

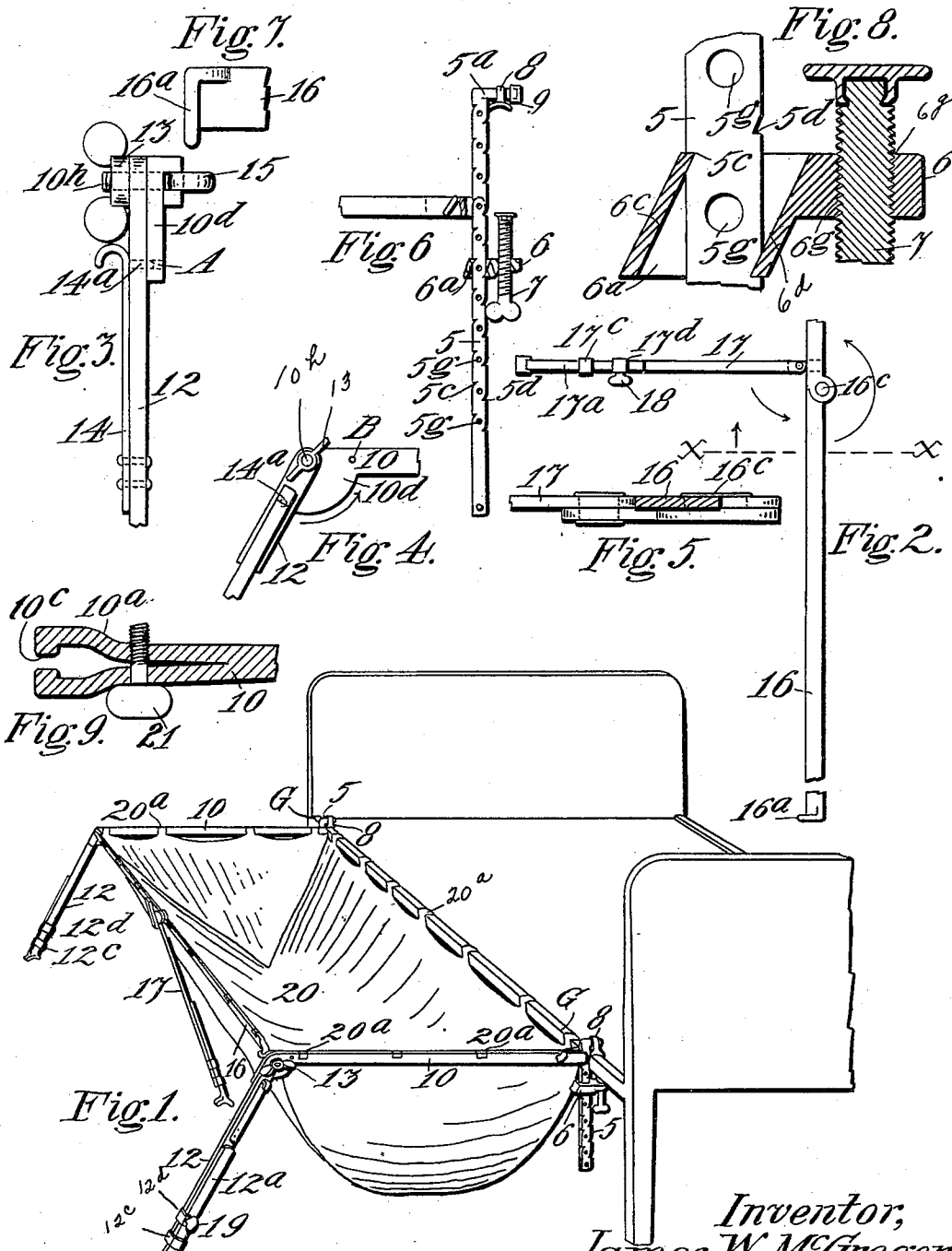
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Patented Mar. 13, 1900.

J. W. MCGREGOR.
PORTABLE BATH TUB.

(Application filed Aug. 22, 1899.)

(No Model.)



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UNITED STATES PATENT OFFICE.

JAMES WESLEY MCGREGOR, OF BRIGHTON, COLORADO.

PORTABLE BATH-TUB.

SPECIFICATION forming part of Letters Patent No. 645,513, dated March 13, 1900.

Application filed August 22, 1899. Serial No. 728,137. (No model.)

