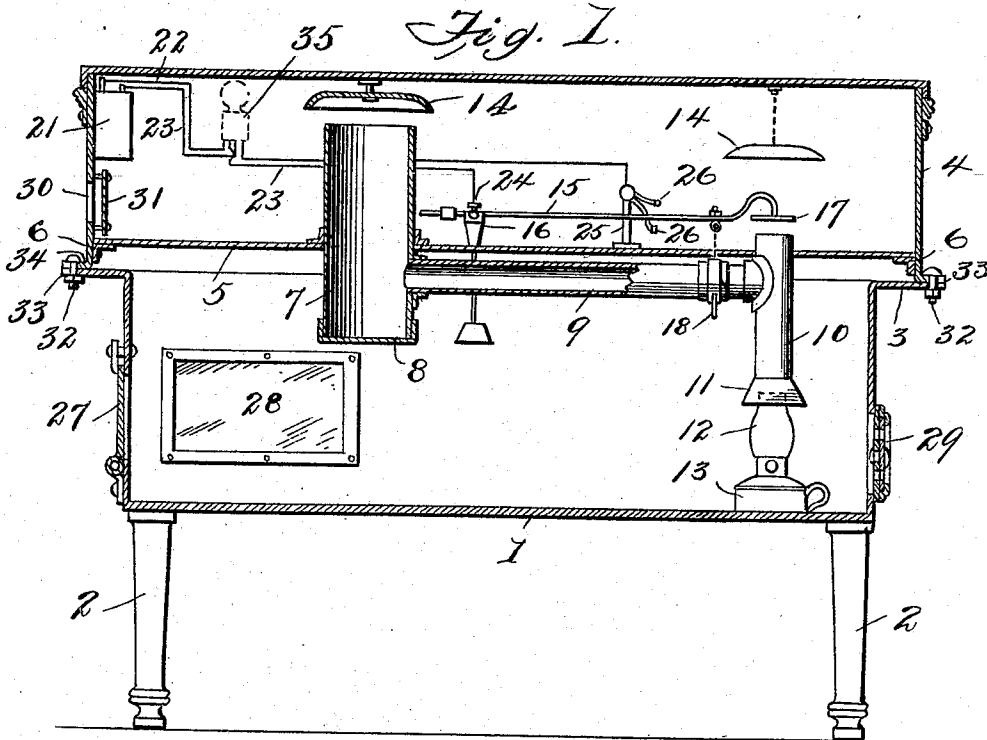
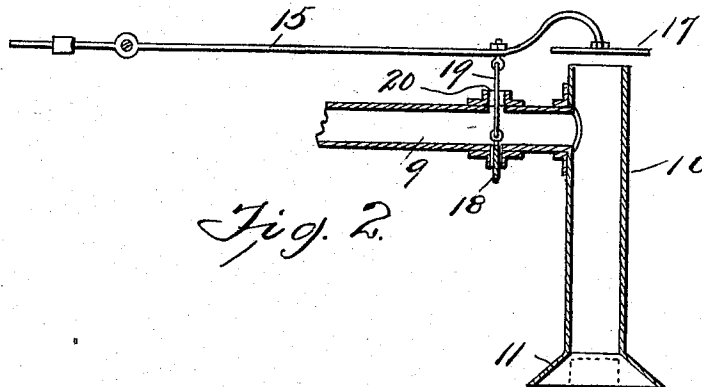


F. T. PORTER.
BROODER.

APPLICATION FILED SEPT. 19, 1906.

907,871.

Patented Dec. 29, 1908.



Witnesses
Chas. H. Davies.
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By

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UNITED STATES PATENT OFFICE.

FAY T. PORTER, OF MORRISTOWN, INDIANA.

BROODER.

No. 907,871.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed September 19, 1906. Serial No. 335,319.

To all whom it may concern:

Be it known that I, FAY T. PORTER, a citizen of the United States, residing at Morristown, in the county of Shelby 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 brooders.

10 The invention aims as a primary object to provide in connection with an electric alarm for indicating the heat, which is the subject of a prior patent, a novel heat regulating means actuated by an element of said alarm.

15 The invention further aims to provide a device that shall be inexpensive to manufacture and practical and efficient in use.

20 The detailed construction will appear in the course of the following description in which reference is had to the accompanying drawings forming a part of this specification, like numerals designating like parts throughout the several views, wherein,

25 Figure 1 is a central longitudinal section of a brooder constructed in accordance with my invention, and Fig. 2 is a detailed longitudinal section of a heat regulating means embodied in my invention.

