

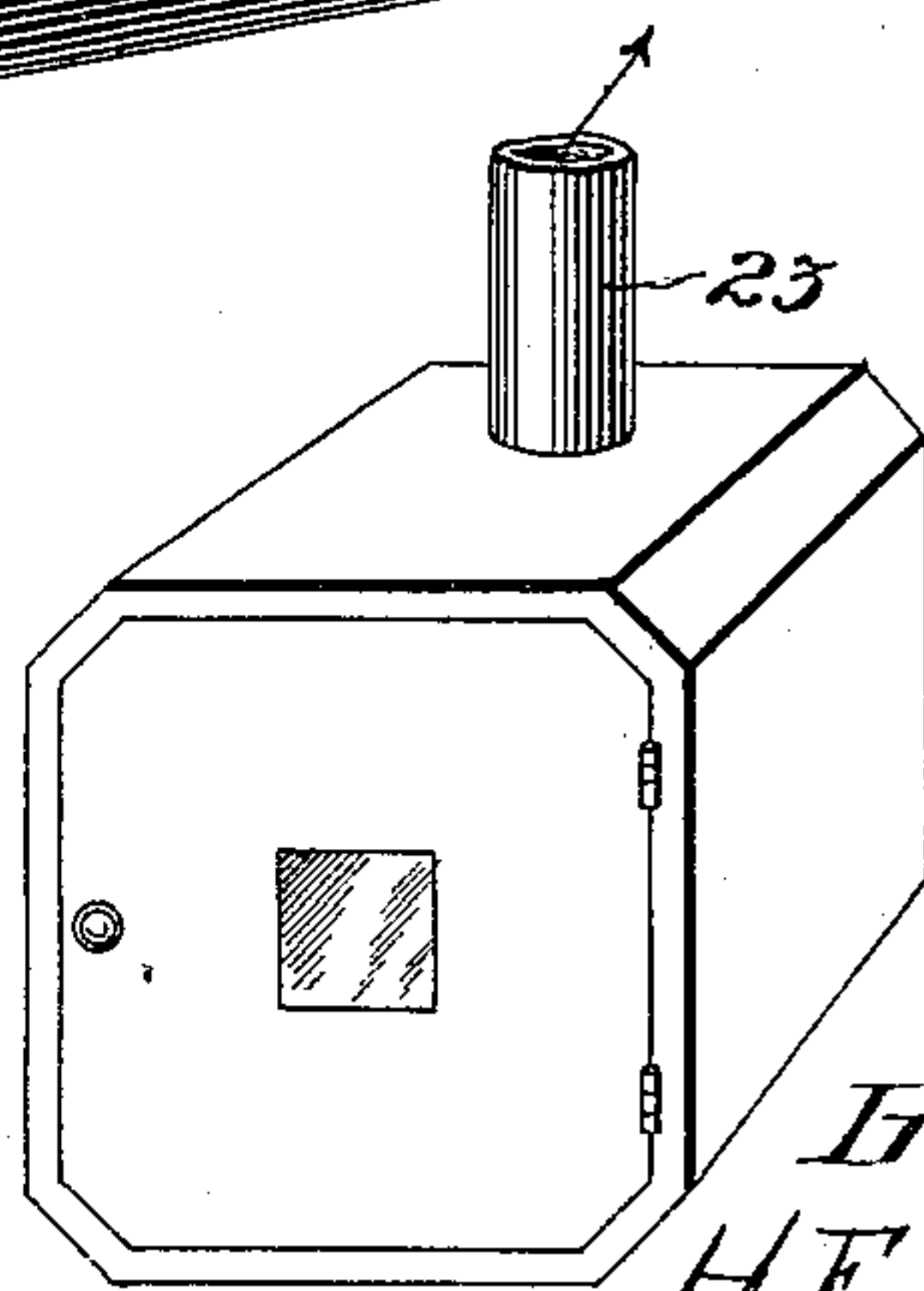
