

No. 656,460.

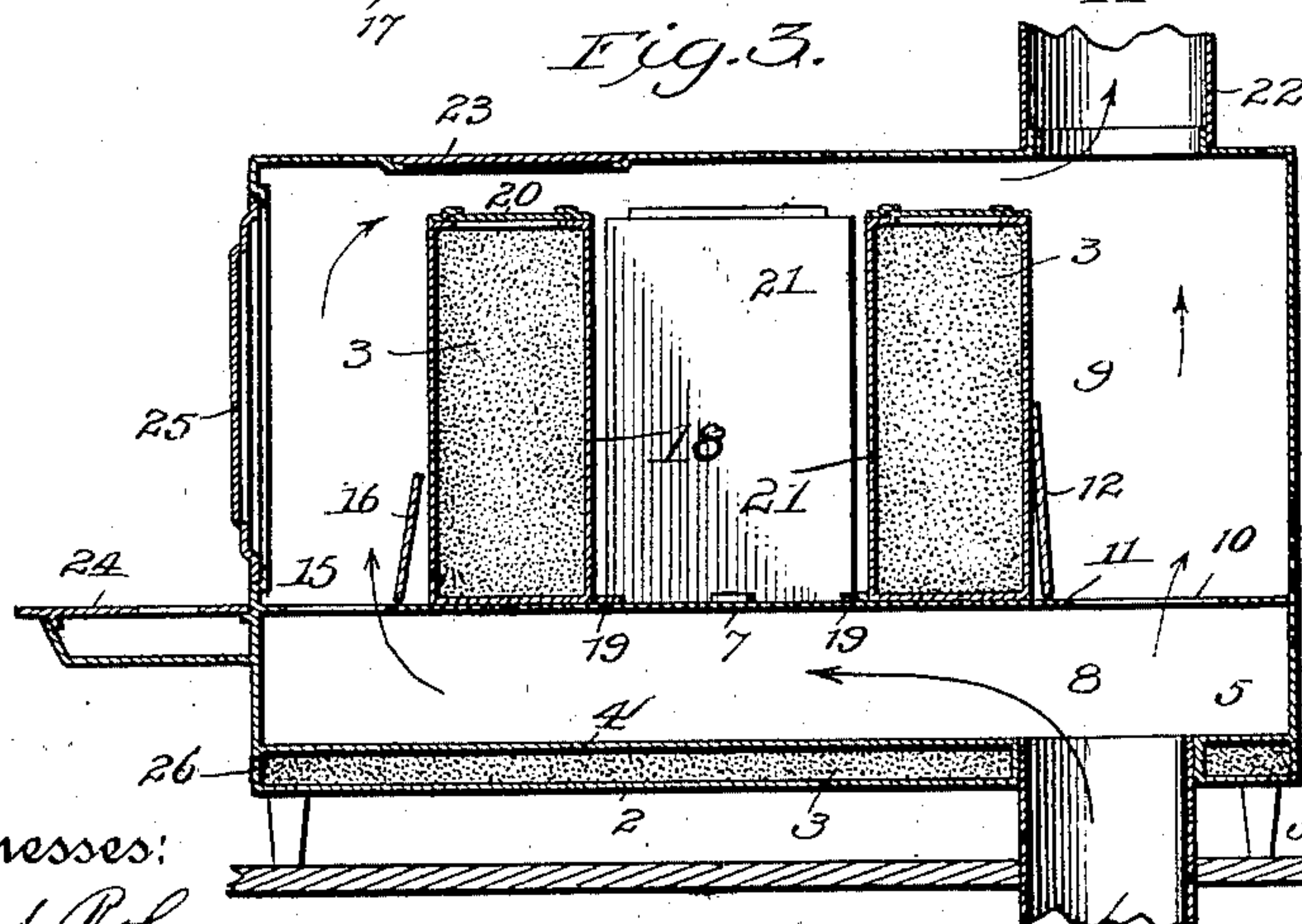
