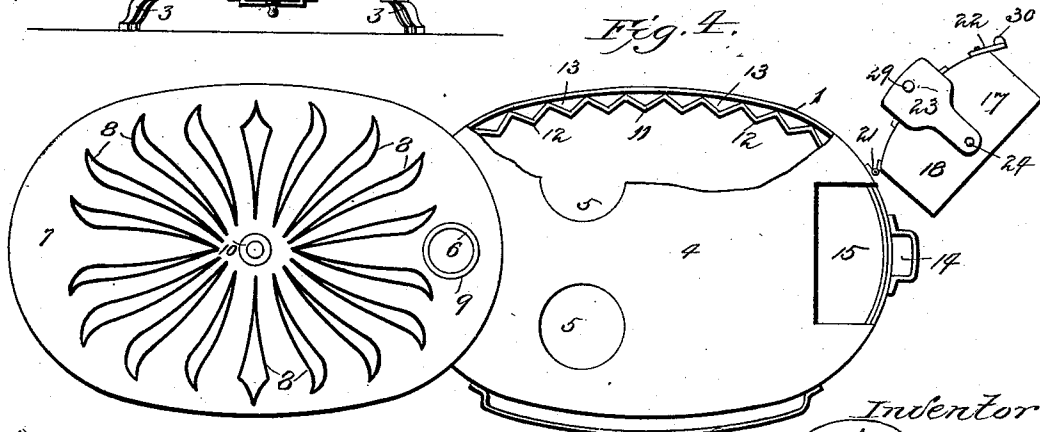
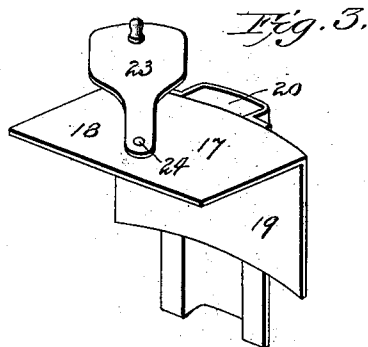
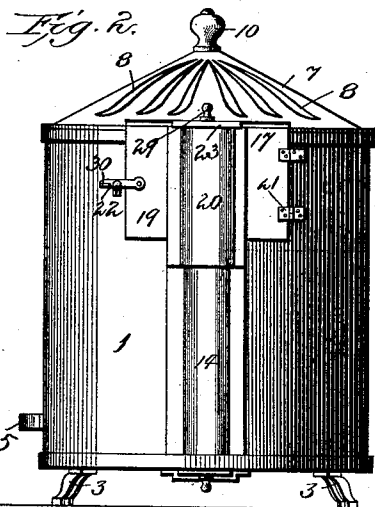
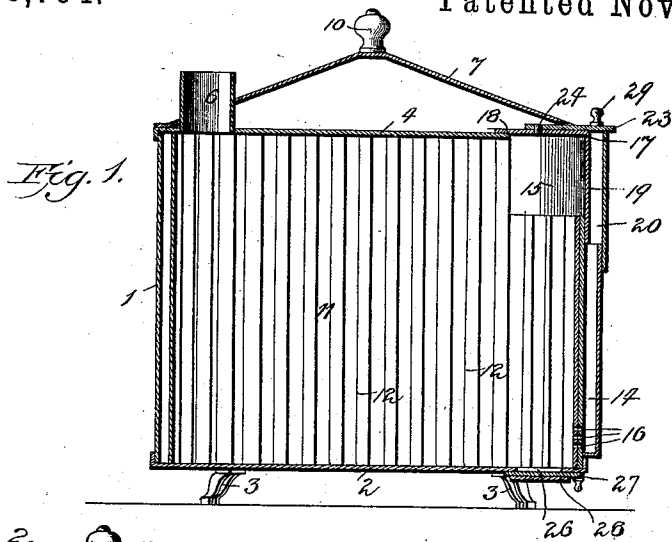


(No Model.)

J. WILSON.
HEATING STOVE.

No. 508,794.

Patented Nov. 14, 1893.



Witnesses:

John Enders Jr.
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UNITED STATES PATENT OFFICE.

JAMES WILSON, OF COLUMBIA, MISSOURI.