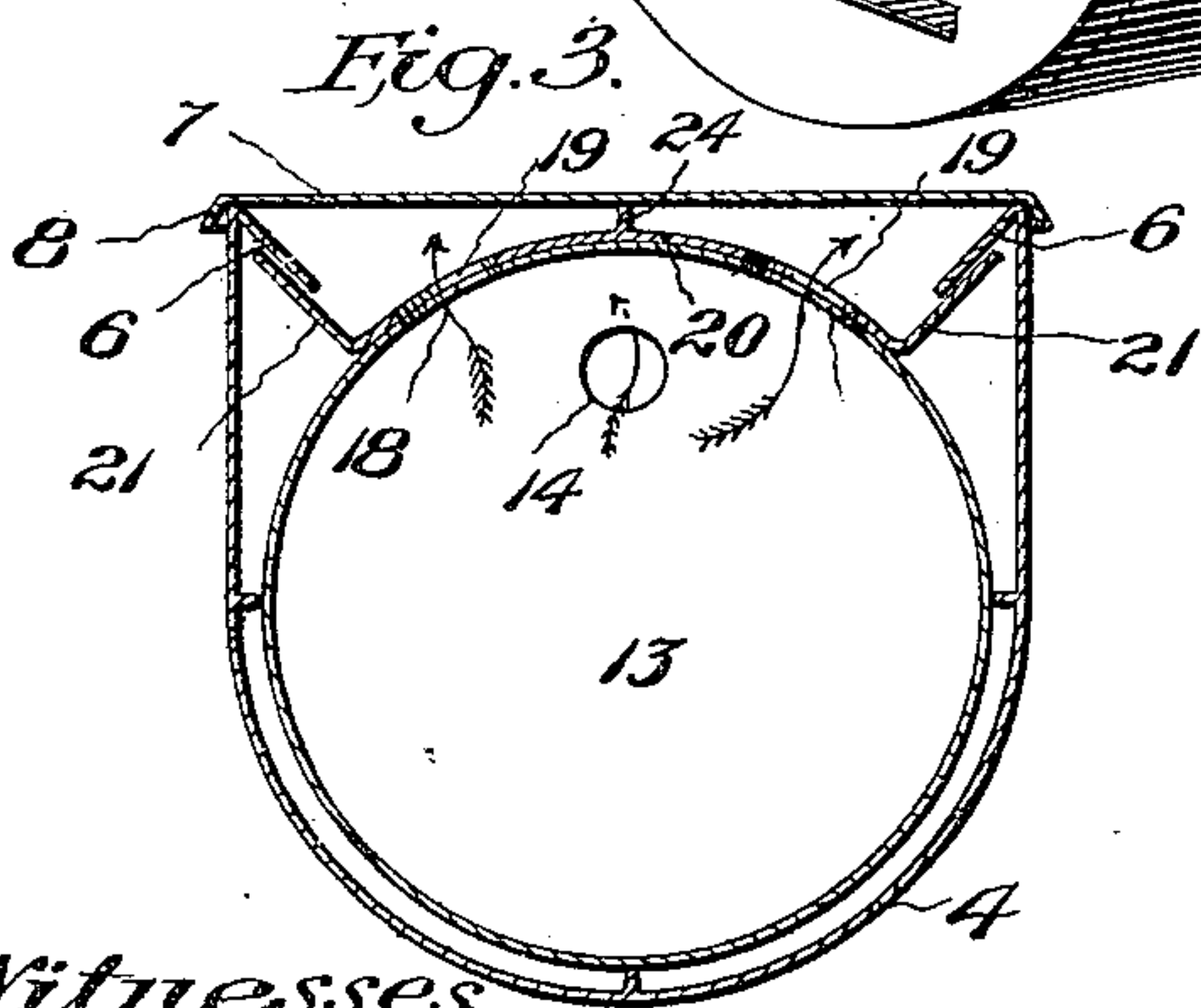
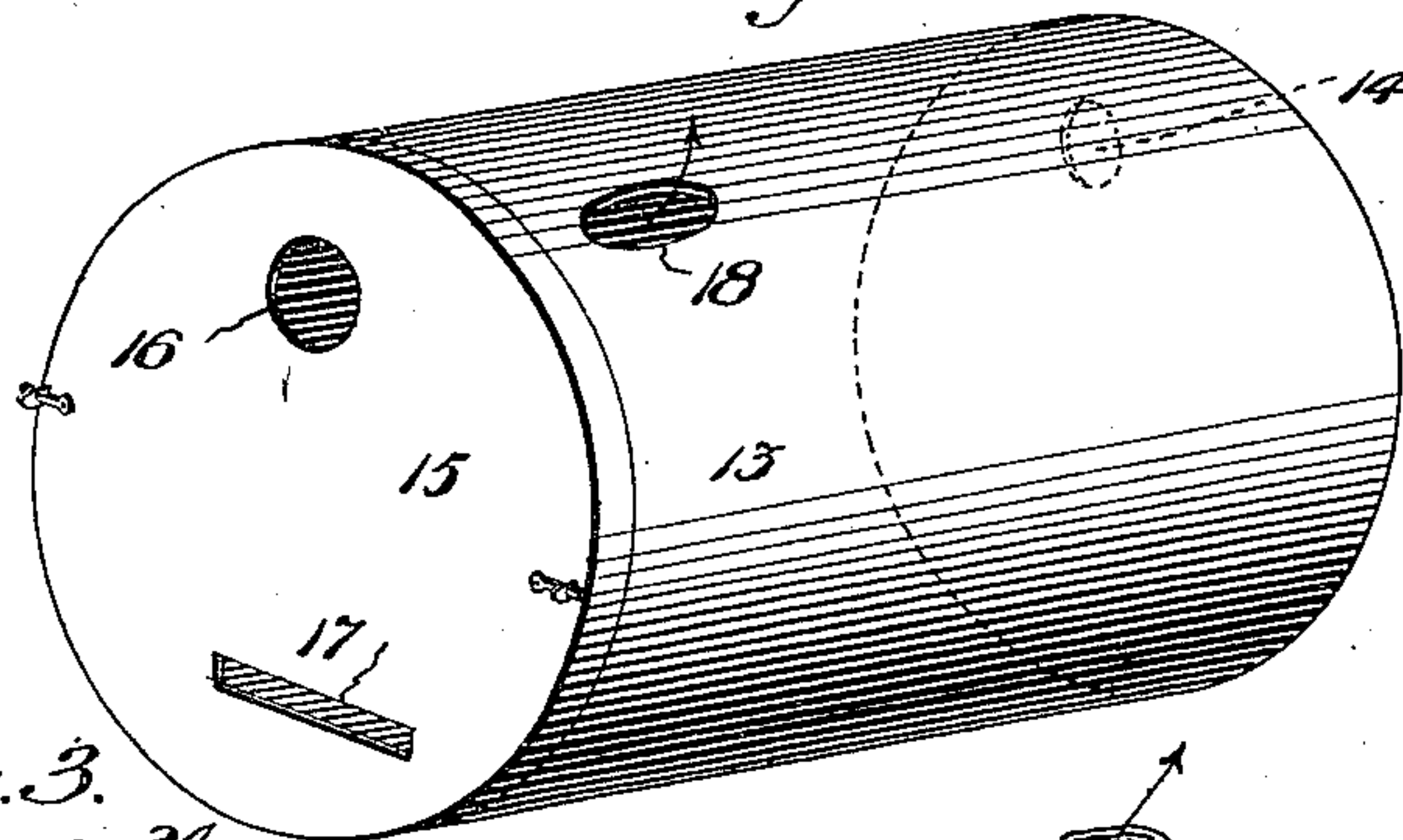
