

(No Model.)

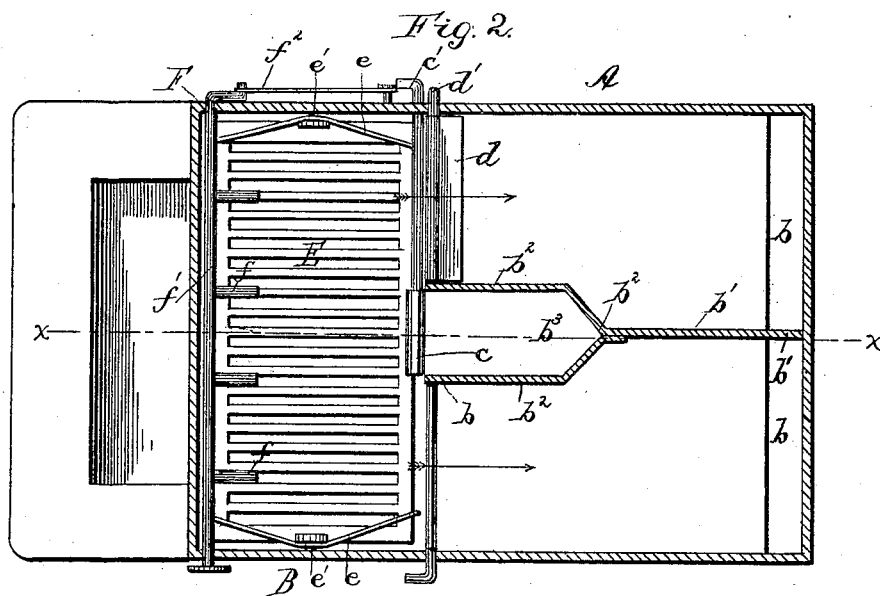
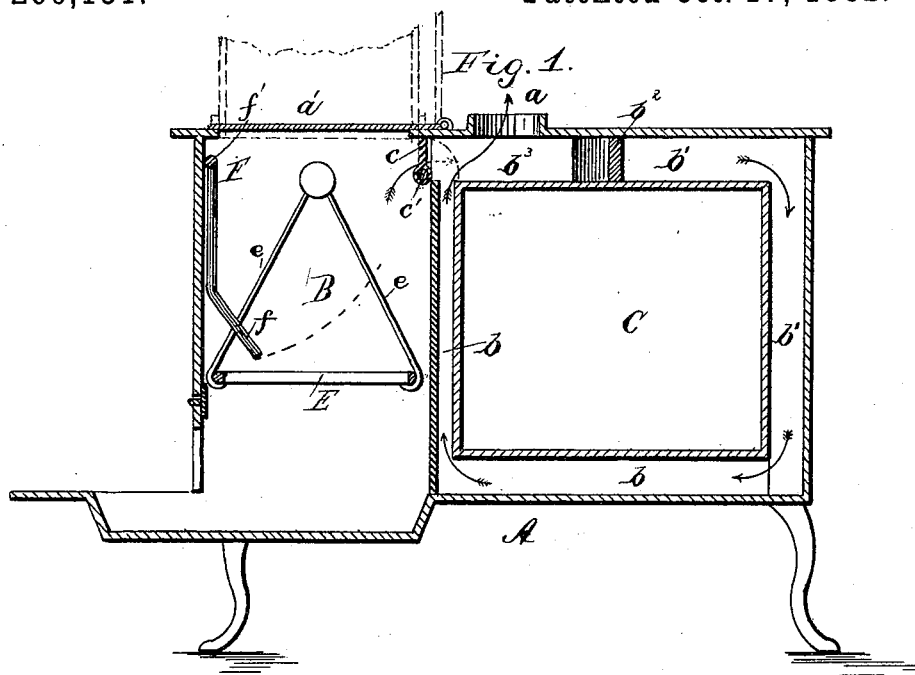
2 Sheets—Sheet 1.

H. GOHRMAN.

HAY AND STRAW BURNING STOVE.

No. 266,131.

Patented Oct. 17, 1882.



Witnesses:

J. W. Garner
W. S. D. Haines

Inventor:

Henry Gohrman.
Arnold A. Horn,
his Attorney.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

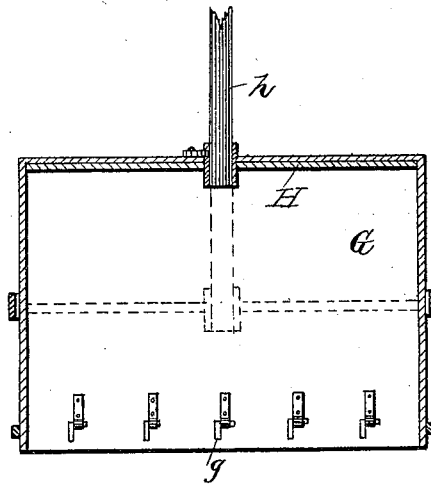


Fig. 5.

