

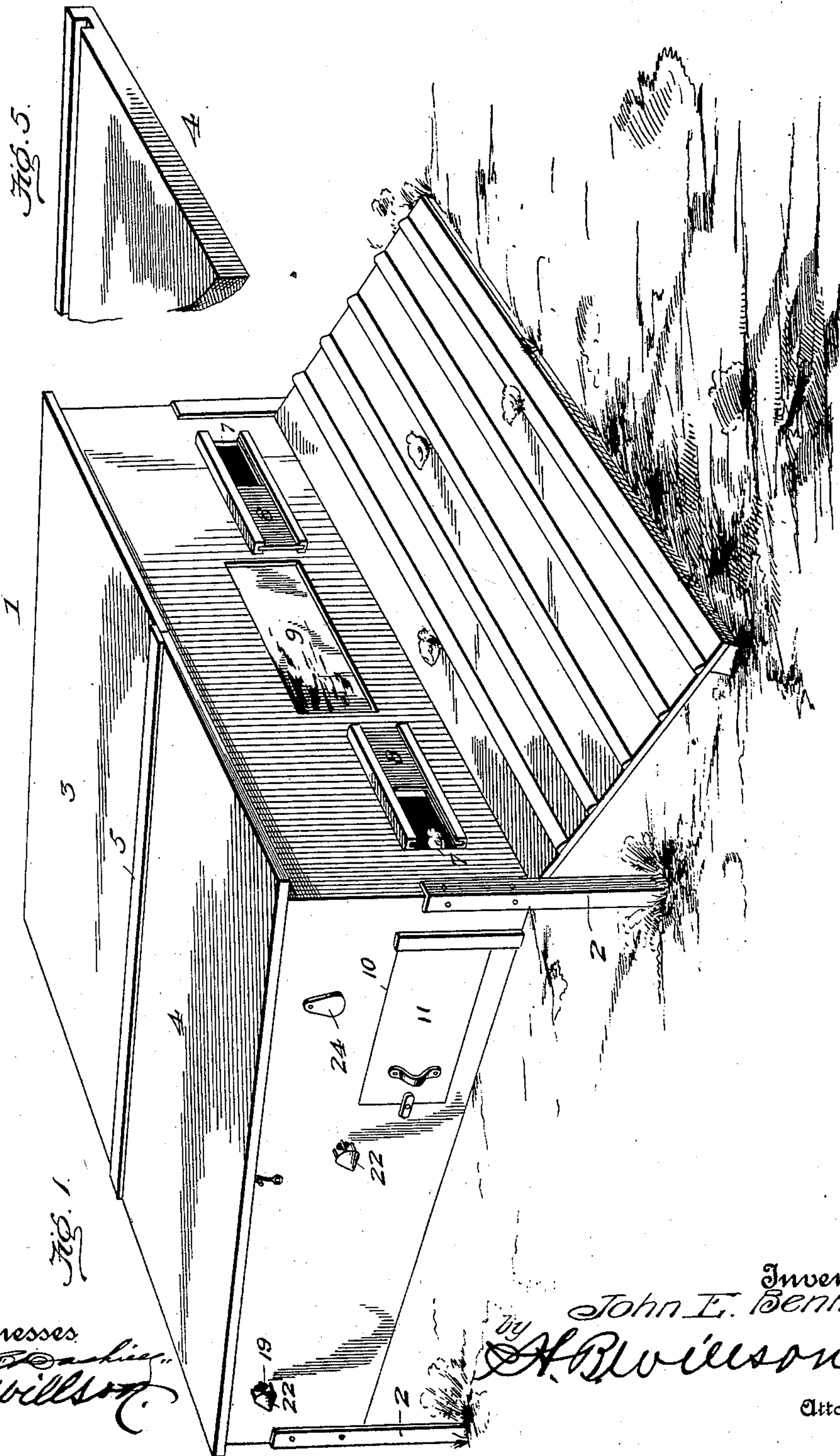
(No Model.)

