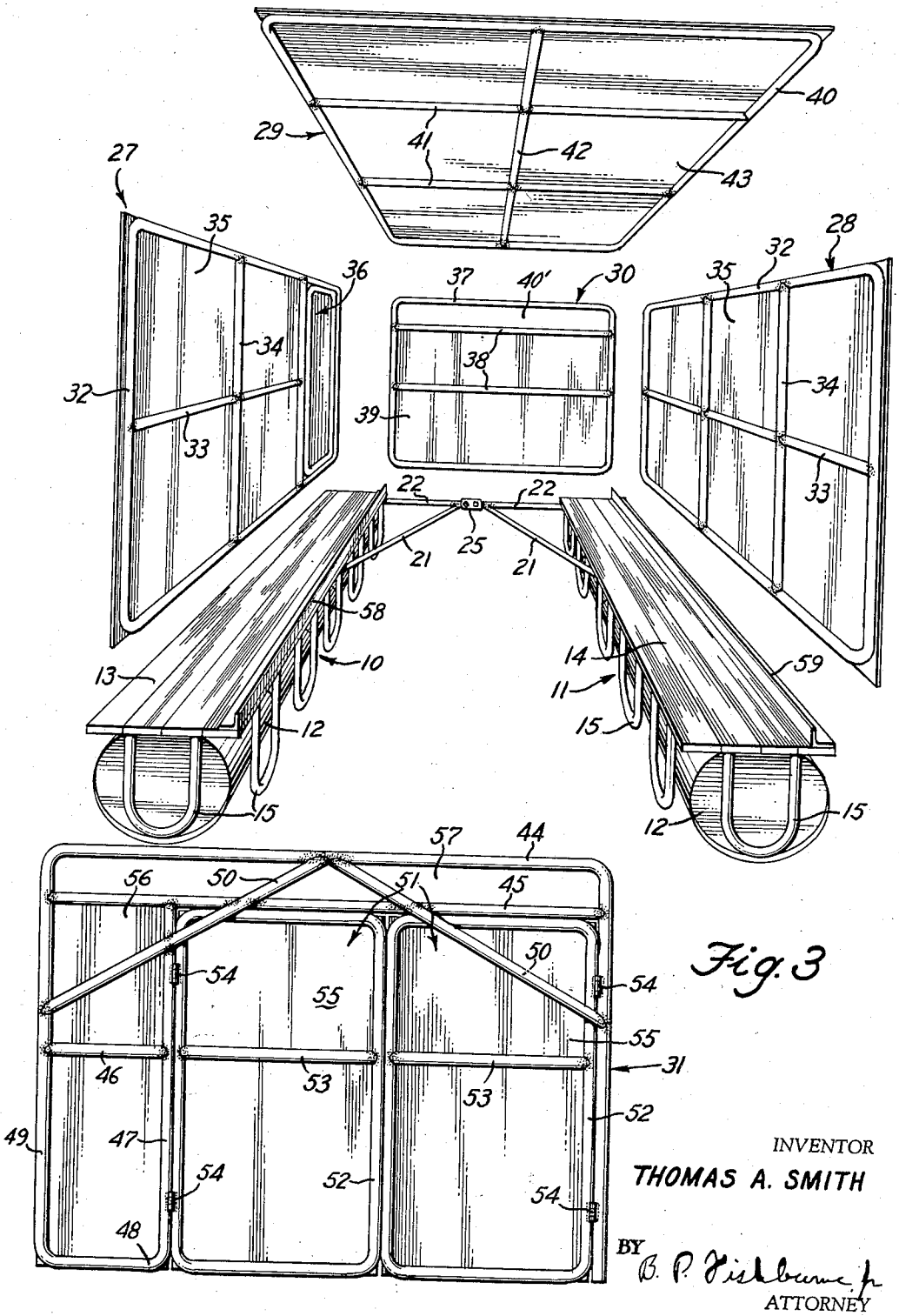



Fig. 3

INVENTOR

THOMAS A. SMITH

BY B. P. Fishburne Jr.

