Dec. 7, 1971 W. S. SHARPS 3,624,844

STEAM OR VAPOUR BATH

Filed Dec. 2, 1969 3 Sheets-Sheet 1

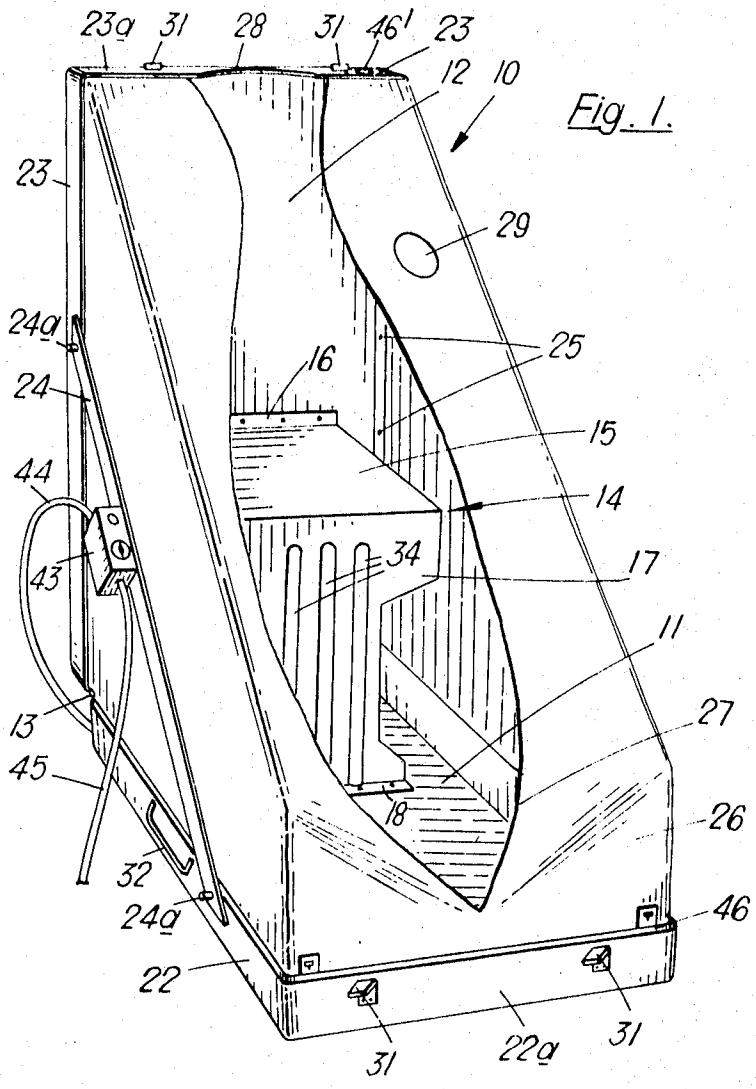


Fig. 1.

