

No. 840,623.

PATENTED JAN. 8, 1907.

F. R. HARRIS.  
INCUBATOR ALARM.  
APPLICATION FILED AUG. 10, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

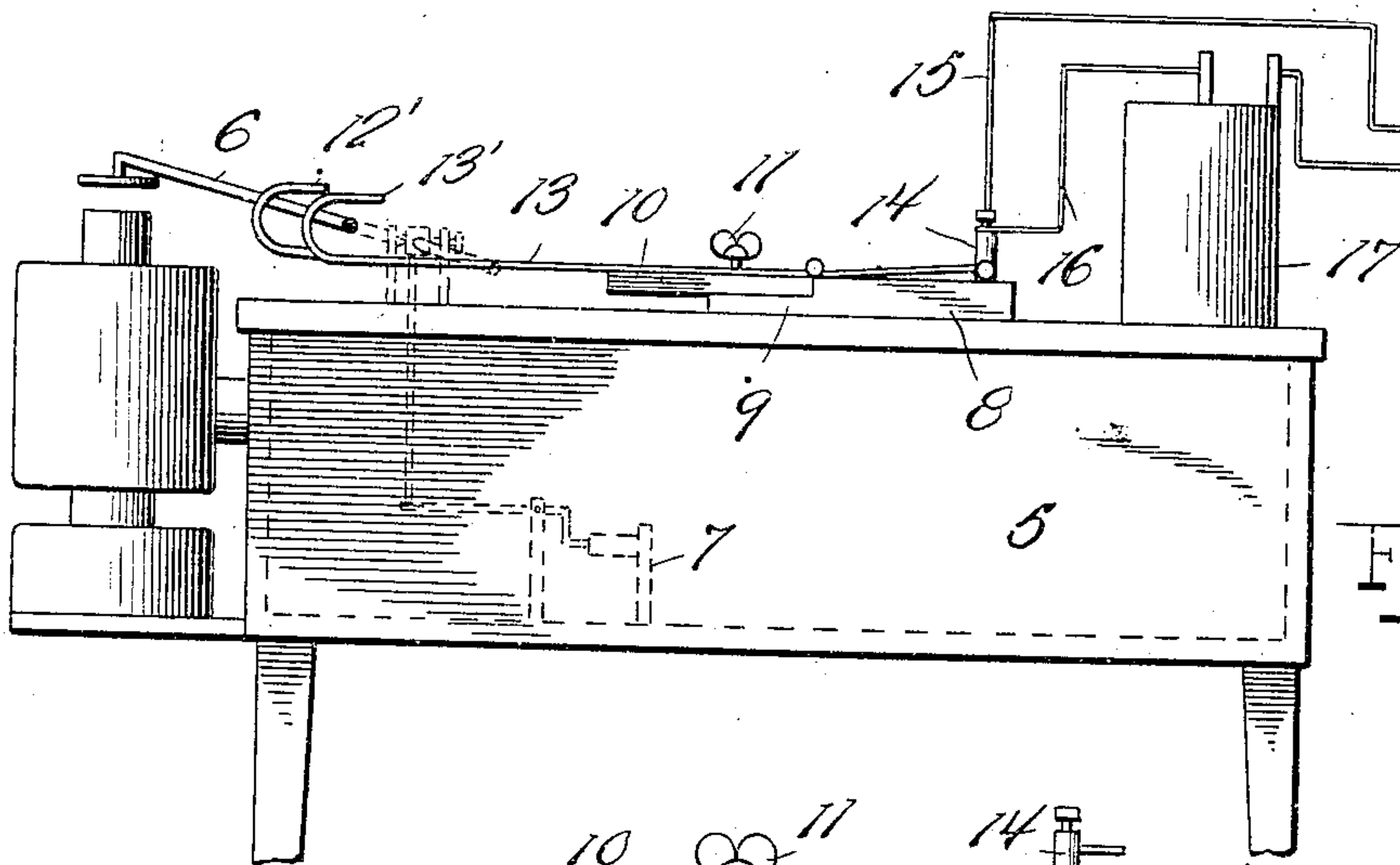
