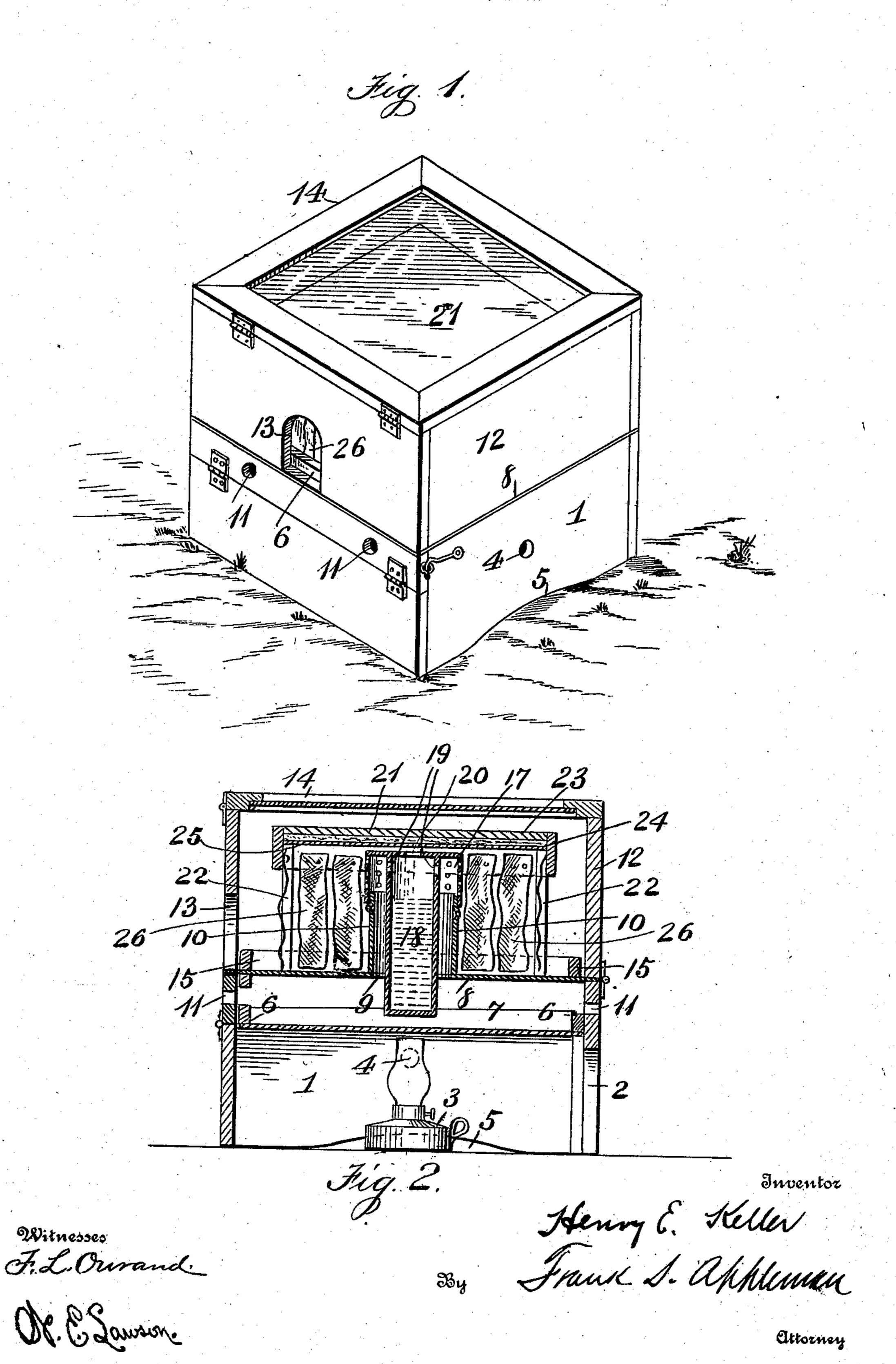
H. E. KELLER.

BROODER.

APPLICATION FILED JULY 26, 1906.



UNITED STATES PATENT OFFICE.

HENRY EDWARD KELLER, OF DECATUR, INDIANA.

BROODER.

No. 840,498.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed July 26, 1906. Serial No. 327,848.

To all whom it may concern:

Beitknownthat I, Henry Edward Keller, a citizen of the United States of America, residing at Decatur, in the county of Adams and State of Indiana, have invented certain new and useful Improvements in Brooders, of which the following is a specification.