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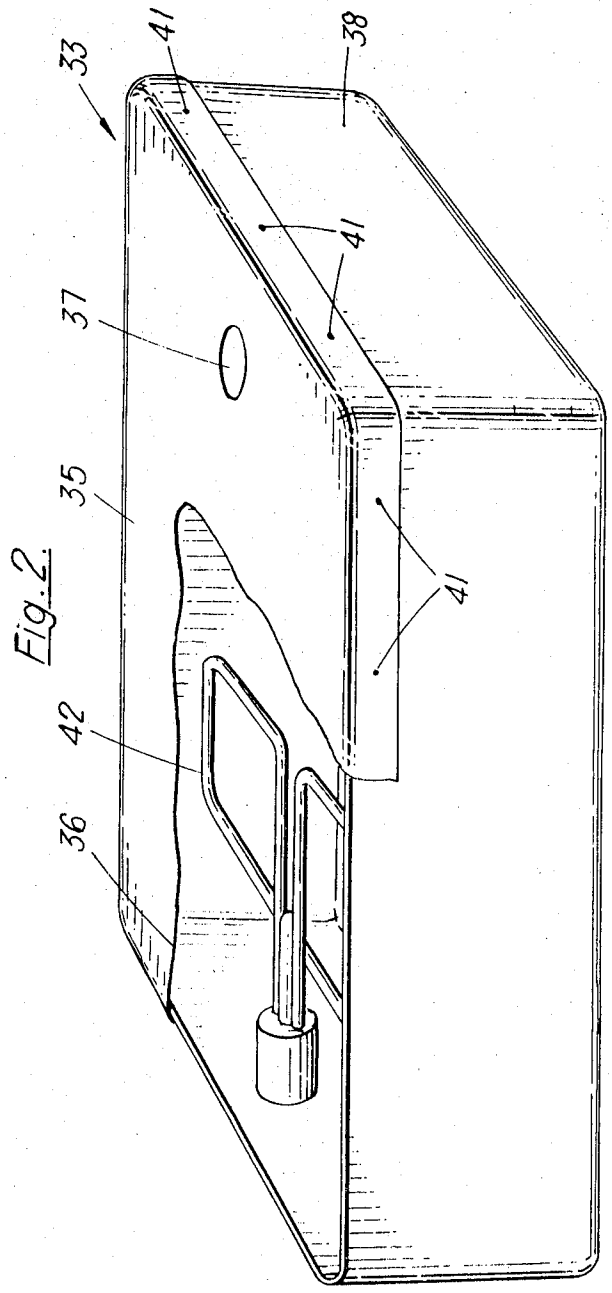


Fig. 2.

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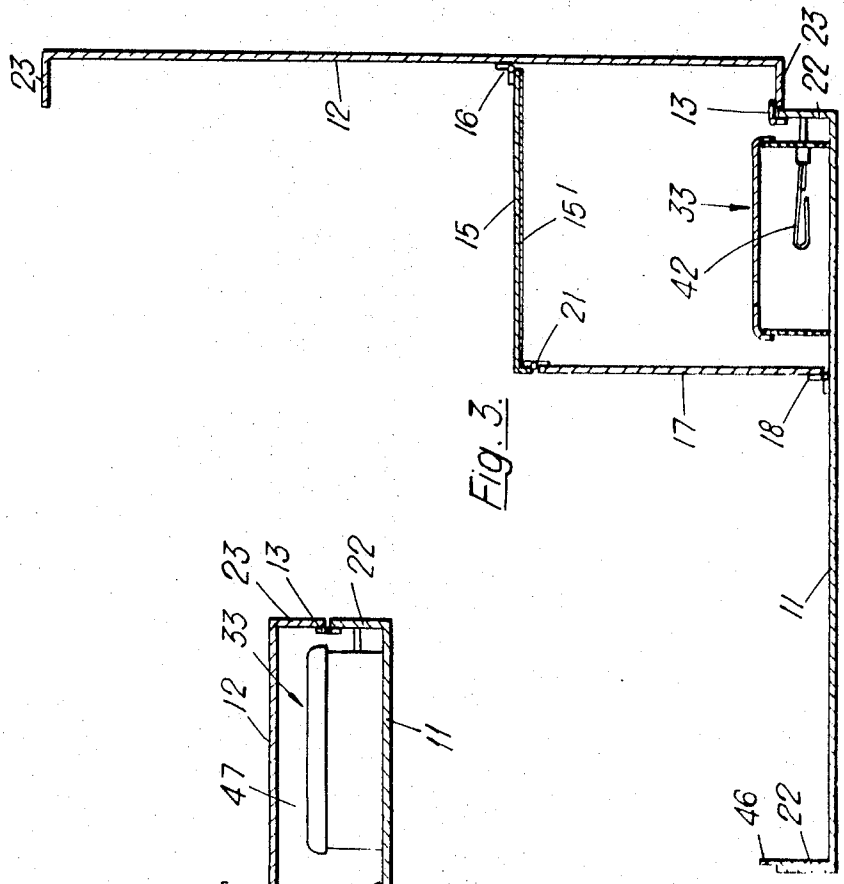


Fig. 3.

