July 15, 1924. 1,501,434

J. W. BRANSON

BROODER STOVE

Filed Nov. 29, 1922 2 Sheets-Sheet 1

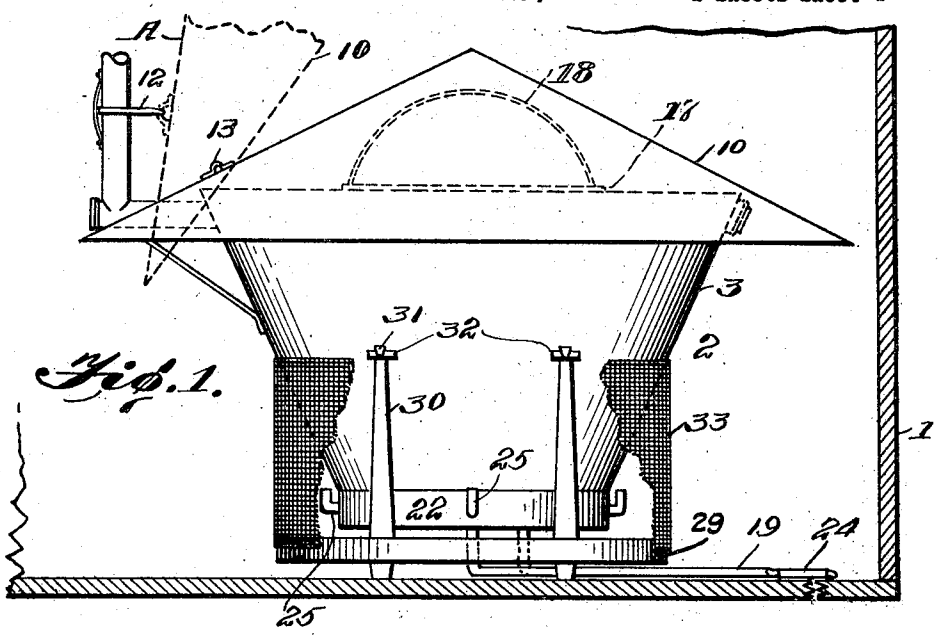


Fig. 1.

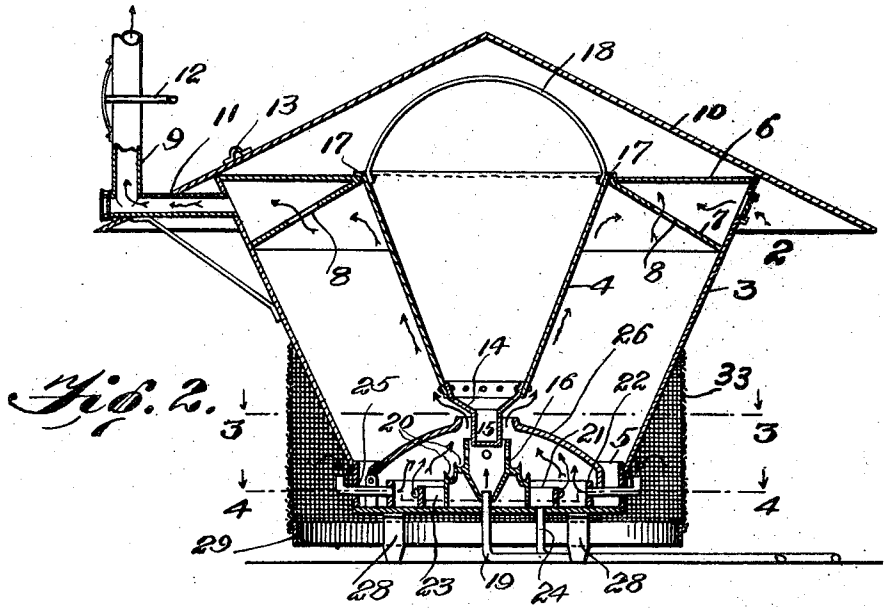


Fig. 2.

