

No. 805,987.

PATENTED NOV. 28, 1905.

E. OCHSNER.  
INCUBATOR.

APPLICATION FILED MAY 31, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

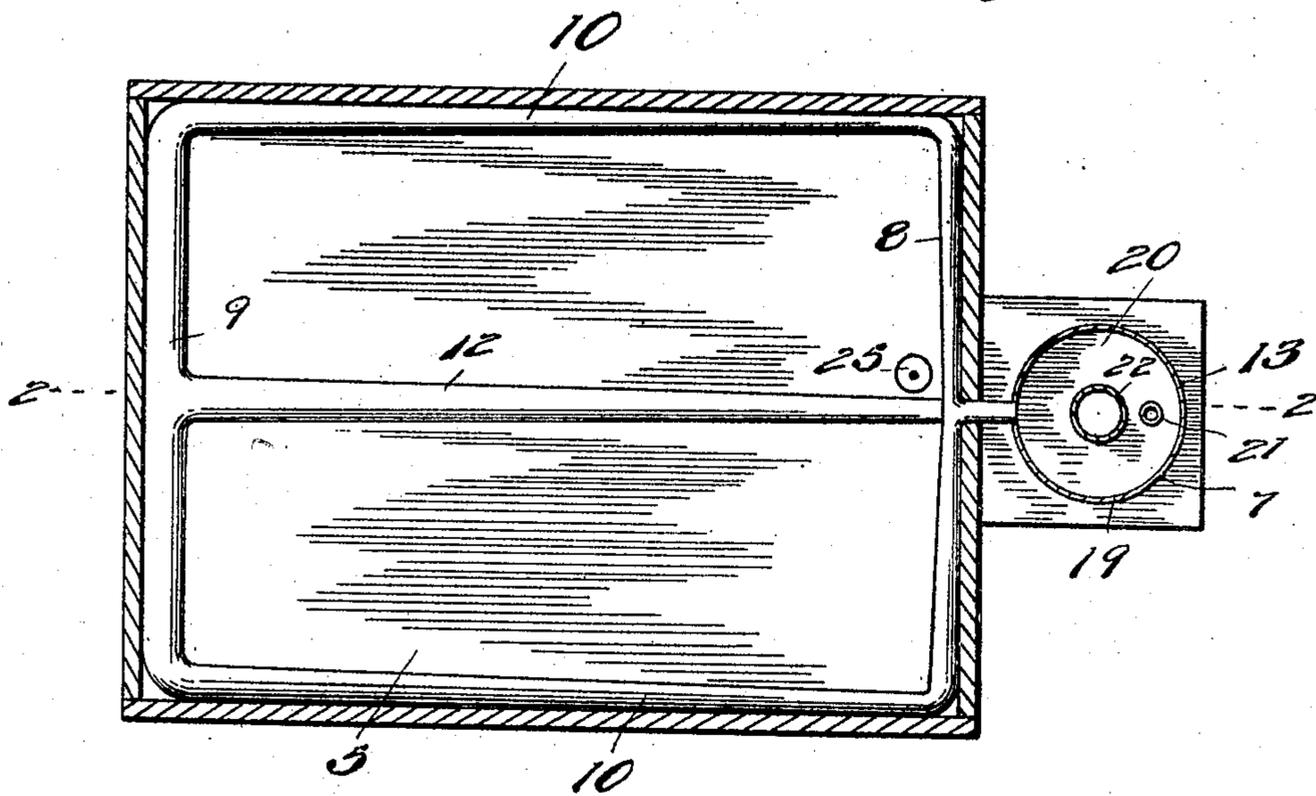
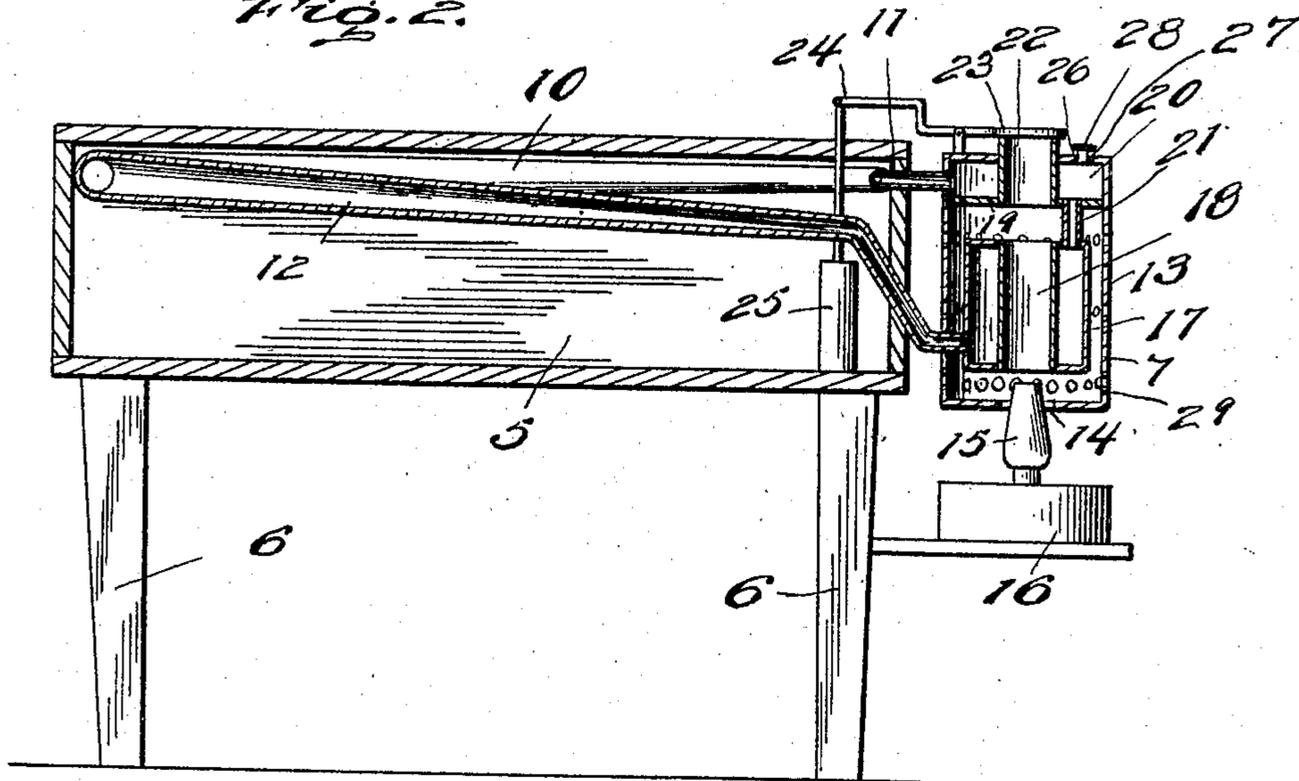


