

J. H. GUEST.

Thermostat.

No. 95,796.

Patented Oct. 12, 1869.

Fig. 1

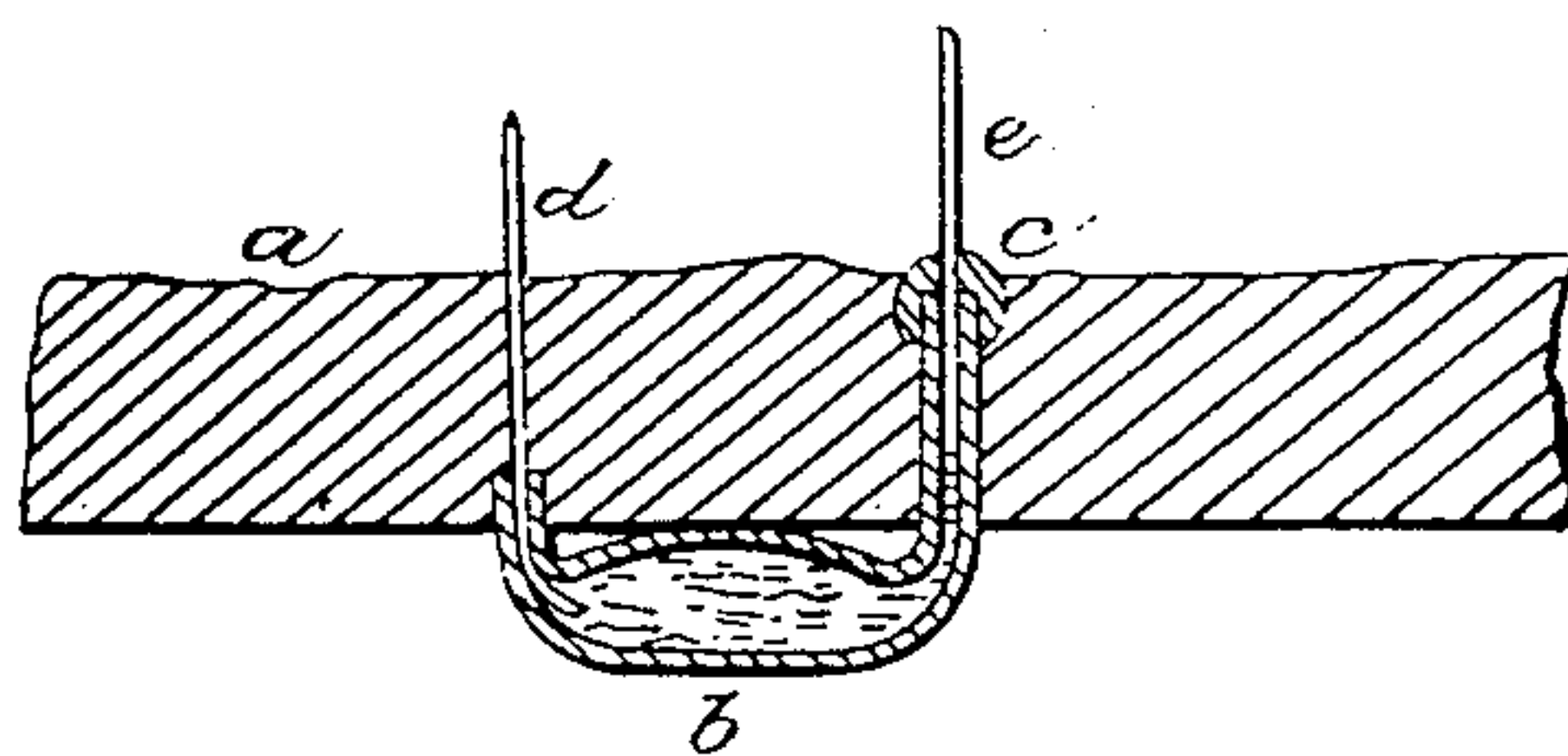
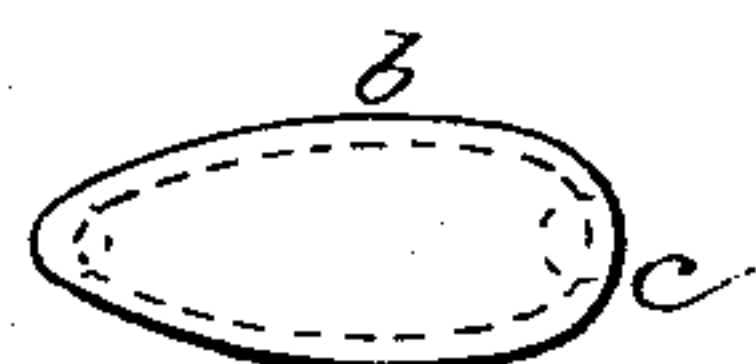