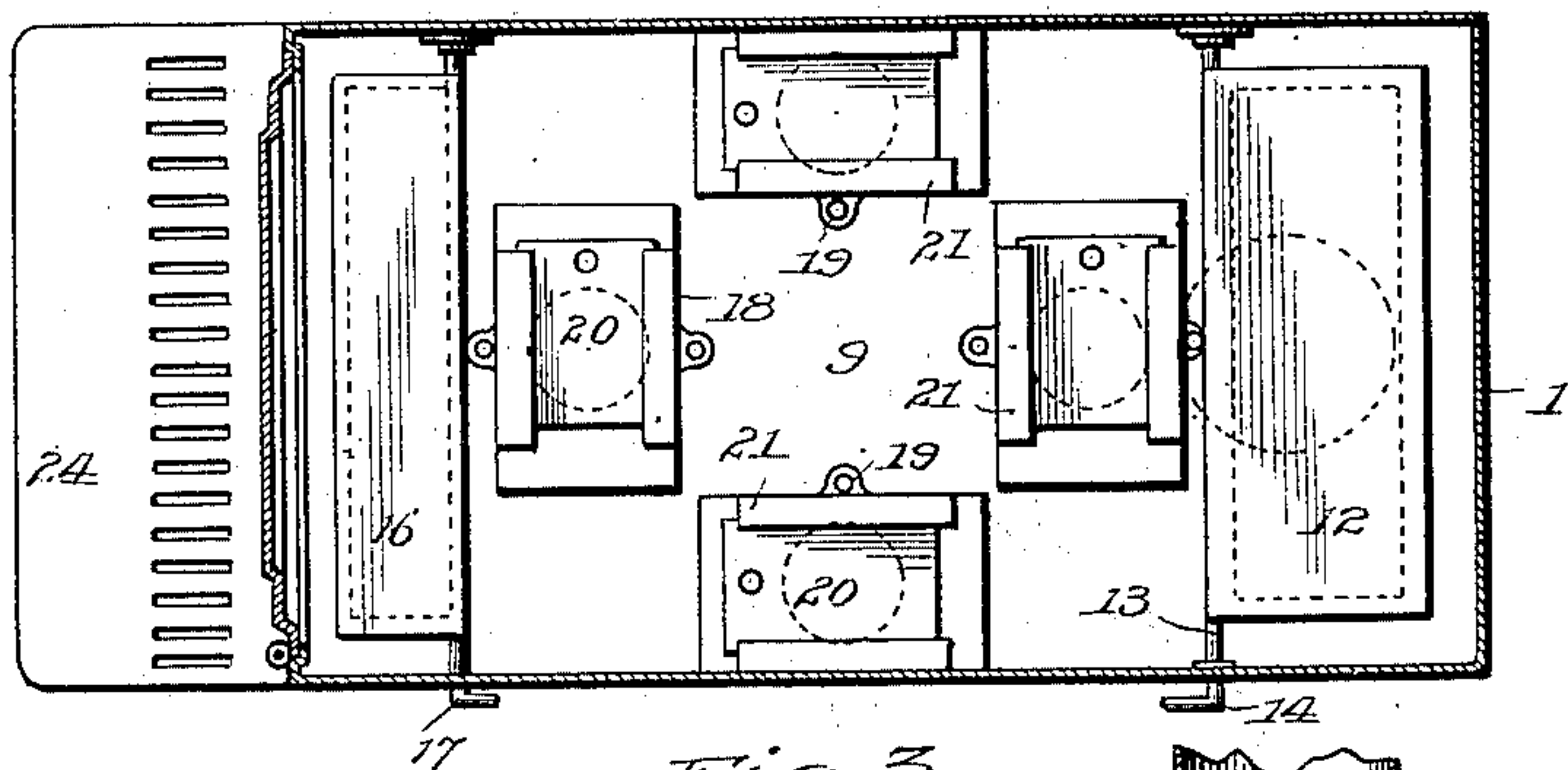
