Dec. 24, 1957 W. JEFFRIES 2,817,095

BATHTUB APPLIANCE

Filed Feb. 13, 1956

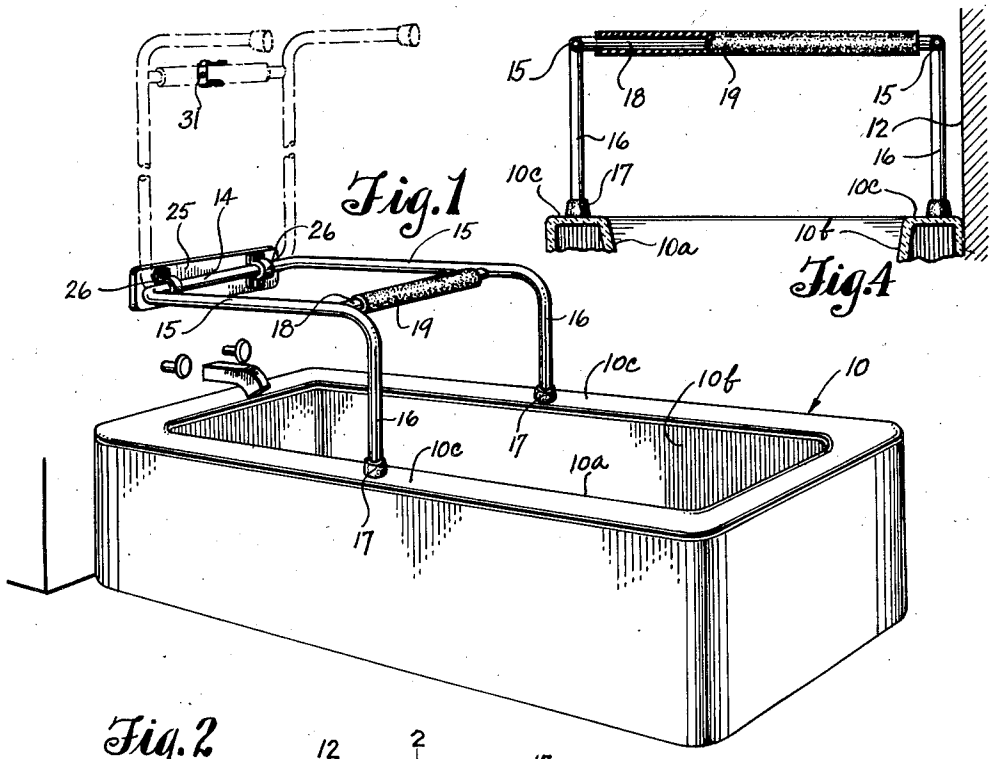


Fig. 1

Fig. 4

Fig. 2

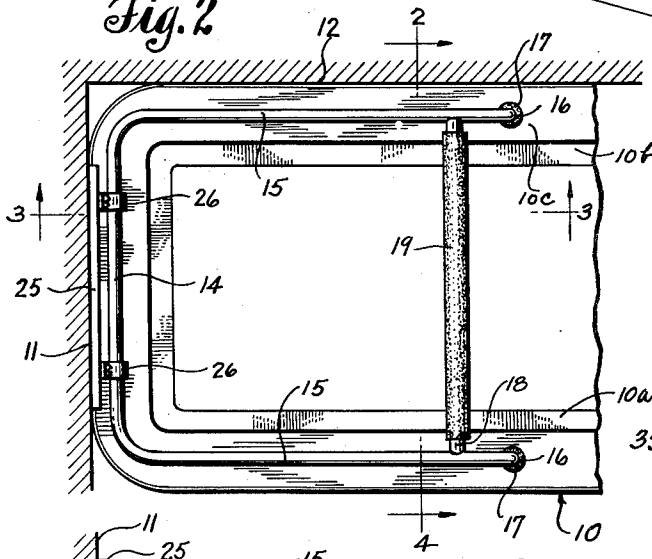


Fig. 7

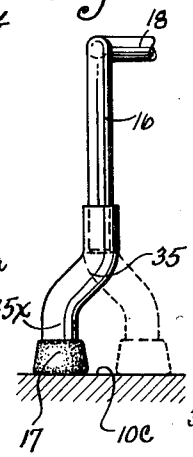


Fig. 5

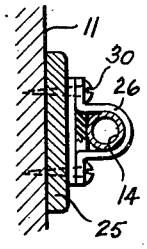
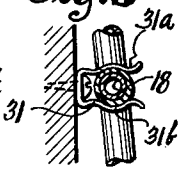


Fig. 6



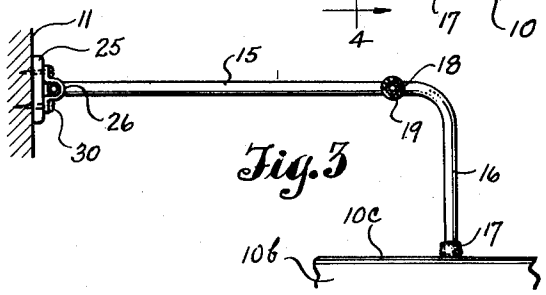


Fig. 3

INVENTOR.
WALTER JEFFRIES
BY
Cook & Robinson
ATTORNEYS

United States Patent Office 2,817,095 Patented Dec. 24, 1957

2,817,095

BATHTUB APPLIANCE

Walter Jeffries, Seattle, Wash.

