

N. F. HOLBERG.
 COMBINED STOVE AND HEATING DRUM.
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996,645.

Patented July 4, 1911.

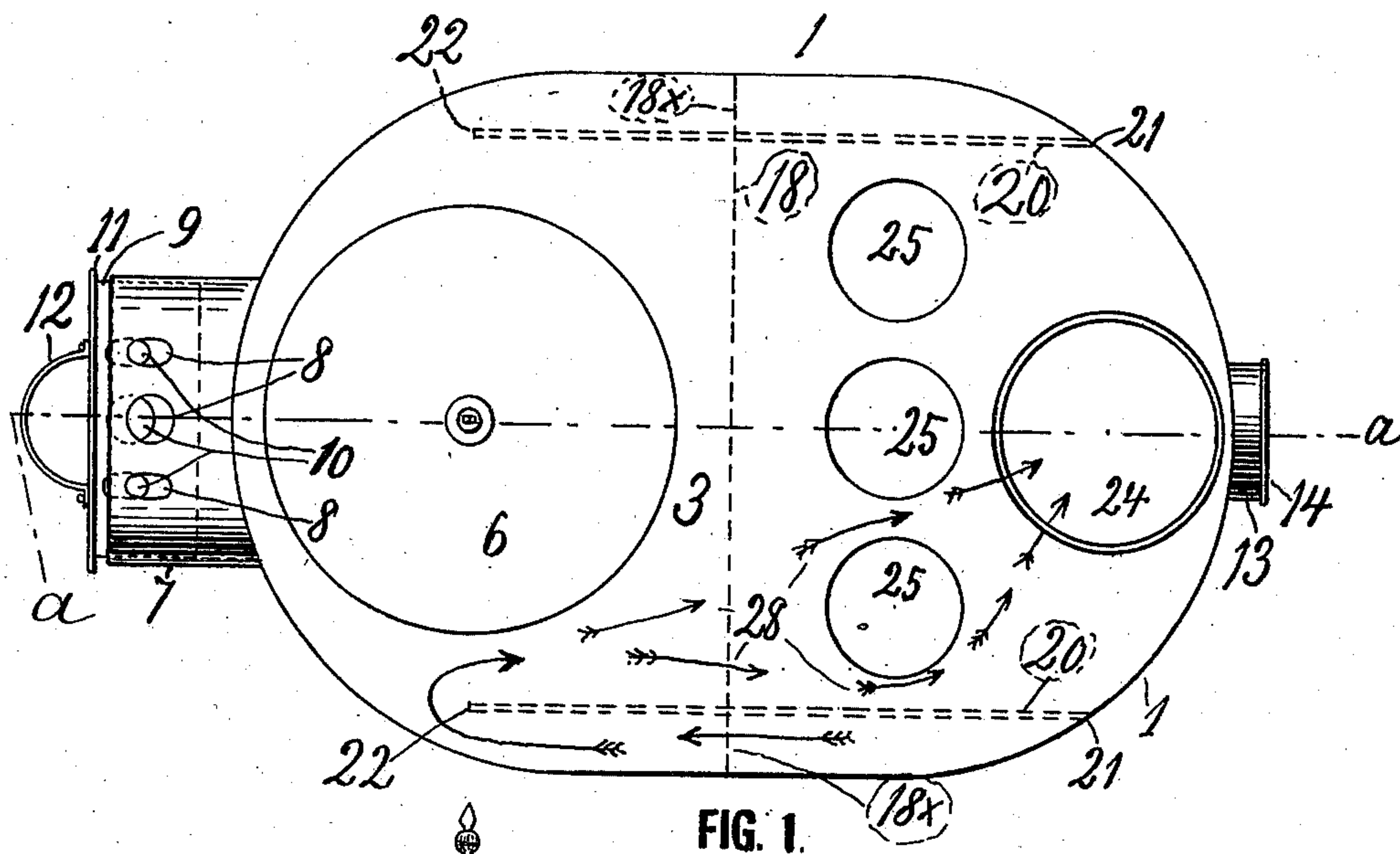


FIG. 1.

