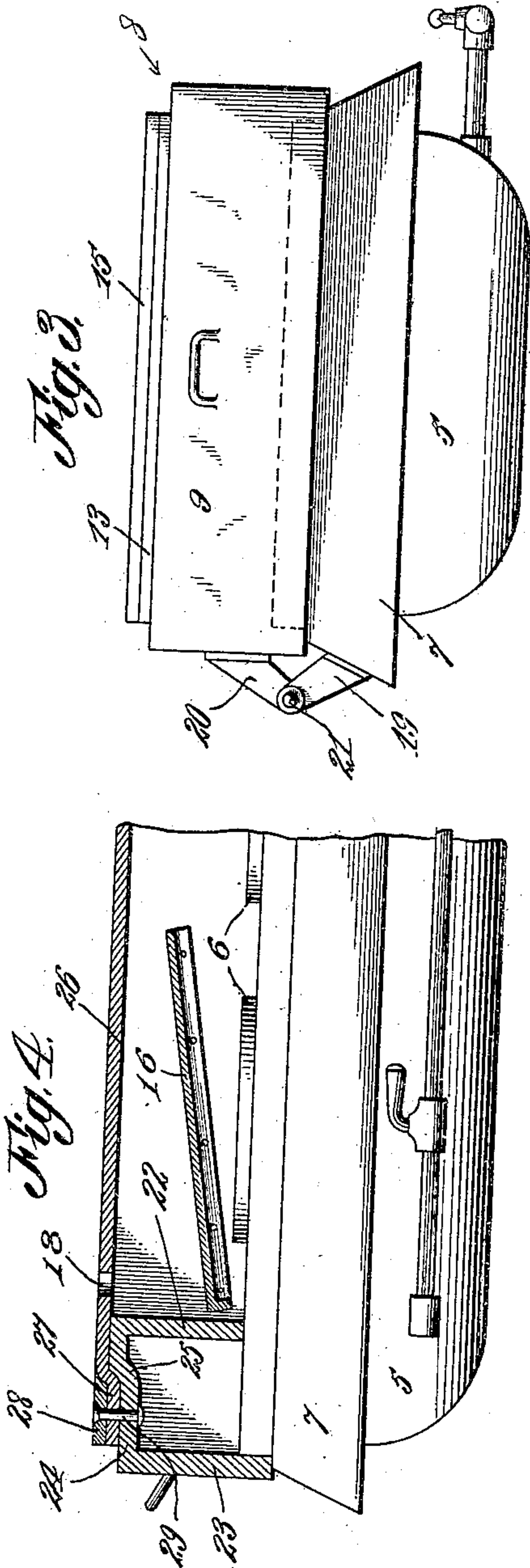
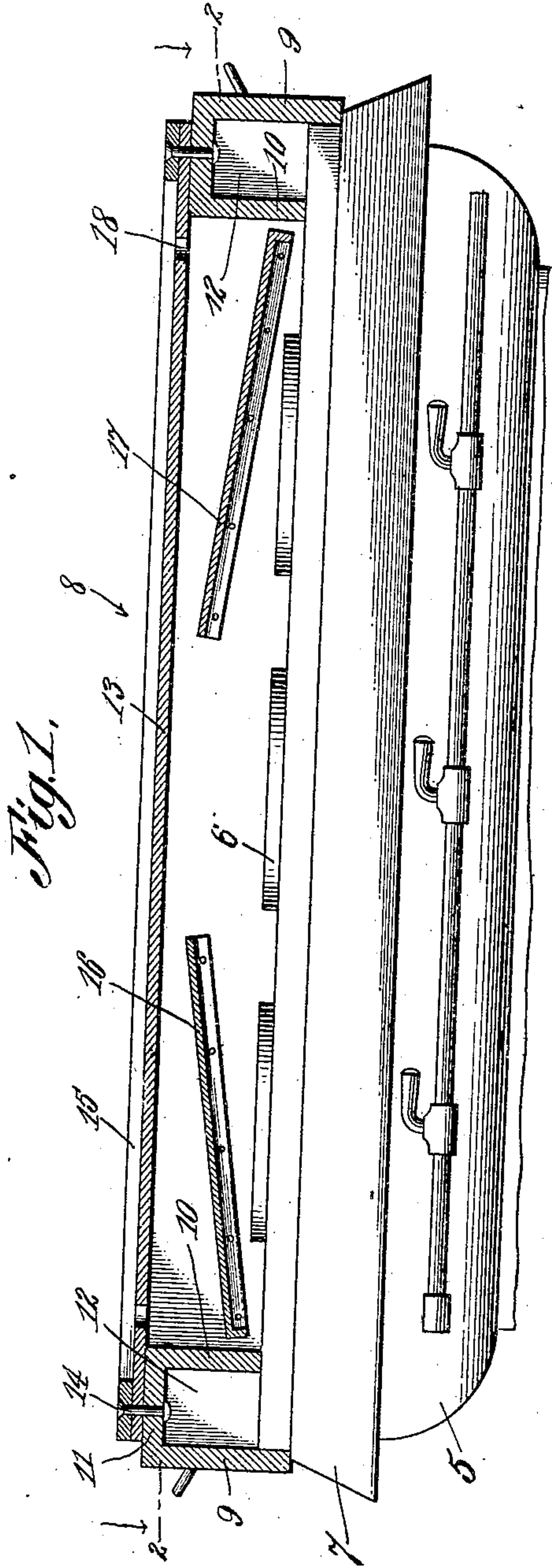


