

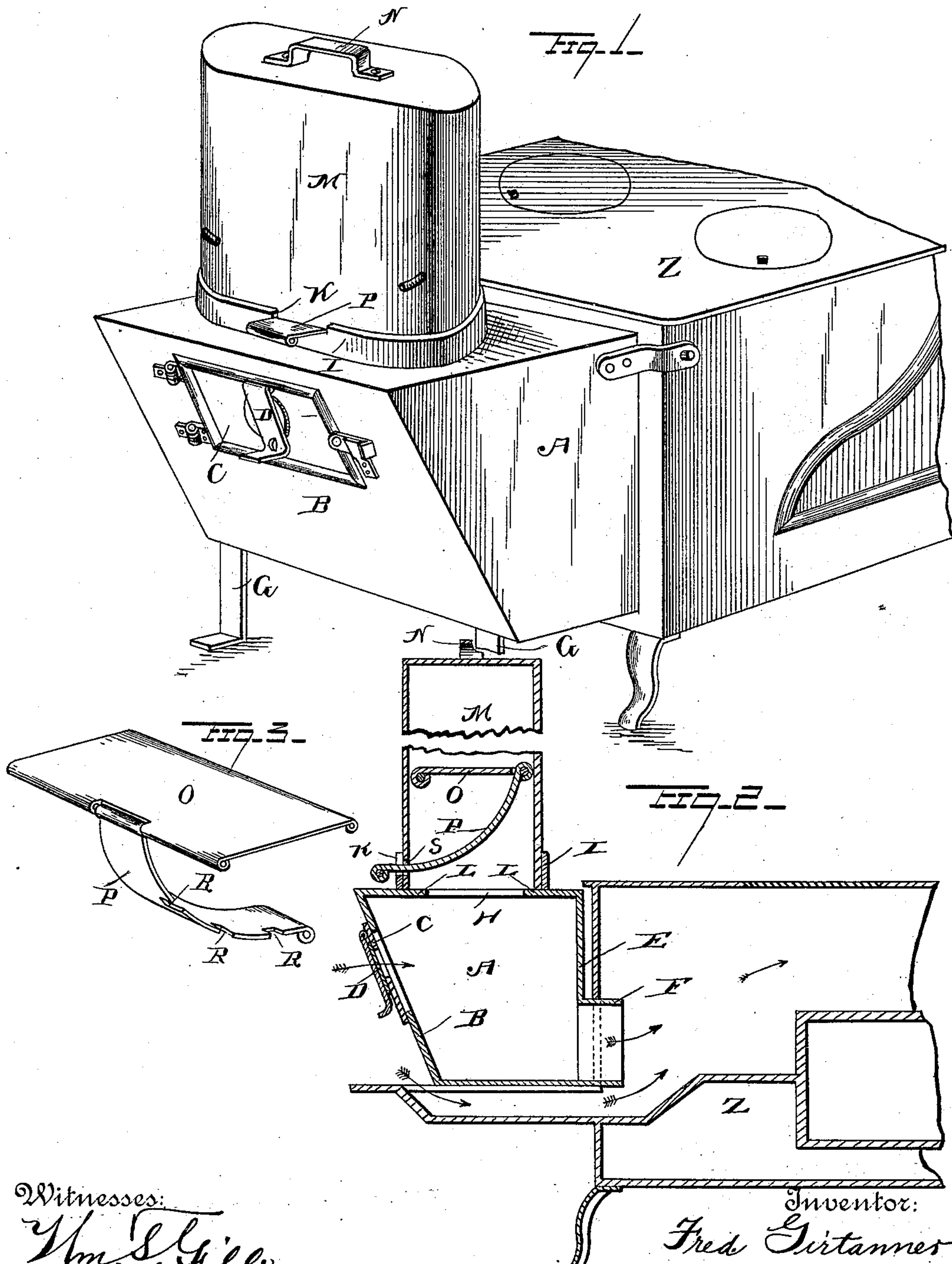
(No Model.)

F. GIRTANNER.

STRAW BURNING ATTACHMENT FOR STOVES.

No. 361,006.

Patented Apr. 12, 1887.



Witnesses:

Wm. S. Gill
J. W. Garner

Inventor:

Fred Girtanner

By his Attorneys

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UNITED STATES PATENT OFFICE.

FRED GIRTANNER, OF BIG STONE CITY, DAKOTA TERRITORY, ASSIGNOR OF ONE-HALF TO CASPER HATZ AND FLORIAN J. HATZ, BOTH OF SAME PLACE.

STRAW-BURNING ATTACHMENT FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 361,006, dated April 12, 1887.

Application filed July 10, 1886. Serial No. 207,701. (No model.)

