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J. H. SIEMER

1,866,427

STOVE

Filed Feb. 26, 1930

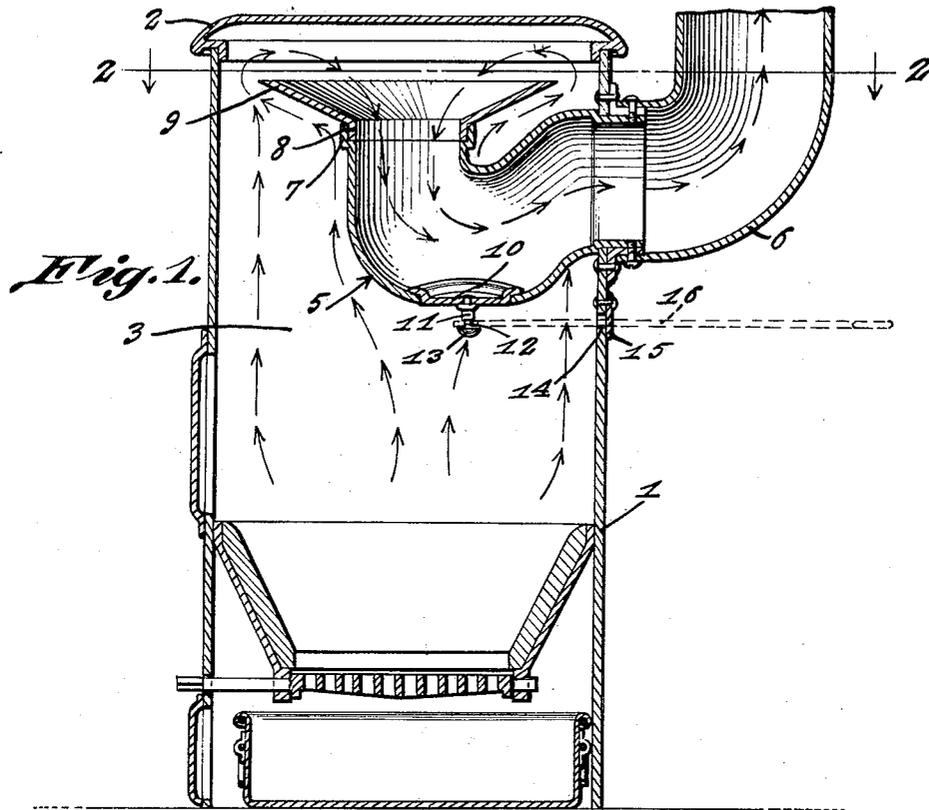
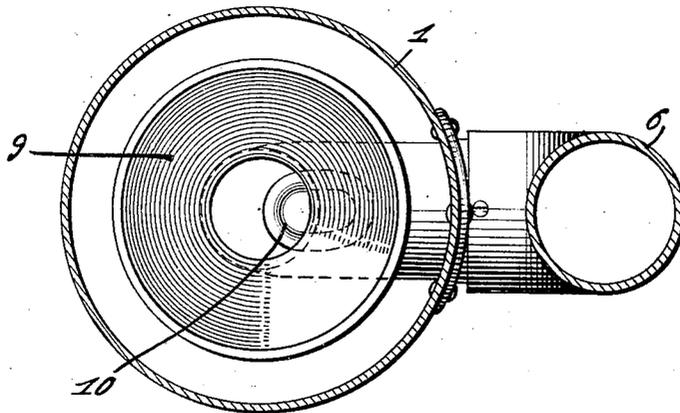


Fig. 2.



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STOVE

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An object of this invention is the provision of a heating stove or furnace with a means that will radiate the greatest possible amount of heat at an expenditure of a comparatively small quantity of fuel and which will consume practically all of the fuel.

To the attainment of the foregoing the invention consists in the improvement herein-after described and definitely claimed.

10 In the drawing:

Figure 1 is a substantially vertical longitudinal sectional view through a stove or furnace provided with the improvement.

15 Figure 2 is a horizontal sectional view on the line 2—2 of Figure 1.

In the drawing the stove or furnace body is indicated by the numeral 1 in which there is arranged the usual grate above the ash pit and which grate is as usual arranged in the bottom of the fire pot. Above the fire pot the stove body 1 is provided with the usual fuel inlet opening closed by the usual door and the ash pit is also provided with the usual door for closing the opening therein. The top 2 of the stove body is preferably removable and in the combustion chamber 3 of the body 1, below the top 2 there is arranged the body portion of my improvement which is broadly indicated by the numeral 5. The improvement is shaped similar to that of a pipe trap, or in other words, of goose neck formation. The hollow goose neck body 5 provides a combined fuel and gas heater or in other words a means for super-heating the products of combustion that pass there-through. The outlet end of the member 5 is connected to the ring flange that surrounds the smoke opening in the body 1 and into which opening there is fixed the elbow 6 for the smoke stack. The centrally arranged vertical branch of the member 5 has a ring member 7, and this ring member receives the downwardly extending end 8 of a bell-shaped flame spreader 9. The flame spreader provides the mouth of the goose neck hollow member 5 and directs the products of combustion from the combustion chamber there-into. The products of combustion will be spread by the bell-shaped member 9 before entering the member 5 so that they will be

subjected to all of the fire from the fire pot and thereby consumed. The products of combustion or gases passing through the member 5 are super-heated by the heat to which the said member is subjected so that such gases are practically entirely consumed before finding an outlet through the elbow 6. The member 5, at the bottom, is provided with an opening and this opening is normally closed by the flange of a disc plate 10. The plate 10 is formed with a depending stem 11 having a reduced portion 12 on whose end there is formed a head 13. The reduced or notched portion 12 of the stem is arranged in a line with the opening 14 in the stove body 1 and this opening is normally closed by a pivoted plate or valve 15. When the plate is swung to open position there may be passed through the opening 14 the forked end of a rod 16, indicated by the dotted lines in Figure 1 of the drawing, the said forked end being received in the notch 12. The lower wall of the opening 14 provides a fulcrum for the rod 16, so that the same can be canted and the disc 10, which provides a closure as well as a valve for the bottom of the member 5 may be swung to open position and a weight may be attached to the outer end of the rod 16 for holding the disc 10 in raised and opened position. This is desirable when the member 5 is to be cleaned or when a direct draft is desired as when the fire is first started.

The construction and advantages of my improvement will, it is thought, be understood and appreciated by those skilled in the art to which such invention relates so that further description will not be required. However, I desire to state that I do not wish to be restricted to the details herein set forth and, therefore, hold myself entitled to make such changes therefrom as fairly fall within the scope of what I claim.

Having described the invention, I claim:

95 A stove comprising a casing having its upper end closed and provided with a smoke opening at one side adjacent the upper end thereof, a fire box in the casing, a tubular body of a goose neck shape located in the casing and having one end mounted in the

smoke opening and the other end disposed
 vertically toward the top of the casing, an
 upwardly and outwardly flared spreader on
 the last named end of the body to direct prod-
 5 ucts of combustion passing upwardly from
 the fire box toward the walls and top of the
 casing before entering said body by way of
 the spreader, said body having an opening
 located directly over the fire box, a remov-
 10 able cover for closing the last named open-
 ing, and an operating rod extending through
 the casing and connected to said cover for
 canting the latter when desiring a direct
 draft for the products of combustion into
 15 the body from the fire box.

In testimony whereof I affix my signature.
 JOHN H. SIEMER.

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