Fig. 2



Witnesses

Charles Smith

Geo. S. Buckney

Inventor

John H. Guest

per L. W. Sewell

United States Patent Office.

JOHN H. GUEST, OF BROOKLYN, NEW YORK.

Letters Patent No. 95,796, dated October 12, 1869.

IMPROVEMENT IN ELECTRICAL FIRE-ALARM THERMOMETERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, JOHN H. GUEST, of Brooklyn, in the county of Kings, and State of New York, have invented and made a new and useful Improvement in Electrical Fire-Alarm Thermometers; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a vertical section of said thermometer, as introduced in a ceiling, and

Figure 2 is an inverted plan of the same.

Similar letters denote the same parts.

Thermometers have before been applied in buildings so that the rise of the same, in case of fire, shall sound an alarm by a magnet. These thermometers have been expensive and not rapid in their operation.

My invention is to furnish a neat, cheap, efficient, and easily-applied thermometer, and one that will not be liable to be broken, and that will not be prominently visible, so that several of these thermometers can be applied in the same room, if it is large, and that without attracting particular attention, even if the room is plastered and finished with elaborateness or beauty.

The heat from a fire always rises, hence the thermometer must be applied in the ceiling, and the fire-alarms heretofore constructed have been objectionable in most ceilings in consequence of their prominence.

The nature of my said invention consists in an electrical fire-alarm thermometer, in which the expansion-stem is bent off at right angles, or nearly so, to an elongated or flattened bulb, and the platina conductors are inserted, one through the glass of the bulb and the other into the expansion-tube.

This construction allows the expansion-tube to be plastered into a small hole in the ceiling, and requires

no other support, and the elongated or flattened bulb is the only thing visible below the ceiling, and the same is in a position to be affected by the heat that may arise from a fire even before the same has spread or warmed the entire room.

In the drawing—

a represents a portion of the plastering of a ceiling;

b, the elongated bulb; and

c, the expansion-tube, which is short, and adapted to being inserted in the plaster and cemented into place, leaving the bulb slightly projecting below the ceiling, or in a recess therein.

The conductor *d*, of platina, is introduced through the bulb into the mercury, the glass being melted around the same, and the conductor *e* is inserted into the expansion-tube, the end being placed in such position relatively to the mercury that the temperature will have to rise to a certain point before the electrical circuit will be completed by the expansion of the mercury.

The conductor *e* is to be secured into the expansion tube by sealing-wax or cement.

This thermometer may be applied to a boarded or wooden ceiling, by inserting the tube *c* into a hole.

What I claim, and desire to secure by Letters Patent, is—

An electrical fire-alarm thermometer, formed with the expansion-tube bent at an angle to the bulb, so as to be inserted in the ceiling, and fitted with the platina conducting-wires, as and for the purposes set forth.

In witness whereof, I have hereunto set my signature, this 13th day of April, 1869.

J. H. GUEST.

Witnesses:

CHAS. H. SMITH,

GEO. T. PINCKNEY.