3 Sheets—Sheet 1

J. E. BENNETT.
BROODER.

No. 596,469.

Patented Jan. 4, 1898.



Witnesses
John E. Bennett
J. A. Willson

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(No Model.)

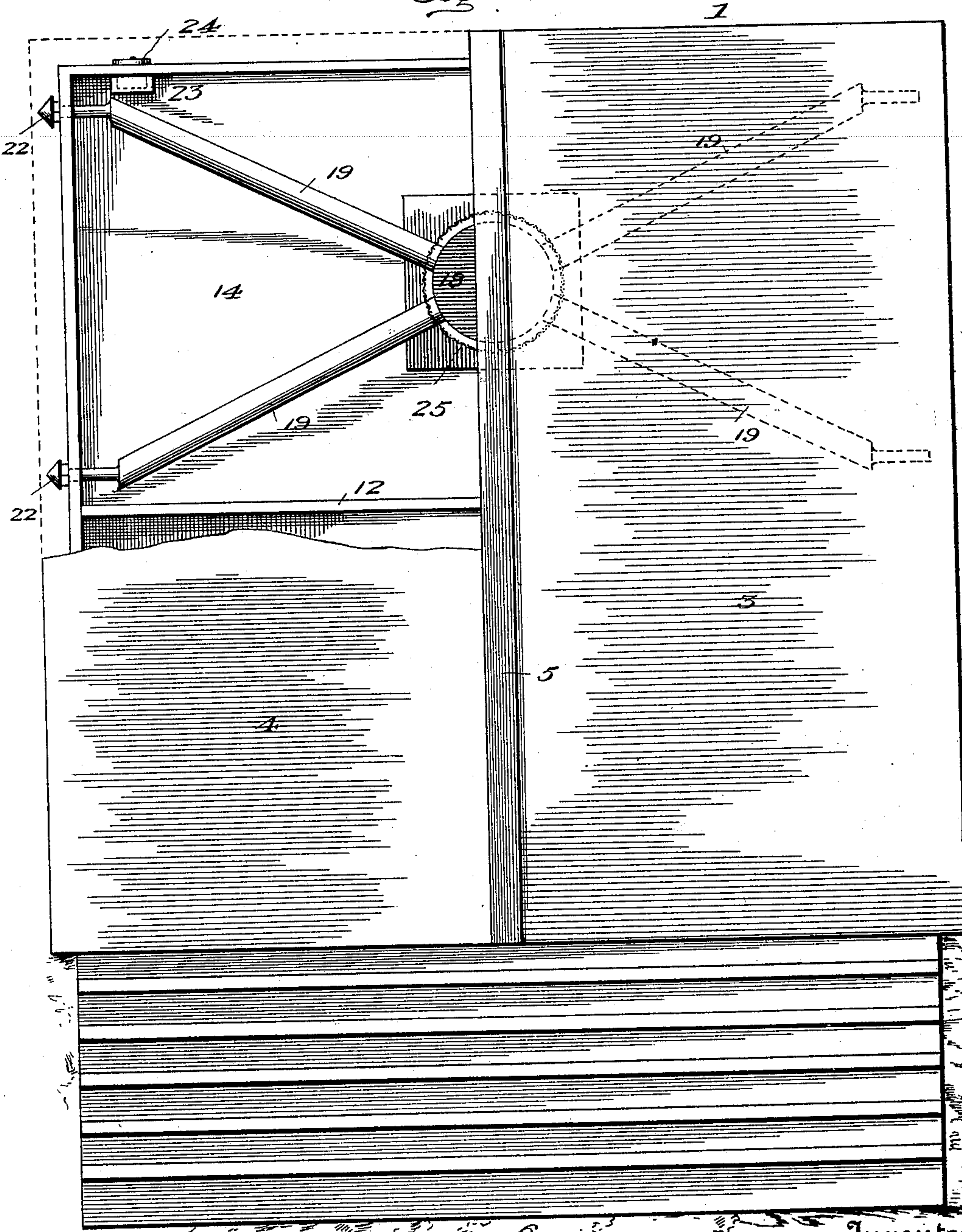
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Fig. 2.