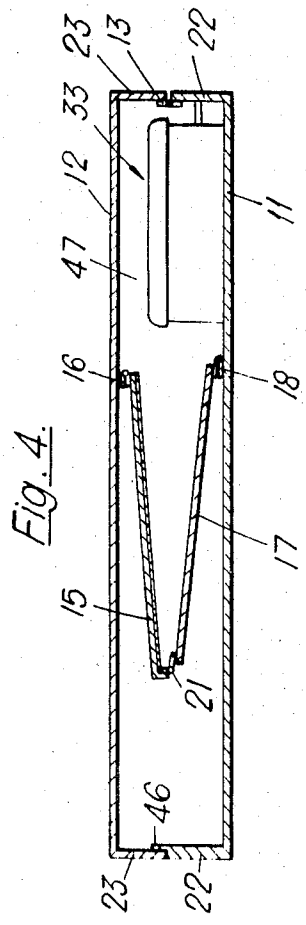


Fig. 4.

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3,624,844

STEAM OR VAPOUR BATH

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Claims priority, application Great Britain, Dec. 3, 1968, 57,378/68
Int. Cl. A61n 33/06
U.S. Cl. 4—160 5 Claims

ABSTRACT OF THE DISCLOSURE

A steam or vapour bath comprises a cabinet within which a person may be seated, the cabinet including a base pivotally connected to a wall, said base and said wall being adapted to be moved relative to each other between, and to be retained in, an operative position in which the wall is substantially perpendicular to the base, and an inoperative position in which said wall is disposed adjacent and substantially parallel to the base. A seat is provided which is mounted within the cabinet and is pivotally connected thereto in such a way as to be moved between operative and inoperative positions when the base and wall are similarly so moved, the seat having a portion which, in the operative position, extends substantially perpendicular to said wall.

The invention relates to steam or vapour baths and it is to be understood that the term "vapour baths" includes those of the "sauna" type using hot air.

According to the present invention there is provided a bath comprising a cabinet within which a person may be seated, the cabinet including a base; a wall pivotally connected to the base, said base and said wall being adapted to be moved relative to each other between, and to be retained, in an operative position in which the wall is substantially perpendicular to the base, and an inoperative position in which said wall is disposed adjacent and substantially parallel to the base; a seat which is mounted within the cabinet; a first portion of the seat which, in the operative position, extends substantially perpendicular to said wall; a first hinge connection pivotally connecting said first portion of the seat to said wall; a second portion of the seat which, in the operative position, extends perpendicular to said base; a second hinge connection pivotally connecting said second portion of the seat to said base; a third hinge connection pivotally connecting the first and second portions of the seat, whereby the seat is moved between operative and inoperative positions when the base and wall are similarly moved; a space beneath the first portion of the seat for reception of a steam or vapour or hot air generator; a plate constituting said second portion of the seat which plate is adapted to prevent direct contact between the steam or vapour or hot air from the generator in said space and the legs of a person seated on the first portion of the seat.

A canopy of flexible material may be attached to said base and said wall to form the remainder of the cabinet.

Preferably said canopy is detachable from the base and wall.

Preferably said base and wall, in the inoperative position, form a case, fastening elements being provided on the base and wall to retain the same in the inoperative position.

At least one strut may be provided to retain said base and said wall in the operative position.

The invention is illustrated, merely by way of example, in the accompanying drawings, in which:

FIG. 1 is a perspective view of a steam or vapour bath according to the present invention, in its open or operative, position,

FIG. 2 is a perspective view of a steam or vapour generator for use with a steam or vapour bath according to the present invention,

FIG. 3 is a cross-section of the steam or vapour bath of FIG. 1 in its open, or operative, position, and

FIG. 4 is a cross-section of a steam or vapour bath of FIG. 1 in its folded, or inoperative, position.

