No. 610,079. Patented Aug. 30, 1898.

J. L. NIX.

THERMOMETER FOR INCUBATORS.

(Application filed Nov. 1, 1897.)

(No Model.)

Fig. 1.

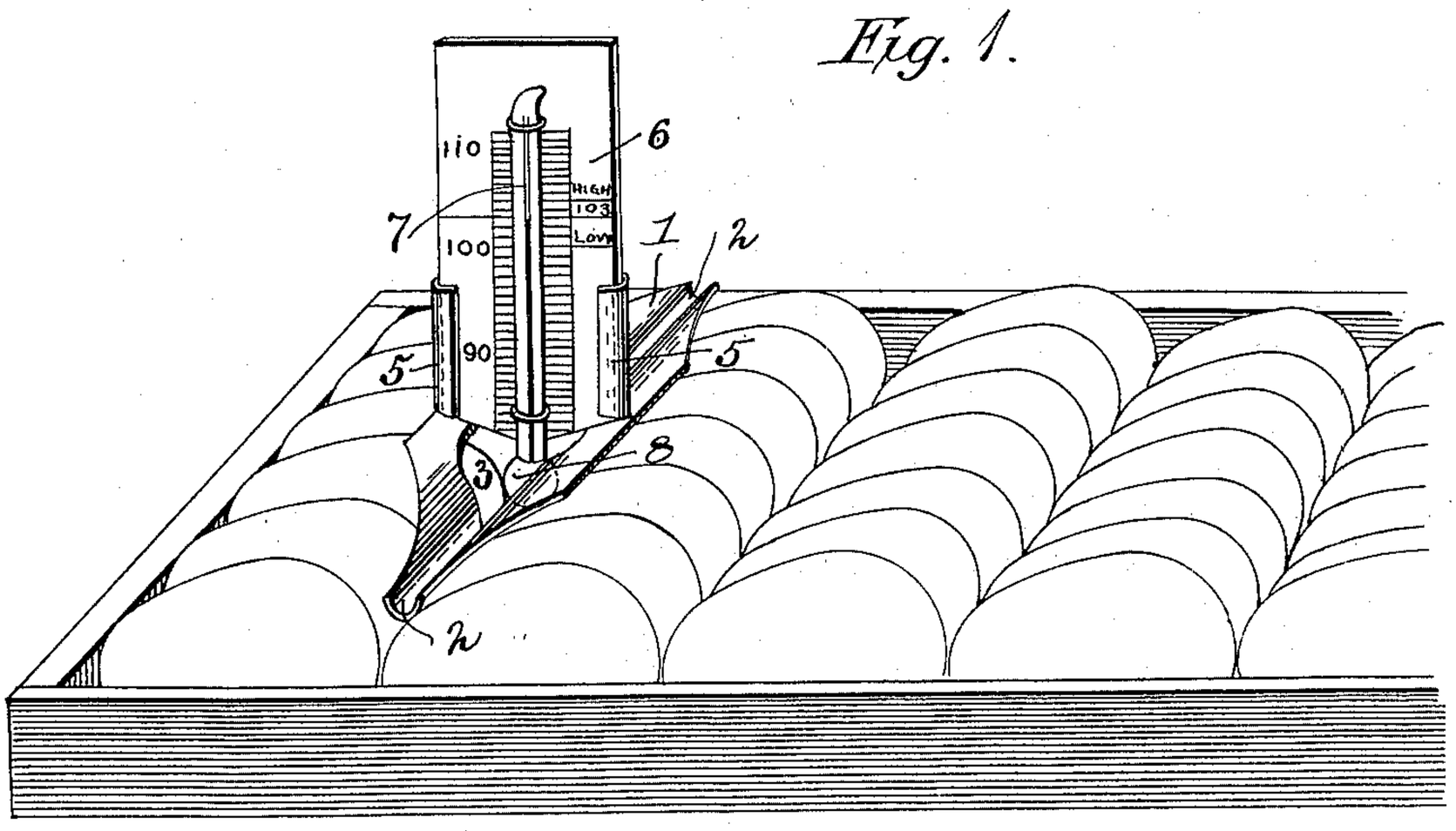

Fig. 3

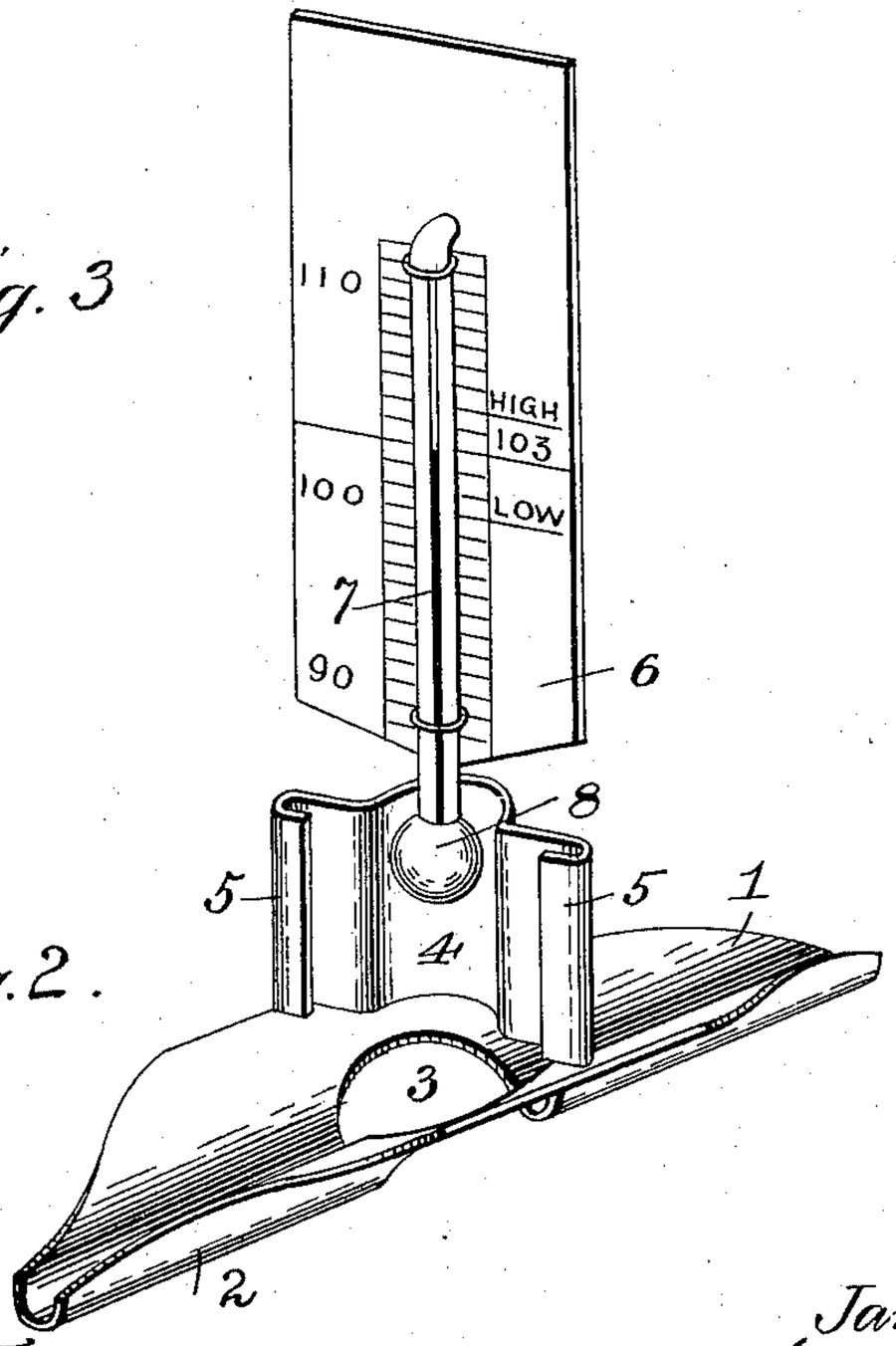

Fig. 2.

Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES LOVE NIX, OF HOMER CITY, PENNSYLVANIA.

THERMOMETER FOR INCUBATORS.

SPECIFICATION forming part of Letters Patent No. 610,079, dated August 30, 1898.

Application filed November 1, 1897. Serial No. 657,087. (No model.)

To all whom it may concern:

Be it known that I, JAMES LOVE NIX, a citizen of the United States, and a resident of Homer City, in the county of Indiana and State of Pennsylvania, have invented certain new and useful Improvements in Thermometers for Incubators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to thermometers for use in connection with incubators for ascertaining the temperature of the eggs contained therein; and its object is to provide an improved construction of the same which may be supported in an upright position, with the bulb resting upon or between two adjoining eggs.

In taking the temperature of eggs in incubators it is the usual practice to lay the thermometer flat upon the eggs, in consequence of which the mercury is liable to run to the top of the tube, and in case the temperature falls the force of gravity or cohesion is not sufficient to bring the mercury down. In some cases stand-up thermometers have been employed; but in these the bulb does not touch the eggs, which is very unreliable, as to ascertain accurately the temperature two of the eggs should be touched by the bulb.

My invention is designed to obviate the above and other objections; and it consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a thermometer for incubators, showing the same as it appears in use. Fig. 2 is a similar view of the base, the thermometer being removed. Fig. 3 is a view of the bulb, the tube, and the graduated plate removed from the base.

In the said drawings the reference-numeral 1 designates the base, which may be of any suitable material, such as metal or wood, but is preferably formed of a metal plate the sides of which are curved upwardly from end to end, forming a central longitudinal keel 2, adapted to rest between two rows of eggs in an incubator-tray, and thus be held in place, the said sides resting on and being supported by the eggs. This plate is formed with a central opening 3 and with an upwardly-projecting transverse plate 4, the sides of which are turned inwardly, forming guide-flanges 5.

The numeral 6 designates the usual graduated plate, to which is secured the thermometer-tube 7, provided with the mercury-bulb 8 at the lower end, which projects down below the lower end of said plate. The side edges of the plate 6 engage with the guide-flanges 5, so that it may be adjusted vertically, so as to accommodate the bulb to different-sized eggs.

In practice the base is placed between two rows of eggs, and the mercury-bulb resting upon two opposite eggs the correct temperature of the eggs will be shown. By moving the graduated plate up or down the bulb may be adjusted to suit different-sized eggs.

Some of the advantages of my invention are the scale or graduated-plate faces, the operator in an upright position enabling it to be readily seen. It is adapted for use with different-sized eggs. The bulb is adjustable, so that the temperature can be taken at any point desired between two of the eggs, and the device is not liable to upset in removing the tray or by rolling of the eggs.

While I prefer the form of base or support shown and described, I do not wish to be limited to such construction, as it may consist of a plate with an opening for the passage of the bulb.

Having thus fully described my invention, what I claim is—

1. In a thermometer for incubators, the combination with the base having a hole or opening therein, and the upwardly-projecting plate secured thereto formed with guide-flanges, of the adjustable graduated plate engaging with said flanges, the mercury-tube secured to said graduated plate, and the bulb projecting below the bottom of the graduated plate and through the opening in the base, substantially as described.

2. In a thermometer for incubators, the combination with the base, consisting of a plate having its sides curved upwardly forming a longitudinal keel, and having a hole or

opening and the plate located above said opening having its ends turned inwardly forming guide-flanges, of the graduated plate, the mercury-tube secured thereto, and the bulb extending below said graduated plate and through the openings in the base, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JAMES LOVE NIX.

Witnesses:

JOHN H. HILL,

H. S. THOMPSON.