

No. 856,043.

PATENTED JUNE 4, 1907.

M. FANDERS.
INCUBATOR.

APPLICATION FILED NOV. 12, 1906.

Fig. 1.

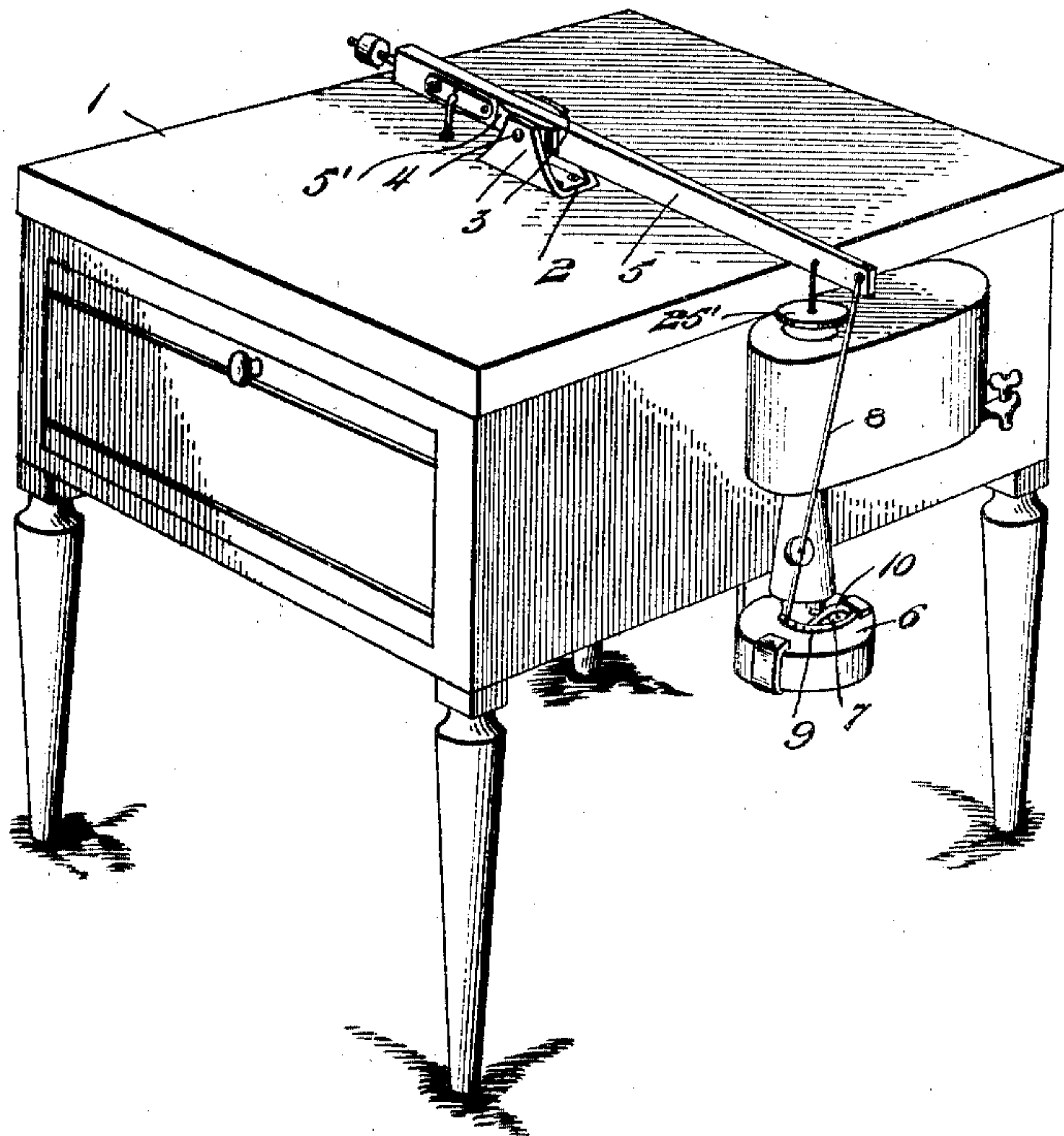


Fig. 2.