ATTORNEY

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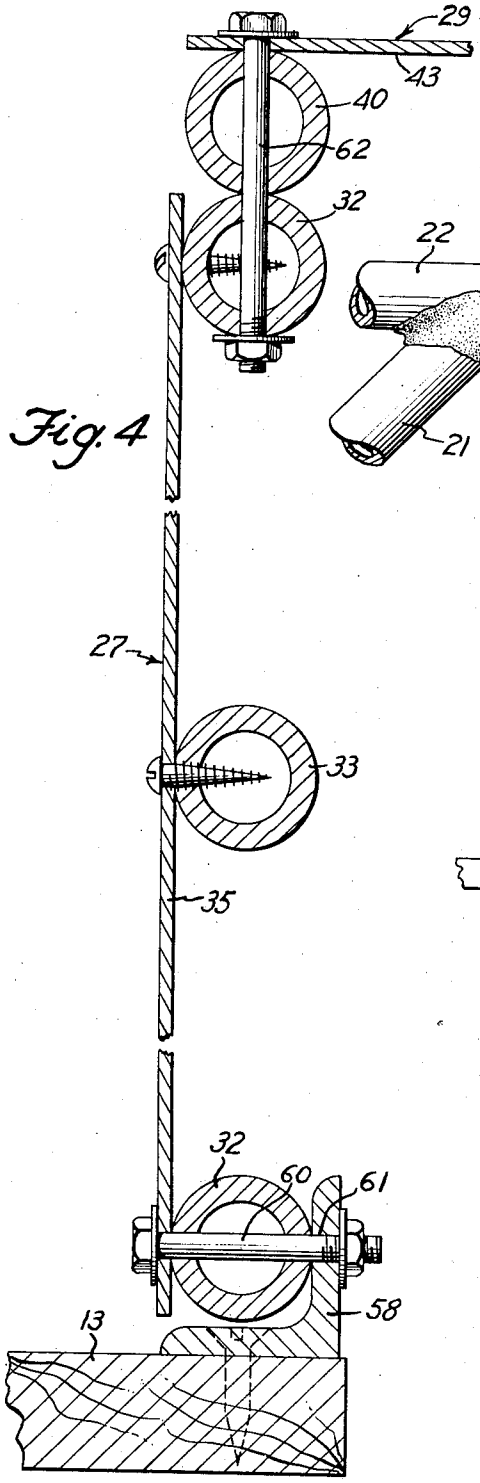



Fig. 4

Fig. 5

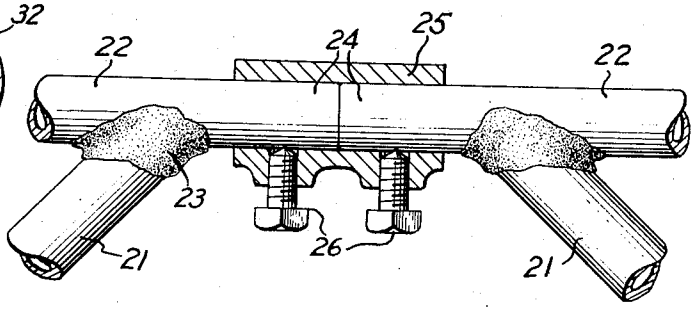
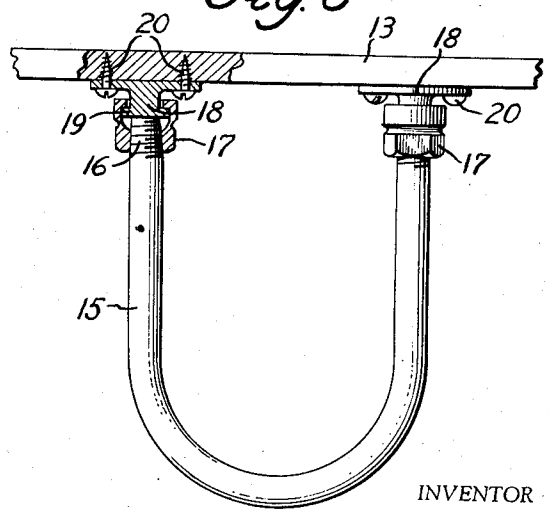



Fig. 6




INVENTOR

THOMAS A. SMITH

BY B. P. Fishburne, Jr.

