

G. M. CURTIS.  
HOVER FOR POULTRY.  
APPLICATION FILED AUG. 28, 1908.

989,127.

Patented Apr. 11, 1911

FIG. 1.

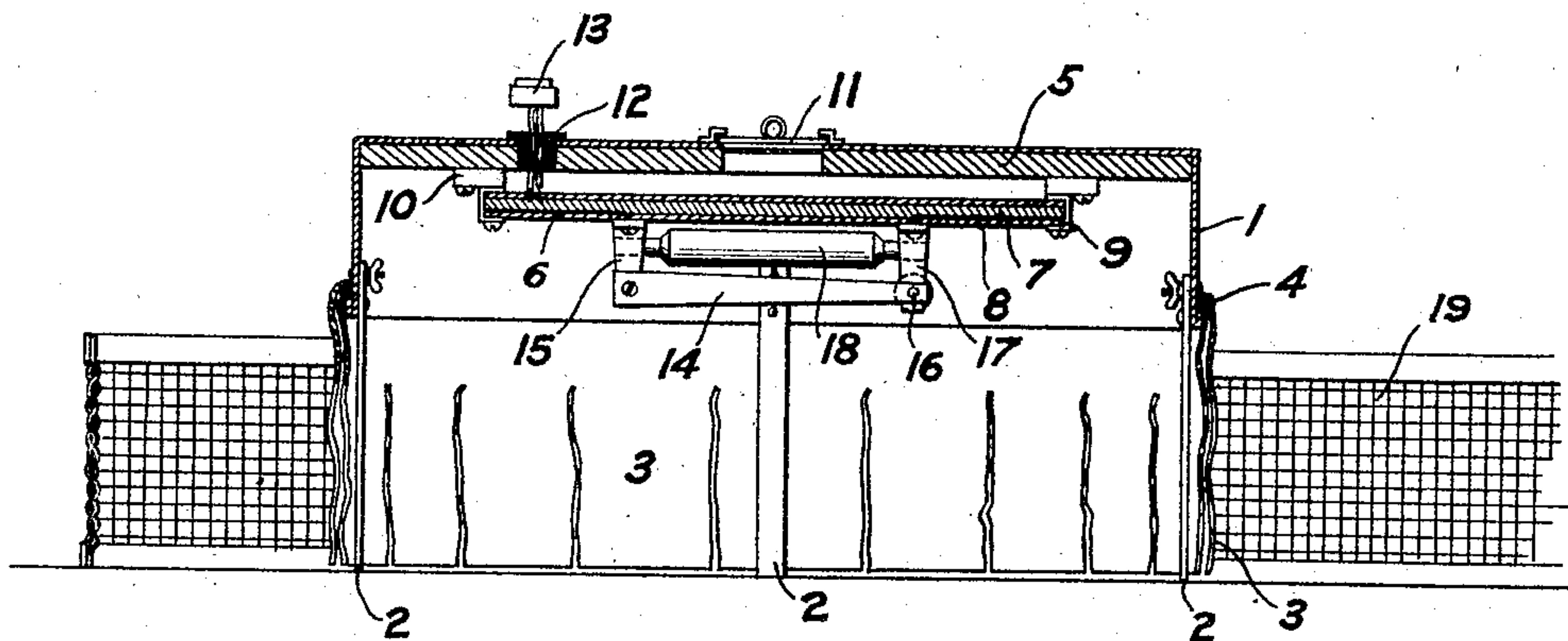
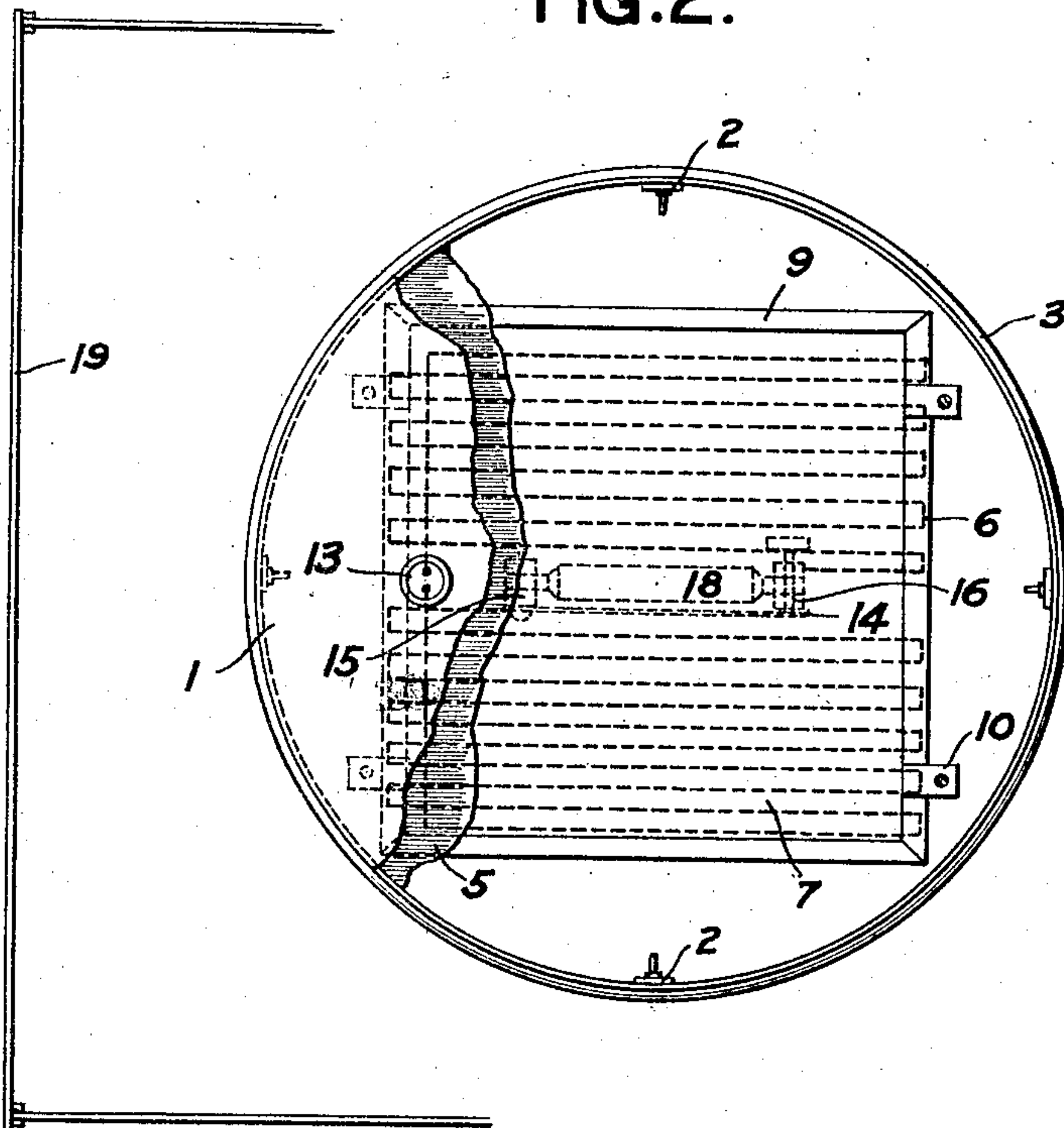


