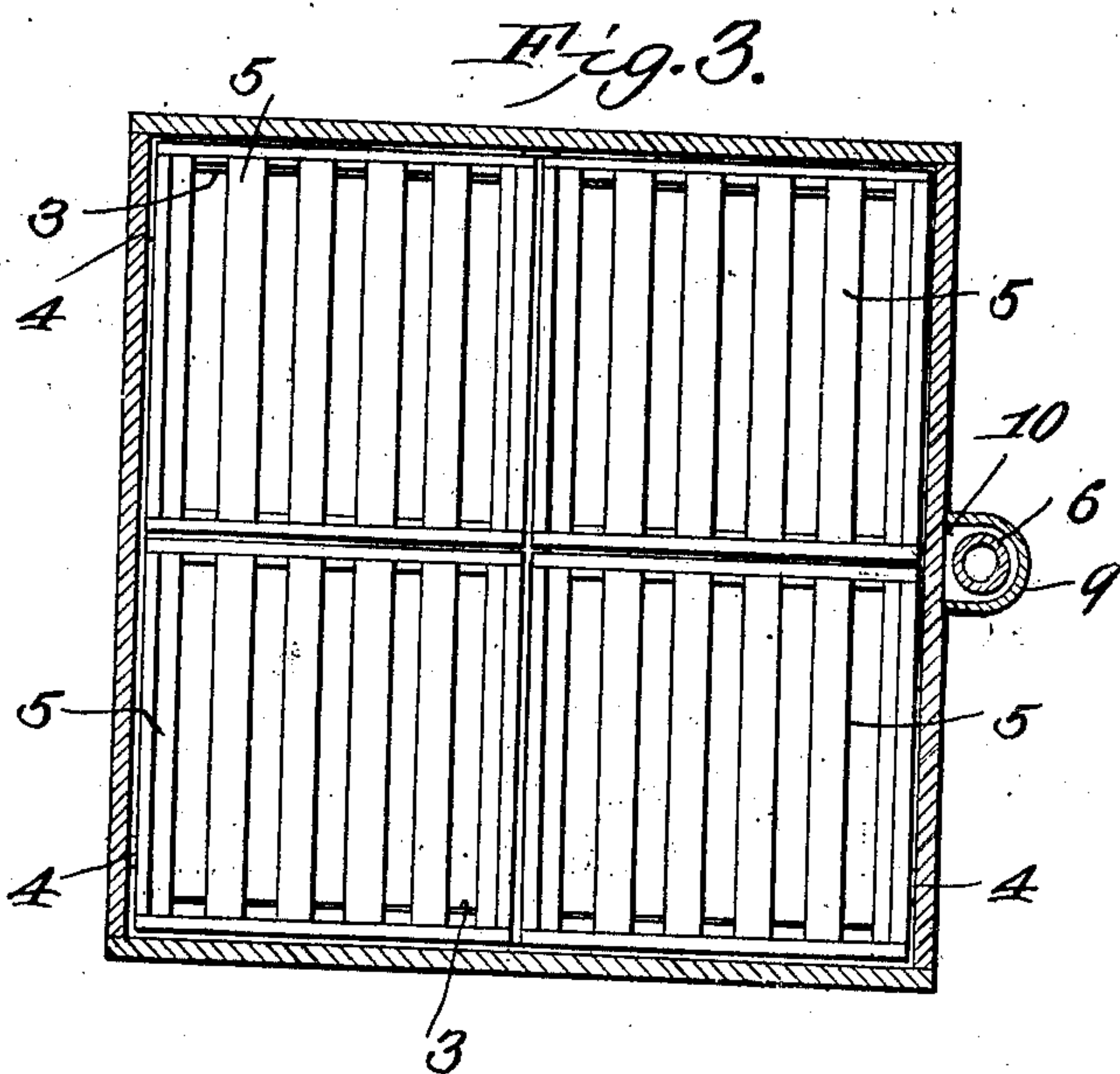
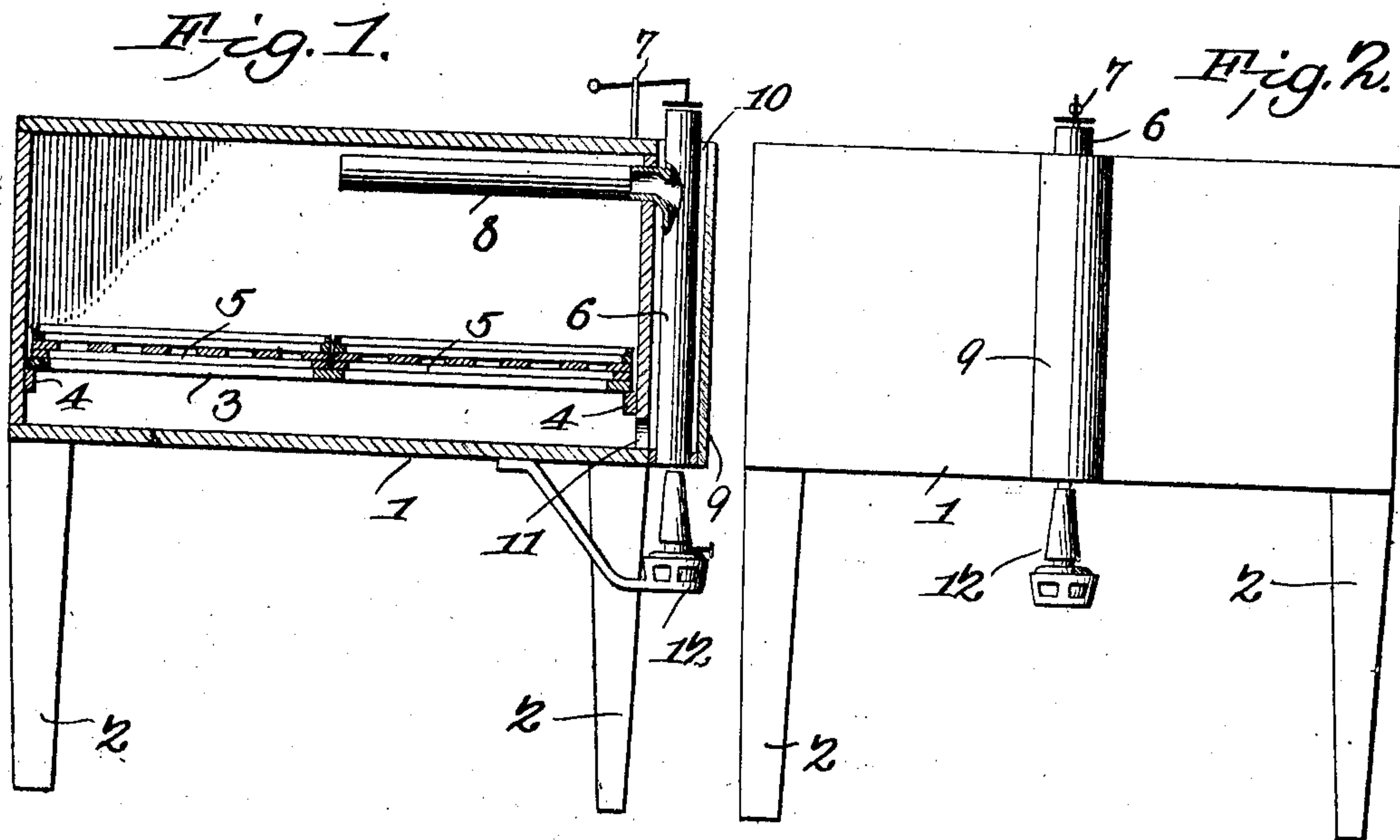