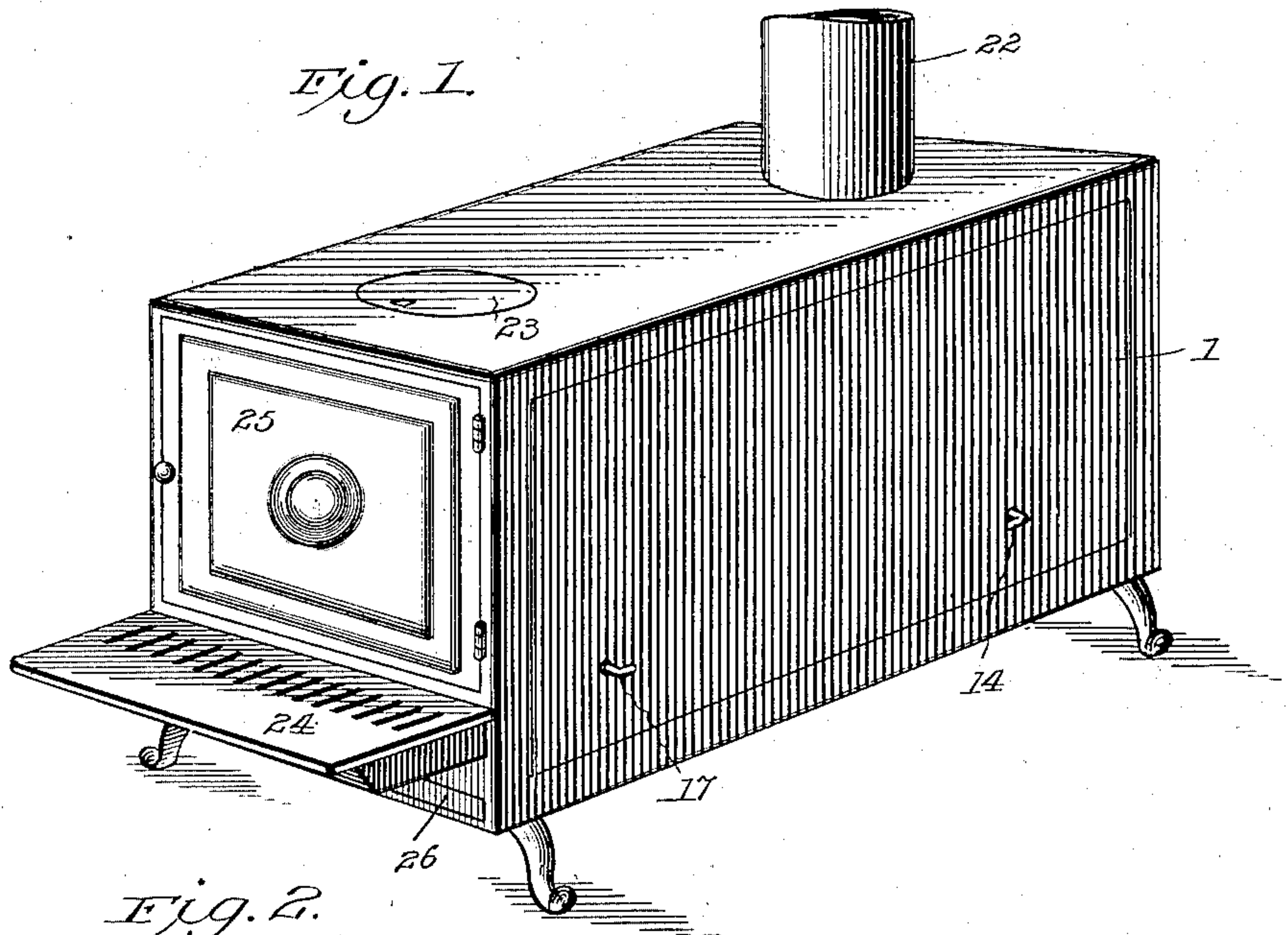
Patented Aug. 21, 1900.