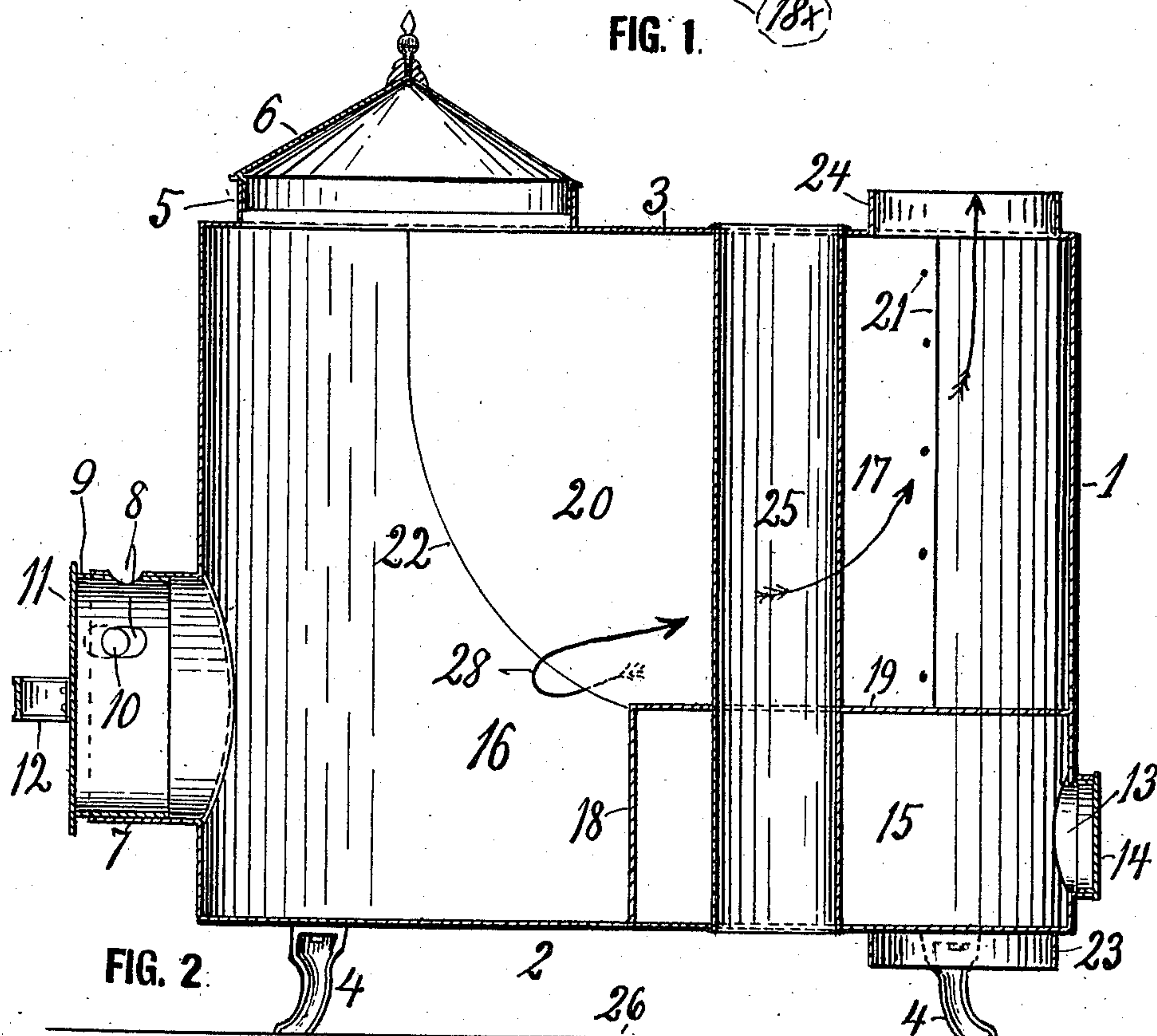


FIG. 2.

WITNESSES:

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INVENTOR:

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UNITED STATES PATENT OFFICE.

NELS F. HOLBERG, OF STILLWATER, MINNESOTA.

COMBINED STOVE AND HEATING-DRUM.

996,645.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, NELS F. HOLBERG, a citizen of the United States, residing at Stillwater, in the county of Washington and State of Minnesota, have invented a new and useful Combined Stove and Heating-Drum, of which the following is a specification.

My invention relates to heating drums, and the objects are to provide an efficient heating drum and also a combined stove and drum, so that if the hot air passing from the stove into the drum does not radiate the desired amount of heat, some extra fuel may be burned in the drum.

In the accompanying drawing Figure 1 is top view of my improved combined stove and stove drum or radiator, and Fig. 2 is a longitudinal vertical section on the line *a-a* in Fig. 1.

