

(No Model.)

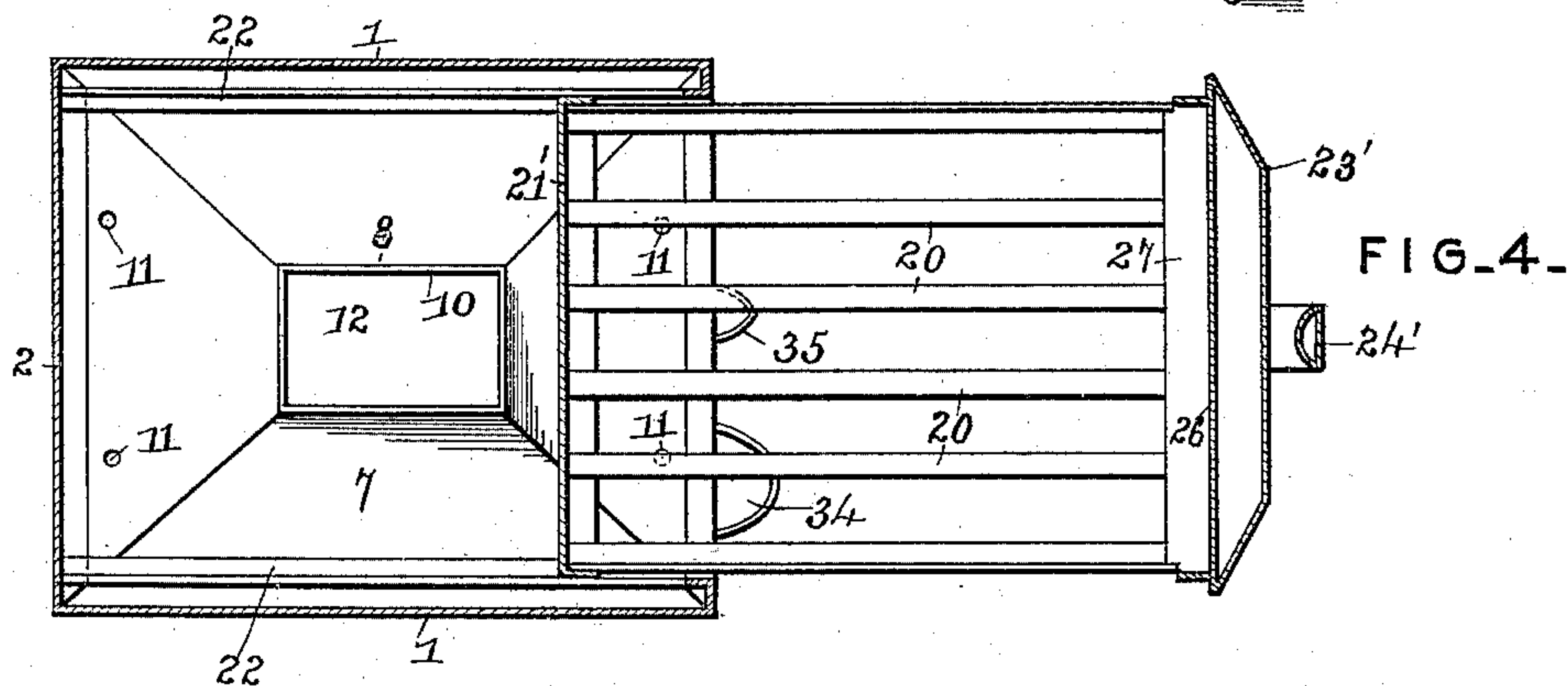
