

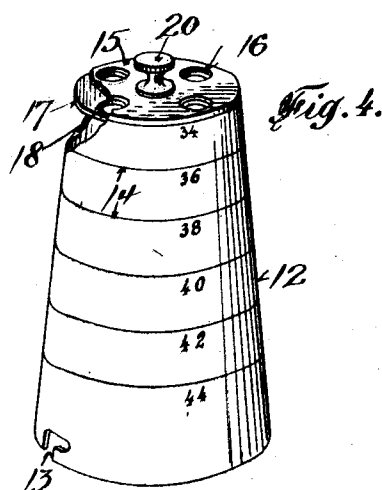
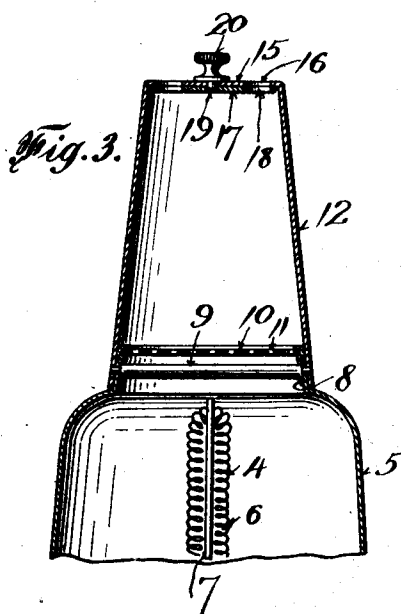
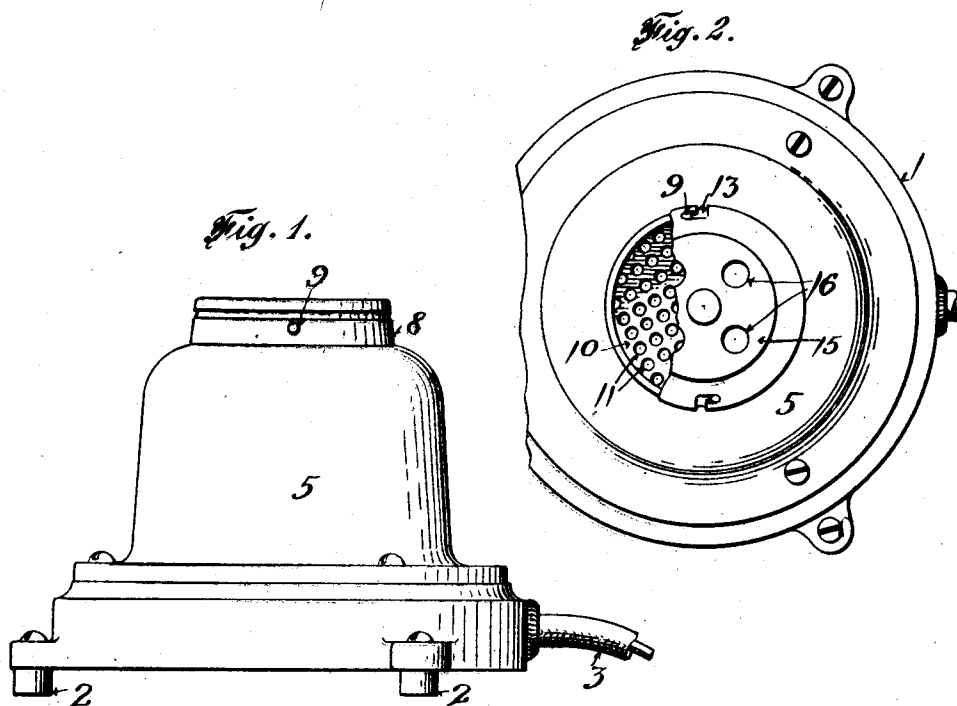
June 9, 1925.

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1,541,375

HEATER FOR SHAPING EYEGGLASS FRAMES

Filed June 17, 1924



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HEATER FOR SHAPING EYEGLASS FRAMES.

Application filed June 17, 1924. Serial No. 720,515.

To all whom it may concern:

Be it known that we, HERMAN NEUWIRTH and JACOB BERNSTEIN, citizens of the United States, and residents of the borough of Brooklyn, county of Kings, and city and State of New York, have jointly invented certain new and useful Improvements in Heaters for Shaping Eyeglass Frames, of which the following is a specification.

It is common practice for opticians to reshape or resize spectacle frames of composition material, such as celluloid or the like, in order to make the apertures in the frame fit to some particular lens. The object of the present invention is to provide a simple and efficient device for heating and sizing the spectacle frame and to provide a frustro conical mandrel of hollow shape over which the spectacle frames are adapted to be applied for heating and shaping, together with means within the base of the device, and consisting preferably of an electric heating member for heating the mandrel, and the mandrel is made to be readily detached from the base in order that portions of the spectacle frame, such as the bow, which extends over the ear, may be heated close to the heating member in order to permit it to be reshaped. In addition, we provide a simple and efficient shutter at the top of the mandrel for controlling outlet apertures of the mandrel in order to regulate the temperature of the mandrel to suit the requirements.

