

No. 656,230.

Patented Aug. 21, 1900.

A. B. VEDDER.

HEATING ATTACHMENT FOR STOVES.

(Application filed Apr. 26, 1900.)

(No Model.)

Fig. 1.

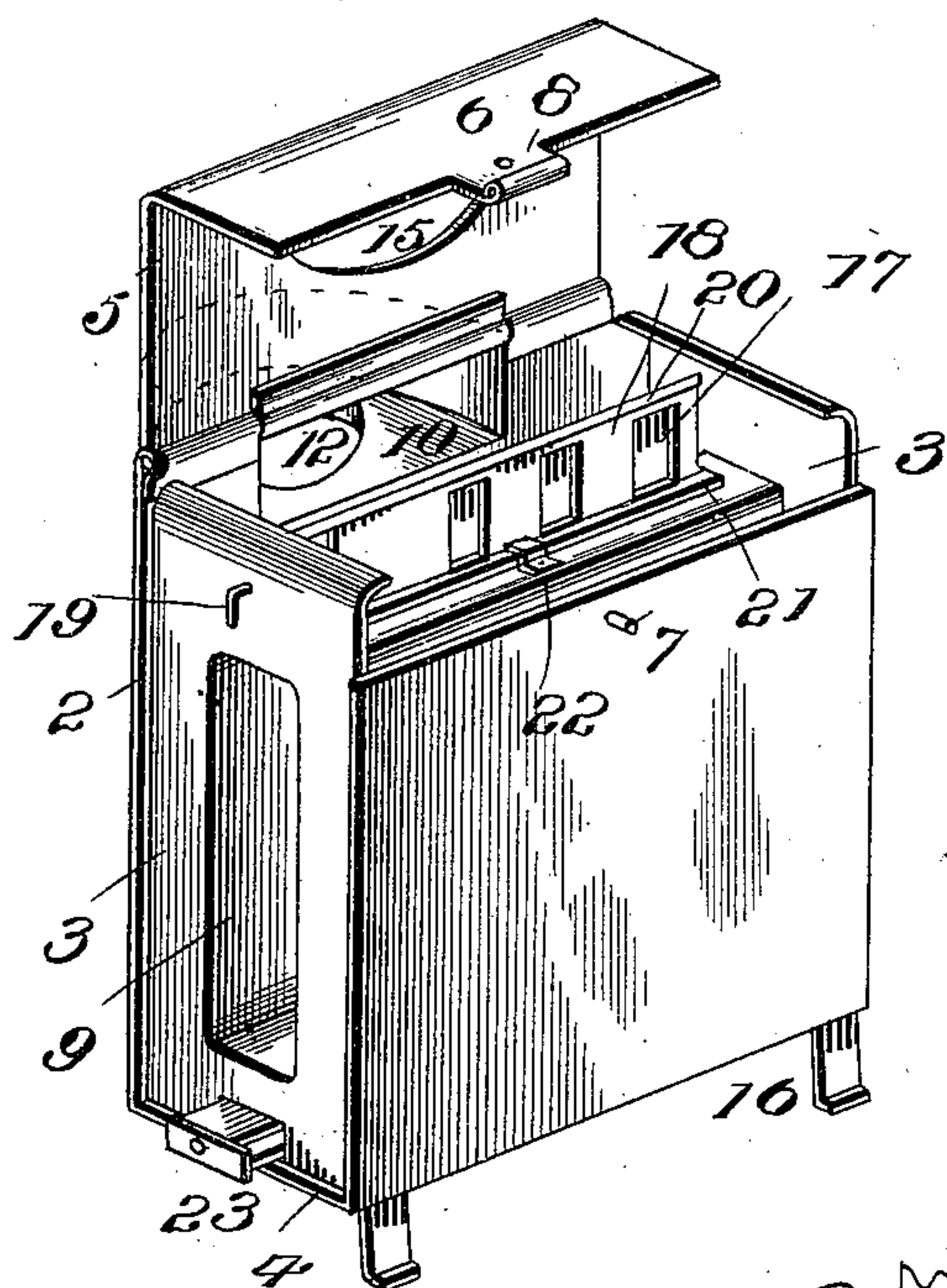


Fig. 3.