FIG. 2.



WITNESSES:

H. Gurnee.  
L. Thon

INVENTOR:

Grant M. Curtis  
by O. J. Davis  
his atty



# UNITED STATES PATENT OFFICE.

GRANT M. CURTIS, OF BUFFALO, NEW YORK, ASSIGNOR TO CYPHERS INCUBATOR COMPANY, OF BUFFALO, NEW YORK, A CORPORATION OF NEW YORK.

## HOVER FOR POULTRY.

989,127.

Specification of Letters Patent.

Patented Apr. 11, 1911.

Application filed August 28, 1908. Serial No. 450,750.

### *To all whom it may concern:*

Be it known that I, GRANT M. CURTIS, a citizen of the United States, and resident of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Hovers for Poultry, of which the following is a specification.

This invention relates to hovers for the care of domestic fowls and the like, and the object of the invention is to produce a hover which is electrically heated in a novel manner.

To the above end the invention consists in the electrically-heated hover hereinafter specifically described, as the same is defined in the succeeding claim.

In the drawings: Figure 1 is a central vertical section of a hover embodying the present invention; and Fig. 2 is a top plan view, parts being broken away to show interior construction.

The hover illustrated in the drawings comprises a circular drum 1, supported from the floor on legs 2, and having a flap or curtain 3 of felt or similar material depending from its lower edge to the floor. The curtain 3 is doubled over a wire 4 that holds it tightly on the rolled edge of the drum 1. The latter is open on the bottom, and its top is lined with a plate of felt or asbestos 5 to prevent loss of heat.

Suspended from the plate 5 in horizontal position is the heating element, which is broad and flat in form and consists of a coil of fine wire 6, supported between asbestos plates 7 and 8. The latter are bound together around their edges by a metal strip 9. Blocks 10 are placed between the latter and the plate 5, and serve to maintain an air-space between said plate and the heating-coils. The resistance of the coils 6 to the passage of an electric current generates heat.

A slide-door 11 is provided in the center of the top of the drum 1, which may be opened for ventilation.

The terminals of the coil 6 are led through an insulating bushing or collar 12 in the top of the drum 1 to a plug 13. The latter is constructed so as to be conveniently connected with a flexible connector from an electric fixture.

For maintaining an even temperature within the hover, a thermostat is connected in circuit with the coil 6, and in the present instance is a bimetallic bar 14, screwed to a post 15 depending from the heating coil at one end, and having its other end freely movable, and adapted to make contact with a screw 16 when the temperature drops below a certain point. The screw 16 is supported in a post 17. The wire 6 is connected to the posts 15 and 17 as shown in Fig. 2. When the thermostat 14 moves away from the screw 16, the current through the coil 6 is interrupted, and when the contact between said thermostat and screw is again made, the current may flow through said coils, and the resistance of the latter generates heat which is reflected downward from the asbestos plate 7.

A condenser 18 is connected across the posts 15 and 17, for the purpose of preventing a spark when the thermostat breaks contact with the screw 16.

A runway for chicks may be constructed by inclosing the hover with a wire-netting fence 19 of suitable dimensions.

The use of a heating-coil suspended near the top of the hover, in combination with a thermostat carried by and directly below the coil, produces a simple, compact and efficient arrangement in which the heat is most effectively applied, while the thermostat is so located as to measure and control the heat at the point where such control is essential, that is, directly above the backs of the chickens. The self-contained arrangement of the coil and the thermostat also adapts these parts for ready insertion in hovers of ordinary commercial form.

### What I claim is:

In a hover, a heating device comprising a flat resistance-coil, means for suspending the resistance-coil in horizontal position from the top of the hover, and a thermostat carried by the heating coil and suspended near the lower surface thereof, the thermostat being connected in series with the coil.

GRANT M. CURTIS.

### Witnesses:

FRANK C. PERKINS,  
E. J. PLUMLEY.