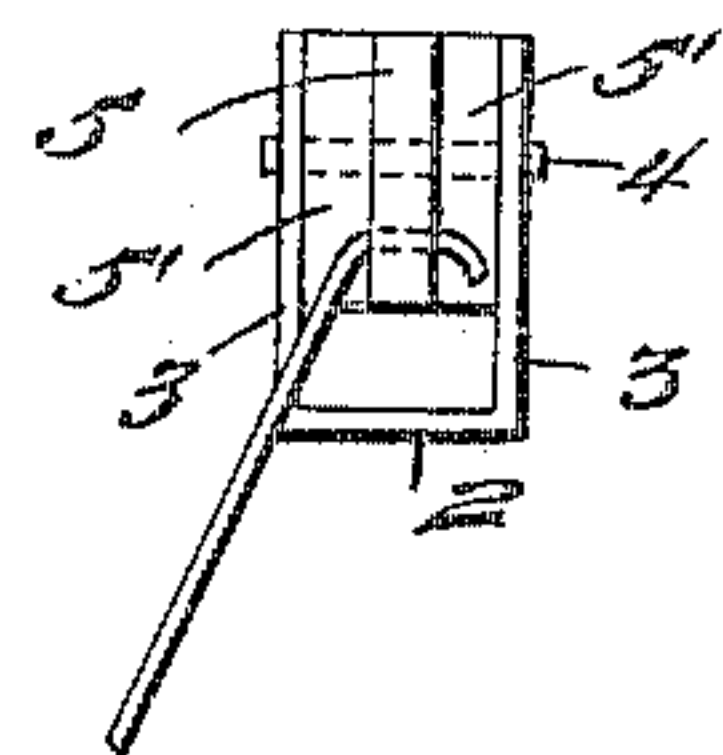
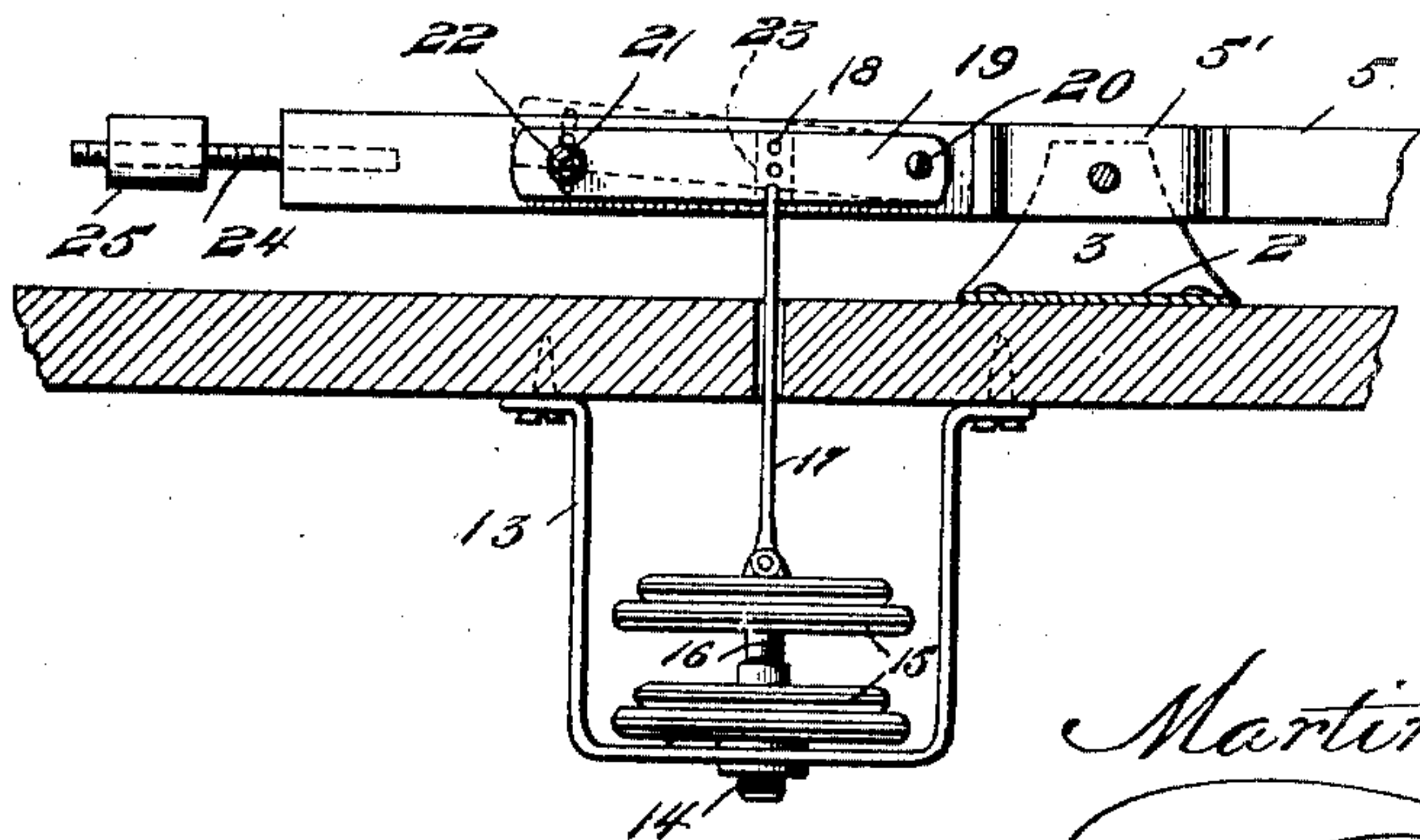
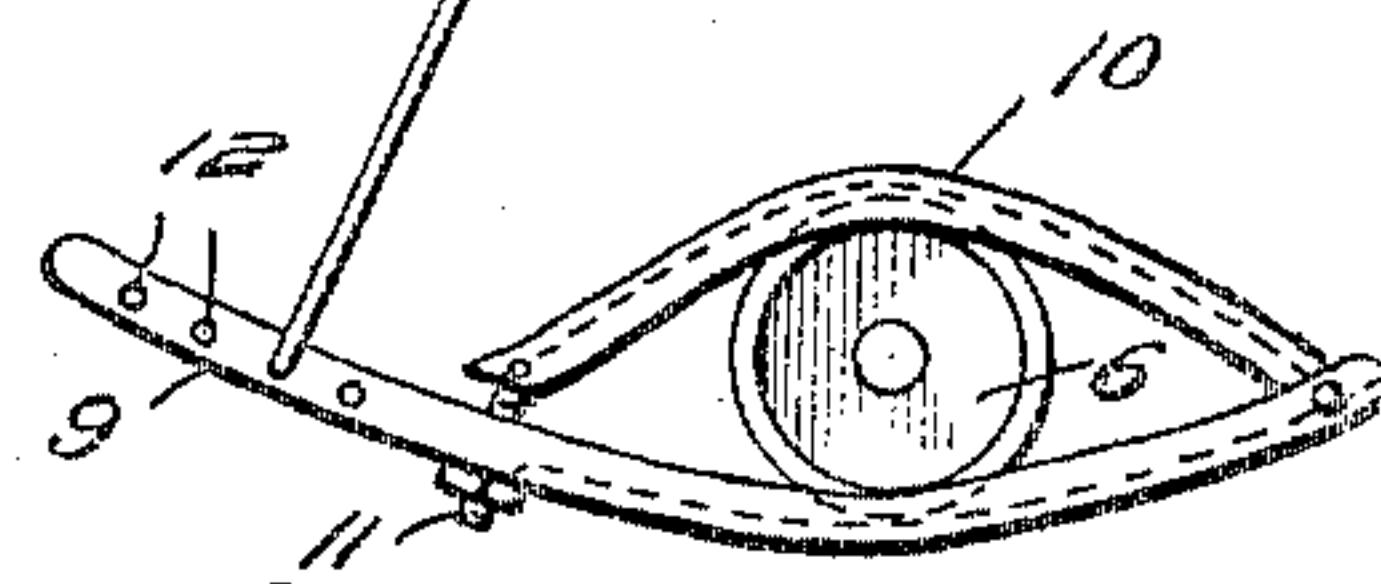