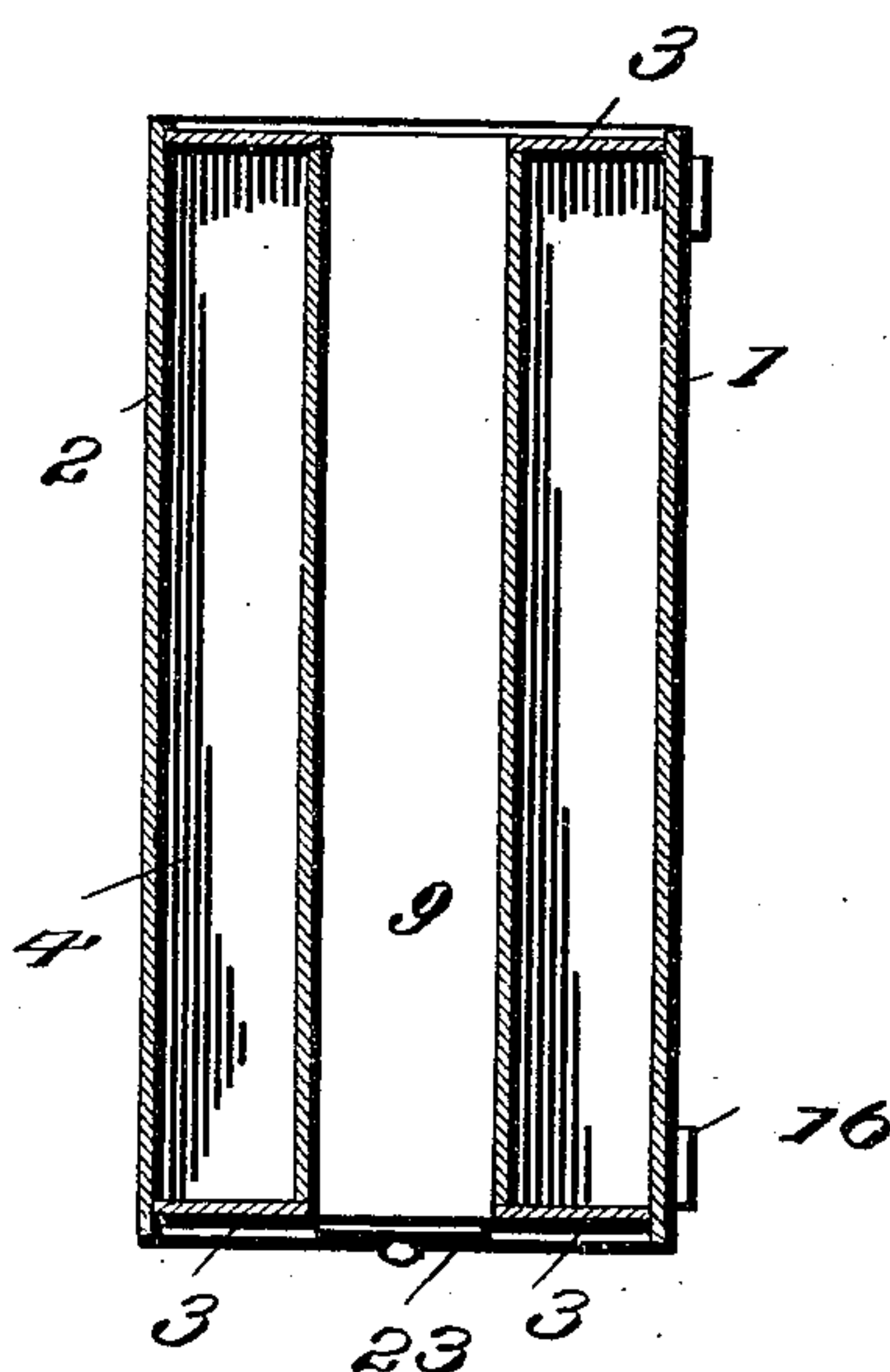
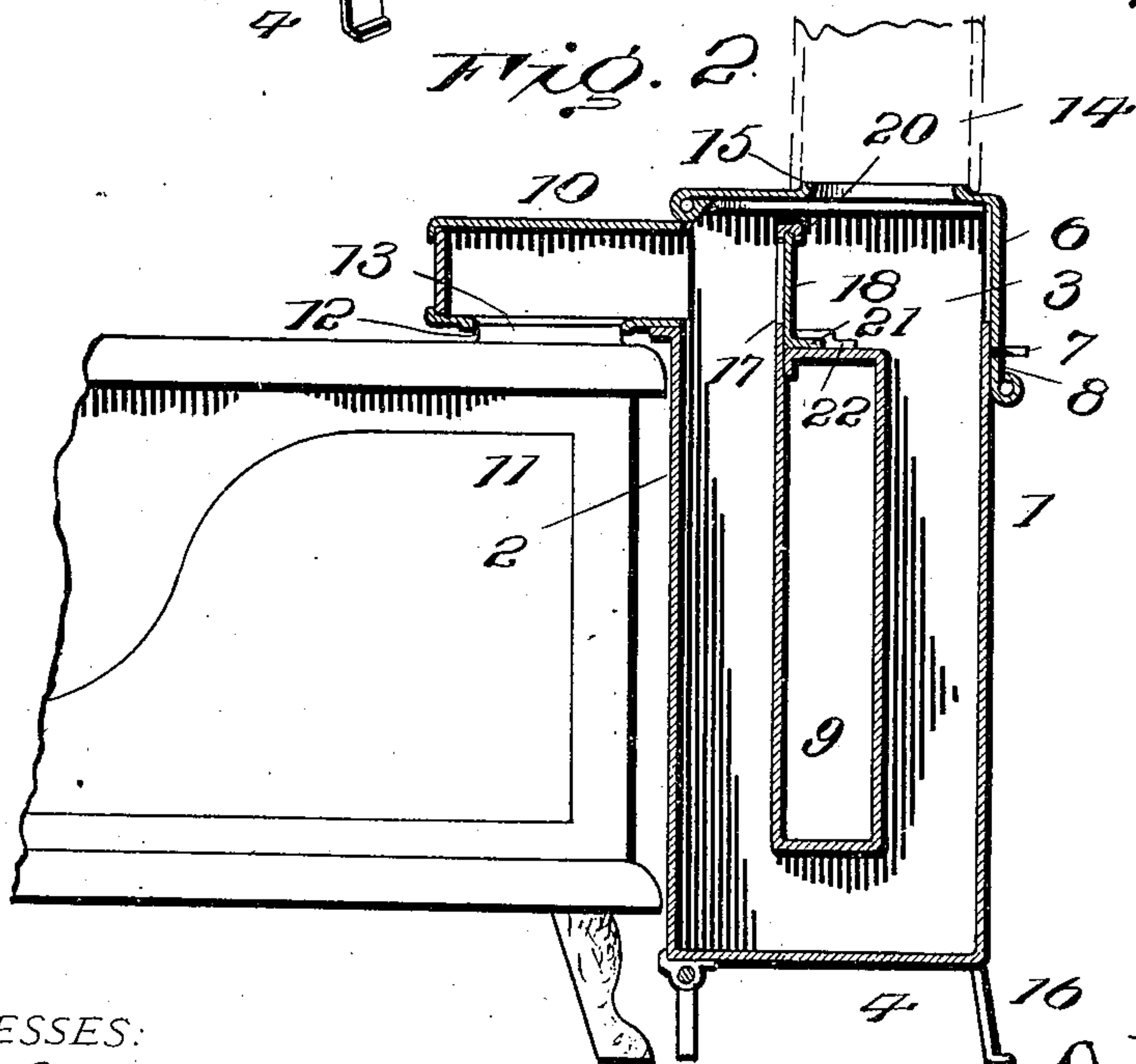