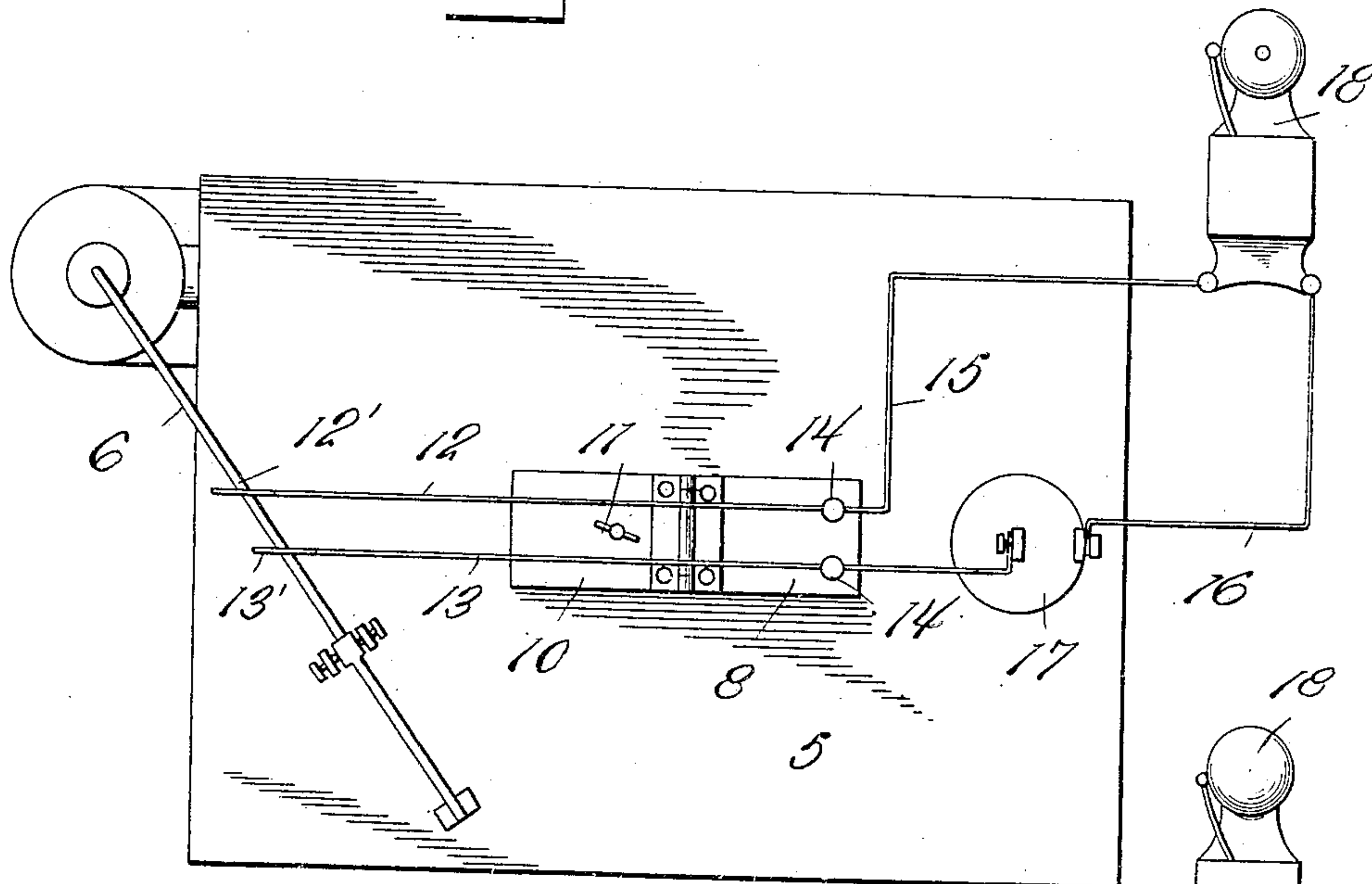
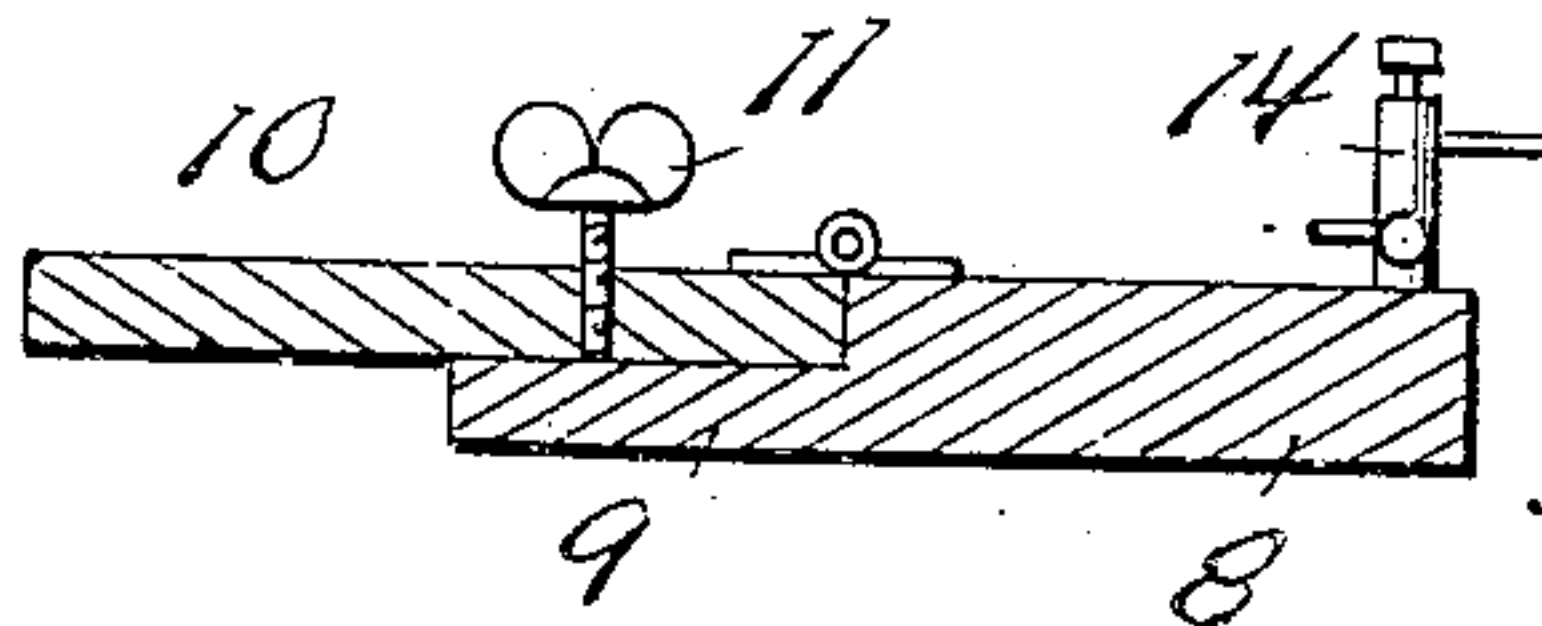


