Feb. 15, 1927. 1,617,923

H. J. O'NEILL

SURGICAL BAKER

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Fig. 1.

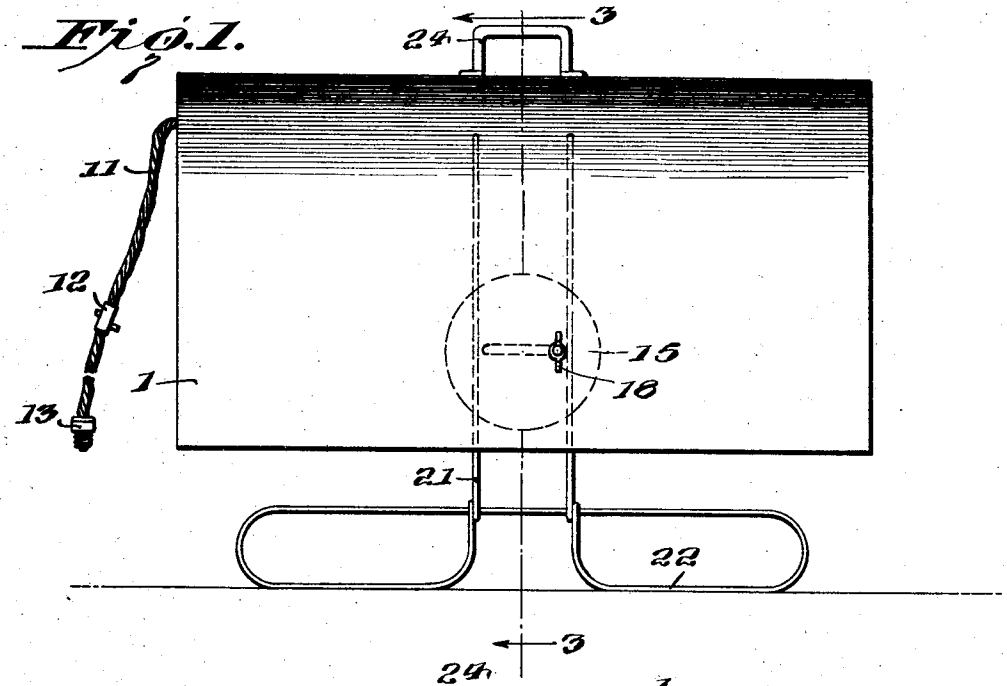
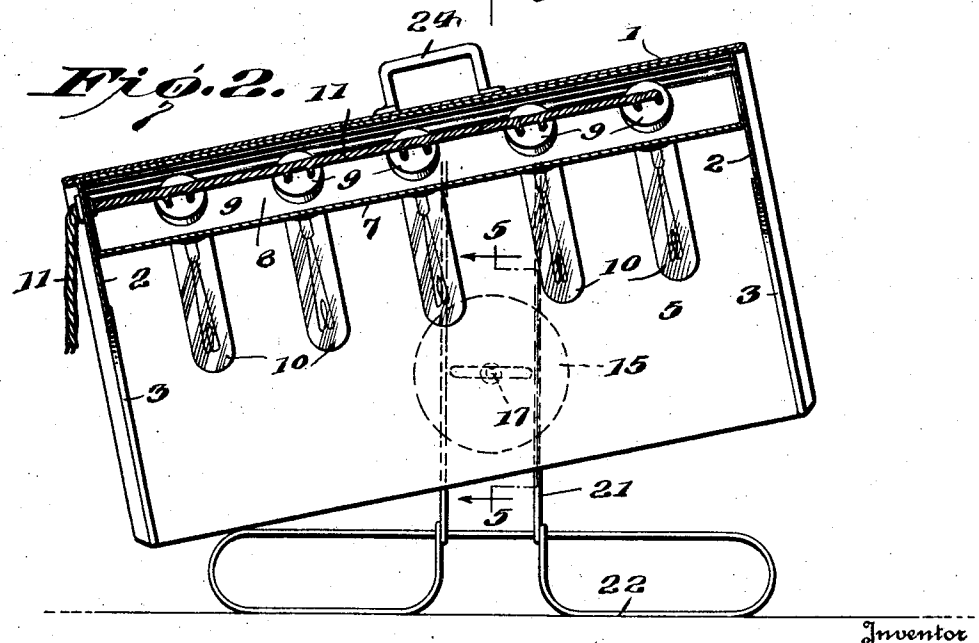


Fig. 2.



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Fig. 3.

