

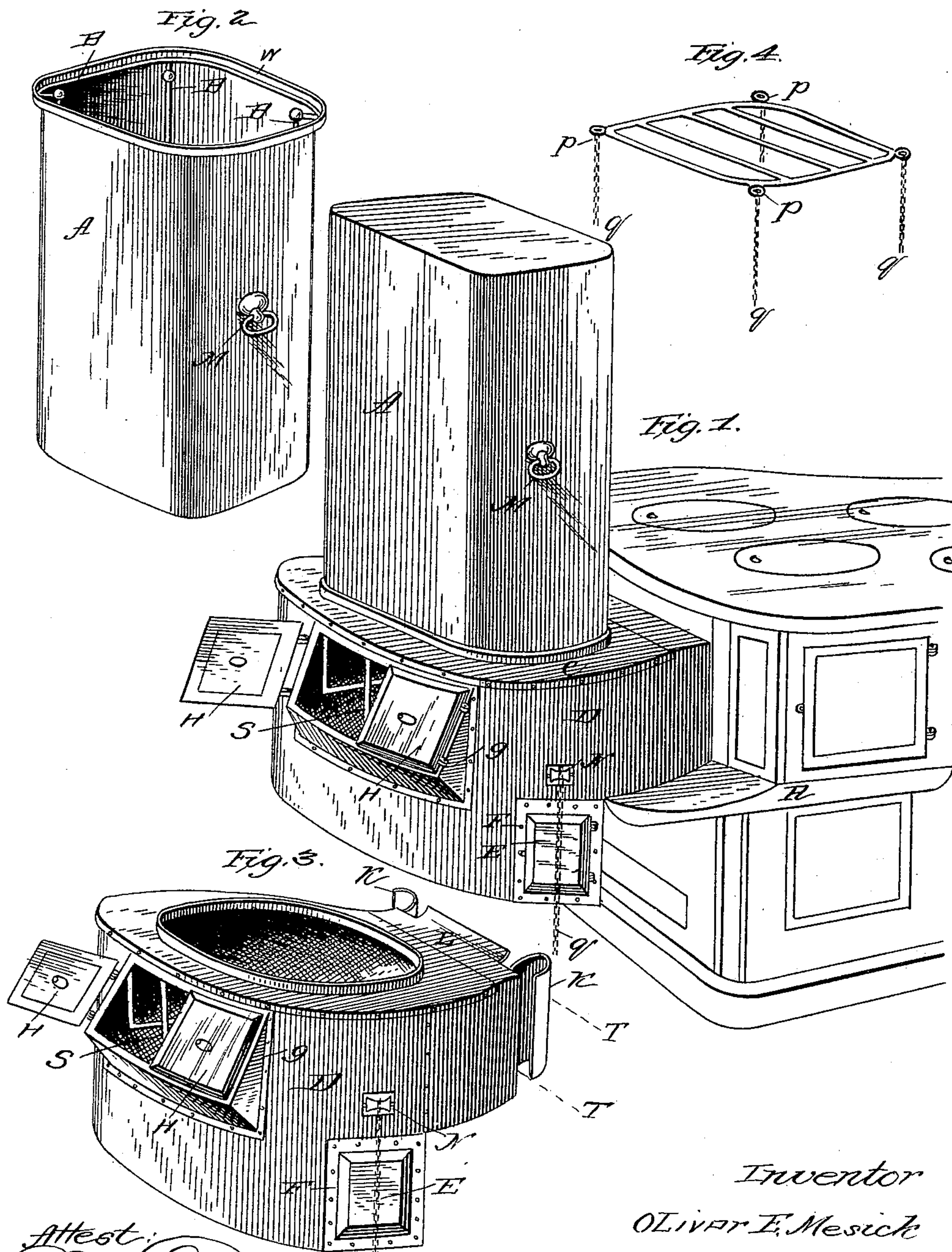
(No Model.)