To all whom it may concern:

Be it known that I, JAMES WESLEY MCGREGOR, a citizen of the United States of America, residing at Brighton, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Portable Bath-Tubs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in folding portable bath-tubs for use in sick-rooms, my object being to provide an apparatus of this class adapted to be connected with the side rail of a bedstead, couch, or other suitable convenient support. The device comprises a folding frame and a flexible water-receptacle attached thereto and composed of rubber or other suitable waterproof material.

The invention will now be described in detail, reference being made to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a perspective view illustrating the apparatus shown in connection with a bedstead. Fig. 2 is a side view of the folding side bar and its central extensible leg. Figs. 3 and 4 are fragmentary views illustrating one end bar and the folding extensible leg attached thereto. Fig. 5 is a section taken on the line X X, Fig. 2. Fig. 6 illustrates the clamping-bar shown in connection with the end bar, the parts being shown partly in section. Fig. 7 illustrates one of the hooked extremities of the side bar. Figs. 8 and 9 show details of construction on an enlarged scale.

Similar reference-characters indicating corresponding parts in the views, let the numeral 5 designate each of a pair of vertical bars provided with notches on opposite edges. Vertically adjustable on each of these bars is a clamping-shoe 6, carrying a bolt 7, engaging a threaded opening 6^s in the shoe. The bar 5 is passed through an opening 6^a in the shoe, having parallel inclined walls 6^c and 6^d. When the shoe is in the holding or clamping position, the upper extremity of the wall 6^c en-

gages a notch 5^c of the bar on one edge, and the lower extremity of the wall 6^s engages the notch 5^d on the opposite edge, whereby the shoe is supported on the bar in any desired position of adjustment. The upper extremity of the bar 5 is provided with a projection 5^a, extending at right angles to the body of the bar and carrying a clamping member 8, adapted to turn on its supporting part and arranged to fit the upper edge of the side rail 9 of the bedstead. By reason of the turning movement of the member 8 on its supporting part the said member may be made to fit a bed-rail having an inclined or sloping upper edge. It often happens that the side rail of the bedstead slopes downward from the head and foot boards, and the member 8 by reason of its adjustability is made to fit bedsteads of this character, as well as those having horizontal side rails. The angle part 5^a of the bar 5 has its free extremity threaded to receive a nut 9, which when screwed thereon forms a stop to prevent the adjustable clamp member 8 from slipping off. As shown in the drawings, the member 8 has a curved lower surface adapted to fit the rounded upper edge of the side rail of the bed. Each bar 5 is further provided with openings 5^s, arranged one above another. Connected with each bar 5 is an end bar 10, having one extremity bifurcated to form spring-jaws 10^a, adapted to embrace the bar 5 on opposite sides. Each jaw 10^a is provided on its inner surface with a stud 10^b. The two studs are arranged to enter an opening 5^s of the bar from opposite sides. The jaws 10^a are normally open, allowing the bar 5 to enter. The jaws are closed, causing the studs to enter the opening 5^s by means of a thumb-screw 21, engaging a threaded opening in one jaw and an unthreaded opening in the other jaw. As this thumb-screw is turned its head is brought against the jaw having the unthreaded opening, and the two jaws are thus closed on the bar 5, causing their studs to enter the opening 5^s, as before stated.

The outer extremity of the end rail 10, or that remote from the spring-jaws, is provided with a segmental part 10^d, having a threaded stud 10^h, fast thereon and adapted to pass through an opening formed in the upper extremity of a leg 12, the two parts 10 and 12

being secured together by means of a thumb-nut 13, secured on the stud 10^b to engagement with the leg 12. The segmental extremity 10^d is provided with two separated openings A and B. Upon the leg 12 is made fast one extremity of the leaf-spring 14, whose opposite extremity is provided with a pin 14^a, adapted to enter an opening in the leg and one of the openings A or B, as desired. When the pin 14 engages the opening A, the leg is in position for use, (see Fig. 1,) while when the pin is in the opening B the leg is in the folded position, lying parallel with and engaging the end bar 10. By pulling outwardly on the upper hooked extremity of the spring 14 its pin may be disengaged from either opening at A or B. The segmental extremity of each end bar 10 is also provided with an apertured lug 15, adapted to receive one of the hooked extremities 16^a of the side bar 16. This side bar is hinged at its center, as shown at 16^c, whereby it is adapted to fold when not in use. To the side bar 16 is also hinged, about midway between its extremities, an extensible leg 17. This extensible feature of the leg 17 consists of a part 17^a, provided with loops 17^c and 17^d, formed on the main part of the leg, whereby the part 17^a may be raised or lowered according as it is desired to make the leg shorter or longer. When properly adjusted, the two parts are locked by means of a set-screw 18 engaging a threaded opening formed in the loop 17^d. Each leg 12 is also extensible by means of a sliding part 12^a, engaging loops 12^c and 12^d, formed on the main part 12, the two parts being locked in any desired position of adjustment by means of a set-screw 19. The legs 12 and 17 are oppositely inclined, whereby the apparatus when in use is securely braced.