Fig. 2.



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2 SHEETS—SHEET 2.

FIG. 3.

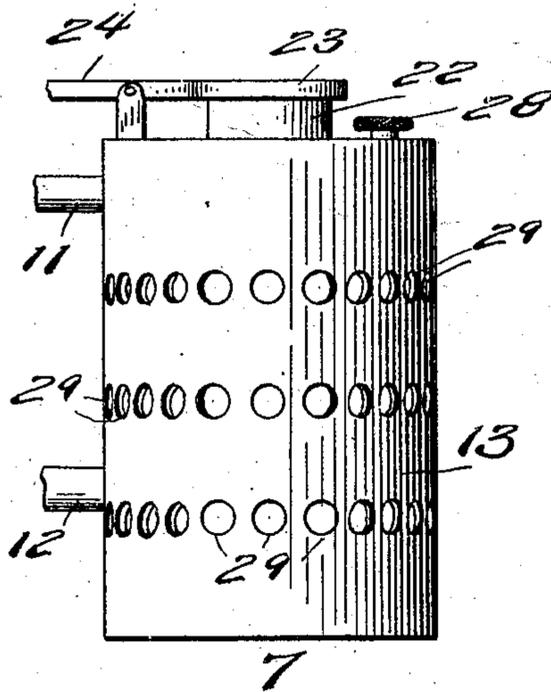
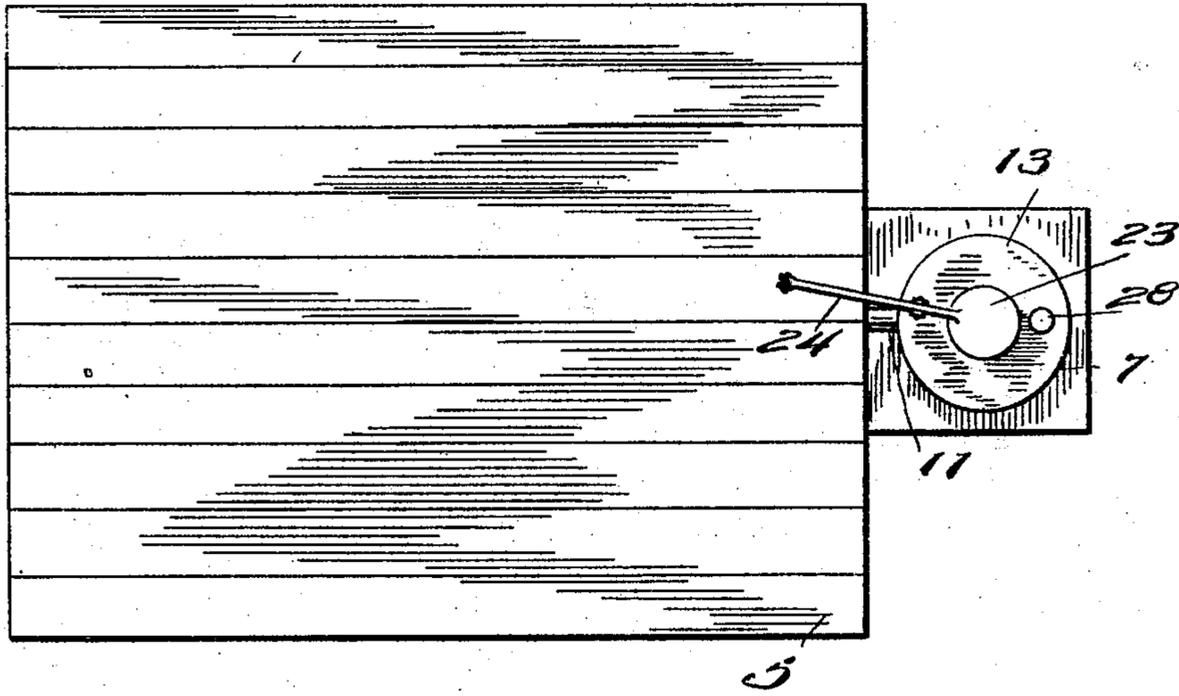


FIG. 4.

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# UNITED STATES PATENT OFFICE.

EMIL OCHSNER, OF SARONVILLE, NEBRASKA.

## INCUBATOR.

No. 805,987.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed May 31, 1905. Serial No. 263,127.

*To all whom it may concern:*

Be it known that I, EMIL OCHSNER, a citizen of the United States, residing at Saronville, in the county of Clay, State of Nebraska, have invented certain new and useful Improvements in Incubators; 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 poultry culture, and more particularly to incubators, and has for its object to provide an incubator which will be equipped with a novel heating system of the water type so constructed that the interior of the incubator may be maintained with all portions thereof at an even temperature.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific construction shown and described may be made within the scope of the claims and that any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a horizontal section through the present incubator. Fig. 2 is a vertical longitudinal section through the body portion and heating apparatus, taken on line 2 2 of Fig. 1. Fig. 3 is a top plan view. Fig. 4 is an enlarged elevation of the heating apparatus, illustrating the air-ports.

Referring now to the drawings, the present incubator comprises a body portion 5, having supporting-legs 6 and having a heating apparatus 7 secured to one of its ends. The body portion has horizontal transversely-extending parallel end pipes 8 and 9 disposed therewithin at its opposite end, which are connected at their ends by longitudinally-extending side pipes 10. The end pipe 8 is reduced in diameter from its ends to its center, at which point a supply-pipe 11 communicates with the pipe 8 and extends outwardly of the body portion. The side pipes 10 at their ends which join the pipe 8 are equal in diameter to that of the last-named pipe, and the pipes 10 are increased in diameter from the pipe 8 to the pipe 9, the latter being considerably larger than the pipe 8 and being of even diameter throughout its entire length.

