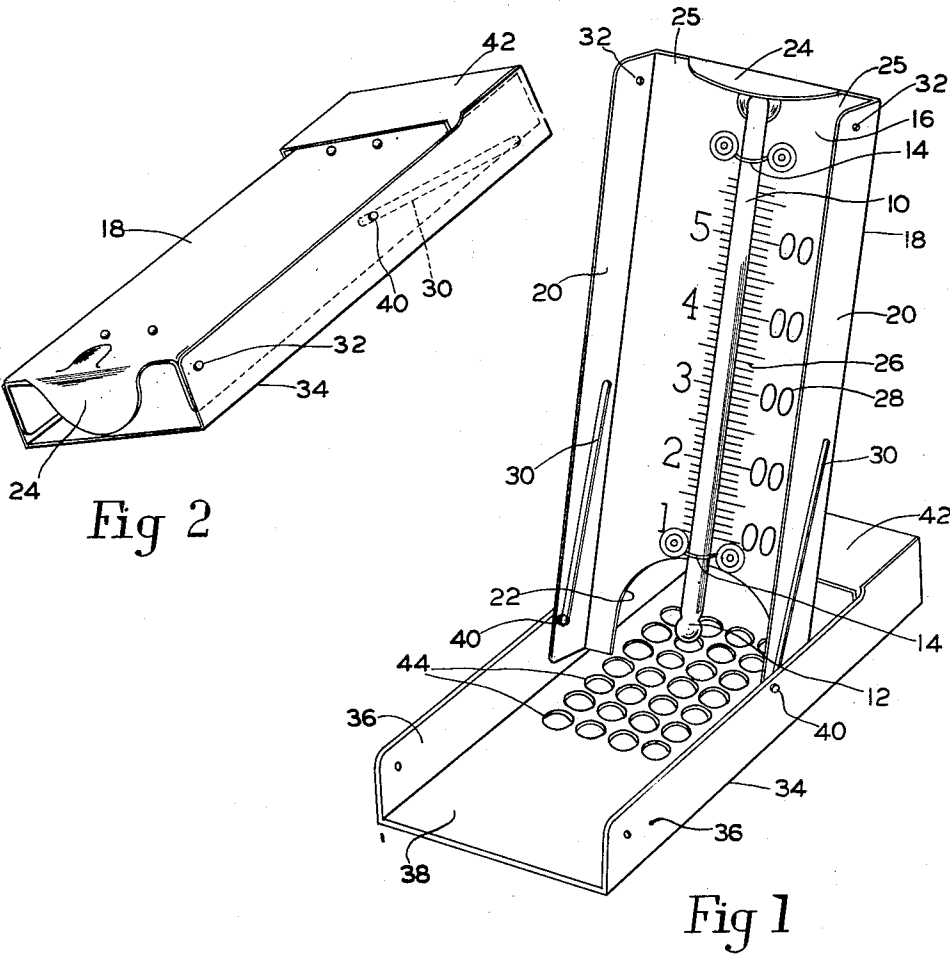


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S. S. BAKER
THERMOMETER

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THERMOMETER

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1 Claim. (Cl. 206—44)

This invention relates to thermometers and more particularly to thermometers of the tube and bulb type for testing the temperature of an oven and the like.

One object of the invention is to provide a portable device which will be self-supporting in use.

Another object of the invention is to completely protect the fragile tube and bulb from breakage during use and in transportation or storage.

Another object of the invention is to reduce to a minimum the time required to test oven temperatures.

Another object of the invention is to increase the accuracy of thermometers of this general type.

Another object of the invention is to facilitate reading of the temperatures indicated by the thermometer.

Another object of the invention is to construct the device of few parts requiring minimum care and attention and being economical to manufacture and purchase.

Other objects and advantages will become apparent from the following description taken in connection with the accompanying drawing wherein:

Fig. 1 is a perspective view of a device embodying the invention shown in the position of use, and

Fig. 2 is a similar perspective view but showing the device when not in use.