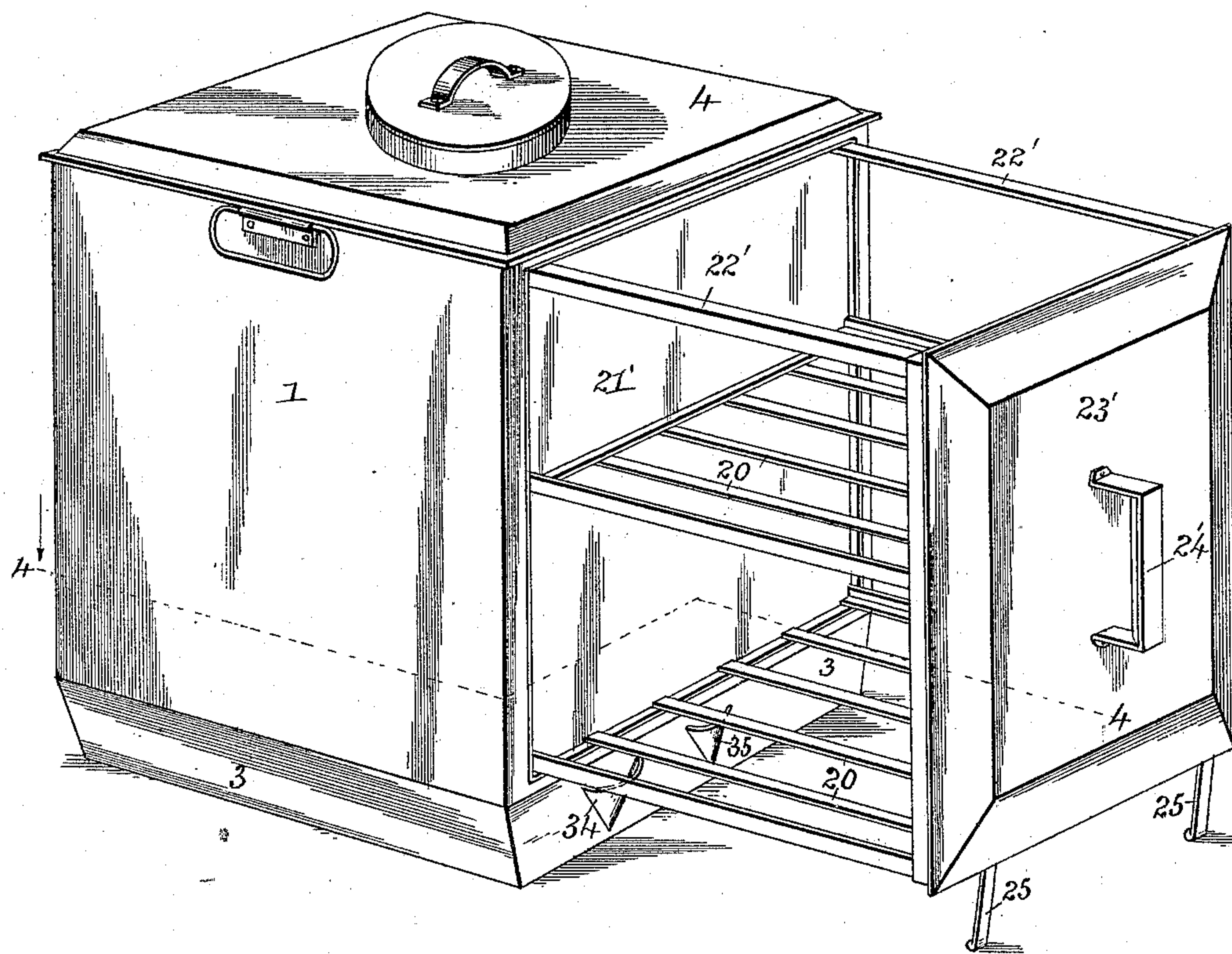
2 Sheets—Sheet 1.