Referring specifically to the accompanying drawings, the numeral 1 designates the body of the brooder, which is supported upon legs or corner posts 2. The body 1 is provided along its upper edge with a lateral flange 3 extending on all sides thereof to which is removably secured a closed upper portion 4 which forms a roof for the brooder and is provided with a horizontal plate or partition 5 supported upon a ledge 6 and serving as a ceiling for the body 1. The ceiling 5 also serves incidentally as a support for the various elements of the invention. To this end a vertical heating drum 7, provided with a bottom 8, and an open upper end is projected therethrough. The drum 7 in its lower portion communicates with a tubular pipe 9 leading from a flue 10 also projecting through the ceiling 5 and provided at its lower end with a flared extension 11 surrounding the chimney 12 of a lamp 13 supported upon the floor of the body 1 and serving for lighting and heating purposes. The top plate of the roof 4 is protected from the heat by suitable guards 14 disposed above the drum 7 and flue 10. A thermostatic lever 15 is pivotally

mounted within the roof 4 upon a suitable support 16 and at its end is provided with a shoe or plate 17 placed directly above the flue 10. From the element 15 a sliding gate 18 is suspended by means of a rod or other suitable connection 19. The rod 19 works in an opening 20 in the pipe 9 and the gate 18 has transverse movement with relation to said pipe. In such action said gate serves as a damper to regulate the heat in the well known manner. Aside from this function as a thermostatic damper regulator, the lever 15 is also designed to sound an alarm by virtue of the electrical connections therewith in its extreme expansive and retractile movement. To this end a battery 21 is provided from which leads a wire 23 having permanent connection with the lever 15 as at 24, adjacent the support 16 of said lever, and a wire 22 having connection with a post 25 from which spaced contacts 26 are supported in superposed relation.

The body 1 is provided with a door 27, a window 28 for admitting light in the day time and an air register 29. The lamp 13 serves to afford light at night to prevent the fowls from crowding. The roof 4 is provided with an opening 30 through which bad air passes from the brooder, a deflecting plate 31 being mounted in front of said opening within the brooder. It is preferred to have the roof 4 removable as shown by providing bolt and nut connections 32 engaging in sheared recesses 33 disposed in registering relation in the flange 3 of the body portion 1 and in a confronting flange 34 of the roof 4. If desired the roof may be hinged or pivoted.

The operation will be readily apparent. The ceiling 5 serves as a distributing plate for the heated air circulating within the roof and in this function co-acts with the drum 7. When the heat becomes excessive the lever 15 expands and rocks upwardly on its pivot so as to engage the uppermost contact 26 and thereby complete the circuit so as to ring the bell 35 interposed in the wires 22 and 23. In this action, the lever 15 raises the gate 18 and shuts off the heat from the drum 7 as will be readily understood. When the temperature falls below a predetermined degree, the lever 15 contracts and rocks downwardly on its pivot so as to engage the lower contact 26 and sound the alarm 35 in the same manner. In this action the gate 18 moves down-

wardly so that communication is established between the flue 10, the pipe 9 and the drum 7.

While the elements herein shown and described are well adapted to serve the functions set forth, it is obvious that various minor changes may be made in the proportions, shape and arrangement of the several parts without departing from the spirit and scope of the invention as defined in the appended claims.

Having fully described my invention I claim:

1. In a brooder, the combination of a casing, a source of heat in said casing, a second closed casing superposed upon said first named casing, a flue leading from said source of heat upwardly through the base of said last named casing, a heat service pipe within said first named casing, and leading from said flue, a damper in said service pipe, a thermostatic bar arranged in said last named casing having one end fixed and having its other end provided with a plate disposed above the upper end of said flue within said last named casing, and a positive connection between said thermostatic bar and said dam-

per, leading through the base of said last named chamber within said first named chamber, substantially as described.

2. In a brooder, a casing having an outwardly flanged upper edge, a source of heat in said casing, a second closed casing mounted upon said flange of said first named casing, a flue leading from said source of heat upwardly, through the base of said last named casing, a heat service pipe within said first named casing, and leading from said flue, a damper in said service pipe, a thermostatic bar arranged in said last named casing having one end fixed and having its other end provided with a plate disposed above the upper end of said flue within said last named casing, and a positive connection between said thermostatic bar and said damper, leading through the base of said last named chamber within said first named chamber, substantially as described.

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

FAY T. PORTER.

Witnesses:

AT CLARK,
WILSON T. HANDY.