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ATTACHMENT FOR STOVES.
APPLICATION FILED MAR. 19, 1910.

Patented Dec. 20, 1910.

2 SHEETS—SHEET 1.



Witnesses
John F. Crawford.
John A. Donagay.

Inventor
Alfred J. Brooks,
By Victor J. Evans
Attorney

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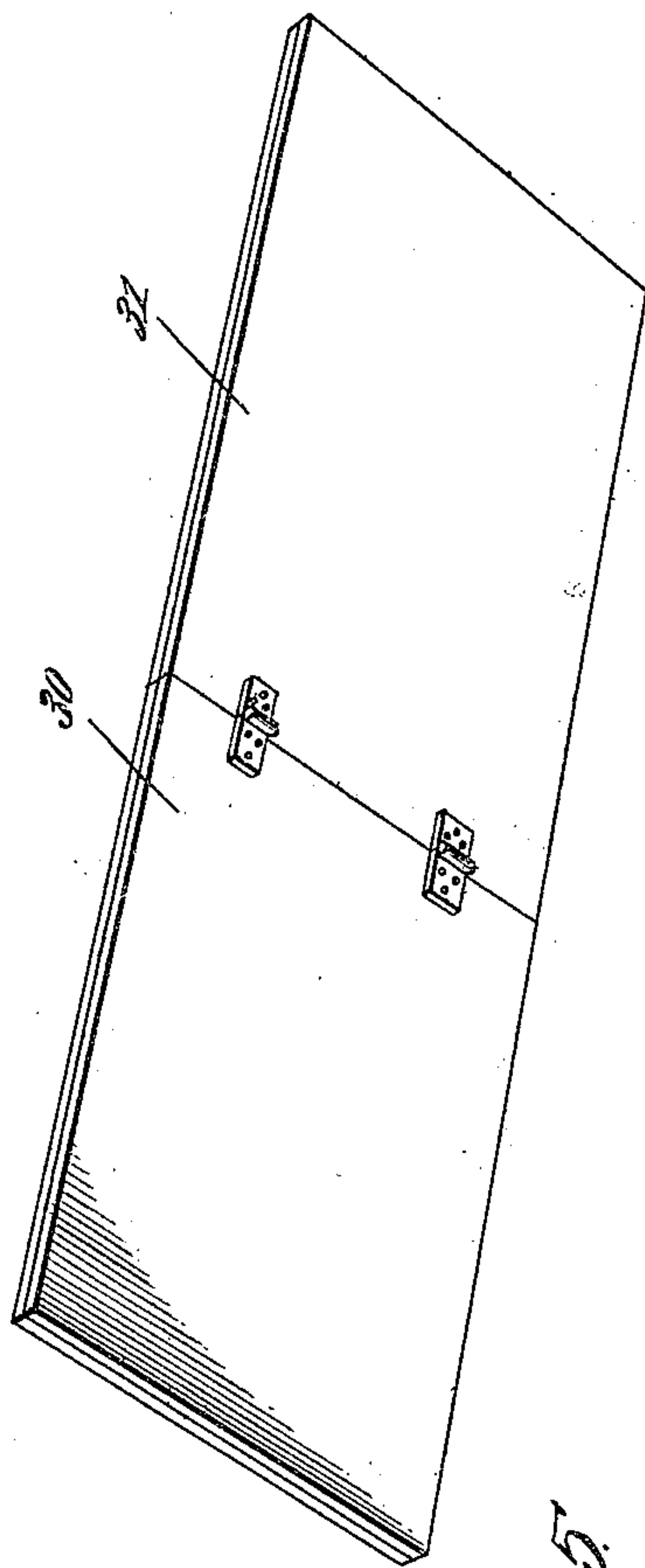
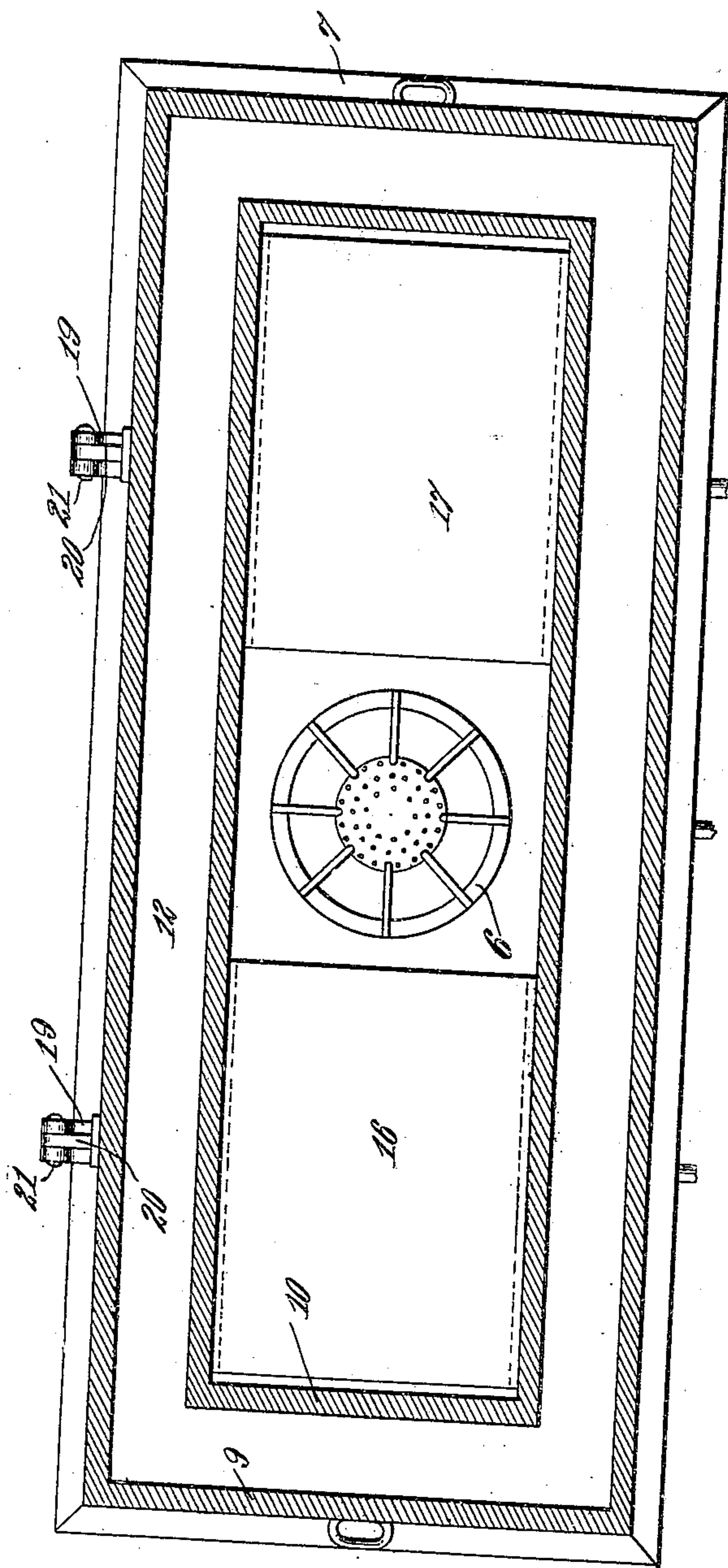


Fig. 2.

Fig. 5.

Witnesses
John H. Crawford.

John A. Donaghy.