Fig. 2.



WITNESSES:

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HEATING ATTACHMENT FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 656,230, dated August 21, 1900.

Application filed April 26, 1900. Serial No. 14,491. (No model.)

To all whom it may concern:

Be it known that I, AMASA BARBER VEDDER, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Heating Attachments for Stoves; and I do hereby 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.

This invention has relation to heating attachments designed, primarily, for cooking-stoves, although adapted for use in connection with stoves of any make or character, the purpose being to utilize a maximum amount of the caloric derived from a given quantity of fuel for effectively heating a given space, the means being so constructed as to admit of ready access thereto for cleaning or any required purpose.

For a full description of the invention and the merits thereof, and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and the drawings hereto attached.

While the essential and characteristic features of the invention are necessarily susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the heating attachment, the top being raised and the stopper at the lower end partly withdrawn. Fig. 2 is a vertical central transverse section of the attachment, showing it applied. Fig. 3 is a horizontal section.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The attachment is of box form in general outline and comprises an outer shell and an inner shell, a space being provided between corresponding walls of the two shells for the circulation of hot air and products of combustion, whereby the shells radiate the heat imparted thereto. The body or outer shell of the device comprises a front wall 1, a rear

wall 2, end walls 3, a bottom wall 4, and a top or cover 5, hinged to the upper edge of the rear wall 2 and having a pendent portion 6 to overlap the top edge of the front wall 1 and completely inclose the upper portion of the heater. The front wall 1 terminates short of the plane of the top edges of the rear end walls, so as to admit of ready access to the damper for controlling the amount of hot air circulating through the attachment when in operation. Any convenient means may be employed for holding the hinged top or cover 5 closed, and, as shown, a pin or stud 7 projects outwardly from the front wall 1 and is adapted to enter an opening formed in an extension 8 of the said top 5, said extension constituting a catch and having its lower edge rolled to provide a finger-grip. The upper ends of the wall 3 are inwardly deflected to make a close joint with the top 5 and prevent the escape of smoke and gases. The inner shell is flattened or elongated and is of a length corresponding to the distance between the end walls 3, to which it is attached, said end walls having openings formed therein corresponding to the outline of the inner shell 9. The ends of the shell 9 are jointed to the end walls 3 in any manner, so as to form a firm connection and prevent the escape of smoke and gases. The inner shell 9 is disposed about centrally with reference to the outer shell, so as to provide a practically-uniform space between opposing and corresponding walls of the two shells.