A. A. BESEMER.
STEAMER.

No. 488,515.

Patented Dec. 20, 1892.

FIG. 1.



Witnesses

Inventor

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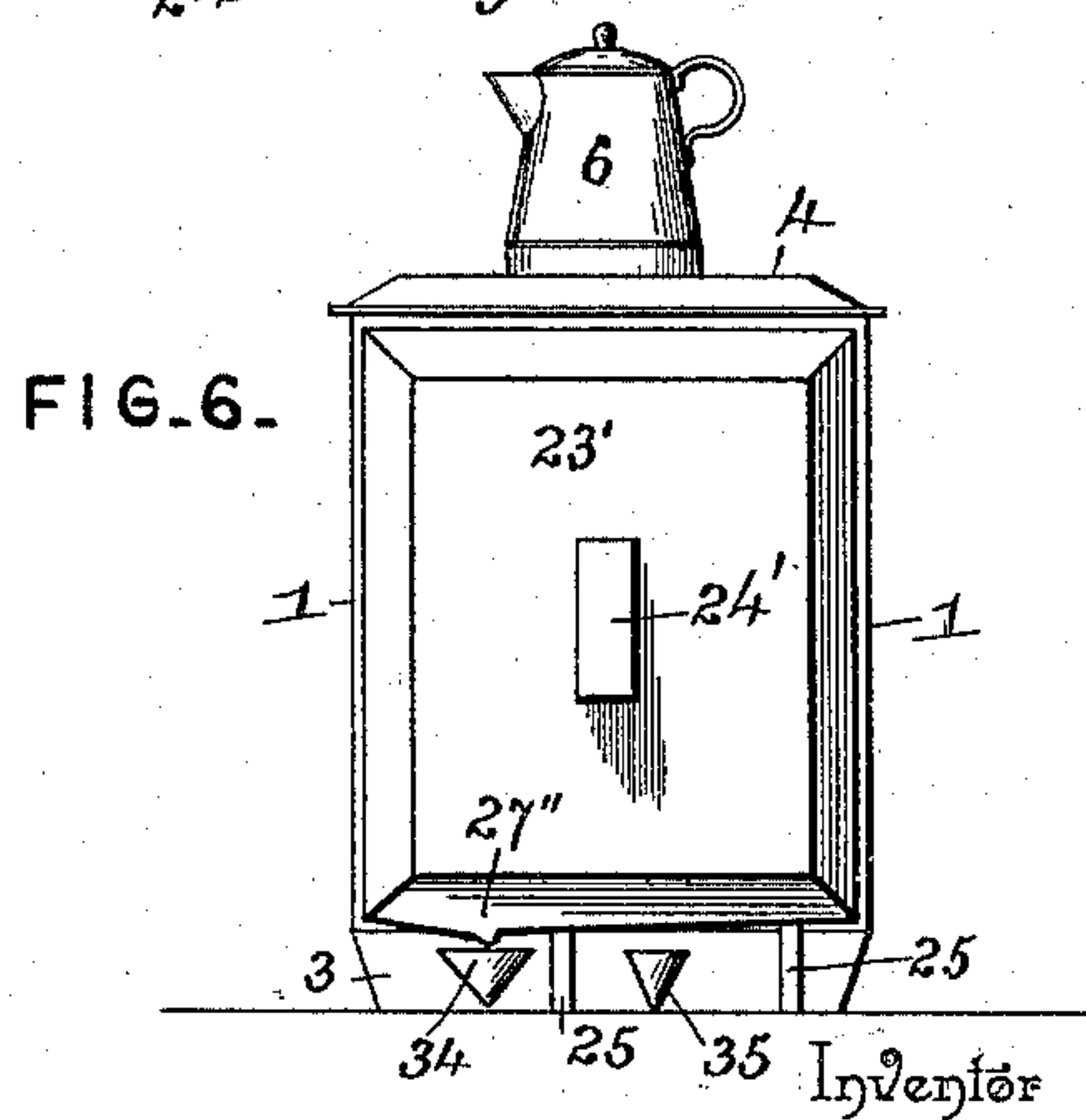
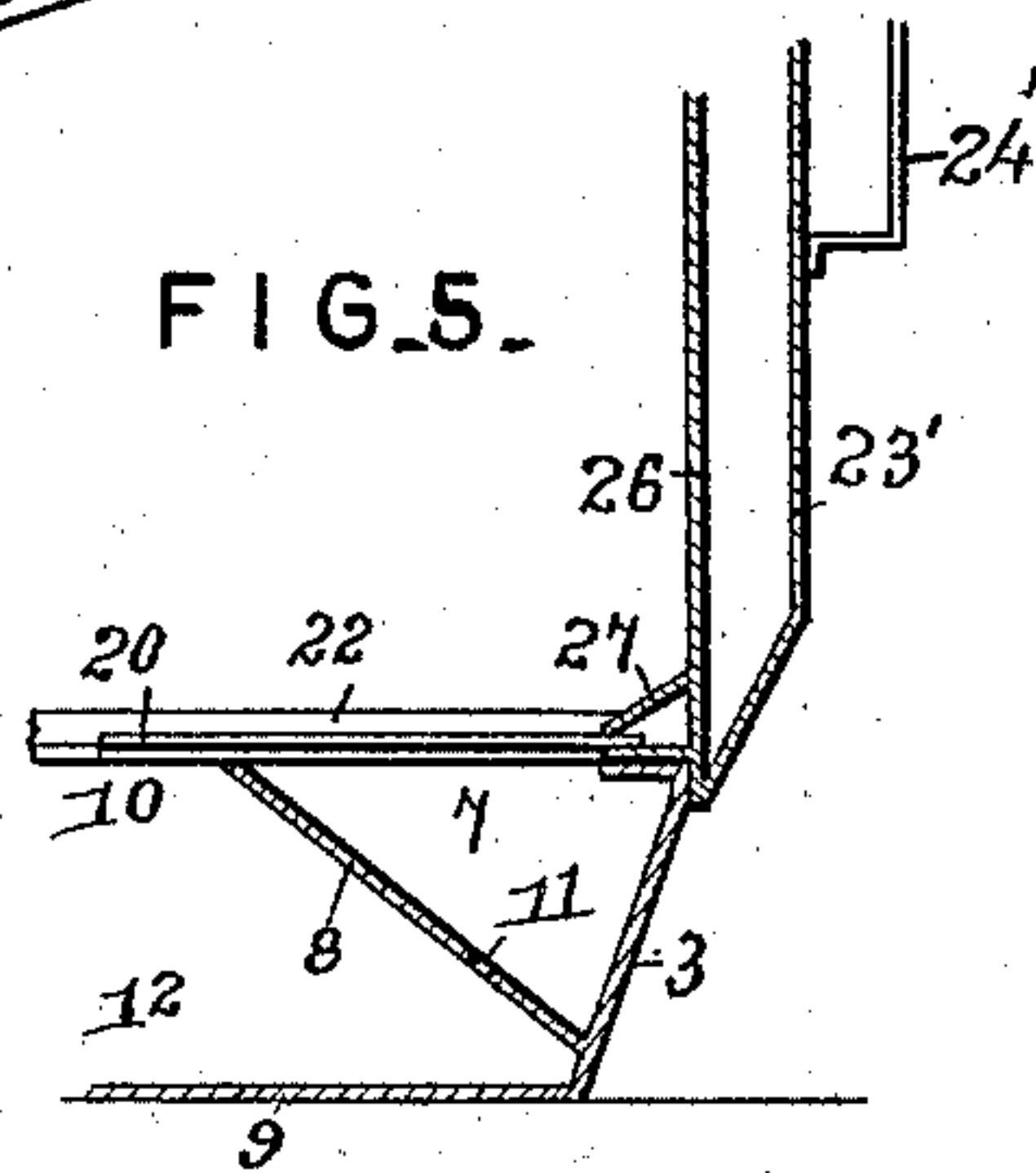