ATTORNEY

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2,887,975

# FLOATING PREFABRICATED BOAT HOUSE

Thomas A. Smith, Spartanburg, S.C.

Application September 4, 1957, Serial No. 681,927

8 Claims. (Cl. 114—.5)

This invention relates to a floating prefabricated boat house.

A primary object of the invention is to provide a substantially all metal prefabricated knock-down boat house of the floating type, and so constructed that it may readily be dismantled for convenient transportation over land on a suitable trailer, the boat house also being adapted to be erected on dry land to provide a storage space for the boat during winter months and the like.

A further object of the invention is to provide a floating boat house which is sturdy and rigid in construction, extremely simplified, easy to maintain, and affording an adequate shelter for the boat, both in the water and on dry land.

Another object is to provide a boat house of the above-mentioned character comprising several completely prefabricated sections, which may be readily assembled by unskilled hands and without the necessity for any special tools or the like.

Still another object is to provide a boat house which is designed to afford maximum convenience and utility in its use for storing or protecting a boat.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a general perspective view of the boat house embodying the present invention.

Figure 2 is a transverse vertical section taken substantially on line 2—2 of Figure 1.

Figure 3 is an exploded perspective view of the boat house with minor parts omitted for the purpose of simplification.

Figure 4 is an enlarged fragmentary vertical section through a side wall of the boat house and associated elements taken on line 4—4 of Figure 1.

Figure 5 is an enlarged fragmentary plan view of connecting means for the companion float sections with parts in section.

Figure 6 is an enlarged fragmentary side elevation of a detachable float positioning element and associated parts, parts in section.

In the drawings, wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numerals **10** and **11** designate generally companion float assemblies for the boat house, each float assembly comprising a plurality of preferably cylindrical float sections **12**, such as ordinary fifty-five gallon metallic drums or the like, arranged in end-to-end abutting relation as shown in the drawings. Any preferred number of the drums **12** may be employed in each float assembly, depending upon the length which it is desired to impart to the particular boat house.

The float assemblies **10** and **11** further comprise elongated cat-walks **13** and **14**, readily formed from suitable boards or planks rigidly connected in a desired manner, and extending lengthwise of the several drums **12** for the



entire lengths of the float assemblies. The cat-walks **13** and **14** are horizontal in assembly, and each cat-walk rests directly upon the several drums **12** beneath it, and is slightly wider than the diameter of the drums as clearly shown in Figure 2 of the drawings.

In order to unitize and stabilize each group of drums **12** in the assemblies **10** and **11**, I provide at the opposite sides of the drums a corresponding number of rigid U-shaped positioning elements or holders **15**, the latter being disposed vertically in assembly, in substantial contacting relation with the opposite sides of the drums **12**, as shown. A pair of the U-shaped positioning elements **15** is provided for each drum **12**, with one element of the pair arranged adjacent one side of the drum. At the opposite ends of each float assembly **10** and **11**, an additional identical U-shaped positioning element **15** is provided to prevent the several drums **12** of each assembly from moving lengthwise or axially relative to the associated cat-walk **13** or **14**. The pair of end positioning elements **15** are likewise vertically arranged, in substantial contacting relation with the outer ends of the endmost drums **12** of each float assembly.

As particularly shown in Figure 6, all of the U-shaped positioning elements **15** are detachably rigidly secured in depending relation to the horizontal cat-walks **13** and **14**. Each U-shaped element **15** has its upper ends screw-threaded at **16** for the reception of screw-threaded swivel nuts **17**, having free turning engagement with elements or pins **18**, having enlarged heads **19**. The elements **18** are in turn rigidly secured at **20** to the undersides of the cat-walks **13** and **14**. The extremities of the U-shaped elements **15** are adapted to be drawn by the nuts **17** into abutting engagement with the bottoms of the elements **18**, as shown clearly in Figure 6. The arrangement is such that by turning the swivel nuts **17**, the U-shaped positioning elements **15** may be readily removed bodily from the float assembly **10** or **11**. When the nuts **17** are drawn up tight as in Figure 6, the U-shaped positioning elements **15** are held rigid with their associated cat-walk **13** or **14** through their engagement with the pin elements **18**. The arrangement is such that one or any desired number of the positioning elements **15** is readily removable from the assembly **10** or **11**, to facilitate removal for servicing or replacement of one or more of the drums **12**. If either of the end positioning elements **15** of the float assemblies is removed, one or more of the drums **12** may readily be floated or removed endwise from the float assembly.