Inventor
Alfred J. Brooks,

By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

ALFRED J. BROOKS, OF QUINCY, MASSACHUSETTS, ASSIGNOR OF ONE-FIFTH TO
WILLIAM H. BROOKS, OF QUINCY, MASSACHUSETTS.

ATTACHMENT FOR STOVES.

979,374.

Specification of Letters Patent.

Patented Dec. 20, 1910.

Application filed March 19, 1910. Serial No. 550,319.

To all whom it may concern:

Be it known that I, ALFRED J. BROOKS, a citizen of the United States, residing at Quincy, in the county of Norfolk and State of Massachusetts, have invented new and useful Improvements in Attachments for Stoves, of which the following is a specification.

This invention relates to improvements in attachments for cook stoves, and has particular reference to a device particularly adapted for use with cook stoves using gaseous or liquid fuel.

It is well known that the ordinary cook stove using gaseous or liquid fuel is provided with a plurality of burners, each of which for the most part is capable of heating but one vessel at a time. In consequence of this construction when it is necessary to place several vessels on the stove a burner must be lighted for each particular vessel, with the result that an enormous amount of fuel is consumed in order to properly cook the contents of the several vessels.

The present invention aims to remedy this defect in stoves of this type by providing an attachment to completely house the top of the stove, the said attachment being so constructed that it will support several cooking vessels in such a position that the contents of the latter may be heated to the required degree with the employment of one burner.

One object of the invention is the provision of an attachment provided with oppositely arranged deflectors so positioned that the heat rising from the burner will be distributed to practically the entire surface of the supporting plate upon which the cooking utensils are placed.

A further object is the provision of a device which may be applied to most forms of cook stoves now in use without the necessity of expensive alterations in the construction of the stove.

With these and other objects in view, as will more fully hereinafter appear, the present invention consists of certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claims, it being understood that various changes in the form, proportion, size, and minor details of construction may be made within the scope of the appended claims

without departing from the spirit of the invention or sacrificing any of the advantages thereof.

In the accompanying drawings forming a part of the specification:—Figure 1 is a front elevation of the upper portion of an ordinary gas stove, showing my device in vertical section and applied thereto. Fig. 2 is a sectional plan view approximately on the line 2—2 of Fig. 1. Fig. 3 is an end elevation of the upper end of a gas stove and also showing my device in end elevation and applied thereto. Fig. 4 is a fragment of the upper end of a gas stove in end elevation and showing a fragment of a modified form of the attachment in vertical section and applied to the gas stove. Fig. 5 is a detail perspective of a modified form of a supporting plate.

Similar numerals of reference will be used throughout the specification to designate the different parts.

That portion of the stove shown is designated in general by the numeral 5, and is shown provided with the usual burner caps 6. As usual, in the construction of stoves of this kind, adjacent to the upper face a lateral extension 7 is formed which extends completely around the upper end of the stove.

Since the stove and its parts form no part of the subject matter of the present invention a detailed description of the same need not be given.

The device forming the subject matter of the present invention includes in its construction a supporting frame designated in general by the numeral 8. The supporting frame conforms to the marginal contour of the top of the stove, and in the present instance is shown to consist of side walls 9 and 10. The side walls 9 and 10 are spaced apart and their upper ends are connected by a cross piece 11, which completely seals the space between the upper ends of the said walls. With this construction it is evident that the supporting frame is a channel shaped structure conforming substantially to the shape of an inverted U.

The area bounded by the inner side wall 10 is somewhat less than the area of the top of the stove whereby the lower end of the said side wall will bear on the top. The outer side wall, however, bounds an area somewhat greater than the area of the top,

but less than the area of the lateral extension 7, and it might moreover be stated that the outer side wall 9 is somewhat greater in width than the width of the side wall 10, so that when the parts are positioned, as shown in Fig. 1, the outer side wall 9 will bear upon the upper side of the lateral extension 7, while the lower end portion of its inner surface will bear on the outer side of the top or that portion of the top located above the extension 7 whereby an air pocket 12 will be formed between the side walls 9 and 10.

When the space bounded by the inner side wall is covered and the burners ignited the pocket 12 serves to insulate the outer side wall, thus keeping the latter in a comparatively cool state and preventing loss of heat.