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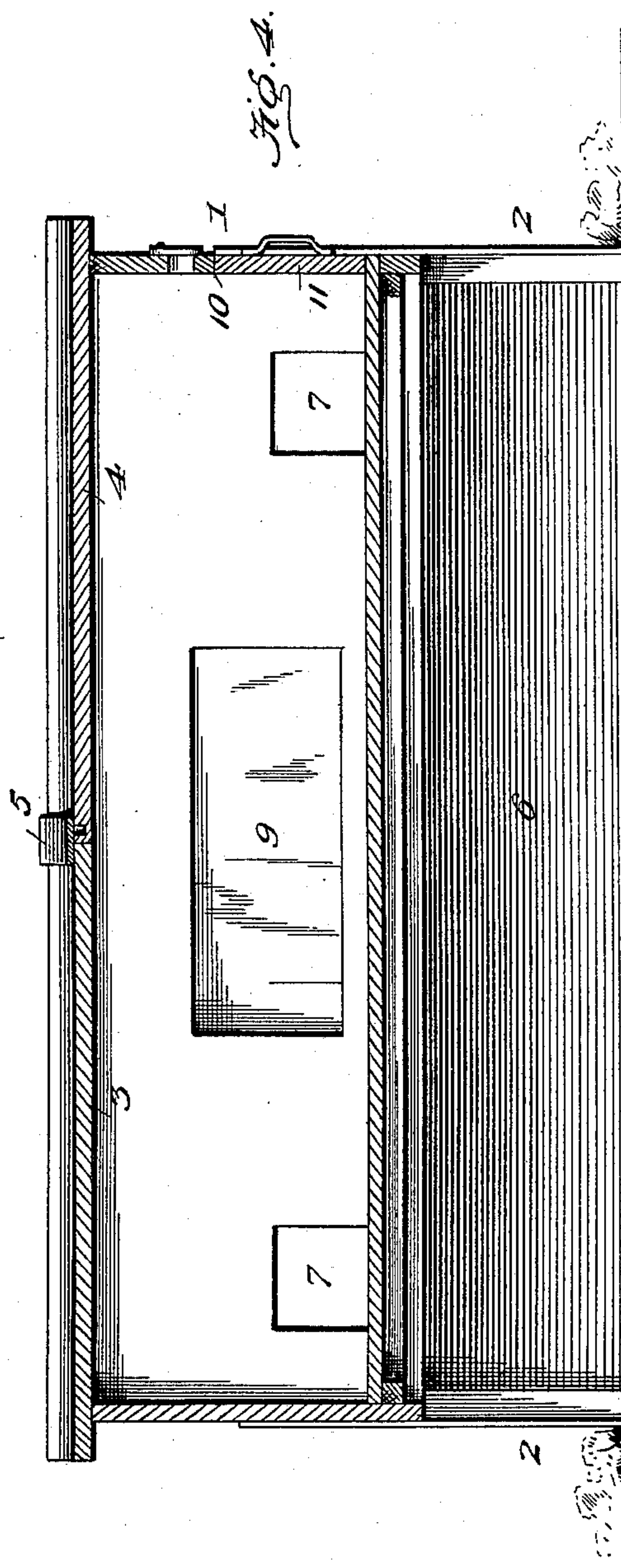
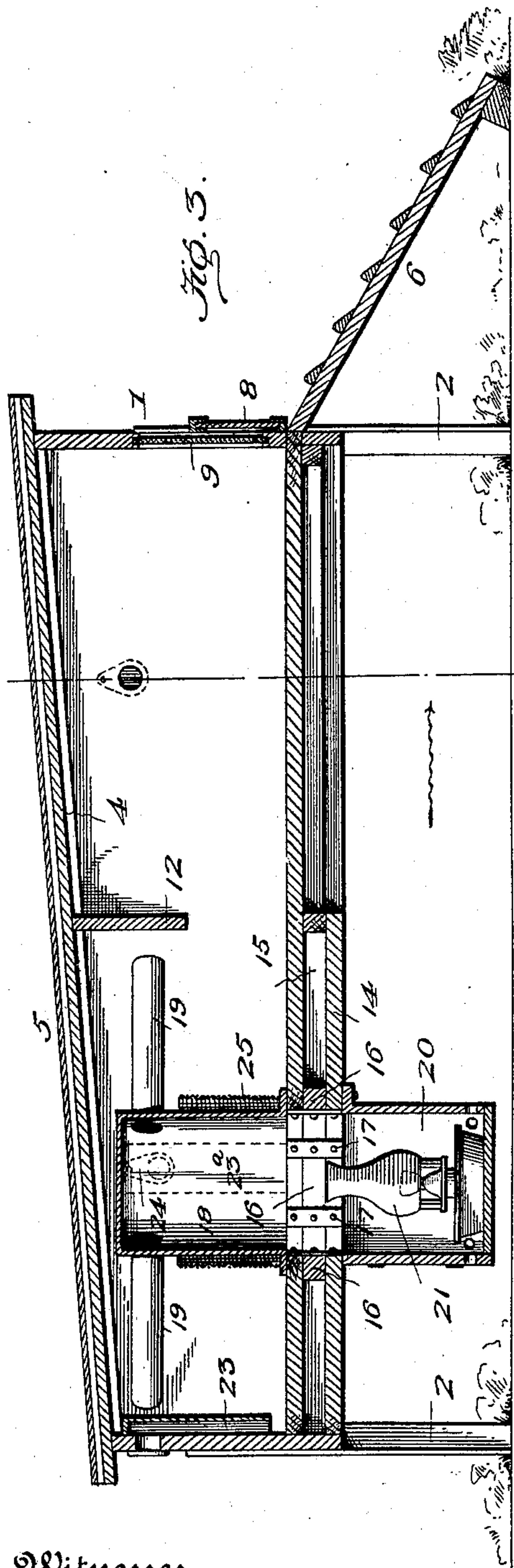
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UNITED STATES PATENT OFFICE.