Means are provided for detachably rigidly connecting the float assemblies **10** and **11** at corresponding ends. This means comprises diagonal and transverse braces **21** and **22** for each assembly **10** and **11**, near corresponding ends of the same, the braces **21** and **22** having their corresponding outer ends suitably rigidly secured to the bottoms of the cat-walks **13** and **14**, as shown. The transverse braces **22** are disposed substantially at corresponding ends of the cat-walks **13** and **14**, at right angles thereto. As best shown in Figure 5, the other corresponding ends of the diagonal braces **21** are rigidly secured as by welding at **23** to the transverse braces **22**, near the inner ends of the latter. The braces **21** and **22** thus constitute horizontal frames which are rigid with the associated assemblies **10** and **11**, as shown in Figure 3. With further reference to Figure 5, the transverse braces **22** extend somewhat inwardly of the diagonal braces **21**, for axially aligned abutting engagement, in assembly, as shown. The inner end portions **24** of the transverse braces **22** are received within a locking sleeve **25**, carrying a pair of adjustable set screws **26**, for rigidly securing the transverse brace portions **24** within the sleeve **25** in the manner shown. With this arrangement, the companion float assemblies or units **10** and **11** are detachably rigidly con-

nected, and it is a very simple matter to separate or join together the assemblies 10 and 11 with the drums 12 and cat-walks 13 and 14 assembled together as described.

The boat house further comprises prefabricated side wall sections or panels shown generally at 27 and 28. It also comprises a prefabricated roof or top wall 29, a prefabricated rear wall 30, and a front wall 31.

The side walls 27 and 28 comprise rigid rectangular frames 32, of welded pipe construction or the like, including suitable horizontal and vertical braces 33 and 34, as indicated. Rigidly secured to the outer side of each rigid frame 32 is suitable sheet metal sheathing 35, or the like, rigidly secured thereto with bolts, by spot welding or by other suitable means. The side wall sections 27 and 28 are substantially identical, except that the side wall section 27 is preferably provided adjacent to its rear end with a horizontally swingable door 36, providing access to and egress from the rear end of the boat house. The door 36 may be omitted if preferred, and it may be provided in either side of the boat house. The side wall sections 27 and 28 are of rigid construction and completely prefabricated, as described. They are of all metal construction, as is the entire boat house except for the cat-walks 13 and 14, which may be formed of wood, if desired.

The rear wall or section 30 of the boat house is formed similarly to the side wall sections, and includes a marginal rigid rectangular frame 37 and suitable cross braces 38 welded or otherwise rigidly secured thereto. The outer side of the frame 37 is covered by sheet metal sheathing 39, rigidly secured thereto in the same manner that the sheathing 35 is secured to the frames 32. If desired, a narrow upper portion of the rear frame 37 may be left open or uncovered, above the upper brace 38, to provide a rear transverse ventilating opening 40' in the rear wall section 30, just below the roof 29.

The roof 29 likewise comprises a rigid rectangular frame 40 constructed from welded metal pipe or the like, and including transverse and longitudinal braces 41 and 42, as indicated. The upper side of the frame 40 is likewise covered with a section 43 of sheet metal sheathing, rigidly secured thereto in the manner described in connection with the side wall sections 27 and 28 and the rear wall section 30.