The water-receptacle 20 may be composed of any suitable flexible waterproof material. If rubber is employed, hooks 20^a, preferably composed of metal, will be attached thereto by vulcanizing or in any other suitable manner. These hooks will be made to engage the side bar 16, the end bars 10, and the side rail of the bed. (See Fig. 1.)

From the foregoing description the manner of setting up and using the apparatus will be readily understood. The bars 5 are first attached to the side rail of the bed by placing the clamp member 8 of each bar on the upper edge of the rail, adjusting the shoe 6 on the bar, and then securing the latter in place by screwing the bolt 7 tightly against the lower edge or surface of the bed-rail 9, the rail-engaging extremity of the clamping-bolt being swiveled thereon to prevent its turning and marring the rail after it engages the same. The parts 10 and 12, which are normally in their folded position when not in use, are then unfolded by loosening the thumb-nut 13 and pulling outwardly on the spring 14 until the pin 14^a is withdrawn from the opening B of the segmental part 10^d

of each end bar 10. The extensible leg 12 is unfolded, turning on the stud-bolt 10^b as a pivot until the spring-pin 14^a enters the opening A. The bifurcated extremities of the end bars 10 are then attached to the bars 5 in the manner heretofore explained. The extensible leg 17 is then unfolded from the side bar 16 and the two parts of the latter unfolded to occupy the position shown in Fig. 2. This side bar is then attached to the end bars by inserting its hooks 16^a in the sockets of the lugs 15. The flexible water-receptacle 20 is then unfolded and attached to the frame and bed-rail in the manner heretofore explained.

My improved bath-tub is then ready for use. After use it may be quickly taken down and folded to occupy but little space by reversing the steps of the setting-up operation heretofore explained.

Having thus described my invention, what I claim is—

1. In a folding portable bath-tub the combination with a flexible water-receptacle, of a supporting-frame comprising clamping-bars adapted to be attached to the side rail of a bed, end bars detachably connected with the clamping-bars, a folding side bar detachably connected with the end bars and suitable means for supporting the side and end bars.

2. In a portable bath-tub the combination with a flexible water-receptacle, of a supporting-frame therefor comprising vertical clamping-bars adapted to be attached to the side rail of a bed and provided with a series of openings, end bars having bifurcated extremities forming spring-jaws provided with studs adapted to enter the openings of the clamping-bars, thumb-screws for closing the jaws of the end bars, a side bar detachably connected with the end bars and suitable legs for supporting the side and end bars.

3. In a folding portable bath-tub the combination with the flexible water-receptacle, of a supporting-frame comprising clamping-bars adapted to be attached to the side rail of a bed, end bars detachably connected with the clamping-bars and provided with folding legs, and a folding side bar detachably connected with the end bars, and also provided with a folding leg.

4. In a folding portable bath-tub the combination with a flexible water-receptacle, of a supporting-frame therefor comprising clamping-bars having hooked extremities adapted to engage the side rail of a bed, each being provided with an adjustable shoe carrying a bolt arranged to cooperate with the hooked end of the bar, end bars detachably connected with the clamping-bars, and provided with folding extensible legs and a folding side bar adapted to be connected with the end bars, and provided with a folding extensible leg.

5. In a folding portable bath-tub the combination of two clamping-bars having hooked extremities adapted to engage the side rail of

a bed, and each provided with an adjustable shoe carrying a bolt arranged to cooperate with the hooked end of the bar; two end bars suitably connected with the clamping-bars, a
5 side bar connected with the end bars, and suitable supporting-legs.

6. In a folding portable bath-tub the combination of two clamping-bars, each being notched on opposite sides, a shoe having an
10 opening for the bar, said opening having inclined walls, whose upper and lower extremities respectively engage the notches in the opposite edges of the bar, a bolt engaging a

threaded opening in the shoe, end bars having bifurcated extremities adapted to engage 15 the clamping-bars, a side bar having hooked extremities engaging sockets in the end bars, and suitable legs supporting the side and end bars.

In testimony whereof I affix my signature 20 in presence of two witnesses.

JAMES WESLEY MCGREGOR.

Witnesses:

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