To all whom it may concern:

Be it known that I, Lloyd Groff Copeman, a citizen of the United States of America, residing at Flint, in the county of Genesee and State of Michigan, have invented certain new and useful Improvements in Thermostats and Thermometers, of which the following is a specification, reference being had therein to the accompanying drawings.

It is the object of the invention to obtain a construction of thermometer which is applicable to an oven or other heater and which is provided with a heat controlling means for limiting the temperature to any desired degree.

The invention consists in the construction as hereinafter set forth.

In the drawings—Figure 1 is a front elevation; Fig. 2 is a side elevation partly in section.

A is a casing within which is arranged any suitable means operating upon change in temperature for communicating movement to an index B traveling over a dial or indicator C. As the specific construction of the index operating mechanism forms no part of the present invention it is not illustrated. D is a transparent face for the casing A arranged in front of the dial C and spaced therefrom. E is a second index hand the hub of which is arranged preferably in axial alinement with that of the index B but separated therefrom and movable in a parallel plane. The index E is provided with an operating knob F which is arranged outside of the transparent face D, the latter being formed of electrical insulating material. The shank G of the index E engages an electrical connection H which extends outside of the case A and is insulated therefrom. There is also preferably a cap member I for holding the transparent face upon the casing A, and this cap member is insulated both from the case and from the member H by suitably interposed insulation I'.

The index hands B and E are provided with cooperating electrical contact members J and K, which when the hands are in registration will come into contact with each other. An electric circuit L is arranged to have one lead thereof extending to the member H, while the other lead L' is connected with the index hand B through the operating connections therefor, and the metallic case A. Thus whenever the index hands B and E come in contact the circuit L will be closed and suitable heat controlling or heat regulating devices not shown will be operated by the closing of this circuit.

What I claim as my invention is:

1. The combination with a case having a dial, of a thermometer having an index hand movable over said dial, a transparent face in front of said dial, a second index movable over said dial to different positions of adjustment, a knob for operating said second index arranged outside of the transparent face, co-acting electrical contacts on said index members adapted to engage on the registration thereof, the electrical lead to one of said contacts being through said case, and a cap for holding the transparent face upon the casing, said cap being insulated from said case.

2. The combination with a case having a dial, of a thermometer having an index hand movable over said dial, a transparent face in front of said case, a cap holding said face in position on said case, said cap partially surrounding said case and insulated therefrom, a second index axially arranged with the first index, a knob for actuating said second index extending outward through said transparent face cooperating electrical contacts on said index members adapted to engage upon the registration thereof, the electrical lead to one of said contacts being through said case and the other electrical connection being interposed between and insulated from said case and cap.

In testimony whereof, I affix my signature in presence of two witnesses.

LLOYD GROFF COPEMAN.

Witnesses:
E. D. BLACK,
DELLA G. SMITH.