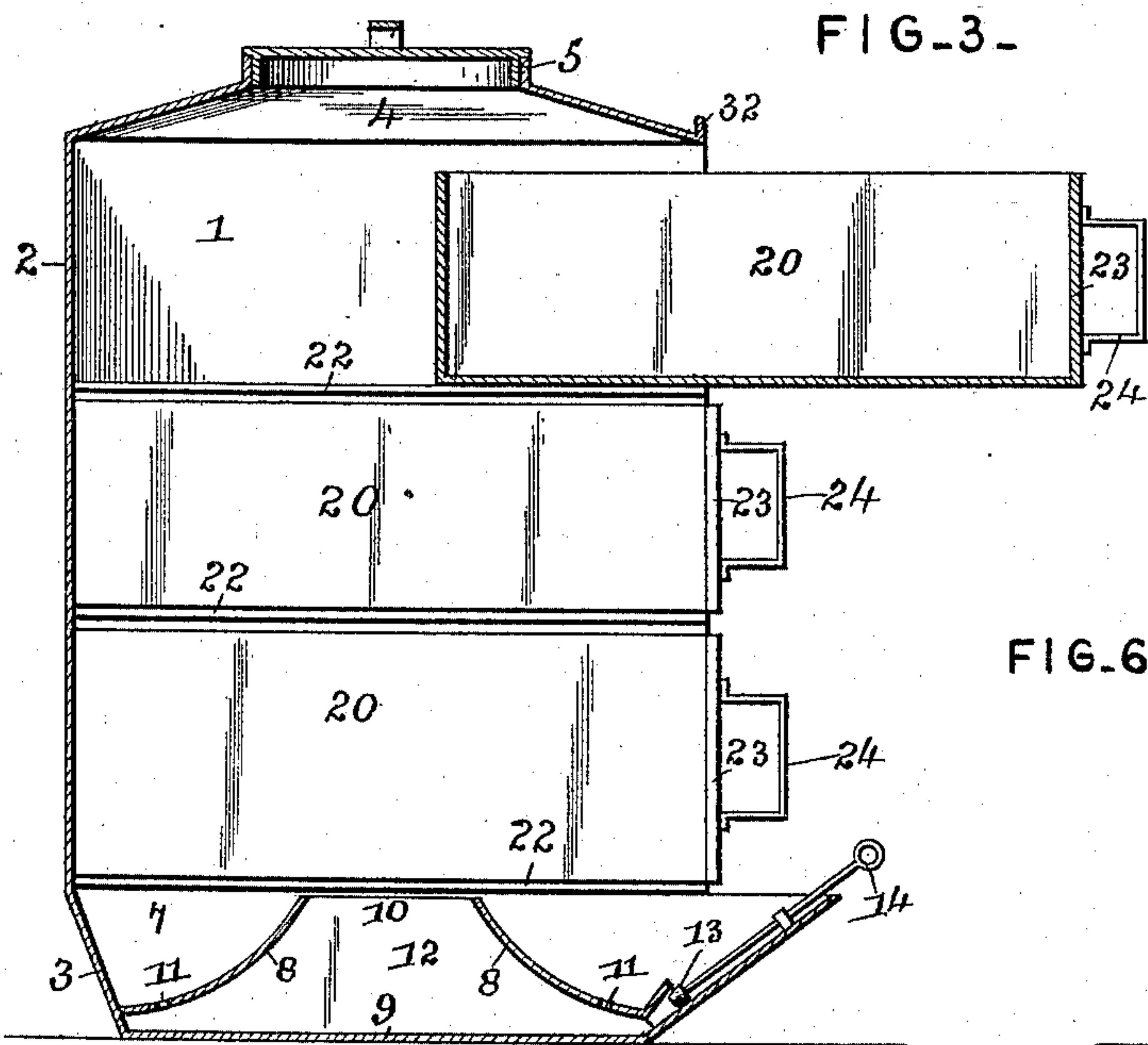
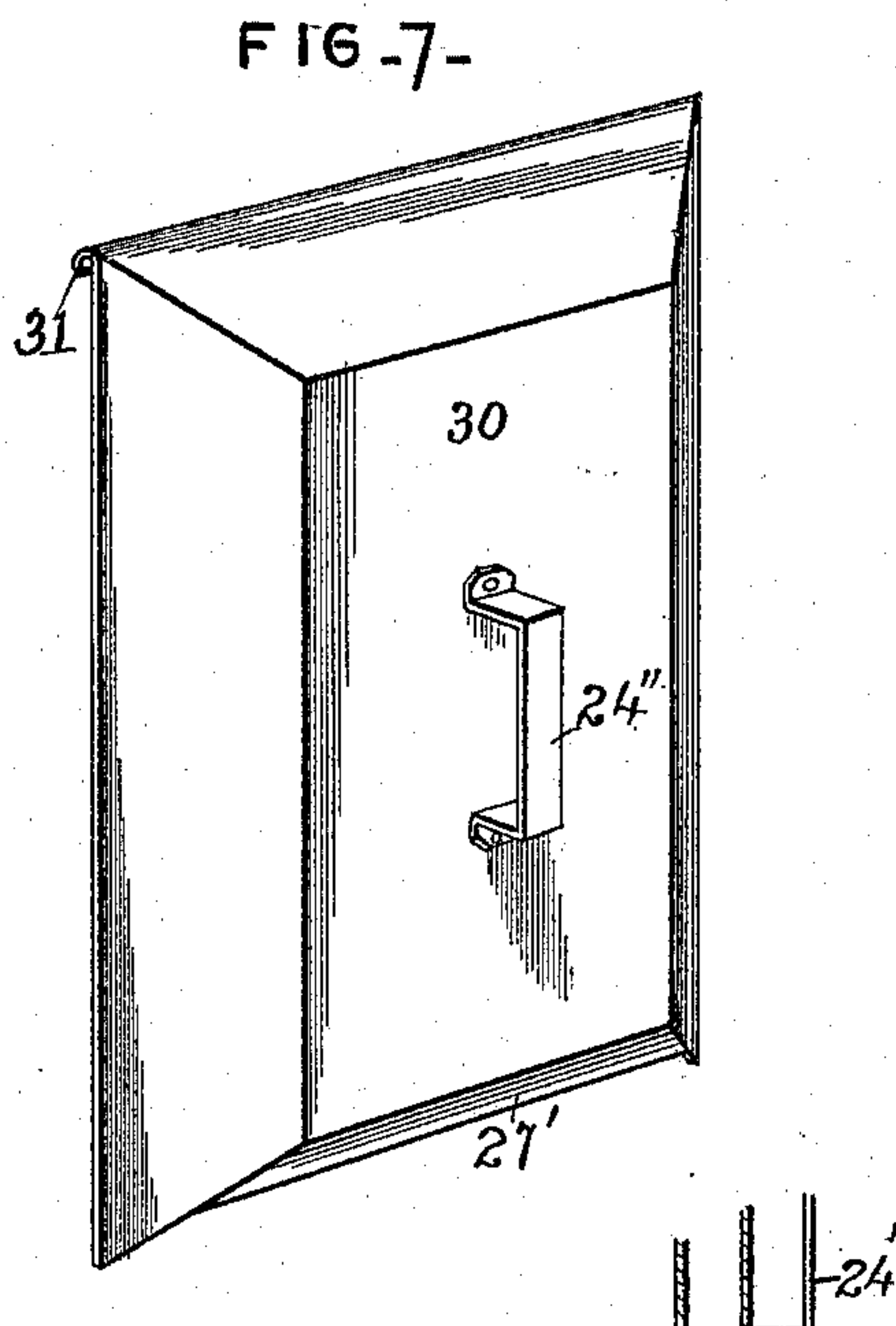