No. 830,677.

PATENTED SEPT. 11, 1906.

A. SCHAFER.
INCUBATOR.

APPLICATION FILED MAY 5, 1906.



WITNESSES:

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ADAM SCHAFFER, OF ROSSVILLE, ILLINOIS.

INCUBATOR.

No. 830,677.

Specification of Letters Patent.

Patented Sep. 11, 1906.

Application filed May 5, 1906. Serial No. 315,331.

To all whom it may concern:

Be it known that I, ADAM SCHAFFER, a citizen of the United States, residing at Rossville, in the county of Vermilion and State of Illinois, have invented a new and useful Incubator, of which the following is a specification.

This invention relates to incubators; and its object is to provide novel means whereby a mixture of fresh air and hot products of combustion may be discharged into the upper portion of the incubator and flow downward through the trays and thence into an exhaust-flue.

With the above and other objects in view the invention consists of a casing adapted to support the trays in the usual manner, and a hot-air flue is disposed at one end of the casing and extends into the upper portion thereof and is adapted to discharge the hot gases at a point adjacent the center of the casing. A portion of the flue is surrounded by a jacket constituting an outlet-flue, and this flue has an inlet-port at its lower end through which the gases escape after passing through the trays. A hydrocarbon-heater is disposed below the hot-air flue, and a sufficient space is provided between the upper end of the heater and the flue to permit the admission of fresh air in desired quantities, which is carried into the incubator by the products of combustion.

The invention also consists of certain other novel features of construction and combinations of parts which will be hereinafter more fully described, and pointed out in the claim.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is a longitudinal section through an incubator with the improvements applied thereto. Fig. 2 is an end elevation thereof, and Fig. 3 is a horizontal section therethrough.

Referring to the figures by characters of reference, 1 is a preferably rectangular casing, supported by legs 2 in the usual manner and having a sliding tray 3 therein mounted on supporting-cleats 4. This sliding tray is adapted to support, preferably, four similar rectangular egg-holding trays 5, which when grouped together will completely cover the tray 3 and can be readily interchanged, so as to move the eggs located adjacent the corners toward the center of the casing, and thereby insure the equal distribution of heat.

A hot-air flue 6 is arranged upon one end of

the casing and has its upper end provided with a suitable regulating-damper 7, while its lower end is opened. A branch flue 8 extends into the casing 1 from the flue 6 and is disposed close to the top of said casing, this branch flue terminating adjacent the center of the incubator. A jacket 9 is secured around the flue 6, so as to form an outlet-flue 10, and this flue is closed at its lower end, while its upper end is opened. An inlet-port 11 establishes communication between the bottom portion of casing 1 and the lower end of the flue 10.

A heater 12 for burning hydrocarbon oil is arranged directly under the flue 6 and with its upper end spaced below said flue a sufficient distance to permit the admission of a predetermined quantity of fresh air. The gases after leaving the flue 8 will spread in different directions over the trays 5 and will pass through them and then escape into the outlet-flue 10 through the port 11. Importance is attached to the fact that the hot products of combustion are discharged directly into the upper portion of the incubator.

The preferred form of the invention has been set forth in the foregoing description; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of the invention.

What is claimed is—

In an incubator the combination with a casing having an egg-receiving compartment; of a hot-air flue at one end of the casing and extending into the center of the upper portion of the egg-compartment and opening thereinto, an outlet-flue surrounding the hot-air flue and open at its upper end and having a port at its lower end, said outlet-flue communicating with the hot-air flue only through the egg-compartment and said port, and a hydrocarbon-burner below the hot-air flue for generating heat and directing it into said flue, there being sufficient space between the burner and flue to admit a predetermined quantity of air into the hot-air flue.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ADAM SCHAFFER.

Witnesses:

EDITH A. CRAYS,
SAML. COLLISON.