The prefabricated front wall section 31 comprises a rigid marginal frame 44, of the same construction previously described in connection with the other wall sections of the boat house. The frame 44 includes an upper horizontal brace 45, rigid therewith, and extending for its full width, as shown. It further comprises a short lower horizontal brace 46, rigidly connected at its inner end to a vertical brace 47, the upper end of which is rigidly secured to the upper brace 45. The frame 44 further comprises a lower short horizontal section 48, rigid with the vertical brace 47 and the adjacent vertical side 49 of the frame 44. The front wall frame 44 is further strengthened by a pair of diagonal braces 50, rigidly interconnecting the top of the frame 44 with the vertical sides of the same, as shown. A pair of horizontally swingable main or front doors 51 are provided in the front wall section 31, as shown, and each door 51 comprises a rigid marginal rectangular frame 52, preferably including a cross brace 53, at or near the elevation of the brace 46. The outer edges of the doors 51 are hinged at 54 to the vertical brace 47 and the adjacent vertical side of the frame 44, as best shown in Figure 3. The doors 51 are covered with sections 55 of sheet metal sheathing, rigidly secured thereto, and the portion of the frame 44 bounded by the frame elements 45, 47, 48 and 49 is likewise covered with a rectangular section 56 of sheet metal sheathing, rigidly secured thereto. The sheet metal sheathing sections 55 and 56 are applied to the outer side of the front wall section 31, Figure 3, and it should be understood in connection with Figure 3 that the inner side of the front wall section is being viewed,



to correspond with the viewing in Figure 3 of the other wall sections 27, 28, 29 and 30. If desired, the front wall section 31 may be provided between the upper brace 45 and the top of the frame 44 with a narrow transverse ventilating opening 57, similar to the opening 40' in the rear wall section 30. On the other hand, if preferred, both of the openings 40' and 57 may be eliminated, and the entire frames 37 and 44 covered upon their outer sides with the sheet metal sheathing.

In the assembling of the several wall sections shown in Figure 3, and with particular reference to Figure 4, the side wall sections 27 and 28 extend vertically above the cat-walks 13 and 14, and the cat-walks 13 and 14 are provided adjacent to their inner and outer edges respectively with longitudinal angle bars 58 and 59, suitably rigidly secured thereto. As shown in Figure 4, bolts 60 engage through the lower member of the frame 32 of side wall section 27, and through openings 61 provided in the upstanding flanges of the angle bars 58 and 59. At the tops of the side wall sections 28 and 27, the same are detachably rigidly secured to the roof section 29, Figure 4, by bolts 62 which extend through openings in the roof frame 40 and the upper member of the side wall frames 32. The rear wall section 30 and the front wall section 31 are likewise rigidly bolted to the side wall sections and roof section 29 in the identical manner illustrated in detail in Figure 4 in connection with one side wall section and the roof section 29. It may thus be seen, that the several prefabricated wall sections are rigidly connected in assembly, so that they cannot sway or deflect relative to each other, and at the same time, the several sections are readily detachable when it is desired to dismantle the boat house for transporting the same from the water to a desired point of erection on dry land, or the like.

With particular reference to Figures 1 and 2 of the drawings, showing the completely assembled boat house, it will be observed that the entire float assembly 10 including the cat-walk 13 is disposed outwardly of the adjacent side wall section 27 of the boat house. On the other hand, the float assembly 11 including the cat-walk 14 is arranged entirely inwardly of the opposite side wall section 28. This arrangement constitutes an important feature of the invention, in that the boat shown at 63, while anchored within the boat house, is not arranged at the center thereof, but rather adjacent to the side wall section 27, and midway between the cat-walks 13 and 14, Figure 2. The front doors 51 are similarly offset laterally in assembly, Figure 1, so as to provide access for the boat into the boat house between the side wall 27 and the interior cat-walk 14.

With this arrangement, the motor boat may be driven into the boat house as shown in Figure 2, and suitably tied up, as at 64, and the operator or driver may either step from the boat onto the cat-walk 14, which cat-walk is sheltered inside of the boat house, or he may step from the deck of the boat directly onto the outside cat-walk 13 through the rear side door 36. The arrangement of the one cat-walk 14 inside of the boat house is highly advantageous, for this permits of the unloading of articles from the boat under a shelter. The inside cat-walk 14 also provides a convenient platform for working on or around the boat, and when the forward doors 51 are opened, a person may step from the cat-walk 14 into another boat at the front of the boat house. One who wishes to enter the boat house or boat from the dry land may simply step from the bank onto the outside cat-walk 13 and then enter the boat through the rear side door 36.