Referring first to FIG. 1 there is shown a stem or vapour bath generally designated by the reference numeral **10**. The steam or vapour bath **10** has a base **11** made of, for example, fibre glass and a wall **12** also made of fibre glass. The base **11** and the wall **12** are hinged together by means of a hinge **13**.

The steam or vapour bath **10** has a seat **14** which comprised a first portion **15** attached by a hinge **16** to the wall **12** and a second portion **17** attached by a hinge **18** to the base **11**. The first portion **15** and the second portion **17** are hinged together by a hinge **21** (see FIG. 3).

Both the base **11** and the wall **12** are tray-like members having small upstanding walls **22** and **23** respectively, and, in the open, or operative position of the steam or vapour bath **10**, are positioned substantially perpendicular to each other by means of two rigid struts **24** (only one shown) which are removably attached by fastening elements **24***a*. As an alternative the struts **24** may have slots (not shown) in the ends thereof, these slots engaging with protuberant arms (not shown) located on the upstanding walls **22**, **23** internally of the steam or vapour bath **10**, to retain the base **11** and wall **12** substantially perpendicular to one another. In a further illustrated alternative the struts **24** may be permanently pivotally retained internally of the steam or vapour bath **10**. In this case they are hinged substantially at the centre so that when the steam or vapour bath is folded the struts **24** fold with the base **11** and the wall **12** and are, in the folded position, located within the base **11** and the wall **12**.

Attached to the upstanding walls **22** and **23** by means of snap-fasteners **25** is a canpoy **26**, made of, for example, nylon (trademark) sheet. The canpoy **26** is provided with a releasable fastener element **27**, such as, for example, a zipper which, when open, allows a person to enter the steam or vapour bath **10** and when closed prevents steam or or vapour substantially from escaping from the steam or vapour bath. When the releasable fastener element **27** is closed a space is left adjacent the top of the wall **12** to allow the head and neck of a person seated in the steam or vapour bath to project outwardly from the canopy **26**. For comfort a curved portion **28** is removed from the upstanding wall **23** to accommodate the neck. The canopy **26** is also provided with two arm holes **29** (only one shown in FIG. 1) to allow the hands and the arms up to the elbow of a person seated in the steam or vapour bath to project oltwardly of the steam or vapour bath. The arm holes **29** have cuffs (not shown) to prevent steam or vapour escaping.

The canopy **26** may have, at its corners, strengthening elements (not shown) which are integral with the canopy and are attached to the upstanding walls **22** and **23** so as to give a certain predetermined shape to the canopy. Furthermore, a panel (not shown) may be hingedly connected to the base **11** at a portion **22***a* of the upstanding wall **22**. This panel may be locked in a position perpendicular to the base **11** to enable the lower part of the canopy to retain its shape. When the steam or vapour bath **10** is folded the panel is folded with it. As an addition or as an alternative a similar panel may be hingedly connected to the wall **12** at a portion **23***a* of the upstanding wall **23** to enable the upper part of the canpoy to retain its shape.

Both the base **11** and the wall **12** have interengaging catches **31** on the portions, **22***a*, **22***b* of the upstanding walls **22**, **23** respectively for keeping the two parts parallel and adjacent to each other in the folded, or inoperative, position. In addition the base **11** has a carrying handle **32**.

Referring to FIG. 2 there is shown a steam or vapour generator **33** adapted to be positioned in a space under the first portion **15** of the seat **14** in the open position. To protect the legs of the user of the steam or vapour bath the second portion **17** of the seat **14** consists of a plate so that steam cannot come into direct contact with the users legs. Additionally the first portion **15** of the seat **14** has a heat resistant padding **15'** on the under surface thereof to prevent the upper surface from becoming excessively hot in use. The padding **15'** may be, for example, expanded polystyrene. Since a plane plate has little structural strength portion **17** is provided with a plurality e.g. 3, of strengthening ribs **34**.

