(No Model.)

2 Sheets—Sheet 1.

E. P. SNYDER.

POULTRY BROODER.

No. 503,172. Patented Aug. 15, 1893.

Fig. 1.

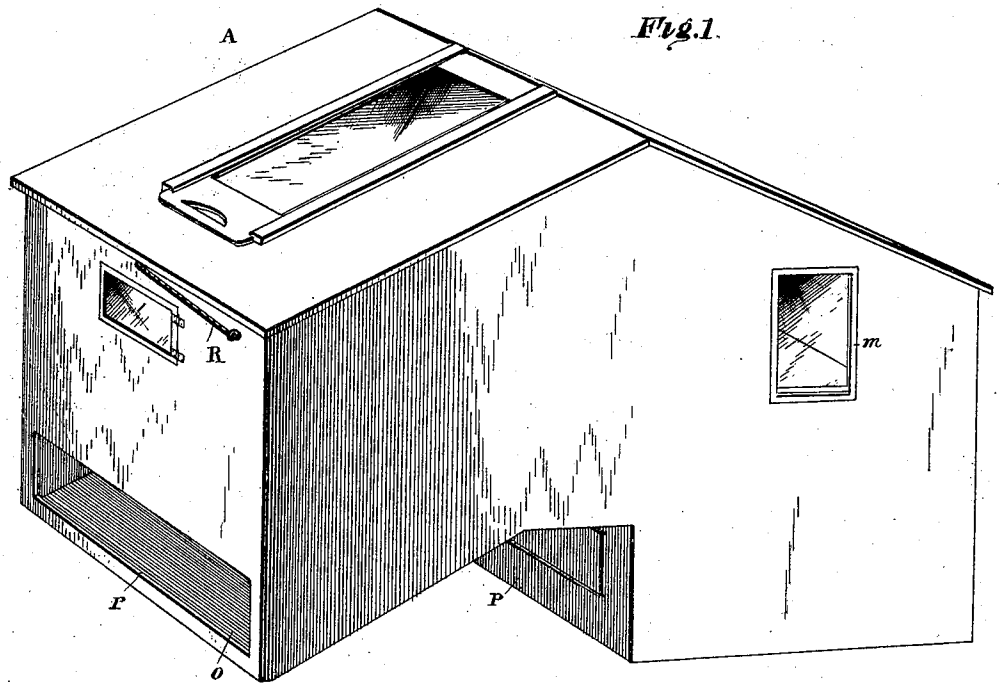


Fig. 4.

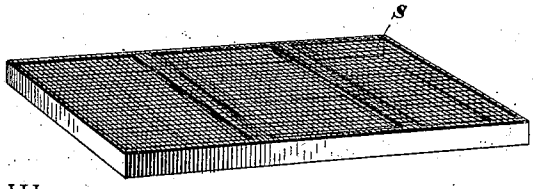
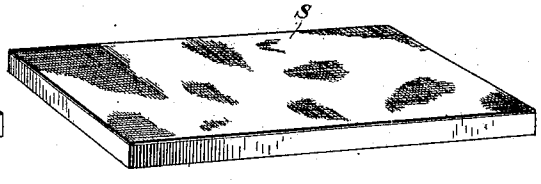


Fig. 5.



Witnesses
A. Ford.
C. E. Coyle.

Inventor
E. P. Snyder.

By his Attorneys,
C. A. Snow & Co.

(No Model.)

2 Sheets—Sheet 2.

E. P. SNYDER.

POULTRY BROODER.

No. 503,172. Patented Aug. 15, 1893.

Fig. 2.