HEATING-STOVE.

SPECIFICATION forming part of Letters Patent No. 508,794, dated November 14, 1893.

Application filed June 26, 1893. Serial No. 478,787. (No model.)

To all whom it may concern:

Be it known that I, JAMES WILSON, of the city of Columbia, county of Boone, State of Missouri, have invented certain new and useful Improvements in Heating Stoves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to an improved "heating stove," and consists in the novel construction, combination and arrangement of parts hereinafter specified and pointed out in the claims.

The object of my invention is to provide an improved stove which shall be very efficient and economical in operation, of low cost, and which shall be devoid of draft openings in its lower portion, and in which the draft opening and the damper therefor shall be located at or adjacent the top of the stove and remote from the fire.

In the drawings: Figure 1 is a sectional side elevation of a stove embodying my invention. Fig. 2 is a front end elevation of same. Fig. 3 is a detail view in perspective of the combined draft damper and fuel-door. Fig. 4 is a sectional top plan view, with parts broken away, and with the cover swung around.

1 indicates the body of the stove, or the outer casing thereof, which is preferably made of sheet-iron, although it may be made of cast metal, so that the stove will be oblong or elliptical in plan view. This outer casing has vertical walls and a bottom 2 provided with suitable supporting legs 3 and a top 4 having suitable openings 5 in which cooking utensils may be placed when the stove is used as a cook-stove, and a vertical pipe thimble 6 projecting from the top adjacent the rear end of the stove.

7 indicates a conical or dished-top, which is preferably made of cast iron, with ornamental openings or outlines 8 formed therein. This top is provided with a circular opening 9 at a point adjacent its rear end which engages the exterior of the thimble 6, and forms a sort of hinge upon which the top may be turned, and swung around off of the top of

the stove, as indicated in Fig. 4, said pipe thimble being of extra vertical length to enable it to act as such. The top 7 is provided with a suitable handle 10 by means of which it may be manipulated or entirely detached from the stove.

11 indicates an inner lining for the stove, which is preferably made of corrugated sheet metal plates having a width corresponding to the height of the stove between its bottom 2 and top 4, and extending completely around the interior of the stove, with the corrugations 12 of said plates arranged vertically with relation to the stove, thereby forming a series of vertical separate air spaces 13 between the inner lining and the outer casing.

Formed upon or secured to the front end of the stove is a vertical draft passage 14 having an open upper end and a closed lower end, the upper end opening at a point a short distance below a fuel opening 15, which is formed partly in the top 4 and partly in the front wall of the stove. The swinging-top is of such size as to overlap the portion of the fuel-opening 15, which is formed in the top of the stove. Said swinging-top also overlaps a portion of the combined draft-damper and fuel-door hereinafter mentioned, whereby a very complete and finished construction is provided.

16 indicates a series of small openings or passages formed in the front wall of the stove and connecting the interior of the draft passage 14 with the interior of the stove at a point adjacent the lower end of said passage and adjacent the bottom of the stove.

17 indicates a combined draft damper and fuel door which is provided with a horizontal top 18 and a front 19 which is curved to fit the front of the stove and depends from the horizontal top 18 a sufficient distance to cover the portion of the fuel opening which is formed in said front. The horizontal top 18 of the door is of sufficient area or size to cover a portion of the draft opening 15 which is in the top of the stove. Formed upon or secured to the front 19 of the door is a draft passage 20 the walls of which in cross-section correspond to the cross-section of the draft

passage 14 of the stove. These draft passages I may term "draft pipes" and I may term the portion which is fixed to the stove, the lower section, and the portion which is fixed to the door, the upper section of the draft-pipe. The upper section 20 of the draft pipe projects below the lower edge of the front 19 of the door, and overlaps the exterior of the lower section 14, so that when the door is closed, a continuous draft passage is formed in a vertical line from the bottom of the stove to the top thereof. The upper and lower ends of the upper section are normally open.

21 indicates suitable hinges by means of which the door 17 is hinged to the front of the stove, so as to swing around in a horizontal plane, as shown in Fig. 4.

22 indicates a suitable latch or fastening for said door, which may be of any common form, as may also the hinges.