To all whom it may concern:

Be it known that I, FRED GIRTANNER, a citizen of the United States, residing at Big Stone City, in the county of Grant, Dakota Territory, have invented a new and useful Improvement in Straw-Burning Attachments for Stoves, of which the following is a specification.

My invention relates to an improvement in straw-burning attachments for stoves; and it consists in the peculiar construction and combination of devices that will be more fully set forth hereinafter, and particularly pointed out in the claim.

In the drawings, Figure 1 is a perspective view of my invention attached to a cooking-stove. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 is a detailed perspective-view of the valve and its adjusting-strap.

A represents a fire box or receiver, which is rectangular in shape, and has its outer or front wall, B, inclined, thereby making the fire box or receiver wider at its upper side than at its lower side. In the front inclined wall, B, is located a hinged door, C, which is provided with a damper, D, to admit air to the fire-box. The rear wall, E, of the fire-box is formed with a rearwardly-projecting neck or flange, F, which fits in the opening made in the front side of the stove Z, to receive it. The said neck or flange corresponds in size to the opening in the said stove, so as to form a tight joint therewith. By arranging the said neck at the lower side of the fire-box it will be observed that when the neck is inserted in the opening in the stove the fire-box is prevented by the neck from toppling outwardly from the stove and overturning by any sudden jar or from other causes, the neck thus serving as a means for securely connecting the fire-box to the stove.

The receiver or fire-box may either rest upon the hearth of the stove, as shown in Fig. 2; or, where the stove is not provided with the hearth, the receiver is constructed with supporting-legs G.

In the top of the fire box or receiver is made an opening, H, and from the said top, surround-

ing the said opening and located at a slight distance therefrom, is a vertically-extending flange, I, which is cut away on its front side at the center to form a notch, K. By thus providing the flange I for the opening H and forming the said flange at a slight distance from the sides of the opening the latter is provided with a shoulder, L, on which the lower open end of the drum M is supported. The said drum may be of any suitable size and shape, and is closed at its upper end, and provided with a handle, N. Near the lower end of the drum is a hinged valve, O, which extends nearly entirely across the drum, so as to form a bottom therefor, and to the free edge of the said valve is hinged a curved downwardly and forwardly extending metallic strap, P, which is provided on one edge with a series of notches, R. The outer end of the said strap passes through a slot, S, which is made in the front side of the drum, at the bottom edge thereof, the said lower and outer end of the strap also passing through the notch K in the flange I. By engaging one of the notches R in the edge of the strap with that part of flange I which forms one end of the slot S it will be seen that the hinged valve O may be turned to any desired inclination in the lower side of the drum and secured therein in any desired position, thus permitting the straw, which is placed in the upper portion of the drum, to be fed to the fire-box in any desired quantity. As the said valve O extends nearly across the drum, and is provided with a strap, by means of which it may be tilted or inclined to any desired position, it will be seen that I am enabled to entirely dispense with the use of a poker for stirring the straw in the drum, in order to feed it to the fire, as it is only necessary to lower and raise the free side of the hinged valve successively a few times in order to dislodge the straw and cause it to descend into the fire-box. The valve is also effective in causing the straw to be fed evenly to all parts of the fire-box, thus preventing the straw from being consumed only on one side or end of the fire-box and leaving the other untouched.

The fire-box is made wider at its upper side than at the bottom, and is provided with the

inclined front side, B, so as to leave no space for ashes or partially-burned straw to settle and accumulate in the fire-box, and the inclined front B is also useful in directing the draft in a slanting direction under the flame and fuel, thus causing the fuel to be entirely consumed. The ashes which gradually accumulate in the fire-box may be discharged therefrom through the neck F by taking the fire-box from the stove and inclining it so that the ashes will slide downwardly and outwardly on its bottom. The inclined front also permits a secondary draft down through the hearth of the cook-stove, as shown in Fig. 2, and this causes a secondary and thorough combustion of the burning fuel sucked through the neck by the upper draft. (See arrows, Fig. 2.)

The flange I on the upper side of the fire-box fits closely around the lower edge of the drum, thereby firmly securing the latter to the fire-box and obviating the necessity of having to tie it in position in order to prevent it from being overturned.

I am aware that it has been heretofore pro-

posed to provide a fire-box attachment for a stove and a drum for the said fire-box, in order to feed straw thereto as fuel, and this broadly I disclaim.

I am also aware that it has heretofore been proposed to provide the drum with sliding dampers in its ends, and this also I disclaim.

Having thus described my invention, I claim—

A straw-burning attachment for stoves, comprising the fire-box having the outwardly and upwardly inclined front wall, B, provided with a damper, the neck F on the rear side near the bottom, the feeding-drum resting upon the top of the fire-box, and the hinged adjustable valve in said drum, substantially as described.

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

FRED GIRTANNER.

Witnesses:

CASPER HATZ,
W. R. MOVIUS.