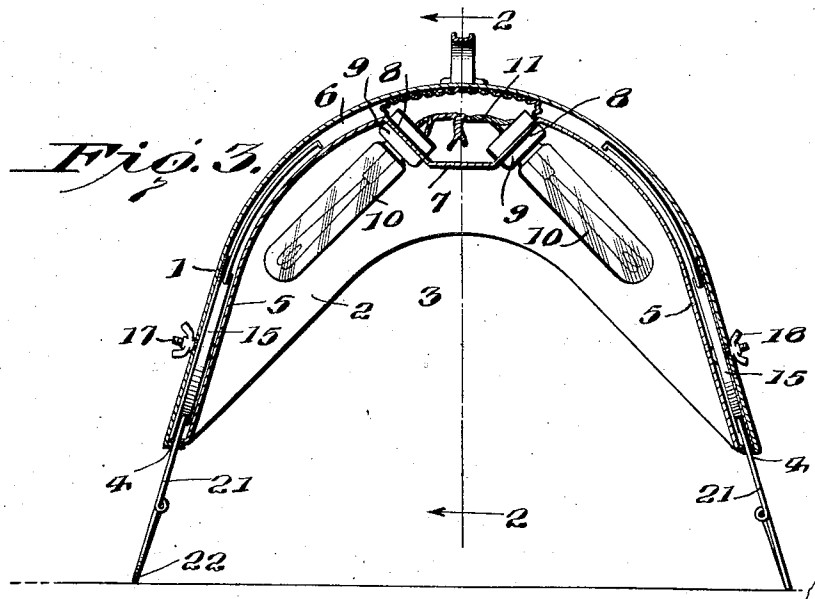


Fig. 5.

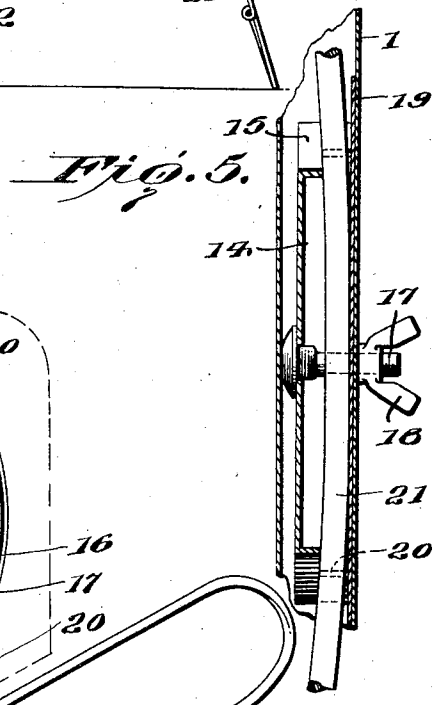


Fig. 4.

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UNITED STATES PATENT OFFICE.

HENRY J. O'NEILL, OF ROCHESTER, MINNESOTA.

SURGICAL BAKER.

Application filed March 4, 1926. Serial No. 92,232.

This invention relates to an improvement in surgical bakers.

The object of the invention is to provide an improved form of surgical bakers which may be used in hospitals in arthritis and rheumatism cases, where it is desirable to soften the tissues, and in connection with ointments and massage treatments. The use of the baker is not confined to such cases but may be used wherever it may be found desirable.

A further object of the invention is to provide for tilting the baker whenever it is used on a foot, or whenever it is desired to have one end of the baker higher than the other in order to gauge the heat for all of the parts of the member being treated.

With these objects in view, the baker includes an outer casing which is partially closed at the opposite ends in order to receive the member for treatment, and located along the top of the casing are a plurality of electric lamp sockets, which receive lamps, the latter extending in opposite directions from the support in order to impart a more uniform supply of heat to the member under treatment. A reflector is placed on the inside of the casing and behind the lamps, in order to direct the heat therefrom toward and upon the treated member. Supports are provided on opposite sides of the casing in the form of bent wires which extend between the casing and the reflector and which pass through slots formed in a tilting disk which is pivotally connected to the casing, but which is provided with means for securing the same in a fixed relation relative to the casing. Whenever it is desired to tilt the device, the casing is moved relative to the wire supports and about the pivot of the pivoting disk, after which it is locked in its tilted position.

In the accompanying drawings:—

Fig. 1 is a side elevation of the invention;

Fig. 2 is a longitudinal section through the same in its tilted position and taken on the line 2—2 of Fig. 3;

Fig. 3 is a transverse sectional view taken on line 3—3 of Fig. 1;

Fig. 4 is a perspective view of the tilting device and supporting frame; and

Fig. 5 is a detail sectional view taken on line 5—5 of Fig. 2.

The surgical baker is provided with an outer metal jacket 1 made substantially semi-circular or arcuately, as shown in Fig. 3, and the ends of this jacket 1 are partially closed by means of end plates 2, which are provided with openings 3 therein for receiving the member to be treated. The lower edges of the outer jacket 1 are bent inwardly as at 4 and mounted upon these inturned lugs 4 is a reflector 5, which is of substantially the same form as the outer jacket 1 but spaced therefrom to provide an intermediate space 6. The reflector 5 terminates at its top in a depressed socket support 7, which is provided with the inclined sides 8, which extend upwardly in opposite directions as clearly shown in Fig. 3. Lamp sockets 9 are mounted in these inclined portions 8 for receiving lamps 10. By reason of the position of the lamp sockets and the inclined portions 8, it will be apparent that the lamps 10 will extend in substantially opposite directions from each other and will thereby provide a more uniform radiation of heat over and about the member being treated.