Referring more particularly to the drawing the usual tube 10 and bulb 12 of the thermometer are shown in Fig. 1 as being supported by spaced clips 14 against the inner face 16 of a cover member 18. The cover member 18 may be formed of a single rectangular sheet of metal or other suitable material which has its side edges 20 bent substantially perpendicular to the inner face 16, forming a channel section. The tube 10 and bulb 12 are together somewhat shorter in overall length than the cover member 18, but the bulb and the adjacent portion of the tube 10 are removed from contact with the inner face 16 by the provision of a cut-away portion 22 in the cover member 18 exposing these parts. The opposite end of the cover member 18 may be provided with a lip 24 extending over the end of tube 10 and forming a protective guard therefor. Preferably, the lip 24 extends across the median portion only of the cover leaving open portions 25 on each side thereof.

Suitable indicia are provided for the thermometer comprising graduation lines 26 and numerals

28 extending between the spaced clips 14 on the inner face 16. The indicia may be marked in any suitable manner, a preferred method being by etching them into the metal of the cover member 18, then filling the impressions with a black lacquer which is afterwards baked. The described method results in a scale possessing a high degree of legibility under the conditions for which the device is designed to be used.

A slot 30 is formed in each of the side edges 20 adjacent the cut-away portion 22 and extends at an angle from the outer portion thereof to the inner face 16 of the cover member 18. These slots 30 are located opposite one another and are of similar length and angularity. The side edges are further provided with a pair of buttons 32 which project slightly beyond the surface of the channel section at the end having the lip 24 thereon.

A base member 34 is provided for the device and may also be made of metal or other suitable material in channel section form as in the case of the cover member 18. In this instance, the side edges 36 are of substantially the same height as the edges of the cover member but the inner face 38 is sufficiently wider than the inner face of the cover to permit the latter to slide within the base member 34. This construction provides the device with a closed position as shown in Fig. 2.

The cover member 18 is secured to the base member 34 in a manner permitting both pivotal and longitudinal slidable movement of the one with respect to the other. To this end, the side edges 36 of the base member 34 are provided with oppositely disposed pins 40 located substantially midway between the ends of the base member and in close proximity to the outer portions of the side edges. The slots 30 are adapted to engage with these pins 40 and provide the desired movements while preventing undesired detachment of the base from the cover.

The end of the base member 34 which is adjacent the lip 24 when the device is in closed position is left open to accommodate the lip. The opposite end of the base member, however, is provided with a hood 42 which accommodates the open end of the cover when the device is in closed position and serves to support the cover when in open position. The hood 42 may be formed by bending over a portion of material of the base portion 34 left for this purpose, or a separate section may be secured thereto if desired.

In order to provide free circulation of the heat

currents around the bulb 12, the base member 34 is provided with a plurality of apertures 44 therein, located in the median portion of the inner face 38 where the bulb is located in the open position of the device.

Due to this construction the cover member may be raised and retained in open position by means of the pin and slot engagement, together with the support provided by the edge of the hood 42. The thermometer is then in an upright position and can easily be read. The flat base construction permits the device to be slid along the shelf or other projection in an oven and provides a stable support against tipping. The large number of apertures provided in the base member allows the thermometer to take advantage of numerous convection currents circulating in the oven and provide an accurate indication of the temperature. Moreover, the cutaway portion cooperating with the apertures provide, in effect, the same conditions as would prevail if the tube and bulb were suspended freely in the oven and subjected to complete exposure to heat currents from all directions. Accurate and speedy readings are thus secured.

When the test is completed the device may be removed easily from the oven and closed for transportation or storage until again required. It will be observed that a single movement of the hand will serve to pivot the cover member on the base and then slide the former under the closed end to the position shown in Fig. 2. The buttons on the cover member frictionally engage

the side edges of the base and lock the members together. Due to the channel section protecting the sides, and the lip and hood protecting both ends, there is no opportunity for other articles being carried or stored in the same place to enter the device and damage the bulb and tube. These fragile elements are housed within a substantially closed box-like construction and are thus adequately protected. It will further be observed that the lip permits ready opening of the device by inserting the fingers on either side thereof for this purpose.

I claim:

A combined case and stand for a thermometer having a bulb, comprising a base member of channel section, a hood extending across the channel and closing one end of said base member, a plurality of apertures in said base member for admitting heat currents to the bulb, a cover member of channel section adapted to fit within said base member, a lip projecting from the end of the cover opposite said hood and forming a partial closure for the opposite end of said base member, a cutaway portion in the end of said cover opposite said lip within which the bulb may be located, and a slot in one of said members coacting with a pin in the other for causing both pivotal and sliding movement therebetween to open and closed position, said members forming a box-like structure in the closed position with the open end of the cover within said hood.

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