The steam or vapour generator **33** consists of a lid **35** having a cut out portion **36** and a finger hole **37**. The lid **35** fits onto a base **38** and is retained thereon by rivets **41**. Disposed within and projecting through one wall of the base **38** is an electrical heating element **42**. The electrical heating element **42** is controlled by an adjustable resistance box **43** (FIG. 1) which has a clip (not shown) engaging one of the struts **24**. From the resistance box **43** a cable **44** leads to a connector (not shown) which is connectable to the electrical heating element **42** and cable **45** leads to a source of supply of electricity (not shown).

Thus it will be appreciated that when the base **38** is filled with water or vapour forming material the heat from the electrical heating element **42** will cause the water or material to vaporise. As an alternative to the steam or vapour generator **33** shown in FIG. 2 a hot air generator which is not illustrated may be provided, the hot air generator comprising a heating element which is suspended within a base so as to heat the air above the latter and thus to provide hot air currents so that the steam or vapour bath **10** may be used as a sauna bath. The base in this alternative construction may, if so desired, be adapted, when filled with water, to produce steam.

In FIG. 3 there is shown a lip **46** which is provided on the upstanding wall **22**, the lip **46** not being shown in FIG. 1. This lip is provided to receive the upstanding wall **23** when the steam or vapour bath is in the folded position as shown in FIG. 4. It will be seen from this latter figure that there is a space **47** between the base **11** and the wall **12** in which the steam or vapour generator **33** may be housed in the folded condition. In addition the struts **24** and canopy **26** and resistance box **43** may be housed therein.

A portion **23***a* of the upstanding wall **23** has a hole **46'** therein which, in the open position of the steam or vapour bath **10**, has a thermometer (not shown) disposed therein. The bulb of the thermometer projects into the steam or vapour bath to give an indication of the temperature thereof which indication is visible to a person sitting in the steam or vapour bath. When the steam or vapour bath is folded the thermometer is removed from the hole **46** and housed within the folded steam or vapour bath.

From the foregoing description it will be seen that the present invention concerns a particularly useful folding steam or vapour bath which can be easily arranged either in the operative position shown in FIG. 1 in which the wall **12** of the seat **14** is perpendicular to the wall **12**, and the inoperative position, shown in FIG. 4, in which the wall **12** is adjacent and substantially parallel to the base **11**.

I claim:

1. A bath comprising a cabinet within which a person may be seated, the cabinet including:

a base;

a wall pivotally connected to the base, said base and said wall being adapted to be moved relative to each other between, and to be retained in, an operative position in which the wall is substantially perpendicular to the base, and an inoperative position in which said wall is disposed adjacent and substantially parallel to the base;

a seat which is mounted within the cabinet;

a first portion of the seat which, in the operative position, extends substantially perpendicular to said wall;

a first hinge connected pivotally connecting said first portion of the seat to said wall;

a second portion of the seat which, in the operative position, extends substantially perpendicular to said base;

a second hinge connection pivotally connecting said second portion of the seat to said base;

a third hinge connection pivotally connecting the said first and second portions of the seat, whereby the seat is moved between operative and inoperative positions when the base and wall are similarly moved;

a space beneath the first portion of the seat for reception of a hot vapour air generator;

a plate constituting said second portion of the seat which plate is adapted to prevent direct contact between the steam or vapour or hot air from the generator in said space and the legs of a person seated on the first portion of the seat.

2. A bath as claimed in claim **1** in which a canopy of flexible material is attached to said base and said wall to form the remainder of the cabinet.

3. A steam or vapour bath as claimed in claim **2** in which said canopy is detachable from the base and wall.

4. A steam or vapour bath as claimed in claim **1** in which said base and wall, in the inoperative position, form a case, fastening elements being provided on the base and wall to retain the same in the inoperative position.

5. A steam or vapour bath as claimed in claim **1** in which at least one strut is provided to retain said base and said wall in the operative position.

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