Fig. 2.

Fig. 3.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 4.

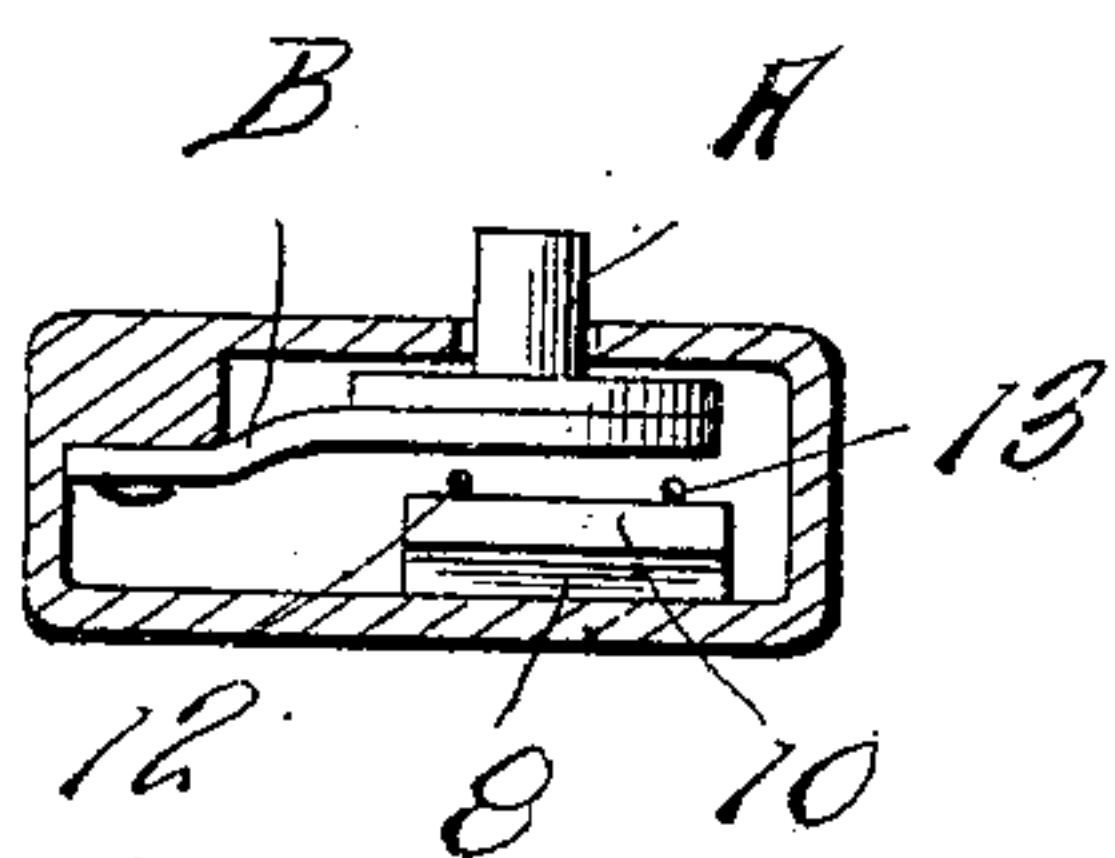
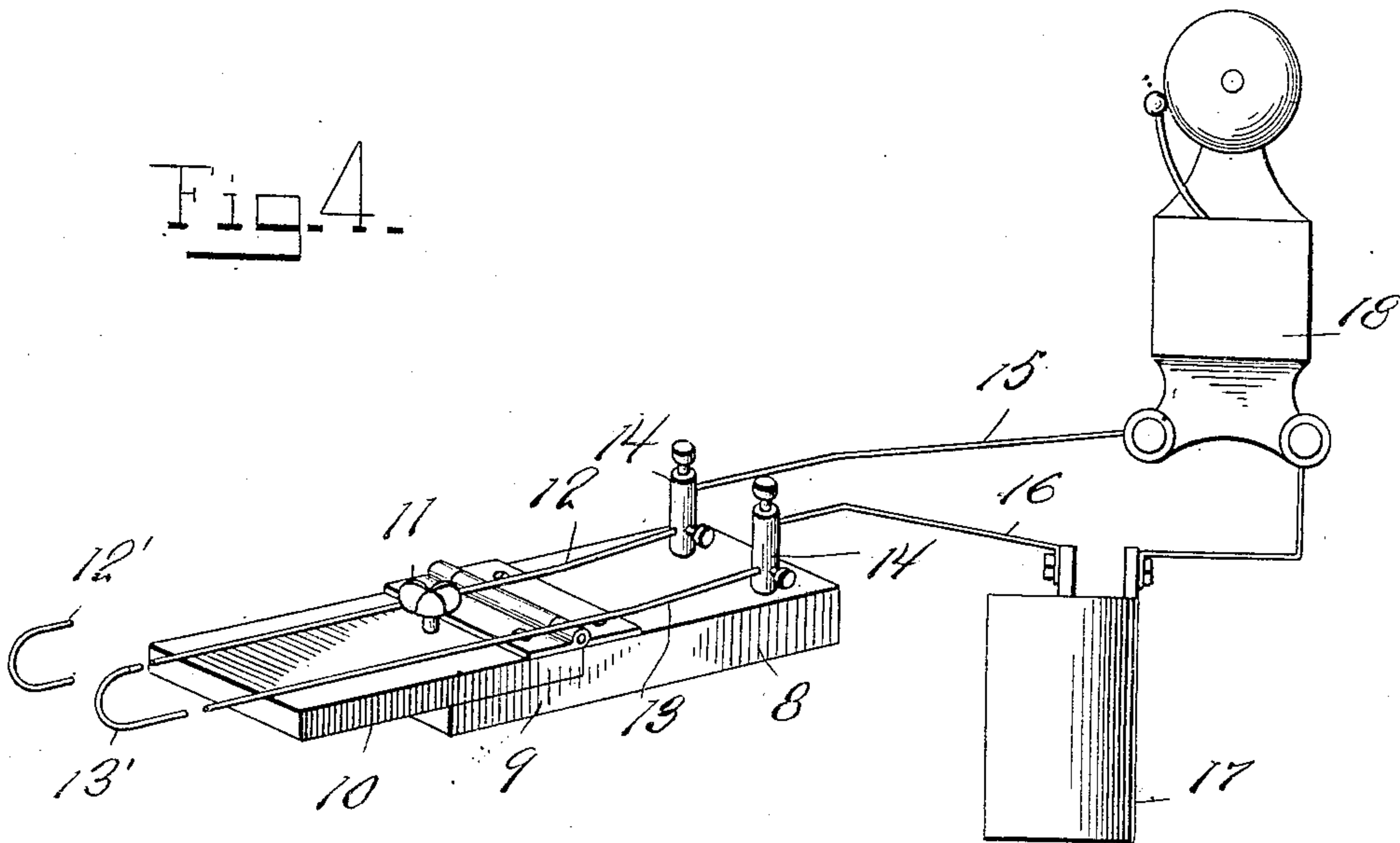