The supporting plate or cover is designated by the numeral 13. This member is preferably of copper or analogous metal having a high heat conductivity, and is fixedly secured to the cross piece 11 by means of bolts or rivets 14 and when so secured will cover the space bounded by the inner side wall 10. The supporting plate or cover 13 is preferably clamped to the supporting frame by means of a collar 15 secured to its upper face, as shown in Fig. 1 and located at the periphery of the plate 13.

By reference now to Figs. 1, 2 and 4, it will be seen that secured to the inner side wall 10 are a pair of deflectors 16 and 17. These members are spaced apart and located at diametrically opposite points on the frame. These deflectors correspond in length to the width of the frame and incline downwardly from points on the opposite sides of the center of the frame. The space between the adjacent ends of the deflectors corresponds approximately to the diameter of an ordinary burner cap, as shown in Fig. 1, so that the heat rising from the flame from the center burner cap will rise to the supporting plate 13, after which the heated air will move over the upper faces of the deflectors 16 and 17, as will be noted by reference to Fig. 1. Owing to the inclination of the deflectors, the velocity of the air rising from the burning flame will be increased as it passes from the narrow space between the adjacent ends of the deflectors and supporting plate 13 so that it will be quickly distributed over the entire surface of the supporting plate 13.

Reference now to Fig. 1 discloses the fact that the supporting plate 13 is provided at points adjacent the inner side wall 10, with a plurality of perforations 18 which permit the heated air passing over the deflectors as before described to escape. When desired, the attachment may be permanently combined with the stove, as shown in Fig. 3, by forming integral or otherwise securing to the outer face and adjacent the opposite ends

of the side of the extension 7, a pair of upwardly inclined lugs, one of which is shown in Fig. 3 and designated by the numeral 19, and also providing the outer side wall 9 with a similar pair of lugs, one of which is shown in Fig. 3 and designated by the numeral 20, each of the said lugs 20 inclines downwardly and outwardly and has an opening at its free end to coincide with a similar opening adjacent to the free end of the adjacent lug 19 these openings receiving suitable pintles 21 whereby the attachment may be hingedly united with the stove.

In Fig. 4 a modified form of clamping the supporting plate to the frame is shown, and in this connection the side walls 22 and 23 have their upper ends connected by a cross piece 24, the said cross piece 24 being medially provided with an offset 25.

The supporting plate 26, is, adjacent its periphery, provided with a depending offset 27 to set in the offset 25 so that the peripheral portion of the supporting plate will be below the plane of the major portion of the upper face of the said plate. The clamping collar 28 corresponds in width to the width of the offset 27 and in thickness to the depth of the offset, and is designed to be seated therein so that the upper surface of the collar and supporting plate will coincide.

In Fig. 5, a modified form of the supporting plate is shown constructed of a pair of hingedly united leaves or sections 30 and 31. These sections may be folded one upon the other when removed from the supporting frame, and when opened outwardly, as shown in Fig. 2, their combined lengths will be sufficient to cover the space bounded by the inner side wall as before described.

From the foregoing it can be seen that I have provided a device which is comparatively simple in construction and inexpensive to manufacture and which may be readily applied to most forms of gaseous or liquid fuel burning stoves now in use.

Having thus described the invention, what I claim as new, is:—

1. The combination with a stove, of a cooking attachment therefor including in its construction a supporting frame having an inner side wall to extend around the top and bear adjacent the edge thereof, an outer side to bear on the entire outer side of the top, and a cross piece sealing the space between the upper ends of said side walls whereby a pocket is provided to prevent the too rapid radiation of heat from the inner side wall, and a cover secured to the cross piece to form a closure for the open space of the said frame.

2. The combination with a stove, of a cooking attachment therefor including a channeled supporting frame to bear on the top of the stove, a metallic cover sealing the open space of said frame, and a pair of

spaced deflectors arranged in planes oblique to each other and oblique to the plane of the supporting frame said deflectors being secured to the frame with their adjacent ends
5 spaced from the lower face of the cover for the purpose specified.

3. The combination with a stove, of a cooking attachment therefor including a channeled supporting frame having side
10 walls of different widths to bear on the outer side of the top of the stove, a metallic supporting plate sealing the open space of

said frame, and a pair of spaced deflectors arranged in planes oblique to the horizontal plane of the supporting plate with their
15 outer ends spaced from the lower face of the supporting plate and fixedly secured to the frame for the purpose specified.

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

ALFRED J. BROOKS.

Witnesses:

W. D. FESLER,

J. E. FITZGERALD, Jr.