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Fig. 3.

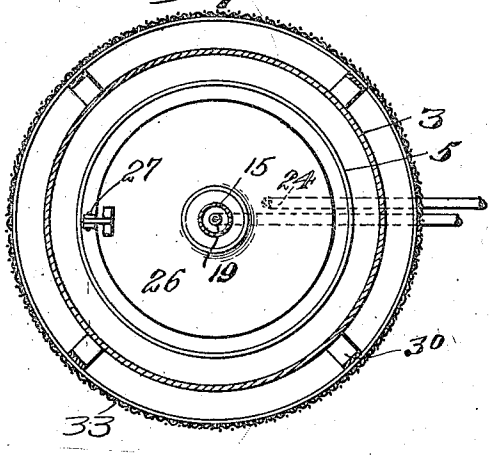


Fig. 4.

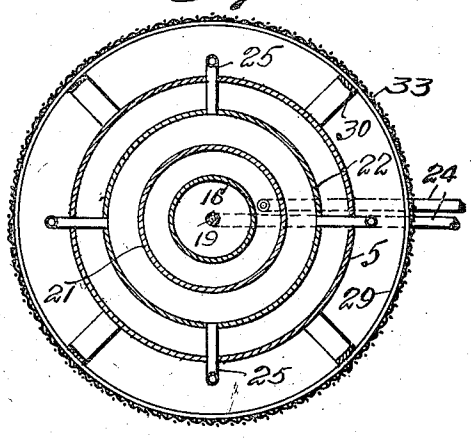
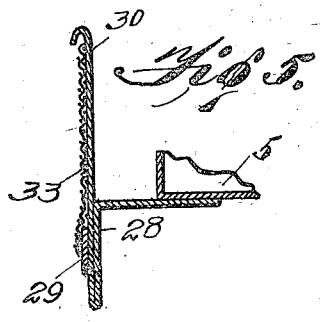


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN W. BRANSON, OF WALLACE, VIRGINIA.

BROODER STOVE.

Application filed November 29, 1922. Serial No. 604,048.

To all whom it may concern:

Be it known that I, JOHN W. BRANSON, a citizen of the United States, residing at Wallace, in the county of Washington and State of Virginia, have invented certain new and useful Improvements in Brooder Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a hot blast brooder stove, and the object of the invention is the construction of a simple and efficient stove for brooders, which will operate in a positive manner, giving a maximum amount of heat for satisfactorily heating a brooder.

Another object of the invention is the construction of a regulating device, whereby the amount of fuel supplied to the brooder stove may be accurately and efficiently controlled.

With these and other objects in view, my invention comprises certain novel combinations, constructions and arrangements of parts as will be hereinafter described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a view showing part of a brooder body with my improved brooder stove mounted therein, said stove being shown in side elevation.

Figure 2 is a vertical, central sectional view of the brooder stove.

Figure 3 is a section, taken on line 3—3, Fig. 2, and looking in the direction of the arrows.

Figure 4 is a sectional view, taken on line 4—4, Fig. 2, and looking in the direction of the arrows.

Figure 5 is a fragmentary, sectional view of the brooder stove, showing particularly the wire mesh guard and the frame to which it is attached.

Referring to the drawings by numerals, 1 designates the brooder body in which the brooder stove 2 is positioned.

The brooder stove 2 comprises an outer drum 3 and an inner drum 4. The outer drum 3 is connected at its lower end with the burner pan 5 and to its upper end is secured the horizontal top 6. Fastened to the inner end of top 6 and to the inner face of outer drum 3 is an inclined smoke drum 7.