JOHN E. BENNETT, OF GOUVERNEUR, NEW YORK.

BROODER.

SPECIFICATION forming part of Letters Patent No. 596,469, dated January 4, 1898.

Application filed March 22, 1897. Serial No. 628,710. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. BENNETT, a citizen of the United States, residing at Gouverneur, in the county of St. Lawrence and State of New York, have invented certain new and useful Improvements in Brooders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to brooders; and the object is to provide a device of this character which shall be simple of construction, durable in use, and comparatively inexpensive of production.

With these objects in view the invention consists of certain features of construction and combination of parts, which will be hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved brooder, looking from the front end. Fig. 2 is a top plan view of a portion of one of the roof-sections removed. Fig. 3 is a longitudinal vertical sectional view. Fig. 4 is a similar view taken at right angles to Fig. 3, and Fig. 5 is a detail perspective of a fragment of the removable section of the roof.

In the drawings, 1 represents the brooder-casing, which in the present instance is shown as rectangular in form and supported by legs 2. The roof of the brooder-casing is made of two sections 3 4, the former of which is permanently secured to the casing and the latter of which is removably secured thereto. The roof slants from its forward to its rear end, so as to drain off water when the brooder is used outdoors. The removable section 3 of the roof fits under a lap-joint 5, and is provided with a longitudinal groove, which lies below the joint, so that the water which tends to run in between the joints will be drained off at the rear end of the roof.

6 denotes a platform which extends across the front of the casing, and 7 the entrance-openings through which the chicks pass in and out. These openings are adapted to be closed by sliding doors 8.

9 denotes a large glass window in front, preferably, of the casing, which serves to furnish light to the chicks.

