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FOLDING BATH CABINET

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Fig. 1

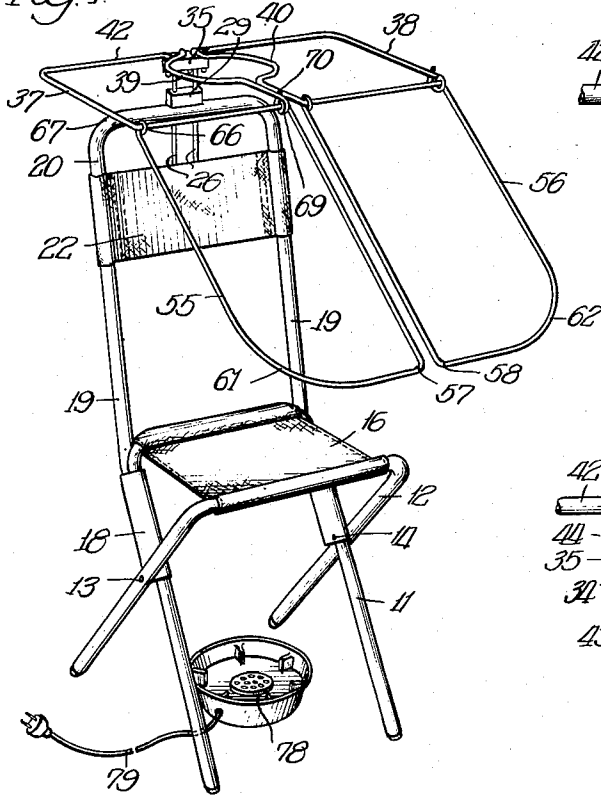


Fig. 2

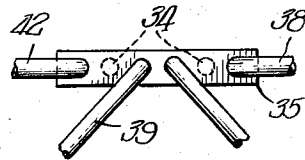


Fig. 3

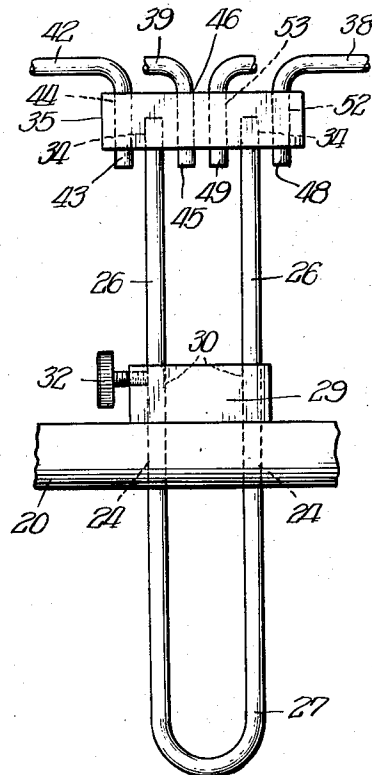
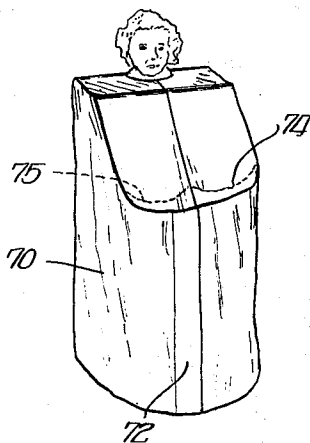


Fig. 4



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FOLDING BATH CABINET

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This invention relates to a new and improved collapsible steam bath cabinet or the like and more particularly to a device of this kind comprising a metal frame and a removable covering of flexible sheet material for the frame.

Steam baths which provide treatments prescribed for various purposes, as normally constructed, comprise a cabinet sufficiently large to enclose a person sitting on a chair therein, with the person's head projecting through an opening in the upper wall of the cabinet. It is necessary to hinge several wall and upper sections of the cabinet to provide for entrance and exit of the user and also to provide a reasonably close fit about the neck of the user. Such cabinets are cumbersome, awkward to manipulate by the user alone and take up considerable storage space. They are, therefore, not well adapted for home use.

It is an object of the present invention to provide a new and improved collapsible bath cabinet.

It is a further object to provide a cabinet of this type which may be readily disassembled and stored in a small space.

It is also an object to provide a cabinet comprising a light metal frame having a removable covering of flexible, water and steam resistant material.

It is another object to provide a cabinet which may be easily opened and closed by the user.

It is an additional object to provide a cabinet which is easily adjustable as to height so that it may be readily adapted for use by persons of different heights with a proper fit of the upper surface about the neck of the user.

It is a further object to provide a cabinet which is simple in design and construction and adapted for commercial production and use.

