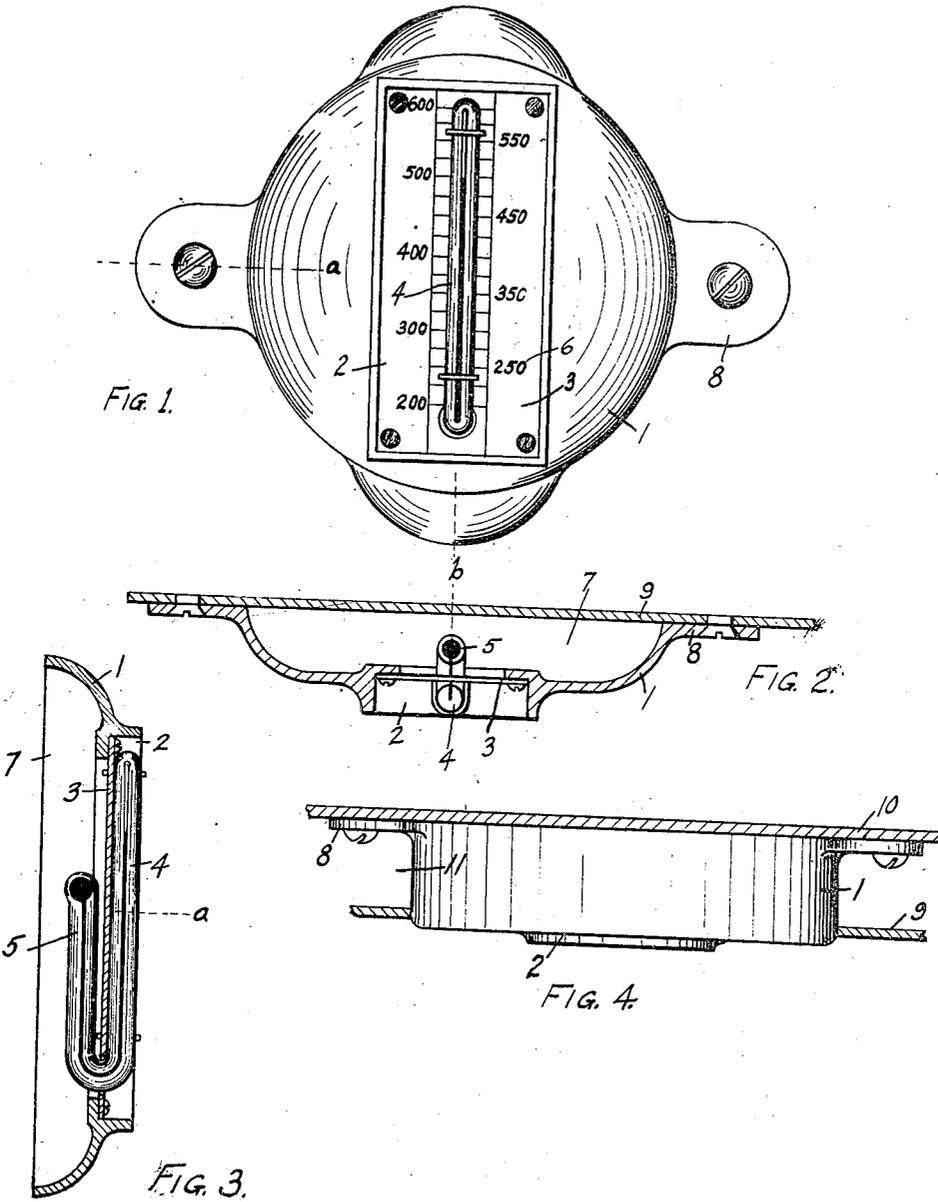


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OVEN THERMOMETER.
APPLICATION FILED NOV. 4, 1918.

1,298,054.

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Witness:
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HORACE B. KERLIN, OF HAMILTON, OHIO.

OVEN-THERMOMETER.

1,298,054.

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To all whom it may concern:

Be it known that I, HORACE B. KERLIN, a citizen of the United States, residing at Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Oven-Thermometers, of which the following is a specification.