A central pipe 12 communicates at one end with the pipe 9 at the center of the latter and has a slight downward slant toward the heating apparatus 7, the pipe 12 extending beneath the center of the pipe 8, where it is directed downwardly at a more abrupt angle and passes out through the end wall of the body portion, and this pipe 12 is tapered from the pipe 9 to its outer end.

The heating apparatus 7 consists of an outer cylindrical casing 13, having an opening 14 in its bottom, in which there is engaged the upper end of the chimney 15 of a heating-lamp 16. Disposed within the casing and in spaced relation to the walls thereof there is a cylindrical water-receptacle 17, having a central flue 18, which registers with the opening 14, and this receptacle lies in spaced relation to the bottom of the casing 13. A horizontally-extending water-tight partition 19 is secured to the inclosing wall of the casing and lies above and in spaced relation to the receptacle 17 to form a water-chamber 20, and a short vertically-extending pipe 21 connects the chamber 20 with the receptacle 17 for the passage of water from one to the other. A flue 22 passes through the chamber 20 centrally thereof and lies directly above the flue 18, and a cap 23 is provided for the flue 22, this cap being mounted upon a pivotally-mounted lever 24 for movement into and out of position to close the flue. The lever 24 is connected with a thermostat 25, located within the body portion for operation of the lever.

The pipe 11 communicates with the chamber 20, while the pipe 12 is connected at its outer end with the receptacle 17 adjacent to the bottom of the latter. A filling-port 26 is formed in the top 27 of the casing 13 and is provided with a removable cap 28. Formed in the wall of the casing 13 there are a plurality of air-ports 29.

In use the heat from the lamp 16 will circulate through the casing 13 and the flues 18 and 22 to heat the water within the chamber 20 and the receptacle 17, the latter rising and passing out through the pipe 11 to and through the pipes within the body portion, where it will give off its heat, and will return through the pipe 12 to the receptacle 17, to be again heated. When the interior of the body portion has reached a certain temperature, the thermostat 25 will be actuated to open the flue 23, when the draft thus caused will cause

air to pass in through the ports 29, and this air being of a comparatively low temperature will reduce the temperature of the water.

What is claimed is—

- 5 1. In an incubator the combination with a body portion, of spaced pipes disposed there-  
within, one of said pipes being of greater di-  
ameter than the other, the smaller pipe being  
tapered inwardly from its ends, an outwardly-  
10 extending pipe communicating with said  
smaller pipe at the meeting-point of its tapered  
portions, tapered pipes communicating at  
their minor ends with the smaller of the first-  
15 larger of the first-named pipes, a tapered pipe  
communicating at its major end with the  
larger of the first-named pipes between the  
second-named pipes and extending at its minor  
end outwardly of the body portion and a fluid  
20 heating apparatus disposed outwardly of the  
body portion said first and second named out-  
wardly-extending pipes communicating with  
the heating apparatus at the upper and lower  
portions thereof respectively.
- 25 2. In an incubator the combination with a  
body portion, of fluid-pipes disposed there-  
within, upper and lower fluid-pipes commu-

nicating with the first-named pipes and ex-  
tending outwardly of the body portion, a cas-  
ing located exteriorly of the body portion and 30  
having an opening in its bottom, a heating  
device disposed to discharge heat through the  
opening into the casing, a receptacle disposed  
within the casing in spaced relation thereto,  
said receptacle having a vertical flue, a hori- 35  
zontal partition disposed within the casing  
above the receptacle to form an upper cham-  
ber, said chamber having a vertical flue there-  
through, a pipe communicating with the up-  
per chamber and with the receptacle, a cap 40  
movable into and out of position to close the  
last-named flue, a thermostat, operative con-  
nections between the thermostat and cap, said  
upper and lower outwardly-extending pipes  
communicating with the upper chamber and 45  
the receptacle respectively, said casing having  
air-ports formed therein.

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

EMIL OCHSNER.

Witnesses:

P. F. NUSS,  
PHILIPP SERR.