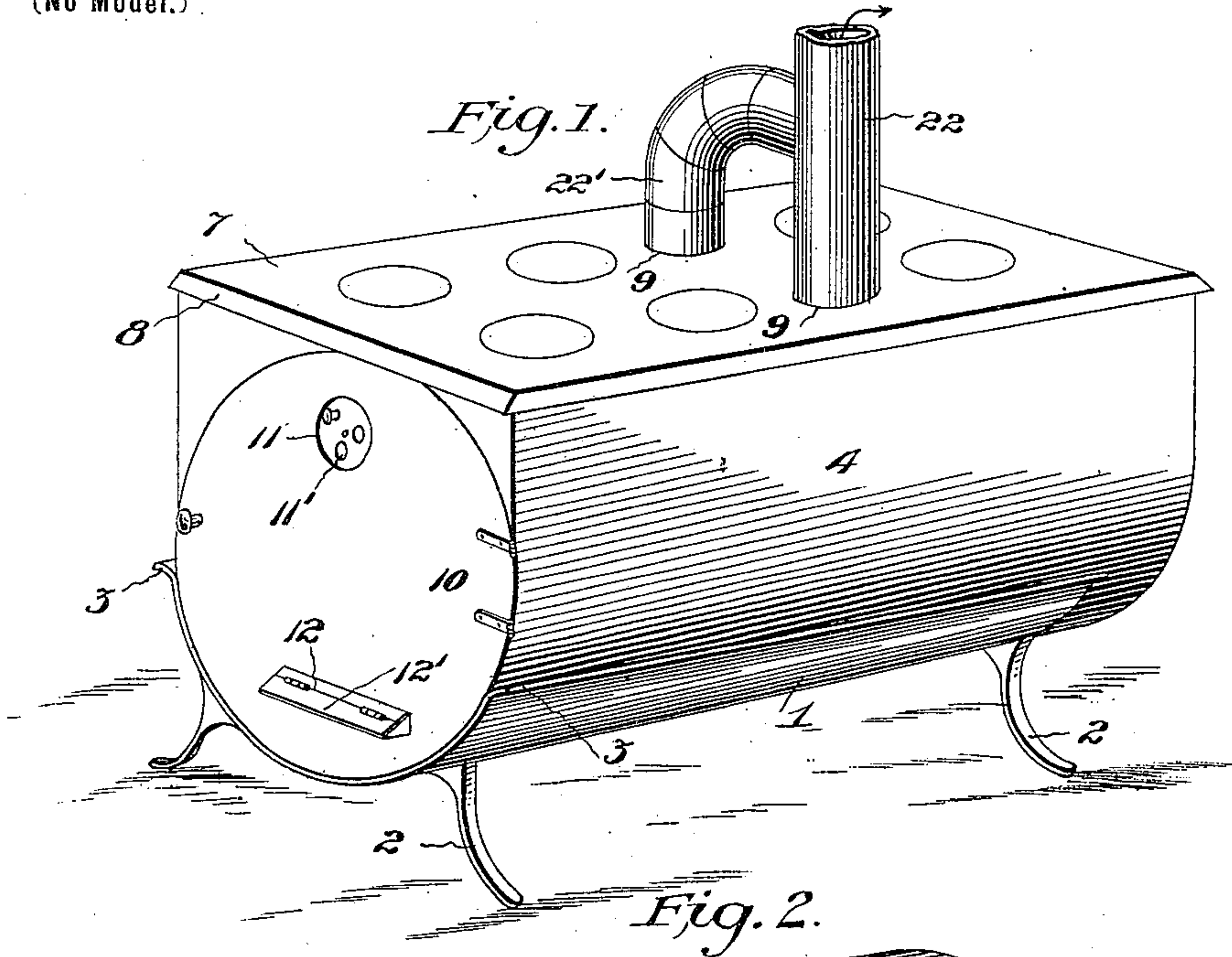
No. 663,458.