This invention relates to new and useful improvements in poultry culture, and has relation more particularly to brooders.

It is an object of this invention to provide a novel device of this character wherein the heat is discharged within the brooder-chamber with the proper moisture.

It is also an object of this invention to provide a novel device of this character wherein plenty of fresh air is conveyed within the chamber.

Furthermore, an object of this invention is to provide a novel device of this character in which the whole brood-chamber is lighted up, so that the chicks have no dark corners to stand or sit in to chill.

It is also an object of this invention to provide a novel device of this character so constructed that it is impossible for lamp-fumes to enter the brood-chamber and have a disastrous effect on the chickens.

Finally an object of this invention is to produce a device of the character noted which will possess advantages in points of simplicity, efficiency, and durability, proving at the same time comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, in which—

Figure 1 is a view in perspective of the invention. Fig. 2 is a central sectional view.

In the drawings, 1 indicates the bottom section of the brooder, which is adapted to rest upon the ground or floor and is provided in one side with the opening 2, in order to permit the insertion within the section of the lamp 3. The sides of the section are also provided with the openings 4, while the lower edges of certain of the sides are provided with the elongated rounded recesses 5.

The openings 4 and the recesses 5, together with the opening 2, permit the admission of sufficient air within the section to support combustion.

Fitting within the top of the section 1 is a 60 frame 6, to the lower edge of which is fastened the metallic plate 7, which extends entirely across the upper portion of the section 1. This plate is slightly below the upper edge of the section. Resting on and fastened to the 65 upper edge of the section is a second metallic plate 8, which extends entirely over the section and is provided with the central aperture 9, having the upstanding annular flange 10. In the sides of the section 1 are openings 70 11, which permit fresh air to enter in the chamber formed by the two plates for a purpose to be hereinafter set forth. Hinged to one side of the section 1 is a second section 12, which is provided in one of its sides with a 75 suitable inlet 13. This section is provided with a hinged glass cover 14, the said cover lighting up the entire chamber formed by the section, said chamber being of course the brood-chamber. Around the edges or adja- 30 cent the edges of the plate 8 are strips 15. These strips are for the purpose of confining sand, which is placed upon said plate on which the chicks will rest.

Fitting over the flange 10 is a cap 17, hav- 85 ing its side wall or flange perforated. This will allow the air within the chamber between the two plates to enter into the brood-chamber. The lamp will heat the under plate, which in turn will heat the air between the 90 two plates. Said heated air will pass up through the opening in the top plate into the brood-chamber and said passage of air will continually draw fresh air through the openings before referred to. Depending centrally 95 from the under side of the cap is a copper tube 18, which when the cap is in applied position terminates a slight distance above the lower plate 7. The upper portion of the tube 18 is provided with a series of perforations 19, 100 while the top of the cap is provided with a central aperture 20, communicating with this tube. Water is placed within the tube through the opening 20 of the cap and when said water is heated sufficiently moisture 105 will pass through the openings 19 in the side of the tube within the cap and mingle with the hot air passing therethrough, and thus the air delivered into the chamber will be properly moistened. It is essential that the 110

bottom of the tube does not contact with the bottom plate 7, as the water therein would

become unduly heated.

Within the brood-chamber and positioned 5 over the tube is a hood 21, which is supported by the standards or legs 22. This hood is made preferably of wood 23, lined with asbestos 24, and then provided with a tin covering 25, making it waterproof. The sides of 10 the hood are provided with the curtains 26 as are ordinarily employed.

By having the chicks rest or walk upon the sand the same are prevented from being crippled, due from any possible excessive heat, 15 and I also find that in this device the chicks do not crowd each other as the heat or warm air is evenly diffused over the entire chamber. With the use of sand a most sanitary device is given, as the chamber can be easily cleansed 20 by removing the sand, as will, it is thought, be readily appreciated.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a device of the character described, a 25 chamber having a double flooring, the upper flooring being provided with an opening, an annular flange arranged around the opening, a cap fitted on the annular flange, the walls of said cap being perforated and the top of the 30 cap being provided with an opening, a tube depending from the top of the cap, the upper portion of the tube being perforated, and a heating means arranged beneath the double flooring.

In testimony whereof I affix my signature, in the presence of two witnesses, this 24th

day of July, 1906.

HENRY EDWARD KELLER.

Witnesses:

OSCAR HOFFMANN, FRED V. MILLS.