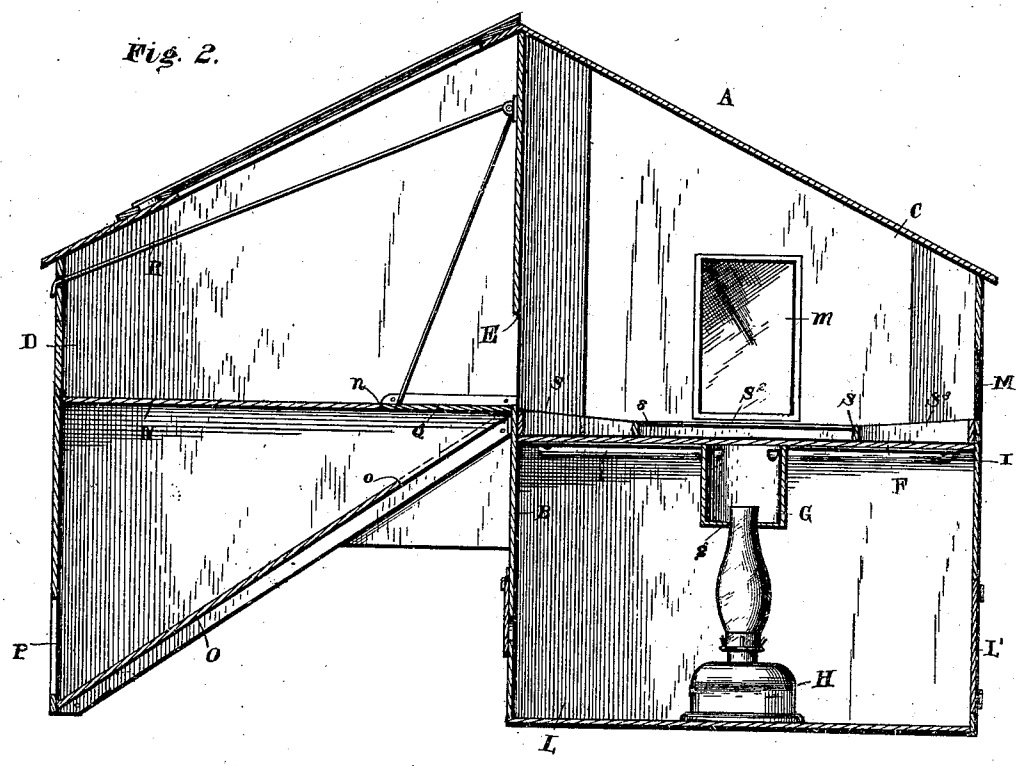
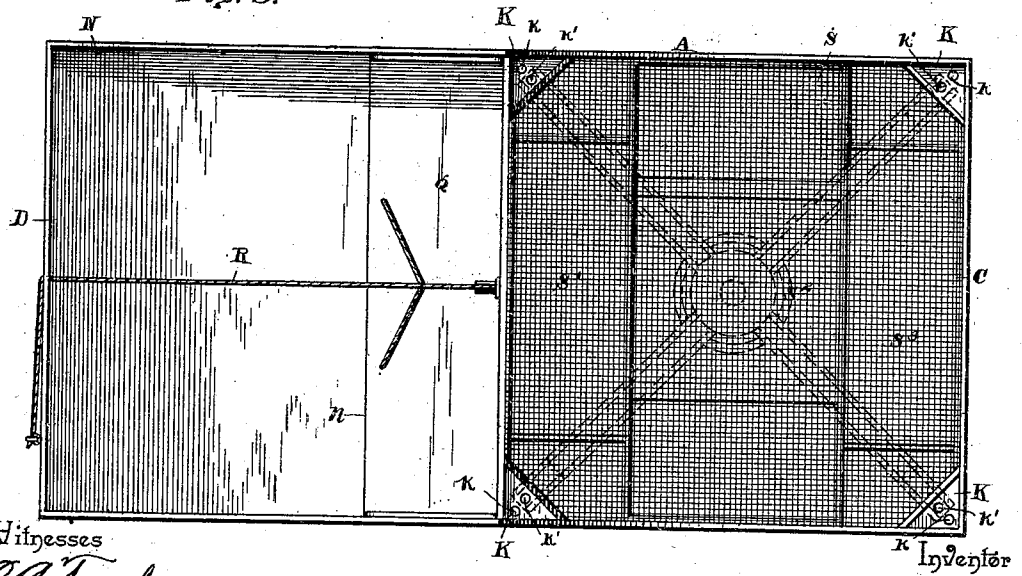


Fig. 3.



Witnesses

A. Ford.

Inventor

E. P. Snyder.

By his Attorneys,

A. Snow & Co.

UNITED STATES PATENT OFFICE.

EMORY P. SNYDER, OF CHAMBERSBURG, PENNSYLVANIA.

POULTRY-BROODER.

SPECIFICATION forming part of Letters Patent No. 503,172, dated August 15, 1893.

Application filed October 20, 1892. Serial No. 449,460. (No model.)

To all whom it may concern:

Be it known that I, EMORY P. SNYDER, a citizen of the United States, residing at Chambersburg, in the county of Franklin and State of Pennsylvania, have invented a new and useful Poultry-Brooder, of which the following is a specification.

My invention relates to improvements in poultry-brooders; and the object of my invention is to provide means to prevent the smothering, common among young chickens; furthermore, to provide means to maintain an even temperature, thereby preventing chilling and over-heating; and furthermore, to provide simple and readily operated means for feeding, liberating, and providing light and air to the poultry.

Further objects and advantages of my invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings: Figure 1 is a perspective view of a brooder embodying my improvements. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a plan view of the floor of the brooding chamber, showing in dotted lines the arrangement of the heating cylinder and conducting tubes. Fig. 4 is a detail view of one of the sections of the raised, perforated platform. Fig. 5 is a similar view of a section of the raised platform covered with canvas or other fabric, this being used when the chickens are too young to be placed upon the grating of the platform.