In the light of the above description, it should now be obvious that the prefabricated metal boat house may be very readily assembled and disassembled, and it is a simple matter to dismantle the boat house and transport it over land on a trailer or the like to a desired site for again erecting it. In this connection, I contemplate using the boat house as a floating boat house in the summer-

time, and then dismantling it and transporting the boat house to a permanent site on dry land during the winter.

When the boat house is erected on dry land, the float assemblies **10** and **11** are unnecessary, and these may merely be disconnected at **25** and dragged up onto dry land during the winter months. Prior to the next spring season, the drums **12** may be painted or replaced, and the float assemblies **10** and **11** are again connected through the medium of the sleeve **25** and refloated for sustaining the boat house in the water.

The boat house may be further equipped with any desired or conventional adjuncts, such as resilient fenders **65** for the boat, mounted upon the inner sides of the float assemblies **10** and **11** in any desired manner.

It is now apparent that I have provided a prefabricated knock-down substantially all metal boat house which is adapted to be used in the water or on dry land, and which is readily dismantled for transporting upon a trailer or like road vehicle. The boat house is relatively light weight, yet sturdy and durable in construction, and if the metal sheathing on the side wall and roof sections is made of aluminium or the like, substantially no maintenance is required, other than occasional replacement or repairing of the drums **12** and cat-walks **13** and **14**. As previously mentioned, the U-shaped drum positioning elements **15** are readily removable, individually, to facilitate servicing or replacement of the drums **12**.

The overall width of the boat house may be varied by merely lengthening the connection afforded by the sleeve **25** with the transverse braces **22**, and correspondingly increasing the spacing between the assemblies **10** and **11**. If this is done, roof and end wall sections of correspondingly increased width are utilized in the boat house. Likewise, the boat house may be constructed in any desired length, by merely increasing the number of drums **12** used in the float assemblies **10** and **11**, and by lengthening the side wall and roof sections **27**, **28** and **29**.

The longitudinal angle bars **58** and **59** may be adjusted laterally with respect to the cat-walks **13** and **14**, and if these angle bars are arranged at the transverse centers of the cat-walks, the entire boat house may be centered relative thereto to provide cat-walks upon opposite sides of the side wall sections **27** and **28**. Additionally, the cat-walk **13**, rather than the cat-walk **14**, may be made the interior cat-walk, merely by placing the angle bar **58** adjacent to the outer side of the cat-walk **13** and the angle bar **59** adjacent to the inner side of the cat-walk **14**. If this is done, a modified front wall section **31** is used, wherein the doors **51** are located toward the opposite side of the boat house.

It is to be understood that the form of the invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in the shape, size and arrangement of parts may be resorted to, without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A floating boat house comprising a pair of spaced companion float assemblies, each float assembly including a plurality of separate unconnected float units arranged in end-to-end relation, substantially horizontal cat-walks mounted upon said float assemblies and extending lengthwise thereof, elements dependingly secured to said cat-walks at opposite sides of the same and at the ends of the cat-walks for maintaining the separate float units in assembled relation below the cat-walks, readily detachable interconnecting means for the float assemblies near corresponding ends of the same, and knock-down prefabricated wall and roof sections for the boat house mounted above the cat-walks and detachably secured thereto and to each other.

2. A floating boat house comprising a pair of companion spaced apart float assemblies, each float assembly comprising a plurality of cylindrical drums free from direct connection and arranged in end-to-end substantially contacting relation, substantially horizontal cat-walks resting upon said drums and extending lengthwise thereof, U-shaped elements dependingly secured to the cat-walks adjacent to opposite sides of the same and at the ends of the cat-walks and engaging upon opposite sides of said drums and at the ends of the endmost drums to restrain the drums from movement relative to the cat-walks, connecting frames carried by said float assemblies near one pair of corresponding ends only of the assemblies, detachable interconnecting means for said frames, and knock-down roof and side wall means for the boat house connected with said cat-walks.