Fig. 3.



Martin Fanders-Inventor

By *[Signature]* Attorney

Witnesses
[Signature]
[Signature]

UNITED STATES PATENT OFFICE.

MARTIN FANDERS, OF DILLER, NEBRASKA.

INCUBATOR.

No. 856,043.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed November 12, 1906. Serial No. 343,002.

To all whom it may concern:

Be it known that I, MARTIN FANDERS, a citizen of the United States, residing at Diller, in the county of Jefferson and State of Nebraska, have invented certain new and useful Improvements in Incubators, of which the following is a specification.

My invention relates to improvements in incubators, and has particular reference to the heat regulating device for such an incubator, the object of the invention, being to provide a simplified and durable construction which will operate with precision and cause the incubator to be kept at the same even temperature.

Another object of the invention, is to provide adjustable connections for the different parts so that such parts will always be properly balanced and may be readily regulated to suit different conditions.

With these and other objects in view, my invention consists of an incubator provided with a suitable thermostat, a lamp of any ordinary type for maintaining the proper heat in the incubator, adjustable lever connections adapted to be actuated by the thermostat to control the lamp, and in still further providing means for adjusting the balance of the lever connections.

My invention further consists of an incubator embodying certain other novel features of construction, combination and arrangement of parts substantially as herein set forth.