This invention pertains to improvements in that class of thermometers adapted for attachment to the door of an oven, and the invention will be readily understood from the following description taken in connection with the accompanying drawing in which:—

Figure 1 is a face elevation of an oven thermometer exemplifying my invention:

Fig. 2 a horizontal section of the same, in the plane of line *a* of Figs. 1 and 3:

Fig. 3 a vertical section in the plane of line *b* of Figs. 1 and 2: and

Fig. 4 a plan of the thermometer, illustrating a modified form of casing.

In the drawing, referring to Figs. 1, 2 and 3:—

1, indicates the general casing of the instrument:

2, a vertical angular recess in the front thereof:

3, a scale-plate removably secured to the back of recess 2 at a distance from the front of the recess:

4, a thermometer-tube secured against the front face of the scale-plate:

5, an upwardly bent portion of the thermometer-tube at the rear of the scale-plate, the upper termination of this upwardly bent portion containing the bulb of the tube:

6, graduations upon the face of the scale-plate:

7, a chamber in the casing to the rear of scale-plate 3, the scale-plate separating the two chambers 2 and 7:

8, ears projecting from the casing to receive screws to attach the casing to a plate forming part of the oven-door; and

9, the oven-door, to the exterior of which the casing 1 is attached.

The scale-plate separates the casing into separate compartments 2 and 7, the former of which contains the thermometer tube 4, the latter chamber containing the bulbed upturned portion 5 of the tube, the back wall of the chamber 7 being formed by the oven-door to which the casing is attached. The compartment 7 being separated from the oven by the oven-door 9, the normal reading

of the graduation 6 would indicate a temperature within the oven, say at a point midway of the depth of the oven. These graduations on the scale-plate may be properly calibrated by comparison with a thermometer having its bulb disposed at the center of the oven, the scale-plate thus indicating actual oven temperature.

The arrangement dispenses with the projection of any portion of the thermometer inwardly beyond the oven door 9, thus providing the oven-door with an unobstructed surface over which utensils, etc., may be freely slid in case the door is of the drop door type, and at the same time the bulb portion of the thermometer is well protected, the outwardly projecting walls of compartment 2 serving to protect the visible portion of the thermometer tube.

In case the door has a double thickness, with a space between them as is not unusual in oven door construction, the construction may be as illustrated in Fig. 4 in which 9 indicates the outer wall of the door; 10 the inner wall; and 11 the space between them. In this case the casing 1 may be attached to the inner wall 10 of the door, and the outer wall 9 may be provided with a perforation to permit the forward protrusion of the bulged portion of the tube avoids the protrusion of this portion into the oven and permits the desired series of graduations to be included in a small vertical compass.

I claim:—

1. An oven thermometer comprising, a casing provided with a front compartment and a rear compartment, a scale-plate separating the two compartments and bearing compensated graduations to indicate oven temperature to the rear of the oven door portion, an oven-door-portion constituting the rear wall of the rear compartment, a thermometer-tube portion secured to the front of the scale plate, and a bulbed portion forming a prolongation of the thermometer-tube disposed in the rear compartment of the casing at the rear of the scale-plate, combined substantially as set forth.

2. An oven thermometer comprising, a casing provided with a front compartment and a rear compartment, a scale-plate separating the two compartments and bearing compensated graduations to indicate oven temperature to the rear of the oven door portion, an oven-door-portion constituting

the rear wall of the rear compartment, a thermometer-tube portion secured to the front of the scale plate, and an upturned bulbed portion forming a prolongation of the thermometer-tube disposed in the rear compartment of the casing at the rear of the scale-plate, combined substantially as set forth.

3. An oven thermometer comprising, a casing having a forwardly open rectangular recess, a scale-plate secured at a distance from the front of said recess and separating the forwardly open recess from a rear recess in the casing and bearing compensated graduations on its front, means for securing the casing against the front of an oven-door-portion, a thermometer-tube secured against the front of the scale-plate, and a bulbed

thermometer tube-portion disposed in the rear recess of the casing, combined substantially as set forth.

4. An oven thermometer comprising, a casing having a rear compartment and a forwardly open front compartment, means for securing said casing against an oven-door-portion, a scale-plate separating the two compartments of the casing and bearing compensated graduations on its front, a thermometer-tube secured in front of the scale-plate, and a bulbed thermometer tube portion disposed in the rear chamber of the casing, combined substantially as set forth.

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