Application February 13, 1956, Serial No. 565,008

5 Claims. (Cl. 4—185)

This invention relates to bath tub appliances, that is, to devices designed for use in connection with, or in combination with bath tubs for the purpose of aiding persons in getting into or from the same, and especially for use by the aged, crippled, physically impaired or sick in getting into and from a bath tub.

It is the principal object of this invention to provide a practical, economical, sanitary, and relatively simple device of the character above disclosed, that can be easily installed for use with present day tubs, and can be easily and readily adjusted, and without detachment from its support, from a position of use relative to the tub, to a position out of the way of persons who may not require or desire its use.

A further object of the present invention is to provide a bath tub appliance of the above character which is made in the form of a rigid frame structure that is adapted to be swingingly attached to a vertical wall at the end or side of a bath tub, to swing vertically from its position of use over the tub to an out of the way position at the end or side of the tub.

Further objects and advantages of the present invention reside in the details of construction and combination of parts embodied in the frame structure, in its combination with a tub and in its mode of use as will hereinafter be fully described.

In accomplishing the above mentioned and other objects of the invention, I have provided the improved details of construction, the preferred forms of which are illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view showing the device of the present invention as functionally associated with a bath tub, and as disposed in its position of use over the tub.

Fig. 2 is a top, or plan, view of the same in the position of use in which it is shown in Fig. 1.

Fig. 3 is a vertical section taken through the present device on the line 3—3 in Fig. 2.

Fig. 4 is a vertical section taken on the line 4—4 in Fig. 2, particularly showing the frame supporting legs at the swinging end of the frame structure.

Fig. 5 is an enlarged side view of one of the hinging or mounting clips for the frame structure.

Fig. 6 is a side view of the spring clip support whereby the frame structure is releasably held in its raised or out-of-the-way position.

Fig. 7 is a view, in elevation, showing an alternative form of supporting leg for the frame.

Referring more in detail to the drawings:

In Fig. 1, I have illustrated a typical present day bath tub installation in which the tub is designated in its entirety by reference numeral **10**. As shown in Figs. 2 and 4, the tub is shown to comprise opposite sidewalls **10***a* and **10***b* which are formed with horizontal top surfaces **10***c*. The tub is shown to be disposed in a corner defined by the vertical walls **11** and **12** of the bath room.

The present device is in the form of a rigid, substantially rectangular frame structure which is preferably

swingingly mounted as shown in Fig. 1. That is, it is swingingly attached to the wall **11** which is at the end of the tub toward which the bather normally faces. However, there may be occasions when it would be more desirable or practical to hinge the device to the sidewall **12**. Therefore, it is not desired to restrict the invention to any specific place of attachment.

In its present preferred form of construction, the frame structure embodied by the present invention is made of light weight metal tubing, preferably chrome plated metal, or of stainless steel, aluminum or of any other suitable material. The frame comprises a horizontal inner end bar **14** which, for explanatory purposes, will be herein referred to as the "base bar." This bar is located closely adjacent the wall **11** above the level of the tub as shown and is attached to the wall for axial turning by means presently to be described. Continuing from the opposite ends of the base bar **14** are the opposite side bars **15—15** of the frame structure. These extend in the same direction, are parallel to each other, and are of equal length. At their outer ends, they are each formed with directly downwardly turned leg portions **16—16**. These legs are of equal length and so designed that when the device is in position of use, as seen in Fig. 1, they will be perpendicular and rest upon the top surfaces **10***c* of the opposite sidewalls of the bath tub. It is preferred that rubber cups, as at **17** be fitted to the lower ends of the leg members **16** so that they will not mar the tub surface at the places of contact.

Extending between, welded to and rigidly joining the side bars **15—15** near their outer ends, is a cross-bar **18**, and it is desirable that a rubber sleeve **19** be applied to this cross bar substantially to its full length so that a better hand hold thereon may be had.

While it is not desired to restrict the device to any specific dimensions, it will be here mentioned that for the ordinary types of present day bath tubs, the side bars **15—15** are approximately twenty-five inches long and the base bar **14** and cross bar **18** are each thirty-six inches long, or of a length that best suits the width of the tub with which the device is used, as measured across from center to center of the top surfaces **10***c* of its sidewalls. The legs are about twelve inches long.