3. A boat house comprising a pair of laterally spaced floats, means for detachably interconnecting the floats near one pair of corresponding ends of the same, substantially horizontal cat-walks mounted upon said floats and extending lengthwise thereof, attaching means carried by one of said cat-walks adjacent to the inner side of the same, attaching means carried by the other cat-walk adjacent to the outer side thereof, a first upstanding side wall section detachably secured to said first-named attaching means, a second upstanding side wall section detachably connected to the second-named attaching means, and roof and end wall sections for the boat house detachably connected with said side wall sections, one end wall section having opening means arranged midway between said cat-walks, one of said cat-walks being disposed exteriorly of the boat house and the other cat-walk being arranged interiorly thereof.

4. A knock-down prefabricated floating boat house comprising a pair of spaced float assemblies, each float assembly including a plurality of hollow drums free from direct connection and arranged in end-to-end substantially contacting relation, cat-walks resting upon the tops of said drums and extending lengthwise thereof, U-shaped elements detachably dependingly secured to said cat-walks at the sides and ends thereof and serving to hold the drums captive beneath the cat-walks and rendering the individual drums readily removable, means for detachably connecting said float assemblies near corresponding ends of the same only, a pair of upstanding side wall sections detachably secured to said cat-walks, one side wall section being disposed adjacent to the inner edge of one cat-walk and the other side wall section being disposed adjacent to the outer edge of the other cat-walk, whereby one cat-walk is disposed exteriorly of the boat house and the other cat-walk is disposed interiorly thereof, the side wall section adjacent to the exterior cat-walk having opening means near one end of the cat-walk, a roof section and a rear wall section detachably connected with said side wall sections, and a front wall section for the boat house detachably connected with the side wall sections and having opening means midway between said cat-walks.

5. A knock-down prefabricated floating boat house according to claim 4, and wherein said opening means in said side wall is a door near the rear end of the boat house and said opening means in the front wall section is a pair of doors.

6. A knock-down prefabricated floating boat house according to claim 4, and wherein said interconnecting means for the float assemblies includes a pair of abutting frame members in end-to-end relation and a sleeve receiving said frame members.

7. A knock-down prefabricated floating boat house comprising a pair of spaced float assemblies, each float assembly including a plurality of hollow drums free from direct connection and arranged in end-to-end relation, cat-walks resting upon the tops of said drums and extending lengthwise thereof, U-shaped elements detachably dependingly secured to said cat-walks at the sides and ends thereof and serving to hold the drums captive beneath the cat-walks and rendering the individual drums readily removable, means for detachably connecting said float assemblies near corresponding ends of the same

only, a pair of upstanding side wall sections extending above said cat-walks, attaching bars secured to said cat-walks and extending longitudinally thereof, bolt means for detachably securing the lower ends of said side wall sections to said attaching bars, one side wall section and one attaching bar being disposed adjacent to the inner edge of one cat-walk and the other side wall section and attaching bar being disposed adjacent to the outer edge of the other cat-walk, whereby one cat-walk is disposed exteriorly of the boat house and the other cat-walk is disposed interiorly thereof, the side wall section adjacent the exterior cat-walk having opening means near one end of the cat-walk, a roof section and a rear wall section detachably connected with said side wall sections, and a front wall section for the boat house detachably connected with the side wall sections and having opening means substantially midway between the cat-walks.

8. A floating boat house comprising spaced substantially parallel elongated floats, substantially horizontal cat-walks resting upon the floats and extending lengthwise thereof and having depending parts engaging outwardly of the opposite sides and ends of the floats to maintain the floats positioned beneath the cat-walks, detachable interconnecting means for the cat-walks near corresponding ends of the same, and knock-down prefabricated wall and roof sections for the boat house mounted above the cat-walks and detachably secured thereto and to each other.



**References Cited in the file of this patent**

UNITED STATES PATENTS

| | | |
|---|---|---|
| 1,643,464 | McCullers | Sept. 27, 1927 |
| 1,871,475 | Smith | Aug. 16, 1932 |
| 2,429,381 | Watson | Oct. 21, 1947 |
| 2,744,483 | Rhindress | May 8, 1956 |