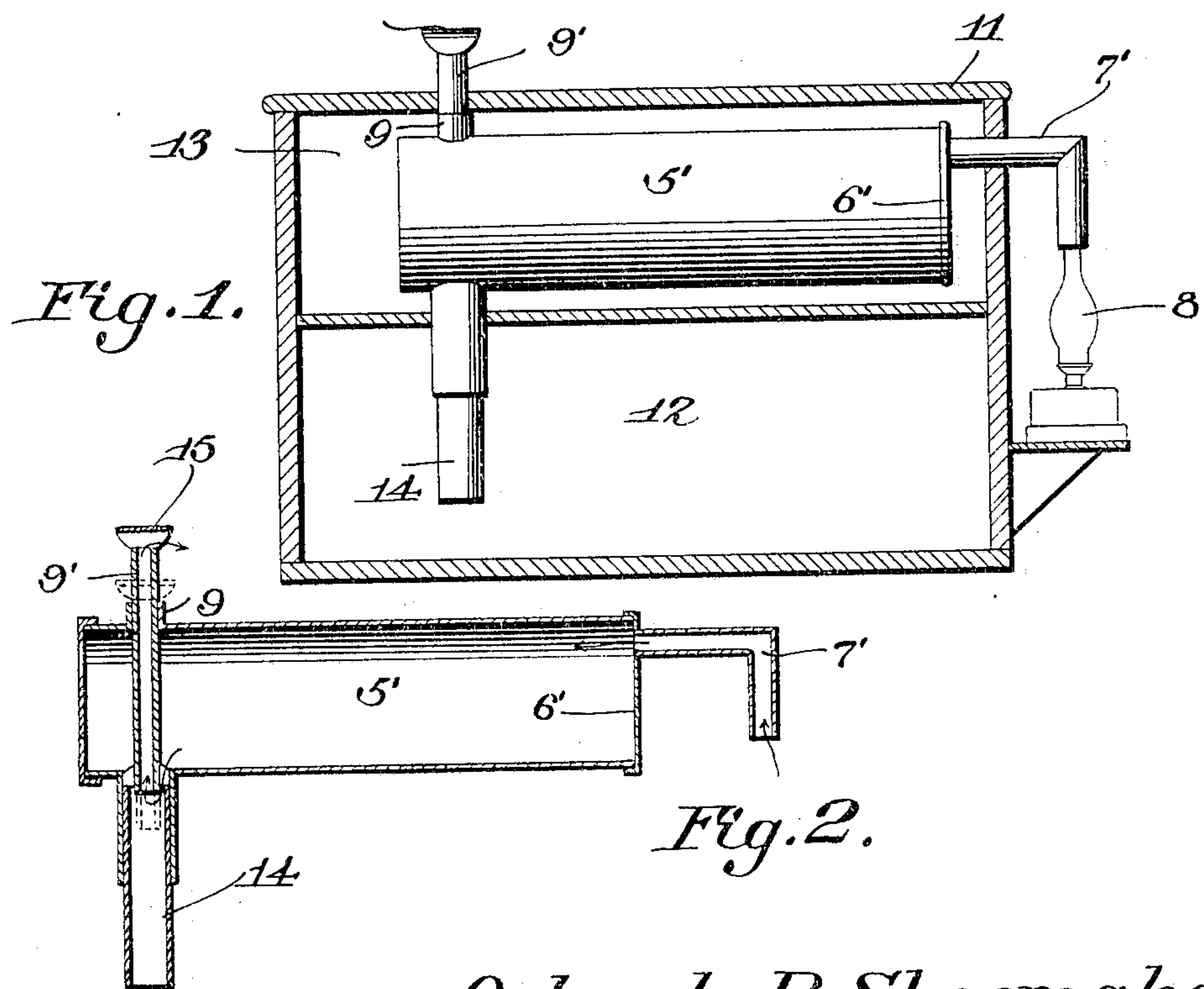


No. 799,199.

PATENTED SEPT. 12, 1905.

O. P. SHOEMAKER.  
HEATER FOR BROODERS.  
APPLICATION FILED JUNE 11, 1904.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ORLANDO P. SHOEMAKER, OF CLAY CENTER, NEBRASKA.

## HEATER FOR BROODERS.

No. 799,199.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed June 11, 1904. Serial No. 212,157.

*To all whom it may concern:*

Be it known that I, ORLANDO P. SHOEMAKER, a citizen of the United States, residing at Clay Center, in the county of Clay and State of Nebraska, have invented a new and useful Heater for Brooders, of which the following is a specification.

This invention relates to heaters designed to be used in connection with brooders; and it has for its object to simplify and improve the construction and operation of this class of devices and to provide means whereby the temperature may be regulated and controlled and whereby foul air may be removed from the brooding-chamber.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention and without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is a sectional view of a brooder equipped with a heater embodying the invention. Fig. 2 is a central longitudinal sectional view through the heater.

Corresponding parts in both figures are indicated throughout by similar characters of reference.

The invention has been shown as employed in connection with a brooder 11, having a hoverer-chamber 12 and an overlying heating-chamber 13, in which latter the heater is arranged. Said heater consists of a drum 5', having an inlet-pipe 7' extending through and terminating adjacent to the inner side of an end wall of said drum. This inlet-pipe consists of an elbow, the inlet branch of which is adapted to be disposed vertically above the chimney of a suitably-supported heater, such as a lamp 8, for the purpose of receiving the

heated air from said heater and discharging it into the interior of the drum. The latter is also provided with a discharge-pipe 9', which is disposed at right angles to the drum and enters the latter vertically from above through a sleeve or collar 9, there being extended transversely from and at right angles to the drum a pipe 14, arranged in parallel alinement with the discharge-pipe 9'. The pipe or duct 14, which extends downward into the hoverer-chamber 12, is composed of a pair of telescopically-adjustable sections, whereby its lower open receiving end may be adjusted toward and from the bottom of the receptacle, while the discharge-pipe 9', the upper end of which is provided with a cap 15, is longitudinally movable for projecting its lower receiving end a greater or lesser distance into the upper end of the pipe 14. It is apparent under this construction that the heating medium will upon entering the drum travel there-through for entrance into the discharge-pipe 9' and that by adjusting the latter for its inner end to extend a greater or lesser distance into the pipe 14 the rapidity of the escape of the heating medium from the drum, and consequently the degree to which the latter will be heated, may be readily regulated. It is further to be noted that as the heated air passes off from the drum through the discharge-pipe 9' the latter will also draw off, through the pipe 14, the dead impure air from the hoverer-chamber, thereby effectually ventilating the latter.

From the foregoing description it will be seen that a device is produced which is well adapted for the attainment of the ends in view. The construction is simple and the device may be produced at a moderate expense. It will also be seen that this improved heating device is adapted to be used in connection with incubators as well as brooders.

Having thus described the invention, what is claimed is—

1. A heater for brooders comprising a drum provided at one end with an inlet-pipe having an elbow and provided near its opposite end with an adjustable exit-pipe, and an adjustable ventilating-pipe disposed in alinement with said exit-pipe.

2. A heater for brooders comprising a drum

provided at one end with an inlet-pipe having  
an elbow and provided near its opposite end  
with an adjustable outlet-pipe, and an adjust-  
able telescoping ventilating-pipe; said outlet-  
5 pipe being axially adjustable within the ven-  
tilating-pipe.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in  
the presence of two witnesses.

ORLANDO P. SHOEMAKER.

Witnesses:

JOHN M. JONES,  
L. F. FRYAR.