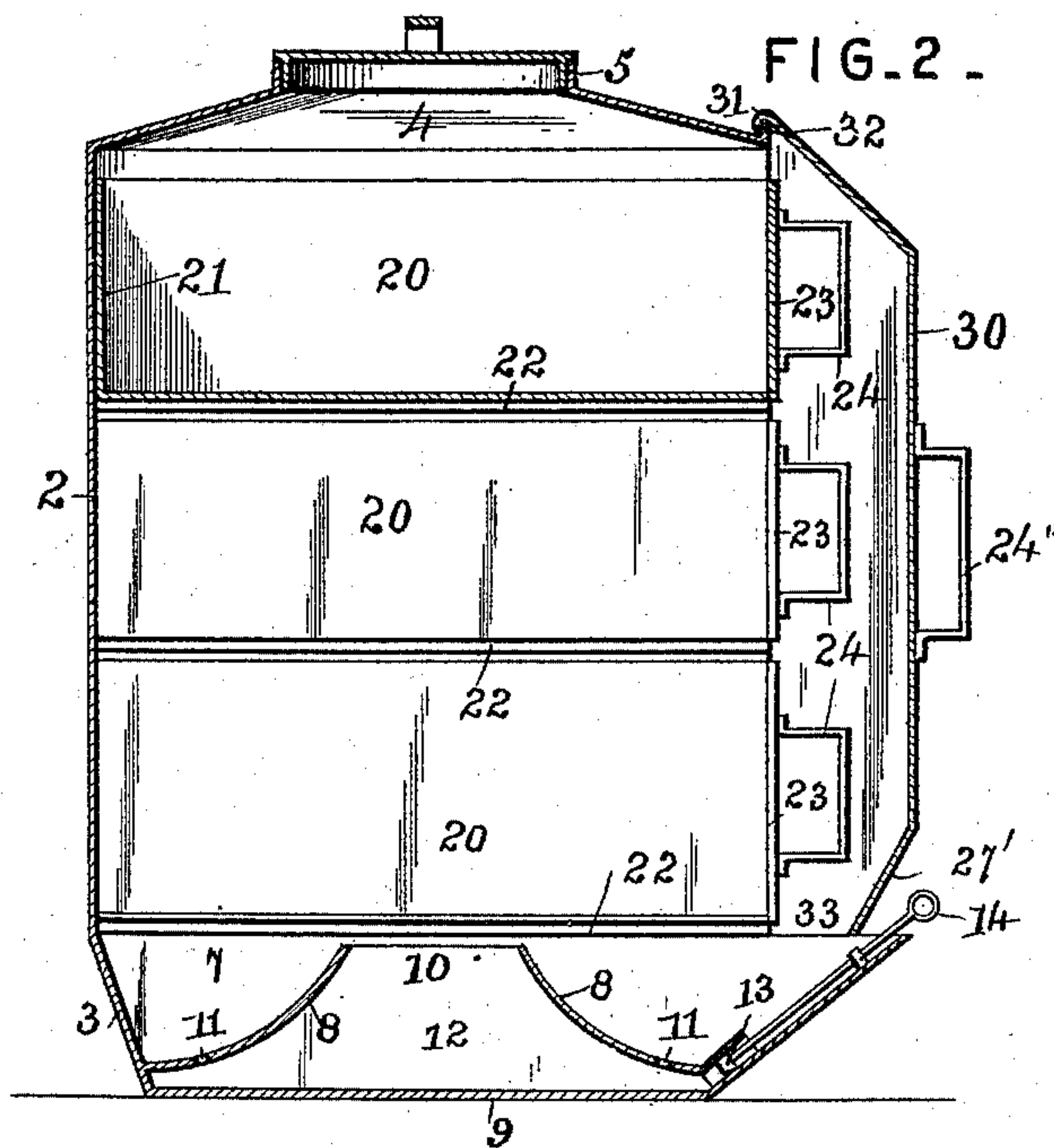
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2 Sheets—Sheet 2.