23 indicates a damper, which is adapted to close and open the upper section of the draft passage or tube. This damper is preferably arranged to slide from left to right. I here show it pivotally connected by means of a rivet or bolt 24 to the top 18 of the door, so as to be swung around in a horizontal plane and cover or uncover the upper end of the upper section 20 of the draft pipe.

25 indicates a suitable foot rest, which is secured in a horizontal position upon one side of the stove adjacent the bottom thereof, for the well known purpose.

26 indicates an opening formed in the bottom 2 of the stove adjacent the front thereof, through which ashes may be removed and dropped into a pan set beneath said opening. This opening is normally closed by a sliding plate 27 which is mounted in suitable guides 28.

The damper 23 is provided with a suitable knob or handle 29 by means of which it may be manipulated. The latch 22 of the door is also provided with a suitable knob or handle 30 by means of which it may be manipulated in opening and closing the door.

It will be observed that all draft to the stove is taken from above, and as there are no draft openings below a perfectly tight stove is provided. The draft regulating damper being above the fire enables the operator to control the fire so that it will not die out for a great length of time.

A stove thus constructed will burn wood, straw, and various kinds of trash, and no ashes can drop on the floor. The draft can be regulated without stooping on the part of the operator.

The corrugated lining makes the stove a very durable one as the vertical air spaces 13 prevent the outer casing of the stove from burning or warping out of shape.

What I claim is—

1. The improved stove having a vertical draft pipe 14 provided with an open upper

end and a closed lower end, a fuel opening 15 formed in the upper portion of the stove adjacent the upper open end of said draft pipe, said draft pipe having an opening adjacent its lower end which connects it with the interior of the stove, a door hinged to the stove so as to cover said fuel opening, an upper section 20 of the draft pipe carried by said door and swinging therewith, and a damper also carried by said door and adapted to control the draft through said upper section, substantially as herein specified.

2. The improved stove, comprising an outer casing 1, a bottom 2, a top 4 having openings 5 in which cooking-utensils may be placed, a vertical draft-pipe 14 provided with an open upper end and a closed lower end, a fuel-opening 15 formed in the upper portion of the stove adjacent the upper end of said draft-pipe, said draft-pipe having an opening adjacent its lower end which connects it with the interior of the stove, a door hinged to the stove so as to cover said fuel opening, an upper section of the draft-pipe carried by said door and swinging therewith, a damper also carried by said door and arranged to control the draft through said upper section, a swinging stove-top mounted upon the top 4 of the stove so as to cover the openings 5 therein and overlap the fuel opening 15 and a portion of said door, and a hinge or pivotal connection by means of which said stove-top is secured to the stove, substantially as herein specified.

3. The improved stove, comprising a body 1 preferably made of sheet iron and elliptical in plan view, a bottom 2, a top 4 having suitable openings 5 in which cooking utensils may be placed, a fuel-opening 15 formed partly in said top and partly in the vertical wall of the stove, a vertical draft-pipe 14 having an open upper end and a closed lower end, the upper end opening at a point a short distance below said fuel-opening, the vertical wall of the stove having a series of small openings 16 formed therein and connecting the interior of said draft-pipe with the interior of the stove at a point adjacent the lower end of said pipe and adjacent the bottom of the stove, a combined draft-damper and fuel-door 17 provided with a horizontal top 18 and a front 19, which latter is curved to fit the front of the stove and depends from the horizontal top 18 a sufficient distance to cover the portion of the fuel opening which is formed in said vertical wall of the stove, a hinge for said door, said horizontal top 18 being of sufficient size or area to cover the portion of the draft-opening 15 which is in the top of the stove, an upper section 20 of the draft-pipe secured to the front 19 of said door and projecting a distance below the lower edge thereof so as to overlap the exterior of the lower section 14 when the door is in a closed position and so that a continuous

draft passage is formed in a vertical line
from the bottom of the stove to the top there-
of, the upper and lower ends of said upper
section being normally open, a suitable latch
5 or fastening for said door, and a damper ar-
ranged to close and open said draft-pipe, sub-
stantially as herein specified.

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

JAMES WILSON.

Witnesses:

J. DEW. ROBINSON,
MATHEW BRADY.