O. E. MESICK.

HAY AND STRAW BURNER.

No. 377,208.

Patented Jan. 31, 1888.



Attest:  
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*Att'y*



# UNITED STATES PATENT OFFICE.

OLIVER E. MESICK, OF POTTER COUNTY, DAKOTA TERRITORY.

## HAY AND STRAW BURNER.

SPECIFICATION forming part of Letters Patent No. 377,208, dated January 31, 1888.

Application filed March 18, 1887. Serial No. 231,462. (No model.)

*To all whom it may concern:*

Be it known that I, OLIVER E. MESICK, a citizen of the United States, residing in Township 117, Range 77, in the county of Potter and Territory of Dakota, (post-office address being Forest City, Potter county, Dakota,) have invented a new and useful Hay and Straw Burner, of which the following is a specification.

My invention is an attachment for stoves, ranges, furnaces, and the like for burning straw, hay, or like light material therein.

It consists in the devices and combination of devices hereinafter particularly described.

In the accompanying drawings, Figure 1 represents the invention as applied to an ordinary cooking-stove, the magazine being broken away to show the interior arrangement. Fig. 2 is a view of the magazine detached. Fig. 3 is a similar view of the fire box. Fig. 4 is a view of the follower.

It will be understood that though this can be attached to any of the stoves now in use temporarily for the purpose of burning light fuel, it may also be applied permanently to stoves when they are to be used in situations where heavy fuel is hard to obtain.

In the drawings I have represented the attachment as applied to an ordinary cooking-stove.

R represents the stove, and A and D my attachment. It is composed of a sheet-metal case formed with a grate and an ash-box beneath the grate and a magazine for holding the hay, straw, or other material. The top plate, C, of the fire-box has extension-plates L on the rear, curved slightly upward, and the side walls have laterally-bent extensions K, and by means of these the burner is securely attached to the stove, these parts fitting snugly under the projecting edges of what in the ordinary stove constitutes the opening to the grate. In order to provide a receptacle for the accumulation of ashes in the attachment itself, the fire-box is extended downwardly in front, as shown, and below that portion adapted to rest upon the stove-hearth. This forms an ash-pit which is below the horizontal plane of the fire-box proper and below, also, the line of draft. The fire-box is, as

shown, provided with a door, E, opening into the ash-pit of the box, for the removal of the ashes, and with doors H H on the front, having the ordinary slides for the regulation of the draft. The magazine A fits over an opening in the top of the fire box, and has in each corner a guiding rod or chain, B, which is adapted to support and guide the weight-frame O. This frame is placed upon the top of the fuel within the magazine and presses it constantly downward through the opening in the fire-box upon the fire in the grate, and this compression of the fuel causes the loose material to burn more evenly and with much less waste.

In order to give greater weight to the frame O when more compression is desired than the said frame gives, I provide chains *q q*, which extend down through the magazine and fire-box and out through holes in the side walls, D, passing over anti-friction pulleys N, and to the ends of these chains weights are attached for the purpose above described.

I claim as my invention—

1. In combination, the vertically-arranged magazine to receive and hold the straw, the fire-box beneath said magazine, the follower for forcing the material downward placed in said magazine, and the chains or wires attached to said follower and extending downwardly, and thence through the walls of the fire-box to the outside, substantially as described.

2. In a straw-burner, the combination of a magazine having a follower therein, a fire-box forming a support for the magazine having a horizontal extension adapted in turn to be supported by the hearth of the stove, and having also an oblong or elongated rear open end to fit the front of the stove, with spring-plates for attachment thereto, and the downwardly-extending portion depending below the hearth and comprising the ash-pit, the grate located beneath the magazine and in the plane of the horizontal portion of the fire-box, the doors in the sides of the downward extension, and the means for operating the follower, all substantially as described.

OLIVER E. MESICK.

Witnesses:

R. MUELLER,  
F. MUELLER.