Connected with the lamp sockets 9 is an electric cable 11, which extends through one end 2 of the baker and is provided with a suitable switch 12 and plug 13 for supplying electric current to the electric lamps 10.

Mounted in the space 6, between the reflector 5 and the outer jacket 4, on each side of the baker, is a pivot disk 14, which is provided with a peripheral flange 15 formed thereon, as clearly shown in Figs. 4 and 5. The disk 14 has a central elongated slot 16 therein, which receives a bolt 17, the latter passing through the slot and through a side of the outer jacket 1 having a wing-nut 18 secured thereon for the purpose of tightening the bolt and clamping the pivot disk in a fixed position relative to the casing. A back plate 19 is interposed between the flange 15 and the outer jacket 1, as clearly shown in Fig. 5. The flange 15 is provided with a plurality of notches 20 formed therein for receiving the upwardly extending rods 21 of the wire support 22. This wire support 22 is made of a single piece of wire bent back upon itself and having the ends bent upwardly, forming the rods 21 which pass through the pivot disk, as clearly shown in Fig. 4. The rods 21 terminate at their upper ends in lugs 23, which are adapted to bear upon the back surfaces of the reflector 5, in order to support the outer ends of these rods.

In operation, the plug 13 is connected

with a suitable source of electric current for illuminating the lamps 10 when the device is placed over the member to be treated and these lamps will effectively supply heat to the member under treatment, and due to the relation of the lamps to each other, they will heat the treated member on as many sides as possible, the reflector 5 serving to direct the heat about the treated member. The handle 24 is secured on top of the outer jacket 1 for the purpose of tilting the jacket with relation to the support and, in order to accomplish this tilting operation, the wing-nuts 18 are loosened on the bolts 17, which releases the clamping connection between these bolts 17 and the pivot disk 14 and also between the flange 15 and the back plate 19, which action allows the baker to be moved about the pivot bolts 17 into any adjusted position as for instance as shown in Fig. 2.

The slot 16 formed in the pivot disk 14 serves to allow this disk to be moved relative to the bolt 17, thereby permitting of the pivot action between the support 22 and the outer jacket 1 of the baker.

It will thus be seen that this improved form of baker is both simple and inexpensive, while at the same time it is so constructed as to effectively supply heat to the member under treatment and to allow the baker to be moved relative to this member to supply a uniform amount of heat to all parts thereof.

I claim:

1. A device of the character described including an arched outer casing, an arched reflector spaced from and within said outer casing, side supporting frames interposed between the reflector and casing, a pivot disk pivotally connected with the outer casing and connected with the supporting frame, and means for locking said pivot disk against pivotal movement.

2. A device of the character described including an arched outer casing, an arched reflector spaced from and within said outer casing, a supporting frame interposed between the reflector and casing, a pivot disk pivotally connected with the casing, said pivot disk having a flange formed thereon and having openings provided in the flange for receiving the supporting frame, and means for locking the pivot disk against pivotal movement relative to the casing.

3. A device of the character described including an arched outer casing, a reflector spaced from and within said casing, a supporting frame interposed between the reflector and casing, a pivot disk for each of said supporting frames, said disk having a slot formed therein, a bolt extending through said slot and through the casing for pivotally connecting the pivot disk to the casing, means for holding the pivot disk against pivotal movement relative to the casing, said pivot disk having a flange formed on the periphery thereof and having notches formed in said flange for receiving the supporting frame, and lugs formed on the ends of the supporting frame for supporting these ends relative to the casing.

4. A surgical baker including an outer casing, a reflector spaced from and within said casing, a lamp support mounted longitudinally of the casing, and intermediate of the reflector, electric lamps extending laterally from the lamp support, a supporting frame interposed between the reflector and casing, a pivot disk pivotally connected with the sides of the casing and connected with the supporting frame, and means for locking said pivot disk against pivotal movement.

5. A surgical baker including an outer casing, a reflector spaced from and within said casing, a lamp supported centrally of the said casing and intermediate of the reflector, an electric lamp extending laterally from the lamp support, a supporting frame interposed between the reflector and outer casing, and a pivot disk pivotally connected with the casing, said pivot disk having a flange formed thereon and having openings provided in the flange for receiving the supporting frame and means for locking the pivot disk against pivotal movement relative to the casing.

6. A device of the character described including a casing, a supporting frame therefor, a pivot disk pivotally connected with the casing, said pivot disk having a flange formed thereon and having openings provided in the flange for receiving the supporting frame and means for locking the pivot disk against pivotal movement relative to the casing.

7. A device of the character described including a casing, supporting frames for the opposite sides of the casing, a pivot disk for each of said supporting frames, said disk having a slot formed therein, a bolt extending through said slot and through the casing for pivotally connecting the pivot disk to the casing, means for holding the pivot disk against pivotal movement relative to the casing, said pivot disk having a flange formed on the periphery thereof and having notches formed in said flange for receiving the supporting frame, and lugs formed on the ends of the supporting frame for supporting these ends relative to the casing.

In testimony whereof I affix my signature.

HENRY J. O'NEILL.