M. & A. E. KENNEDY.

HEATING DRUM.

(Application filed Mar. 22, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

MARGARET KENNEDY AND ANN ELIZA KENNEDY, OF MEXICO, MEXICO.

HEATING-DRUM.

SPECIFICATION forming part of Letters Patent No. 656,460, dated August 21, 1900.

Application filed March 22, 1900. Serial No. 9,796. (No model.)

To all whom it may concern:

Be it known that we, MARGARET KENNEDY and ANN ELIZA KENNEDY, citizens of the United States, residing at Tacubaya, Mexico city, Republic of Mexico, have invented certain new and useful Improvements in Heating-Drums, of which the following is a specification.

This invention relates to new and useful improvements in heating-drums; and its primary object is to provide a heating-drum of neat, simple, durable, and cheap construction capable of utilizing waste heat for cooking and heating purposes and which, if desired, may be readily so arranged as to permit the use of fuel therein.

To these ends the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of our invention, and in which—

Figure 1 is a perspective view of the heating-drum. Fig. 2 is a plan view of the device with the top removed. Fig. 3 is a central vertical longitudinal section.

This heating-drum has the appearance of an ordinary rectangular range, and its walls 1 are formed of any suitable material, as cast or sheet iron. The bottom 2 of the heating-drum is provided with a layer of some heat-retaining material, as ashes 3, covered by a preferably metal shelf 4, a circular walled passage 5 being formed in said bottom, shelf and the ashes therebetween, for the reception of a stovepipe 6, which may be extended from a stove of ordinary construction arranged therebelow or adjacent thereto. At a point above the shelf 4 and in a plane parallel therewith is a metallic partition or floor 7, extending over the entire length and width of the stove and forming the lower chamber or flue 8 and the upper or main chamber 9. This floor is provided at a point directly above the passage 5 with a preferably-circular opening 10, to the upper and forward edge 11 of which is hinged a plate 12, adapted to be operated by an arm 13, projecting through the side of the stove, as shown, and terminating in a crank-shaped handle 14. Near its forward end the floor 7 is provided with a second passage 15, adapted to be closed by a

damper 16, which may be operated in any suitable manner, as by means of an arm 17. At a point to the rear of the center of the passage 15 a rectangular receptacle 18, of sheet-iron or wire-gauze, is secured by means of screws adapted to engage with projections 19 thereon. This receptacle is adapted to be filled with ashes or other heat-retaining material 3, and a lid 20 is provided, whereby the contents of the box are readily accessible. A receptacle 21, similar to the one above described, is secured to each side wall and to the floor adjacent the passage 15. A pipe, as 22, is secured to the top of the heating-drum at a point directly above the opening 10, and openings may be arranged as desired in said top and provided with covers 23. The front of the heating-drum may be provided with a hearth 24, arranged on a line with the floor 7, and a door 25 of ordinary construction is mounted thereabove. A smaller door 26 is hinged to the heating-drum at a point between the bottom 2 and the shelf 4 therein, thereby permitting the ashes 3 to be readily removed from or placed in position. If desired, a fender 26 may be secured around the heating-drum.

In operation smoke, hot air, &c., passing from a stove on a lower floor of a house are conducted through a pipe 6 to the flue 8. If the plate 12 is in position over the opening 10, the gaseous products will pass forward in said flue, up through the passage 15, over and around the receptacles 18 and 21, and out through the pipe 22. It will be understood that as the hot air, &c., pass over the shelf 4 and over and between the receptacles 18 and 21 heat will be imparted thereto, and this heat will be retained and slowly given off by the ashes 3, thereby increasing the efficiency of the heating-drum.

Although our heating-drum is especially adapted to be heated by waste heat, as hereinbefore described, fuel can be burned therein if desired. To do this, it is merely necessary to place a small grate of ordinary construction upon the floor 7.

It is obvious that by regulating the plate 12 the gas from the lower stove may be directed either through the flue 8 or directly from pipe 6 to pipe 22. In the former case there would be sufficient space between the upper edge of

the plate 12 and the top of the heating-drum to permit the gaseous products of the combustion of fuel within the stove to pass therebetween and out into pipe 22.

5 In the foregoing description we have shown the preferred form of our invention; but we do not limit ourselves thereto, as we are aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and we therefore
10 reserve the right to make such changes as fairly fall within the scope of our invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

15 1. In a heating-drum having an inlet and an outlet, the combination with the casing, of a partition therein intermediate the inlet and outlet and having openings therein, dampers to said openings whereby the products
20 of combustion may be permitted to flow directly to the outlet or caused to flow indirectly thereto, receptacles detachably secured upon the partition, and heat-retaining material within said receptacles.

25 2. In a heating-drum having an inlet and an outlet, the combination with the casing, of a partition therein intermediate the inlet and outlet and having openings therein, dampers to said openings whereby the products
30 of combustion may be permitted to flow directly to an outlet or caused to flow indirectly

thereto, powdered or granular heat-retaining material upon the bottom of the casing, a cover therefor, receptacles detachably secured upon the partition adjacent to the sides
35 and to the dampered opening, removable lids to the receptacles, and a powdered or granular heat-retaining material within said receptacles.

40 3. In a heating-drum having an inlet and an outlet, the combination with the casing, of a partition therein intermediate the inlet and outlet and having openings therein near each end, one of said openings in alignment with
45 the inlet and outlet, a door adjacent to the second opening, dampers to the openings whereby the products of combustion may be permitted to flow directly to the outlet or caused to flow indirectly thereto, powdered or
50 granular heat-retaining material upon the bottom of the casing, a cover therefor, receptacles detachably secured upon the partition adjacent to the sides and to the dampered openings, a removable lid for each receptacle,
55 and a powdered or granular heat-retaining material within the receptacles.

In testimony whereof we affix our signatures in presence of two witnesses.

MARGARET KENNEDY.
ANN ELIZA KENNEDY.

Witnesses:

JAMES R. HARDY,
WM. A. DEGRESS.