No. 815,557. PATENTED MAR. 20, 1906

F. T. PORTER.

ALARM FOR INCUBATORS.

APPLICATION FILED MAY 20, 1905.

FIG. 1

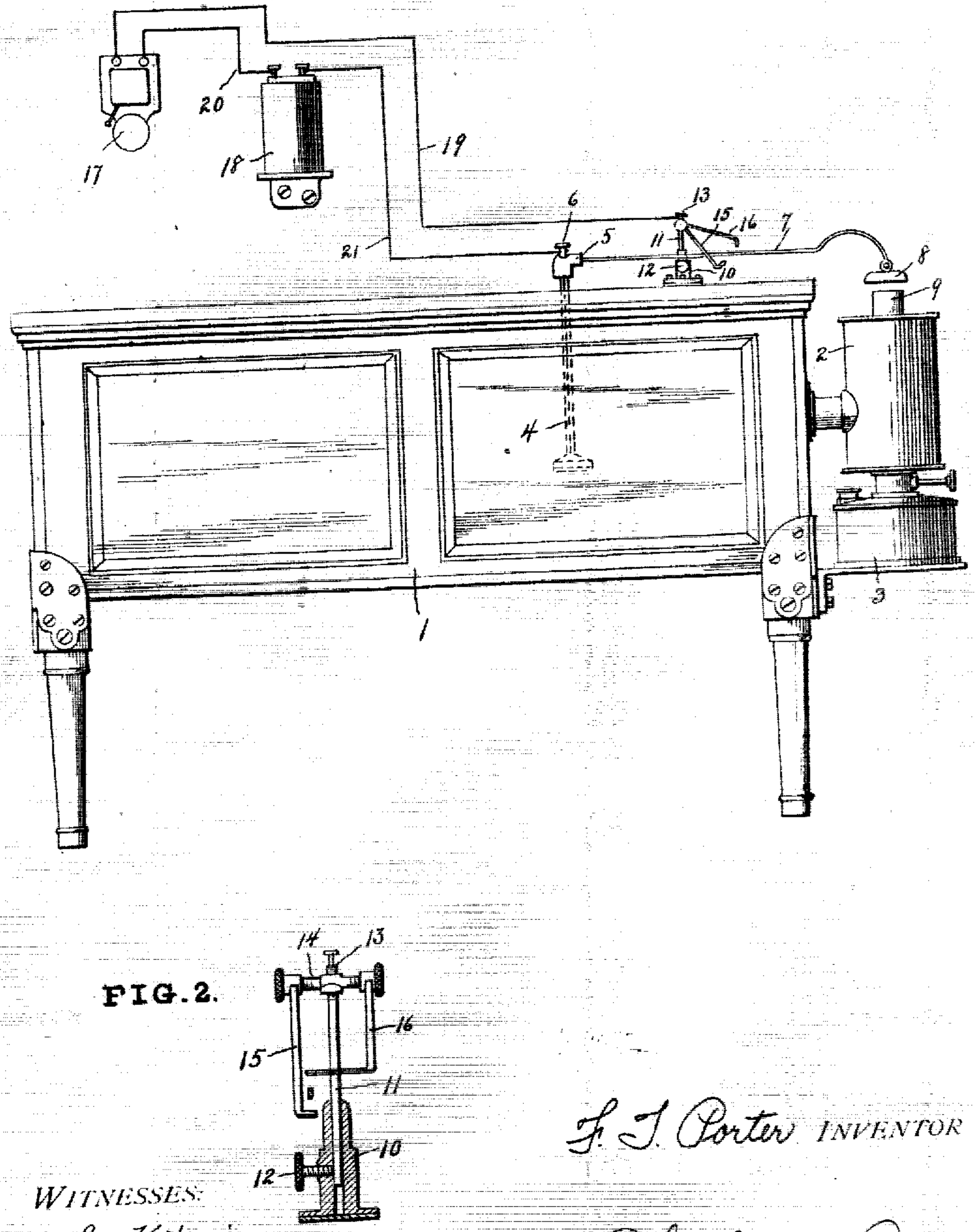

FIG. 2.