Fig. 5.

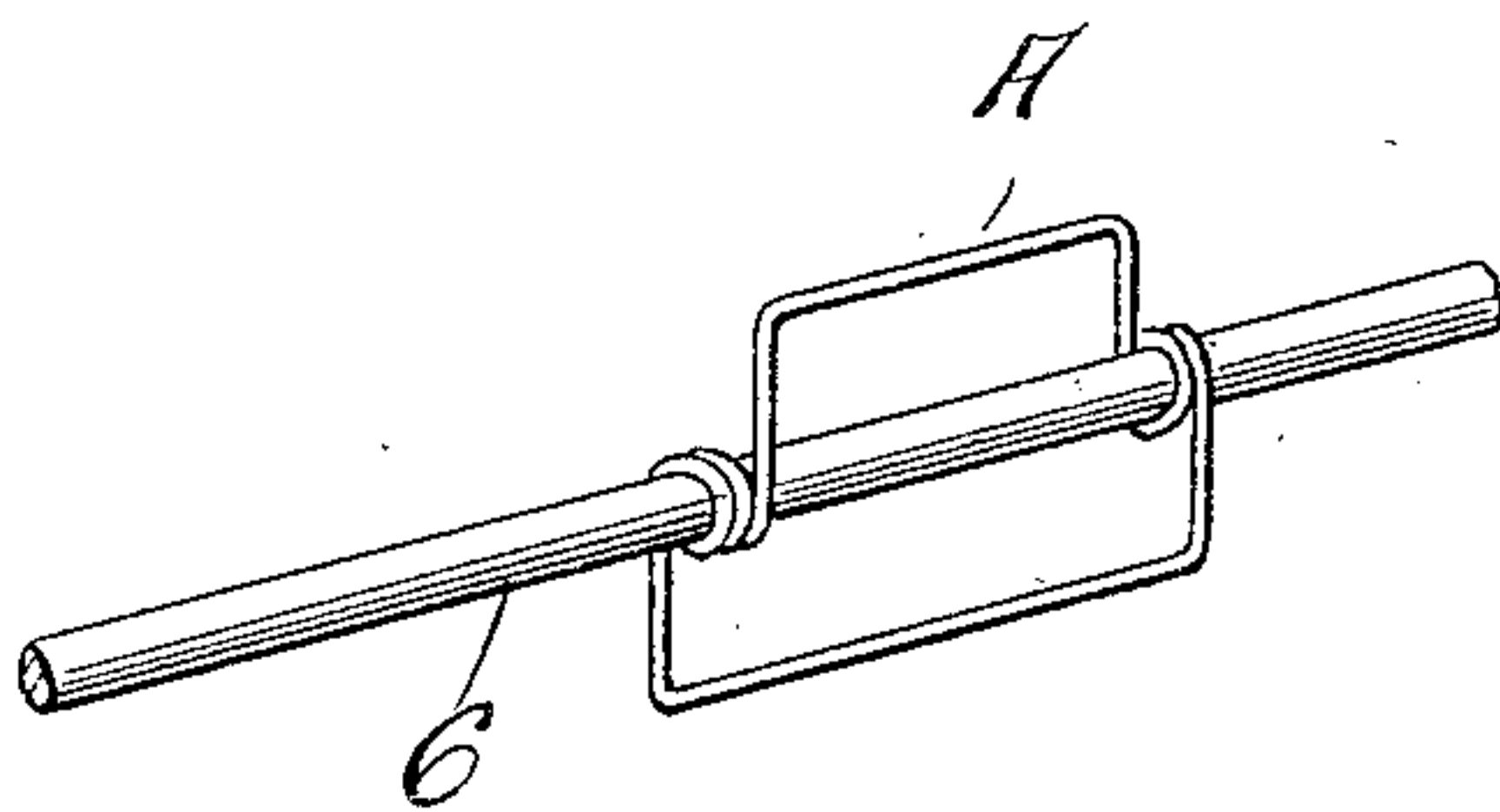


Fig. 6.

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# UNITED STATES PATENT OFFICE.

FREMONT R. HARRIS, OF KENMARE, NORTH DAKOTA.

## INCUBATOR-ALARM.

No. 840,623.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed August 10, 1906. Serial No. 330,101.

*To all whom it may concern:*

Be it known that I, FREMONT R. HARRIS, a citizen of the United States, residing at Kenmare, in the county of Ward, State of North Dakota, have invented certain new and useful Improvements in Incubator-Alarms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to alarms, and more particularly to those for use in connection with incubators, and has for its object to provide an alarm constructed and arranged for coöperation with the damper-arm of an incubator to indicate extremes of temperature within the egg-chamber.

Another object is to provide an alarm which may be adjusted to bring about the desired relation of the coöperating parts.