In the drawing forming part of this application,—

Figure 1 is an elevation of the device showing the mandrel removed for heating various parts of the spectacle frame,

Figure 2 is a plan view of the device with the mandrel in place, a portion of the mandrel being broken away,

Figure 3 is a vertical, sectional view of the device with the mandrel in position for use, and

Figure 4 is a perspective view of the mandrel detached with a portion broken away at the top.

As shown in Figures 1 and 2, there is a base ring 1 having feet 2 secured thereto to use on a table or other support, and a cable 3 for conducting the current from any source of supply, passes through this ring 1 and the current passes through the heating unit 4 supported within the base member 5 which rests upon and is secured to the ring

1. The form of heating unit may be varied but we prefer to use one similar to that which is shown in our copending application, Serial No. 680,315. This comprises a coil of resistance wire 6 suitably arranged on a support 7 of mica or other insulating material. The upper portion of the base is contracted to form a frustro conical neck 8 through which projects a shaft 9 the ends of which extend beyond the outer limits of the neck 8. The top of this neck 8 is closed by means of a plate 10 which is provided with a number of apertures 11 throughout its surface and the purpose of this plate is to prevent any part of the spectacle frame touching the heating unit or coming so close to it as to set it afire, and the perforations in the plate permit the heat to pass upwardly through it. When any portion of the spectacle frame is to be reshaped other than the reshaping to accommodate the lens, the device may be used as shown in Figure 1, so that the portion of the frame which is to be reshaped may be applied close to the source of heat.

There is a frustro conical mandrel 12 of hollow construction, the lower end of which is adapted to fit over the neck 8 and it has bayonet slots 13 in its lower edge which receives the projecting ends of the pin 9. The mandrel is adapted to be placed over the neck 8 until the ends of the pin 9 enter the bayonet slots and the mandrel is then turned to lock the bayonet joint, and the mandrel is thus removably fixed to the base. When the mandrel is thus applied to the base, the heat from the heating unit passes upwardly through the plate 10 and it serves to heat the entire mandrel from the interior. The spectacle frame which is to be resized is placed over the top of the mandrel and it is pressed downwardly thereon until the material of the frame has become softened sufficiently to permit the frame to be forced down upon the mandrel to one of the indicating lines 14 according to the size of the lens to be fitted into the frame. As soon as the frame has been extended to the desired size it is removed and chilled by dipping into water. The top of the mandrel is closed by means of a cap 15 which is provided with several apertures 16 extending through it. Immediately below this cap there is a disc 17 adapted to act as a shutter for either entirely closing the apertures in the cap 15 or for regulating the

extent of opening therein, and for this purpose the shutter 17 is provided with a number of apertures 18 adapted to register partly or wholly with the apertures 16 in the cap. The shutter is mounted on a pin 19 which extends through the cap and is provided with a small operating knob 20 above the cap, for adjusting the position of the shutter. By regulating the shutter it is possible to control the temperature of the mandrel by regulating the release of the heat within the mandrel. In this manner and by this simple means we are able to secure a fine regulation of the temperature of the mandrel without resorting to complicated adjustment of the current in the electric heating unit.

Having described our invention, what we claim is:

1. A heater of the class described comprising a base or bottom member having a chamber therein, a heating unit in said chamber, and a hollow, frustro-conical mandrel detachably secured to said base so that its interior will receive the heat from said base chamber.

2. A heater of the class described comprising a base or bottom member having a chamber therein, a heating unit in said chamber, said base having a frustro-coni-

cal top neck, and a hollow, frustro-conical mandrel detachably connected over said neck so that its interior will receive the heat from said base chamber.

3. A heater of the class described comprising a base or bottom member having a chamber therein, a heating unit in said chamber, a foraminous dividing wall over said heating unit, and a hollow, frustro-conical mandrel detachably secured to said base so that it receives therein the heat from said chamber, the mandrel being removable from said base to provide closer access to said heating unit, said foraminous dividing wall preventing direct contact between the article treated and said heating unit.

4. A heater of the class described comprising a base or bottom member having a heating unit therein, a hollow, frustro-conical mandrel on said base, having an apertured top wall, and a movable shutter adapted to regulate the apertures in said top wall for the purpose of regulating the temperature of said mandrel.

Signed at the city, county and State of New York, this 5th day of June, 1924.

HERMAN NEUWIRTH.
JACOB BERNSTEIN.