Patented Dec. 11, 1900.

H. E. McCONNELL.
STRAW BURNING COOK STOVE.

(Application filed June 21, 1900.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

HUGH E. McCONNELL, OF CODINGTON COUNTY, SOUTH DAKOTA.

STRAW-BURNING COOK-STOVE.

SPECIFICATION forming part of Letters Patent No. 663,458, dated December 11, 1900.

Application filed June 21, 1900. Serial No. 21,129. (No model.)

To all whom it may concern:

Be it known that I, HUGH E. McCONNELL, a citizen of the United States, residing in Codington county, near Strouseton, in the county of Grant and State of South Dakota, have invented certain new and useful Improvements in a Combined Heating, Cooking, and Baking Straw-Burning Stove; and I do 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.

The invention relates to a combined heating, cooking, and baking straw-burning stove. The objects of the invention are to provide a stove of this character which shall be simple of construction, durable in use, comparatively inexpensive of production, and which will permit of its being expeditiously converted from a heating or cooking stove into a baking-stove; furthermore, to provide a stove of this character by means of which the fuel magazine or drum may be easily and quickly removed from the body of the stove and replaced with a freshly-charged drum or magazine; furthermore, to provide means for collecting the moisture from the burning straw and preventing it from running down on the sides of the stove.

With these objects in view the invention consists in certain features of construction and combination of parts, which will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of my improved stove. Fig. 2 is a detail perspective view of the magazine or drum. Fig. 3 is a vertical cross-sectional view through the stove-casing, its top, and the magazine or drum; and Fig. 4 is a detail perspective view of the oven.

Referring to the drawings, 1 denotes a support of trough-like form mounted upon legs 2. The longitudinally-parallel edges of the support are curved laterally to form foot-rails 3. 4 denotes the cylindrical body or casing of the stove, having longitudinally-supporting ribs or flanges, one along its bottom and two along its sides, and having the upper ends of its edges at the sides flanged inwardly, as shown at 6.

7 denotes the top of the stove, provided with marginal flanges 8 to embrace the side and

end walls of the casing or body portion 4 and provided with pipe-holes 9.

10 denotes a door hinged to the front end of the casing, provided with the upper and lower draft-control openings 11 and 12, respectively, provided with dampers 11' and 12', respectively.