The smoke drum 7 is provided with a plurality of apertures 8 through which the smoke or gases may pass, from the burner (hereinafter described) to the smoke pipe 9. A "hover" or cover 10 is mounted upon the upper edge of the outer drum 3 and said cover 10 can move at 11 (Fig. 2), upon pipe 9 to allow the cover to be moved to the dotted position A shown in Fig. 1, in which position it can be held by the catch device 12, which catch device is hooked into the eye 13, secured to the top of the cover 10. It is desired to raise the cover 10 when the operator wishes to examine or have access to the interior of the stove.

The inner drum 4 is of inverted conical shape, and has a closure device 14 mounted in its lower end (Fig. 2). This closure device 14 is provided with a reduced depending extension 15 that projects a slight distance into the body 16 of the burner. The upper end of drum 4 is provided with a horizontal flange 17 that rests upon the upper face of top 6. A handle 18 is fastened to the inner drum 4 to permit the operator to readily lift the drum from its normal or seated position, Fig. 2.

The burner comprises the hollow, apertured body 16 which body is open at its upper end to allow the depending extension 15 to project therein and its lower end is reduced, into which lower end projects the inner end of oil pipe 19. The body 16 is provided with annular grooves 20, one groove being raised slightly above the other to receive the oil prior to lighting the burner. An inner ring 21 and an outer ring 22 are fastened to the burner pan 5, around the burner body 16. Between the burner body 16 and the inner ring 21 is formed an overflow compartment 23, and an overflow pipe 24 communicates, at its inner end, with compartment 23 so that any surplus oil flowing from grooves 20 down into compartment 23 may pass into the overflow pipe 24.

A plurality of air inlet pipes 25 are connected at their inner ends to the outer ring 22, and their outer ends are bent at right angles and open into the outer atmosphere, so that air can enter between the inner and outer rings 21 and 22, respectively, and thence be heated and pass up between the inner and outer drums, which allows oxygen to mingle with the flame, thereby facilitating combustion.

A burner cap 26 is provided with hinge 27 so that the cap 26 is hingedly mounted over the burner. Upon the removal of the

inner drum 4, cap 26 can be raised so that the operator may have ready access to the burner.

Angle legs 28 are secured to the bottom of the pan 5 and a band 29 is fastened to the legs in any desired manner. The portion 30 of each leg 28 extends a considerable distance up the side of the outer drum 3, and on the extreme upper end of the portion 30 is a hook 31 that is fastened, at 32, to the outer face of drum 3, whereby the drum and legs are fastened together; around band 29 and the outer portions of the legs is secured a wire mesh guard 33 which prevents the chickens from coming in direct contact with the heated drum 3, although the chickens will be allowed to stand close to the stove under the hover 10.

While I have described the preferred embodiment of my invention, and have illustrated the same in the accompanying drawings, certain minor changes or alterations may appear to one skilled in the art to which this invention relates, during the extensive manufacture of the same and I, therefore, reserve the right to make such alterations or changes as shall fairly fall within the scope of the appended claims.

What I claim is:

1. In a brooder stove, the combination of a drum, a burner provided with a pan at the lower end of said drum, a plurality of legs supporting said drum, each leg provided with an extension engaging and partly supporting said pan, means securing the upper ends of said legs to said drum, and a wire mesh guard surrounding all of said legs.

2. In a brooder stove, the combination of a drum, a burner provided with a pan at the lower end of said drum, legs fastened to said drum, each leg including a horizontal base portion extending under said pan and a vertical drum engaging portion, a band around the legs and secured to their vertical portions, and a wire mesh guard around the band and the vertical portions of the legs.

3. In a brooder stove, the combination of a plurality of legs, each leg including a vertical portion provided with a hook at its upper end and with an inwardly-extending horizontal extension at its lower end, a pan resting on said horizontal extensions, a drum above said pan and engaging the hooked ends of said legs, means fastening the hooked ends of said legs to the outer face of said drum, a band on the vertical portions of said legs and bracing the same, and a wire mesh fastened at its upper end to said drum and at its lower end to said band.

In testimony whereof I hereunto affix my signature.

JOHN W. BRANSON.