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No. 488,515.

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Witnesses

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UNITED STATES PATENT OFFICE.

ANDREW A. BESEMER, OF HARVEY, ILLINOIS.

STEAMER.

SPECIFICATION forming part of Letters Patent No. 488,515, dated December 20, 1892.

Application filed October 8, 1891. Serial No. 408,139. (No model.)

To all whom it may concern:

Be it known that I, ANDREW A. BESEMER, a citizen of the United States, residing at Harvey, in the county of Cook and State of Illinois, have invented a new and useful Steamer, of which the following is a specification.

This invention relates to stoves and furnaces, and more especially to the steamers adapted to be used in connection therewith; and the object of the same is to effect certain improvements in devices of this character.

To this end the invention consists in the construction hereinafter more fully described and claimed, and as illustrated on the two sheets of drawings, wherein—

Figure 1 is a general perspective view of one form of this device open. Fig. 2 is a central vertical section of another form of the device closed. Fig. 3 is a similar section of the device shown in Fig. 2 with the condenser removed, one shelf partially drawn out, and the valve open. Fig. 4 is a horizontal section on the line 4—4 of Fig. 1. Fig. 5 is a sectional detail of the shelves of the device shown in Fig. 1, showing the incline thereof. Fig. 6 is a front elevation of this device closed, showing a slightly different form of incline. Fig. 7 is a perspective detail of the condenser of Fig. 2 removed.

Referring to the said drawings, it will be seen that the casing of this improved steamer is rectangular and comprises vertical side-walls 1 having a vertical back 2 and an open front, a pan-shaped base 3 closing the bottom of said casing, and a slightly conical top 4 preferably having a central opening 5 which may be closed by a lid or may receive a coffee-pot 6 or other article. Within the base is located a reservoir 7 which is annular, that is the walls of the base form the outer wall of the reservoir while its inner wall consists of a truncated cone 8 rising from the base near its flat bottom 9 and open as at 10 into the center of the lower end of the casing. The inner wall of the reservoir has several fine perforations 11 through which water may pass slowly into the steam chamber 12, and a valve 13 is also provided to permit a greater passage of water when desired, the handle 14 of this valve extending to the outside of the device.

Within the body of the casing are located the shelves 20, of which there may be any desired number up to the limits of the capacity of the device. In Fig. 1 these shelves are shown as connected at their rear ends to a single vertical back 21', but in Fig. 2 each shelf is independent and its back 21 is connected with its body. The shelf in this case slides on ledges 22 carried by the sides 1 of the casing, and its front end 23 has a handle 24 by which this shelf can be drawn out independent of the other shelves. In Fig. 1, however, the ledges 22 are omitted, and a single front 23' is connected with all the shelves and at its upper end with the single back 21' by strips 22', a single handle 24' being in this case secured to the face of the front. The latter is supported when withdrawn by legs 25 as seen in Fig. 1, and at this time the single back 21' closes the open front of the casing and prevents the escape of steam.