13 denotes the fuel drum or magazine, each end of which is provided with an upper draft-opening 14 and the forward end of which is provided with a removable cover 15, having draft-openings 16 and 17, which communicate, respectively, with the draft-openings 11 and 12. The upper side of the drum or magazine is provided with two openings 18, which communicate with similar openings 19, formed in a curved plate 20, which extends the full length of and is similar to the top of the magazine or drum. This plate 20 has upwardly and outwardly projecting marginal flanges 21, which engage or project between the side walls of the casing or body of the stove and the flanges 6, so that should the straw, which is placed within the drum or magazine, be damp the vapor and water of condensation will be collected in the trough formed by the flanges 21 and 6.

22 denotes the stovepipe, having a branch 22'. The branch and the stovepipe proper are adapted to register with the holes 9 in the top of the stove and carry off the smoke and products of combustion. When, however, it is desired to bake with the stove, the stovepipe 22 is removed, and the oven, (shown in Fig. 4,) which has holes (not shown) in its bottom corresponding with the holes 9 in the top of the stove, is placed upon the top of the stove, and the products of combustion are then caused to pass up between the sides of the oven in the usual manner and will pass out through a pipe 23 in the top of the oven.

24 denotes a longitudinally-bracing rib which extends the full length of the drum and supports the top of the stove and prevents it from sagging when intensely heated. It also serves as a partition to divide the top of the stove into two compartments, so that the products of combustion escaping through the holes in the drum and the strengthening-plate will be led rearwardly through each compartment to the outlet-holes 9 in the top.

In charging the magazine the door 10 is

swung open, the magazine or drum withdrawn, and its door or cover 15 removed. The magazine or drum is now charged with straw and its cover 15 secured in place. It is then placed
 5 in position within the body of the stove and the door 10 closed, with the dampers 11' and 12' properly adjusted. The straw is lighted through the forward draft-hole first, then in the lower draft-hole, and if the straw does
 10 not burn quickly enough it is lighted through the rear draft-hole. The smoke and products of combustion will pass out through the fire-holes in the drum or magazine and be led rearwardly and will escape through the
 15 smoke-pipes 22 22' if an oven is not used, and if an oven is used the smoke and products of combustion will pass through the oven and will be discharged through its smoke-pipe 23.

By providing the top of the stove with the
 20 holes 9 for carrying off the products of combustion and by providing the under side of the top with a longitudinal partition dividing the space above the magazine between said
 25 magazine and said top into compartments the products of combustion are more evenly distributed under the top of the stove than they would be if this partition were not provided and but one hole used.

From the foregoing description, taken in
 30 connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood without requiring an extended explanation. The device is exceedingly useful for the pur-
 35 pose for which it is designed and may be placed upon the market at a comparatively small cost.

Various changes in the form, proportion, and the minor details of construction may be
 40 resorted to without departing from the principle or sacrificing any of the advantages of my invention.

Having thus fully described my invention, what is claimed as new, and desired to be pro-
 45 tected by Letters Patent, is—

1. In a stove of the character described, the combination with the stove-casing provided with a door and having its upper edges bent inwardly and inclined downwardly, of
 50 a fuel-magazine adapted to be inserted into said casing through said door, said door being provided with dampers and said magazine being provided with openings controlled by said dampers, a curved plate seated upon
 55 the upper side of the fuel-magazine and provided with upwardly and outwardly projecting side edges overlapped by the upper inclined edges of the stove-casing, thus forming a trough for the condensed vapors of the
 60 burning straw, fire-holes arranged in the upper side of the magazine, a removable top for said stove-casing, a longitudinal partition dividing the space above the magazine and below the top into two compartments which
 65 communicate with the fire-holes, and outlet-holes formed in the said top and communicating with said compartments, substantially as set forth.

2. In a stove of the character described, the combination with the stove-casing pro-
 70 vided with a door, of a fuel-magazine adapted to be inserted into said casing through said door, said door being provided with dampers and said magazine being provided with open-
 75 ings controlled by said dampers, fire-holes arranged in the upper side of the magazine, a removable top for said stove, a longitudinal partition dividing the space above the maga-
 80 zine and below the top into two compartments which communicate with the fire-holes, and outlet-holes formed in said top and communicating with said compartments, substan-
 tially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-
 85 nesses.

HUGH E. McCONNELL.

Witnesses:

T. J. McELLIGOTT,
 J. N. JOHNSON.