Other objects and advantages will be apparent from the following description, and it is to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

In the drawings forming a portion of this specification, and in which like characters of reference indicate similar parts in the several views, Figure 1 is a top plan view of an incubator provided with the present alarm. Fig. 2 is a side elevation, the damper-arm being shown in section to clearly illustrate the hooked ends of the contact-wires. Fig. 3 is a longitudinal section of the hinged blocks. Fig. 4 is a perspective view of the alarm device detached. Fig. 5 is a view showing the structure embodied in a push-button. Fig. 6 is a detail view showing a circuit-closing wire carried by the arm.

Referring now to the drawings, there is shown an incubator 5, having a damper-arm 6, connected with a thermostat 7 for vertical movement thereby. Disposed upon the incubator there is a block 8, which at one end is cut away at its upper portion to form a vertically-reduced end portion 9, which receives one end portion of a second block 10, which is hinged to the unreduced portion of the block 8 for vertical movement, and a set-screw 11 is engaged through the block 10 in position to bear upon the reduced portion 9 of the block 8, and it will be observed that

this set-screw may be operated to hold the block 10 at different points of its movement upon the hinge.

A pair of spaced longitudinally-extending wires 12 and 13, respectively, are secured upon the upper faces of the two blocks, which lie flush with each other, and extend forwardly beyond the blocks 10, the forward ends of these wires 12 and 13 being bared and turned upwardly and rearwardly, as shown at 12' and 13', respectively, to lie in spaced relation to their major portions in the form of rearwardly-directed hooks, and these hooks are disposed with the damper-arm 6, which is of conducting material, within the inclosure of their hooks, so that both upward and downward movement of this arm to a sufficient extent will contact it with the bared portions of the wires and complete a circuit, as will be apparent from the following: At their rearward ends the wires 12 and 13 terminate at binding-posts 14, in which are engaged wires 15 and 16 of an electric circuit, including a battery 17 and a bell 18, these being in circuit with the wires 12 and 13, as shown, so that simultaneous contact of the arm 6 with the wires 12 and 13 will result in completion of the circuit and sounding of the bell 18. The set-screw 11 may be operated, as will be readily understood, to correctly position the arm 6 between the major portions of the wires 12 and 13 and the rearwardly-directed portions 12' and 13' thereof.

In Fig. 5 there is shown a push-button in which the finger-piece A engages a spring-arm B for movement of the latter into engagement with the wires 12 and 13, and the arrangement of the blocks 8 and 10 is such that the button may be adjusted to vary the movement of the finger-piece necessary to sound the bell.

In Fig. 6 there is shown a detail in which the damper-arm 6 has engaged therewith a piece of wire A, which is looped above and below the arm, as shown, to contact with the wires 12 and 13, and the wire A thus forms a circuit-closing wire.

What is claimed is—

1. The combination with an incubator having a movable damper-arm, of pivotally-connected blocks, contact-wires carried by the blocks and located in position for contact by the damper-arm, one of the blocks being movable with respect to the other, to vary



the position of the wires with respect to the arm, means for holding the movable block at different points of its movement, and a battery and bell in circuit with the wires.

5 2. An alarm device for incubators comprising a block having a forwardly-extending reduced portion, a block hinged to the first-named block for movement into and out of position to rest upon the reduced portion, a  
10 set-screw engaged in the second block and bearing upon the reduced portion to hold the second block at different points of its movement, wires secured upon the two blocks and adapted for electrical connection to other  
15 wires thereto at one end, said wires at their other ends being turned upon themselves in spaced relation and bared at both sides of the turn for electrical engagement by the damper-arm of an incubator.

20 3. A device of the class described compris-

ing a block, a block hinged to the first-named block and extending over a portion of the first-named block for movement upon its hinges toward and away from said portion, a set-screw engaged through the second-named  
25 block and engaging the first-named block, contact-wires carried by the blocks, a contact member located for movement into and out of simultaneous engagement with the wires, said set-screw being operable to vary  
30 the position of the wires with respect to the contact members, a source of electricity, and an electrically-operable mechanism in circuit with the wires.

In testimony whereof I affix my signature 35  
in presence of two witnesses.

FREMONT R. HARRIS.

Witnesses:

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