In Figs. 4 and 5 the front is shown as double, that is to say its inner wall 26 is spaced from its outer wall, and the lower end of this inner wall is inclined inwardly as at 27; with which construction, what steam rises from the steam chamber 12 and condenses on the inner face of said inner wall, will run down the same and be directed by the incline 27 back into the reservoir 7. In the device shown in Figs. 2 and 7, however, a condenser 30 serves this purpose. The said condenser comprises a plate bowed outwardly so as to cover the handles 24 when the several drawers are in place, and itself having a handle 24'' by which it may be lifted. The upper end of the condenser has a hook 31 fitting over a bead or ledge 32 along the front end of the top 4, and its lower end is open as at 33 and preferably is inclined as at 27'. In this case the front wall of the base 3 projects forward to such an extent that the upper end of the reservoir 7 at this point is extended under the open lower end 33 of the condenser; and hence the condensed steam running down the inner face of this condenser, will be directed back into the reservoir. This construction is preferable where the device is quite large and has several drawers, but the inner wall 26 and its incline 27 shown in Fig. 5 serve practically the same purpose as the condenser just de-

scribed. The reservoir may be filled by removing the condenser 30, and in the construction shown in Fig. 1 the front wall of the base has a large filling funnel 34 and a small overflow funnel 35 at a slightly lower level.

The condenser when in place closes the front of the casing; and the front 23' performs the same function as the condenser 30 in condensing the steam, and in directing the water resulting from condensation back to the reservoir.

In operation, the food to be steamed is placed on one or more of the shelves in open dishes, water is poured into the reservoir, and the steamer is set on the stove. The water runs slowly through the perforations 11 onto the bottom 9 where it is converted into steam which passes up through the opening 10 and through the several shelves, which I should have said are slatted as shown. If a coffee-pot or other dish be seated in the top of the casing, the contents thereof will be kept warm. As the steam strikes the condenser, it is condensed and it travels down the condenser back into the reservoir as will be obvious. This device is of sheet-metal and of any preferred size and ornamentation, and considerable change in the specific details thereof may be made without departing from the spirit of my invention—one of which that occurs to me at this writing I have illustrated in Fig. 6. That is to say, instead of giving the incline 27 a considerable angle so as to direct the condensed steam over the front wall of the base 3, as seen in Fig. 5, I make this incline slightly funnel-shaped and locate the mouth of the funnel at such a point that it will stand over the filling orifice 34 when the device is closed, as seen in Fig. 6.

What is claimed as new is—

1. A casing, shelves therein, and a steam chamber opening into the bottom of the casing and provided with a partition forming a reservoir; in combination with a condenser closing the open front of the casing, removable therefrom, and connecting at its lower

end with said chamber, as and for the purpose set forth.

2. The combination of a casing having an open front, slatted shelves, a steam chamber opening into the bottom of the casing, a reservoir surrounding the steam chamber and communicating therewith and with the interior of the casing, and means for closing the front of the casing, substantially as described.

3. The combination of a casing having an open front, slatted shelves, a base arranged below the casing and containing a central steam chamber and having a surrounding reservoir each open at the top and a division wall between the two having perforations, a removable front for closing the casing and a lid opening into the top of the casing, substantially as described.

4. A casing having an open front, a base below said casing containing a steam chamber and a reservoir in front of said chamber both being open at the top, and communication between the reservoir and chamber; in combination with a number of slatted shelves, closed vertical back and front connected at their upper ends by strips and secured to said shelves, and a leg depending from said front, as and for the purpose set forth.

5. The combination with a rectangular casing having an open front, a base below said casing containing a steam chamber and a reservoir in front of the chamber and communicating therewith, both being open at the top, of a number of slatted shelves, a hollow front connecting said shelves and removably closing the front of the casing, a handle on the outer wall of said front, and an incline at the lower edge of its inner wall, as and for the purpose hereinbefore set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ANDREW A. BESEMER.

Witnesses:

WILLIAM O. OSBORN,
FRANK M. GROUT.