Figure 1, is a perspective view of an incubator of the ordinary type having my improvements applied thereto. Fig. 2, is a broken elevation to show the manner in which the thermostat and operating lever are connected, the top of the incubator, to which the thermostat and lever are secured, being shown in section. Fig. 3, is a detail view of the lamp-controlling device, the end of the operating lever and the connection therebetween.

My invention does not relate to any particular style or type of incubator, and may be as readily used upon one sort as another, as it is in reality, an attachment for controlling the heating medium for the incubator, and such improvements will now be described in detail:

In the drawings: the numeral 1, designates an ordinary incubator upon the top of which is secured a plate 2, bearing a pair of parallel standards 3, which by means of the pivot pin

4, support the lever 5, therebetween. Spacing blocks 5', are secured to the sides of the lever to keep it properly spaced between the bearings. The incubator is provided with the usual lamp 6, having a thumb nut 7, for turning the wick of the lamp, up or down, to regulate the heat thereof. Pivoted to the forward or long arm of the lever, is a rod 8, which overhangs the edge of the top, extends downward and is in turn pivotally connected to a small lever 9. This small lever 9, is in the shape of an arc and has pivoted to the end opposite the one to which the rod 8, is connected, a clamping member or bar 10, the other end of which is adjustably secured to the lever 9, by the clamping screw 11. Thus it will be seen by referring to the drawings, (see especially Fig. 3) that the thumb nut which regulates the lamp, is clamped to the lever, so that by raising or lowering the lever, the wick is given a corresponding movement. The end of the lever 9, is also provided with a series of openings 12, to receive the lower end of the rod 8, so that the leverage on the wick regulator may be changed as desired.

Within the incubator and preferably secured to the lower or under side of the top thereof at a point in rear of the pivotal support of the operating lever 5, is an arch-shaped frame 13. Secured to the arched portion of the frame by means of the nut 14, is a thermostat, comprising the two independent series of air cells 15, arranged upon a common axis 16. To the upper end of the thermostat is pivoted a rod 17, which extends up through the top of the incubator, and engages one of the series of openings 18, in the plate 19, said plate being pivoted to the lever at one end as 20, the other end of the plate being slotted to receive the bolt 21, and a set screw 22, on said bolt serves to hold the plate in the adjusted position. Beneath the series of openings in the plate, the lever is provided with a recess 23, (shown in dotted lines in Fig. 2) so that the end of the rod 17, will not interfere with the adjustment of the plate. In the rear end of the operating lever 5, is mounted a threaded shank 24, which supports a rotatable weight 25, said weight being threaded in or out on the shank to adjust the balance of the lever. A damper 25', may also be suspended from the forward end of the operating lever to act in conjunction with the lamp.

The operation of my device will be readily understood. As the air in the incubator be-

comes heated, the thermostat expands, thereby forcing the rear end of the lever upward causing the same to turn the wick of the lamp down by means of the rod and clamping lever connections. The device is capable of various adjustments to suit different conditions. The balance of the operating lever may be adjusted by shifting the weight on the end thereof; the position of the lever with respect to the thermostat may be varied by changing the angle of the slotted plate thereon; the leverage and movement of the wick-operating means may be altered by shifting the connecting rod 8, in the series of openings in the clamping lever; and the clamping lever is adjustable to receive wick operating means of various sizes and shapes.

From the above description taken in connection with the drawings it will be evident that I have accomplished all the objects herein set forth and have produced a practical and efficient heat regulating means for incubators.

I claim:

1. In an incubator, the combination with a thermostat consisting of a series of independent air cells adjustably secured together and arranged in the incubator, of an operating lever pivoted upon the top of the incubator, a plate pivoted to the side of the lever and capable of angular adjustment with respect there-

to, a series of openings in said plate, and a connecting rod secured to the thermostat and having engagement with one of the openings in the plate.

2. In an incubator, the combination with a thermostat mounted therein, an operating lever pivoted upon the top of the incubator, a threaded rod extending from the rear end of the lever, and a weight having threaded engagement thereon, of a plate pivoted to the side of the lever and capable of angular adjustment with respect thereto, a series of openings formed in the plate, and a connecting rod secured to the thermostat and having engagement with one of the openings in the plate.

3. The combination with a thermostat, of a pivotal lever, a plate capable of angular adjustment on the lever, connection between said plate and the thermostat, means for adjusting the balance of the pivotal lever, an adjustable clamping lever, and connection between said clamping lever and the end of the pivotal lever.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MARTIN FANDERS.

Witnesses:

O. J. MAYBORN,
CARL HABICHT.