WITNESSES:

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FAY TYNER PORTER, OF MORRISTOWN, INDIANA.

ALARM FOR INCUBATORS.

No. 815,557. Specification of Letters Patent. Patented March 20, 1906.

Application filed May 20, 1905. Serial No. 261,465.

To all whom it may concern:

Be it known that I, FAY TYNER PORTER, a citizen of the United States, residing at Morristown, in the county of Shelby and State of Indiana, have invented certain new and useful Improvements in Alarms for Incubators, of which the following is a specification.

My invention relates to alarms for incubators, and has for its object to provide a device to be attached to an incubator which will give an alarm when the temperature reaches a danger-point above or below normal.

It is a further object of my invention to provide an alarm adapted to be easily and quickly attached to incubators now on the market.

It is a further object of my invention to provide a device for incubators which may be accurately regulated to give an alarm when a predetermined degree of temperature above or below normal is reached.

With these and other objects in view the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a view of an incubator with my device attached thereto. Fig. 2 is a view, partly in section, of the circuit-breaker.

Referring to the drawings, in which like numerals of reference indicate corresponding parts throughout the several views, 1 is an incubator provided with the usual heating-drum 2, lamp 3, and thermostat 4. Secured to the upper end of the thermostat in a metallic socket 5, provided with a binding-post 6, is an arm 7, carrying a cap 8, located above flue 9 of the heating-drum. Socket 10, made of insulating material, adjustably supports rod 11, set-screw 12 being provided to hold said rod in its adjusted position. At the upper end of said rod 11 a binding-post 13 is formed. Cross-piece 14, carrying L-shaped rods 15 and 16, is secured to the upper part of rod 11.

17 indicates an electric bell, and 18 a battery which supplies the current to the bell.

Electric conductor 19 is connected at one end with binding-post 13 and at the other to one of the binding-posts on bell 17. Conductor 20 connects the other binding-post with one of the electrodes of battery 18, the other electrode being connected by conductor 21 to binding-post 6 on socket 5.

The operation of my device is as follows: Socket 10 is secured to the incubator in close proximity to arm 7. The rod 11 is raised or lowered until arm 7 is equidistant from the horizontal parts of arms 15 and 16, when the temperature of the incubator is normal. Should the temperature in the incubator increase, the thermostat 4 will bow toward the left, thereby raising cap 8 and allowing part of the heat to escape through flue 9. Should the temperature increase to a danger-point, arm 7 will contact with the horizontal portion of arm 16, thereby closing the circuit which rings bell 17, the arms 7, 15, and 16 being electrically connected with binding-posts 6 and 13, as hereinbefore described. The bell will continue to ring as long as the temperature within the incubator is high enough to keep arm 7 in contact with arm 16 through thermostat 4. Should the temperature fall below normal, the thermostat 4 will bow toward the right and cap 8 will be lowered, thereby retaining most of the heat in the incubator. If, however, the temperature becomes low enough to allow arm 7 to contact with the horizontal portion of arm 15, the bell-circuit will be closed and a danger-signal given. The arms 15 and 16 being rotatable on cross-piece 14, they can be adjusted with reference to arm 7 so that greater or less variation in temperature may be permitted before an alarm is given.

Having thus described my invention, what I claim as novel, and desire to secure by Letters Patent, is—

In a device of the character described, the combination with a damper-arm of an electric circuit, a signal located in said circuit

and a circuit-closing device comprising a rod capable of vertical adjustment and provided with a plurality of L-shaped contact-arms, one of said arms being adapted to engage the damper-arm when the latter is depressed, the other contact-arm being adapted to engage said damper-arm when the latter is raised.

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

FAY TYNER PORTER.

Witnesses:
R. L. MASON,
U. S. JACKSON