Other and further objects will appear as the description proceeds.

I have shown certain preferred embodiments of my invention in the accompanying drawings, in which—

Figure 1 is a perspective view of the cabinet frame assembled to a chair;

Figure 2 is a fragmentary plan view, on an enlarged scale, of the pivot block and connections;

Figure 3 is a fragmentary elevation, on an enlarged scale, of the pivot and support blocks and connections; and

Figure 4 is a perspective view of the assembly in use.

Referring first to Figure 1, the assembly com-

prises a folding stool section comprising the two U-shaped members 11 and 12 which are pivoted at 13 and 14 to each other. The usual type of fabric seat 16, which may be formed of canvas, is secured to the middle portions of the two U members 11 and 12 by having its ends lapped over these portions, then folded back and sewed to the body in a well-known manner. The upper portions of the two legs of the U-shaped member 11 are each provided with a flat tubular member 18 applied thereto in such manner that they provide sockets to receive the legs 19 of the U-shaped member 20 which forms a back for the chair assembly. These legs 19 have a sliding fit into members 18 so that the back may be removed for packing and storage. The back is provided with a fabric back-rest 22 which is secured to the back legs 19 by being folded around them and being sewed back upon itself in the same manner as the seat.

Referring next to Figure 3, the middle top portion of the chair-back U frame 20 is provided with a pair of openings 24 through which are fitted the two legs 26 of the U-shaped support member 27. The support block 29 is provided with a pair of openings 30 through which the legs 26 pass and this block is secured in adjusted position by means of a thumb screw 32, the inner end of which bears against one of the legs 26. The upper ends of the legs 26 fit into recesses 34 in the underside of the pivot block 35, which block serves to support the upper framework of the assembly.

This upper framework comprises, as shown in Figure 1, a left horizontal frame 37 and a right horizontal frame 38. The frames 37 and 38 have the inwardly bowed portions 39 and 40 formed on their adjacent sides to provide clearance for the neck of the user. The rear portion 42 of the frame section 37 has a downturned end 43 fitting in a bore 44 in the support block 35. Similarly, the end of the curved section 39 of member 37 has a downturned portion 45 fitting through the perforation 46 in the block 35. The horizontal frame section 38 is similarly provided with downturned portions 48 and 49 extending through bores 52 and 53.

The horizontal sections 37 and 38 of the frame serve to support the sloping frame sections 55 and 56. These frames 55 and 56 are shaped in the form of a modified U with adjacent corners 57 and 58 formed on a short radius and the outer lower corners 61 and 62 formed on a longer radius. The upper end of the outer leg of section 55 is given a single turn 66 around the

member 37 and the end of the turn is bent outwardly and upwardly, as shown at 67, underneath the lateral portion of frame 37 so that the frame 55 is held in the position in which it is shown. The upper end of the other leg of frame 55 is similarly twisted around frame section 37, as shown at 69, and has an upstanding portion 70 bent outwardly and under the adjacent rearwardly extending portion of frame 37. As shown in Figure 1, the frame member 56 has the upper ends of its legs finished in the same manner so that it is similarly supported from the frame section 38.

As shown in Figure 4, the assembly is adapted to support a flexible housing 70 having portions corresponding to the supporting frame shape fitted thereon and having downwardly depending walls or skirts long enough to reach the floor with the frame assembly extended to its full height. As shown in the drawing, these skirts have an overlapping portion 72 so that the cabinet may be closed sufficiently to prevent any substantial leakage of steam. As indicated in broken lines at 74 and 75, the member 70 may be provided with interior pockets fitting over the lower ends of members 55 and 56 so as to retain the casing or housing in place. As shown in Figure 1, an electric water heater 78 having the usual current supply cord 79 may be provided and located in use beneath the seat. This should be of a type which will supply adequate steam for the use of the housing as a steam bath. The particular construction of this heater forms no part of the present invention.

In the use of the collapsible steam bath cabinet, after the parts have been assembled and covered with the flexible housing 70, the two sides may be swung well apart, a pivoting and slight twisting action taking place about the downwardly extending portions 43, 45, 48 and 49, which are shown in detail in Figure 3. After the user has been seated, these sections may be readily drawn together and the flexible covering overlapped, as shown in Figure 4. It will be understood that, as usual with steam cabinets, a towel would ordinarily be placed about the neck of the user so as to prevent escape of steam at this point.