As previously mentioned, the frame structure of the device comprised by the rigidly joined base bar **14**, side bars **15—15** and cross bar **18**, is hinged to or swingingly attached to the wall **11** in such manner as to permit the frame to be easily swung from its horizontal functional position, as shown in Fig. 1, to a position leaning against or releasably secured at its swinging end to a wall **11**.

The present preferred means for hingedly or swingingly securing the frame structure to the wall **11** is as shown best in Figs. 3 and 5 wherein a wooden plate **25** is seen to be fastened flatly against and horizontally to the wall **11** at a measured distance above the level of the tub, and that the base bar **14** is disposed therealong and rotatably mounted near its opposite ends, by formed clips or plates **26—26** applied thereover and secured at their ends to the plate **25** by screws or nails **30**. The rotatable mounting of the bar **14** permits the frame structure to be swung freely between its position of rest on the tub as in Fig. 1, to the raised position indicated in dotted lines in Fig. 1. When in its raised position, it can be held by engaging the cross rod **18** with a holding clip **31** which is fixed in receiving position to the wall **11**. This clip **31** preferably is of the U-shaped form shown in Fig. 6, and comprises two coacting spring arms **31***a*—**31***b* between which the cross rod **18** will be received and yieldingly gripped, but from which it can be

readily pulled free for the swinging of the device to its position of use.

The device may be made in its entirety of light weight metal tubing of non-rusting character; the ends of the base bar **14** being bent gradually to merge with the side bars **15—15**, and the latter being bent gradually to merge with the legs **16—16**. Thus, sharp and harmful corners are avoided. Such a tube can be kept clean and sanitary with little effort.

If it is desired, the clips **26** might be applied directly to the wall **11** instead of the plate **25**, and if desirable for any special use, the device could be hinged to the sidewall **12** to extend across the tub.

As an alternative construction, I may utilize the leg design of Fig. 7 which permits a device of one width to be adapted to tubs within a certain range of widths. In this view, the leg member **16** is equipped at its lower end with a short extension **35** of tubular form, having an upper portion rotatably fitted to the leg **16**, and a lower end portion **35x** that is offset from the axial line of the upper part. Thus, by rotating the extension on its mounting leg, its lower end portion can be moved toward or away from the opposite leg, thus permitting the legs of the device to be spaced as required to best suit the width of the tub with which the device is used.

The device, as shown, is a great aid to the infirm, crippled or sick in getting into or from the tub, and it is an insurance against accidental falls by slipping. Furthermore, the device does not interfere with use of the tub by persons not requiring it.

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

1. A bath tub appliance comprising a rigid, substantially rectangular frame structure including a horizontal base bar across one end thereof, opposite side bars continuing from opposite ends of the base bar in the same direction and to equal extent, and equipped at their ends with legs of equal length adapted for support on the top surfaces of the opposite sidewall forming portions of the tub when said frame is in its functional position, and a cross-bar fixed in the frame and extended between the leg equipped end portions of said side bars and serving as a hand hold and steadying support, means associated with the base bar for the hinged mounting of said frame structure on a wall at the end of a bath tub for vertical swinging of the frame, from horizontal functional position to a vertical non-functional position and means on said wall for yieldingly engaging said cross-bar to retain the frame in its non-functional position.

2. An appliance as recited in claim 1 wherein the base bar, side bars and legs of the frame structure are formed from a continuous member.

3. An appliance as recited in claim 2 wherein said cross-bar is fitted with a gripping sleeve of rubber or the like, and said legs are equipped at their lower ends with rubber cups.

4. An appliance as recited in claim 3 wherein the side bars are laterally spaced to approximately the width of the bath tub.

5. A bath tub appliance comprising a rigid frame structure including a horizontal base bar at its inner end and a horizontal cross-bar, serving as a hand hold, at its outer end, means associated with the base bar for the hinged attachment of said frame structure to a wall at the end of a bath tub, to permit said frame structure to be swung between a position at which it extends horizontally over the tub, to a position vertically directed and closely adjacent said wall to which it is attached; said frame structure having rigidly mounted legs at its outer end adapted to engage the top surfaces of the opposite wall portions of said tub for support of that end when the frame is in horizontal position; at least one of said legs including a lower end extension member with its upper portion fitted to the leg for rotary adjustment axially thereof; and its lower end portion offset from the axial line of the upper portion.

References Cited in the file of this patent

UNITED STATES PATENTS

1,923,482	Frankenstein	Aug. 22, 1933
1,950,709	Wells	Mar. 13, 1934
2,036,506	Seaward	Apr. 7, 1936
2,511,756	Wallace	June 13, 1950
2,574,389	Harrold	Nov. 6, 1951
2,736,904	Suggs	Mar. 6, 1956