10 denotes an opening in one of the sides of

the casing, and 11 a door adapted to cover said opening. The lower wall of this opening is flush with the floor of the brooder, so that the same may be easily cleaned.

The brooder is preferably divided into two compartments by a partition 12, which extends across the casing but is separated from the bottom thereof to allow the chicks to pass. The rear compartment is known as the "hover," and for convenience of reference I will term the front compartment the "cooling-chamber." The floor 13 of the hover has a false bottom 14, separated therefrom to form a heating-chamber 15. Coinciding apertures are formed in the floor of the false bottom and are preferably square. Blocks or dampers 16 are adapted to close this heating-chamber. These blocks are each provided with one or more stop-plates, so that in inserting the blocks in the spaces between the floor and the false bottom to close the chamber the blocks will not be shoved too far in between the parts, but will be stopped by the ends of the plates abutting against the edges of the apertures of the floor and the false bottom. In this position they are securely held in place by screws 17.

Secured to the floor of the hover over the opening is a heating-drum 18, which projects upwardly within the hover. This drum is provided with radiating hot-air pipes 19, the outer ends of which are contracted and pass through the sides of the casing. By contracting the ends of these tubes the volume of heat will not so readily escape, and I thus secure a greater radiating-surface for the tubes within the hover.

20 denotes the lamp-box, which is secured to the under side of the false bottom directly beneath the opening therein, and 21 denotes the lamp. One of the sides of the box is hinged, so that the lamp may be inserted and removed therefrom. If it is desired to supply heat to the chicks from above, which is more natural than from below, the dampers are so placed as to prevent the heat from the lamp entering the heating-chamber formed by the floor of the hover and the false bottom. The heat will now pass up through the heating-drum and into the enlarged portions of the radiating-pipes and will thoroughly heat the chamber. Should the heat become too great for the chicks, they may run from

the hover into the cooling-chamber without danger of being chilled, as the temperature in the cooling-chamber is but slightly lower than that in the hover. To prevent the wind
5 blowing out the lamp, I provide hoods 22 at the reduced outlet ends of the radiating-pipes.

To cool the hover, I provide pipes 23 23^a, which are located within the hover, the former pipe supplying fresh air to the bottom or
10 lower portion of the hover and the latter pipe allowing the air to escape at the top of the hover, so that the fresh air must first pass from the bottom to the top, thus more effectually cooling the hover and purifying the
15 air therein. Shutters 24 are pivoted to the casing for closing the ends of these tubes.

To prevent the chicks burning or injuring themselves by coming in contact with the heating-drum, I provide the same with a fen-
20 der 25, which consists, preferably, of a reticulated or foraminous material. This will permit of the radiation of the heat from the drum throughout its entire length.

Should it be desired to heat the floor of the
25 hover, by removing one or more of the dampers the heat will be caused to pass into the chamber formed by the floor of the hover and its false bottom.

From the foregoing description, taken in
30 connection with the accompanying drawings, the operation and advantages of the invention will be readily understood.

The brooder is exceedingly simple, is composed of few parts, and can be placed upon

the market so as to be within reach of all 35 parties.

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

A brooder comprising a casing divided into 40 a hover and a cooling-chamber by a depending partition separated from the floor of the casing, a false bottom for the casing forming a heating-chamber that extends under the entire floor of the casing, a lamp-box secured 45 to the false bottom and communicating with the heating-chamber, dampers or valves arranged at the points of communication of said lamp-box with the heating-chamber, a drum secured within the hover and having 50 its upper end closed, pipes radiating from said drum and extending through the sides of the casing and arranged a sufficient distance above the floor of the hover to be out of reach or touch of the chicks, an open-work 55 shield surrounding the heating-drum, and pipes 23, 23^a, one communicating with the outer air at a point near the top of the hover, and the other at a point near the floor of the hover, substantially as and for the purpose 60 set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN E. BENNETT.

Witnesses:

HARRY C. MILLETT,
COLBERT A. BENNETT.