A box 10 projects rearwardly or outwardly from the wall 2 and is adapted to overlap the stove 11 or other heater to which the attachment is applied, and this box is provided in its lower side with an opening 12 to receive the collar 13 of the stove or heater 11. The box 10 is located at the upper end of the wall 2 and centrally thereof, and its outer end is made rounding to conform approximately to the shape of the stove-collar. The smoke-pipe 14 is fitted to a collar 15, surrounding an opening formed in the top or cover 5. The attachment is designed to be placed against the side of the stove or heater and is supported above the floor, and for this purpose is provided with feet 16, the rear foot

being hinged, so as to be inclined more or less to admit of the proper adjustment of the box 10 with reference to the stove-collar 13.

In order to properly control the products of combustion, a damper is located in the space 5 formed between the top wall of the inner shell 9 and the top or cover 5, and this damper is preferably arranged in the same plane with the rear wall of the shell 9, whereby 10 the best results are obtained in the deflection of the hot air and gases. The damper comprises a fixed plate 17, having openings at intervals in its length, and a movable plate 18, likewise formed with openings corresponding in number and position with the 15 openings of the plate 17. The movable plate 18 is adapted to be shifted by means of a rod 19, attached thereto and passing through an end wall of the outer shell. The upper edge 20 of the plate 17 is folded, as shown at 20, to provide a guide for the upper edge of the movable plate 18, and the lower edge portion of the said plate 18 is bent, as shown at 21, to obtain a footing upon the top wall of the shell 25 9, a cleat 22 being attached to said shell 9 and overlapping the bent portion 21 and acting jointly with the folded edge 20 to hold the plate 18 in position and direct the same in its movements. In the preferable construction the fixed plate 17 is a part of the 30 rear wall and the shell 9. An opening is formed in the lower part of an end wall 3 and is closed by a stopper 23, which latter when withdrawn admits of access to the 35 lower portion of the attachment for the removal of ashes, soot, and any foreign matter which may have accumulated therein.

The attachment is preferably constructed of sheet metal and may be of any size and 40 form, depending upon the design and caprice of the manufacturer and the specific manner of application. When applied to a stove or heater, the box 10 overhangs the same and makes connection with the collar 13, and the 45 smoke-pipe 14 is fitted to the collar 15. When a direct escape for the smoke is desired, as when starting the fire, the damper is open and the smoke can pass direct from the box into the smoke-pipe. Where it is required 50 to cause the heat, products of combustion, and the like to circulate through the attachment and around the inner shell 9, the damper is closed, and by a proper adjustment of

said damper more or less of the hot air may be deflected and caused to circulate through 55 the attachment to meet any demand.

Having thus described the invention, what is claimed as new is—

1. A heating attachment, comprising inner and outer shells having an intercommuni- 60 cating space formed between corresponding walls and provided at its upper portion with a smoke inlet and an outlet, and a damper intermediate of the said smoke inlet and outlet and located between the top portions of the 65 two shells and comprising a fixed plate forming an extension of the rear wall of the inner shell and having its upper edge portion folded, and a movable plate having its lower edge portion outwardly bent and held to the top 70 wall of the inner shell, and having its upper edge portion fitted into the space formed by the folded edge portion of the fixed plate, both plates having corresponding openings, substantially as set forth. 75

2. The herein-described heating attachment, comprising an inner and an outer shell having an intercommunicating space formed between corresponding walls, the inner shell opening through opposite walls of the outer 80 shell, a hinged cover constituting the top of the outer shell and having a pendent portion at its swing end to overlap the upper portion of the front wall of the outer shell, said cover having a smoke-outlet, a box projected from 85 the upper portion of the outer shell and adapted to be connected with the smoke-outlet of a stove, a stopper closing an opening in the lower portion of an end wall of the outer shell, and a damper comprising a fixed and 90 a movable plate having corresponding openings, the fixed plate being an extension of the rear wall of the inner shell and having its upper edge portion folded and the movable plate having its upper edge fitted into 95 the space formed by the folded edge portion of the fixed plate and having its lower edge portion bent to obtain a bearing upon the top portion of the inner shell and held thereto, substantially as set forth. 100

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

AMASA BARBER VEDDER. [L. S.]

Witnesses:

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B. E. BROADDUS.