Referring to the drawing by reference numerals, 1 designates the main body, 2 the bottom and 3 the top of a heating drum embodying my improvements. The drum is preferably mounted on legs 4 and is provided with a fuel opening 5 with cover 6 thereon; and at the front end is a draft tube 7 with apertures 8 and in said tube rotates a collar 9, having apertures 10 adapted to register more or less with the apertures in the tube and thus regulate the draft there-through. Said apertured collar has its outer end closed by a plate 11 having a hand hold 12; and at the rear end the drum has a hole 13 closed by a lid or stopper 14, the removal of which gives access to the lower rear compartment 15 of the drum for cleaning out ashes and soot; it may also serve as connecting point for a stove pipe by which air may be conducted to or from the drum as the occasion may require.

The drum may be considered as divided into three compartments, viz; the front or fuel compartment 16, the upper rear compartment 17 extending therefrom, and the lower rear compartment 15. The latter compartment is bounded by the shell 1, the bottom 2, cross partition 18 and the horizontal partition 19; the latter partition or false bottom extends in transverse direction only between the false walls or cheeks 20 (see Fig. 1.) which are secured to the rear wall or shell at 21 and extend forward with their front edges 22 as shown.

The bottom of compartment 15 is provided with a stove pipe nipple 23 and the top of compartment 17 with a similar nipple 24.

Through said compartments 15, 17 and the partition 19 extend a series of vertical tubes 25, the function of which is to draw cold air from near the floor 26, heat it and let it circulate out at the upper end of the tubes.

In other respects the operation of the device is as follows. The device may be used as an ordinary heating stove with or without closing the nipple 23 by a chimney stop, but when, as in most cases is the intention, the device is used as a heating drum, it is placed high enough usually in a story of a building higher up than the story in which the main fire or stove is located, the pipe from the stove (either the regular stove pipe or a similar heating pipe) is passed through the floor and connected with the nipple 23, and another stove pipe is arranged to connect nipple 24 with a chimney. The hot air from the stove proper (not shown) then passes into compartment 15, then up and forward over the end portions 18^x of partition 18, between the shell and the cheeks 20, then turning in compartment 16 and passing, like arrows 28, rearward between the tubes 25 and passing up and out through nipple 24 reaches the chimney through the stove pipe (not shown) extending therefrom to the chimney. Should the room thus heated by the drum need a little extra heat in extra cold weather, a wood fire may be lighted in the compartment 16, or a gas burner (not shown) may be placed therein and connected to a gas hose inserted through the draft door 9 or openings 8-10 thereof. Should a pipe from a second stove be available, the same may be connected with the opening 13 to furnish additional hot air into the drum. And if the drum is of great capacity and in a small room, a pipe may be directed from the opening 13 upward or laterally into some other room for heating the same by hot air or smoke passed into a second drum (not shown) connected therewith.

What I claim is:—

1. In a heating drum and mounted on supports, a horizontally elongated drum shell having in the rear of its lower portion walls forming with the walls thereof a chamber with an air or smoke inlet to receive a stove pipe and provided with upward openings near both sides of the shell, longitudinal vertical partitions or cheeks near said openings to guide the hot air into the front portion of the shell, a smoke outlet in the top of the rear part of the drum to permit the

smoke to pass rearwardly between said partitions and upwardly into a stove pipe; said air or smoke inlet chamber having its front wall extended entirely across the drum the full
5 height of the chamber, the front portion of the shell constituting a fire box with openings for fuel and air, and means controlling said openings.

2. In a heating drum and mounted on supports, a horizontally elongated drum shell
10 having in the rear of its lower portion walls forming with the walls thereof a chamber with an air or smoke inlet to receive a stove pipe and provided with upward openings
15 near both sides of the shell, longitudinal vertical partitions or cheeks near said openings to guide the hot air into the front portion of the shell, a smoke outlet in the top of the

rear part of the drum to permit the smoke to pass rearwardly between said partitions
20 and upward into a stove pipe; said air or smoke inlet chamber having its front wall extended entirely across the drum the full height of the chamber, the front portion of the shell constituting a fire box with open-
25 ings for fuel and air, and means controlling said openings; said rear bottom chamber having a lateral or rear opening with means closing it when not in use.

In testimony whereof I affix my signature, 30
in presence of two witnesses.

NELS F. HOLBERG.

Witnesses:

L. BLEASLEE,
F. B. CASTLE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."