The assembly is very easily opened so as to permit the user to leave the chair when it is desired to terminate the use of the cabinet. The entire cabinet may be very quickly assembled for use and also quickly separated for packing and storage where it occupies a very small space. The two upper frame assemblies are lifted out of the support block 35 and, with the lower portion 55 folded back against the upper portion 37 and similarly section 56 folded against section 38, these portions take up very little space. The supporting U 27 may be removed from the chair-back, if desired, by loosening the nut 32. It may, if desired, be merely slipped down until the ends of legs 26 are within the block 29 and the screw 32 tightened up again. It then adds very little to the height of the back for storage. The back may be removed from the seat and leg portions of the chair by lifting the sides 19 of the chair out of the members 18. The leg and seat portions of the chair may be folded in the usual manner. The outer covering 70, being flexible, may be folded and packed in a small flat space. It will be apparent, therefore, that the cabinet may be collapsed quickly and packed in a very small area. The method of assembly will be readily understood, being merely the reversal of the steps just described in connection with taking

it apart for storage. It will be apparent, also, that the chair, with or without the back, may be used separately for other purposes. Also, the water heating and steam creating unit 78 may be used for other purposes when not desired in connection with the cabinet.

The parts may be made of various materials, but aluminum tubing for the chair and aluminum rods for the upper frame assembly, together with aluminum support and pivot blocks, have been found very efficient. This material is light to handle and requires no painting to prevent rust or corrosion from contact with the steam.

While I have shown and described certain preferred embodiments of my invention by way of example, it is capable of variation to meet differing conditions and requirements and I contemplate such modifications as come within the spirit and scope of the appended claims.

I claim:

1. In a steam bath cabinet, a chair, supporting means secured to the chair, a cabinet frame carried by the supporting means, said cabinet frame comprising a pair of members pivoted on the supporting frame, each of said members having a re-entrant portion adapted to fit about a user's neck, and a housing carried by the frame.

2. In a steam bath cabinet, a chair, supporting means secured to the chair, a cabinet frame carried by the supporting means, said cabinet frame comprising a pair of members pivoted on the supporting frame, each frame member comprising a main element and a secondary element pivoted to the first element about a substantially horizontal axis, and a housing carried by the frame.

3. In a steam bath cabinet, a chair, supporting means secured to the chair, a cabinet frame carried by the supporting means, said cabinet frame comprising a pair of substantially horizontally extending main members each generally rectangular in shape and formed of a unitary bar both ends of which are fitted into the supporting means, and a second forwardly extending element carried by each horizontally extending main member, and a housing carried by the frame.

4. In a steam bath cabinet, a chair, supporting means secured to the chair, a cabinet frame carried by the supporting means, said cabinet frame comprising a pair of substantially horizontally extending main members each generally rectangular in shape and formed of a unitary bar both ends of which are fitted into the supporting means, and a second forwardly extending element carried by each horizontally extending main member, said forwardly extending elements each being formed of a generally U-shaped bar with its ends pivotally secured to the forward portion of the main member, and a housing carried by the frame.

5. In a steam bath cabinet, a chair, supporting means secured to the chair, a cabinet frame carried by the supporting means, said cabinet frame comprising a pair of substantially horizontally extending main members each generally rectangular in shape and formed of a unitary bar both ends of which are fitted into the supporting means, and a second forwardly extending element carried by each horizontally extending main member, said forwardly extending elements each being formed of a generally U-shaped bar with its ends pivotally secured to the forward portion of the main member by passing around the front bar portion and having an

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extension passing under a lateral bar portion to limit the pivotal action, and a housing carried by the frame.

6. In a steam bath cabinet, a chair having a back, a support adjustably secured to the chair-back whereby its elevation may be varied, said support having sockets therein, a cabinet frame formed of bars, said frame comprising a pair of generally rectangular main members, each formed of a single bar having downturned ends, said downturned ends fitting in the support sockets for pivotal movement, secondary forwardly extending elements carried by the main members, and a flexible housing fitted on said frame.

7. In a steam bath cabinet, a chair having a back, a support adjustably secured to the chair-back whereby its elevation may be varied, said support having sockets therein, a cabinet frame formed of bars, said frame comprising a pair of generally rectangular main members, each formed of a single bar having downturned ends, said downturned ends fitting in the support sockets for pivotal movement, secondary forwardly extending elements carried by the main members, and a flexible housing fitted on said frame, said housing having pockets formed therein to fit over portions of the frame to maintain the housing located thereon.

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8. In a steam bath cabinet, a chair having a back formed of an inverted U-shaped member detachably secured to the chair, the upper portion of the back having a pair of vertical openings therein, a U-shaped support having its legs extending upwardly through the openings, a support block fitting over said legs above the back and adjustably secured thereto, a pivot block supported by the upper ends of said legs, a pair of frame members detachably fitted into said pivot block to pivot thereon, and a flexible housing supported by said frame members.

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