Referring by letter to the drawings, A represents the box or inclosure, which is divided by a vertical partition, B, into sections or divisions, in one of which, at the top, is arranged the brooding-chamber, C, and in the other the feeding chamber, D, these feeding and brooding chambers being arranged to communicate through the opening, E, in the vertical partition.

F designates the floor of the brooding-chamber, beneath which, at its center, is arranged the vertical heating cylinder, G, having an opening, *g*, in its bottom to receive the upper end of the chimney of a lamp or heating device, H. Communicating with this cylinder are the radially disposed distributing or conducting tubes, I, which are half-tubular in shape and are secured by means of flanges to the under side of the floor of the brooding-chamber. The heat which is received in the heating cylinder is distributed by means of these tubes, and the upper sides of the latter being formed by the floor of the compartment it is evident that the heat is communicated directly thereto without appreciable loss. Vertical corner walls are arranged at the angles of the brooding-chamber to form flues, K K, which communicate, by means of apertures, *k k*, in their bottoms, with the heating compartment, L, in which is arranged the heating-device. This heating-compartment is provided with a door, L′, and the brooding-chamber is provided with a door, M, and side windows *m m*, to admit light, and, when necessary, air.

The floor, N, of the feeding compartment is provided with an opening, *n*, and the inclined way, O, which is arranged at its upper end close to the inner side of the floor, N, and at its lower end on the plane of the bottom of the exit, P, is also provided with an opening, *o*, and a swinging leaf, Q, is hinged to the bottom of the opening E in the vertical partition and is adapted to lie in either of the openings, *n*, *o*, so as to complete either the floor of the feeding chamber or the inclined way. An operating cord, R, is attached to this swinging leaf and extends to the outside of the box or inclosure. The roof of the feeding chamber is provided with a sliding glass door, to afford light at all times and ventilation when necessary.

I arrange a perforated false-bottom, S, in the brooding-chamber, with a subjacent air-space, *s*, between the same and the floor of the chamber, whereby the chickens are prevented when crowded together from smothering those at the bottom of the pile. This frequently happens with young chickens, those at the bottom being unable to liberate themselves, and being entirely cut off from a supply of air. But by the use of a raised, perforated platform, which is separated from the imperforate floor of the chamber by an intermediate air-space this danger is avoided. I also preferably form this platform in separable sections, S', S^2 and S^3, the central section being horizontal and the end sections being inclined upward toward their outer edges, as shown clearly in Fig. 2. This is to prevent

the crowding of the chickens in the corners of the chamber, &c.

In Fig. 5 I have illustrated a form of the platform which is covered with canvas, ticking, or other porous fabric which will allow the air to penetrate therethrough, said platform being designed for use with the chickens immediately after being hatched, to prevent them from being chilled. The tubes I I extend beneath the vertical flues K K, and communicate therewith through small apertures, *k' k'*, by which the heat from the lamp is conveyed directly to the flues, and is also admitted thereto through the apertures, *k*.

Changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. In a poultry-brooder, the brooding-chamber provided at its sides with vertical imperforate flues, a subjacent heating-chamber, a heating-cylinder located at the center of the heating-chamber in contact with the interposed imperforate main floor of the brooding-chamber, horizontal distributing tubes in contact with the under surface of said main floor of the brooding-chamber, communicating at their inner ends with the heating cylinder and at their outer ends with the lower ends of the vertical flues, a perforate removable floor arranged above and separated from the main floor, and means for supplying heat to the heating-cylinder, substantially as specified.

2. In a poultry brooder a brooding-chamber provided with a perforated floor having a central horizontal portion and side portions which are inclined toward the center to prevent crowding in the corners, substantially as specified.

3. In a poultry brooder, the combination with the brooding-chamber provided with an imperforate floor, of a perforated and raised platform resting upon and supported by said floor and comprising a central horizontal and side inclined sections, substantially as specified.

4. In a poultry brooder, the feeding chamber having its floor partly cut away to form an opening, an inclined way located beneath the floor of the feeding chamber and having a similar opening near its upper end, a swinging leaf adapted to fit either of said openings, to complete either the floor of the feeding-chamber or the inclined way, and means to operate said leaf, substantially as specified.

5. In a poultry brooder, the box provided with an intermediate vertical partition, a brooding-chamber at one side of said partition and a feeding-chamber at the other side thereof, said chambers communicating through an opening in the partition, an inclined way leading from said opening near the plane of the floor of the feeding-chamber to an exit, a swinging leaf adapted to fit in openings in either the inclined way or the floor of the feeding chamber, and means to operate said leaf, substantially as specified.

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

EMORY P. SNYDER.

Witnesses:
DAVID FRANK,
A. M. CRISWELL.