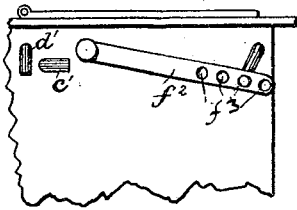
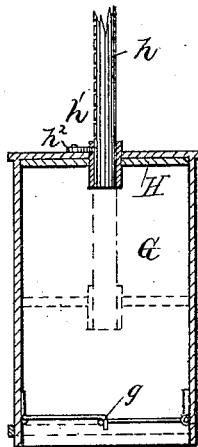


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY GOHRMAN, OF REDWOOD FALLS, MINNESOTA.

HAY AND STRAW BURNING STOVE.

SPECIFICATION forming part of Letters Patent No. 266,131, dated October 17, 1882.

Application filed March 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY GOHRMAN, a citizen of the United States, residing at Redwood Falls, in the county of Redwood and State of Minnesota, have invented certain new and useful Improvements in Hay and Straw Burning Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to hay-burning stoves; and it consists in the construction and arrangement of its several parts, as will be hereinafter fully set forth, and pointed out in the claims.

In the drawings, Figure 1 is a vertical section. Fig. 2 is a horizontal section; Fig. 3, a vertical section of the hay-reservoir, and Fig. 4 a vertical end section of the same. Fig. 5 is a detail side elevation, showing the device for holding the grate-fingers in position.

A represents the frame of a stove, in the forward portion of which is the fire-box B, and in the rear portion is arranged the oven C, as shown. A suitable smoke-flue opening, *a*, is placed in the top of the frame, immediately in the rear of the fire-box, said box being closed by a hinged cover, *a'*, as shown.

C is the oven. It is situated within the rear portion of the frame A, between which and the sides of the oven are flue-spaces *b*, as shown. The oven is secured in position by the support *b'*, which extends from its rear lower side up over its top, and immediately in the rear of the flue *a* it divides and extends around said opening, as shown at *b''*, and forms a smoke-space, *b''*. The forward portion of the flue *b*, or that portion next the fire-box, is closed at its top, except the space between the supports *b''*, as shown. The oven is further supported by the connection of its top, bottom, and sides with the exterior sides of the stove, as shown in Fig. 1.

c is a damper, which allows the heat to enter the flue *a*. It is secured to a damper-rod, *c'*, the end of which projects from the side of the stove, as shown. The damper is arranged to operate within the opening of the space *b''*, and when placed in the upright position shown in Fig. 1 the heat will be turned into the flue *b* and carried up the flue *a*. By turning the damper down over the opening of the flue *b* the heat passes directly into the space *b''* and through the flue *a*.

d is a damper arranged at the entrance to the flue *b* on one side of the supports *b''*, and is secured upon the rod *d'*. When the damper *c* is turned to prevent the direct entrance of the heat into the space *b''* the damper *d* is turned down to allow the heat to pass freely into the flue *b*.

It will be seen that upon one side of the supports *b''* no damper is provided, which leaves that side of the flue *b* always open and prevents the stove from becoming choked.

E is the grate. It is hung upon inverted-V-shaped hangers *e*, supported upon pins *e'*, fastened to the sides of the fire-box, as shown. The grate is detachable from hangers *e*, and can be removed when bent by the action of the heat, reversed, and replaced upon the hangers.

F is a hinged adjustable grate, and consists of fingers *f*, secured to a rod, *f'*, as shown, said rod being journaled along the upper and outer edge of the fire-box. The fingers *f* extend vertically into the fire-space, and their lower ends are bent toward the center, as shown. This adjustable hinged grate is intended for use when light fuel—as hay or wood—is burned, and it operates to keep the fuel lightened up, so that the air may easily circulate through it. When hay is burned in the stove this grate is turned outwardly into the fire-box, keeps the hay separated, and causes it to burn more rapidly and freely. This grate is held in any desired position by the keeper *f''*, which is pivoted to the side of the frame and provided with a series of holes, *f'''*, which receive the end of the grate-rod *f'*, as shown. I do not, however, wish to claim the grate as a part of this patent; but it is my intention to make it the subject of a future application.

G is the hay-reservoir. It is open at the bottom and rests over the open top of the fire-box, as shown. Journaled in the sides of the reservoir are short hooks *g*. They are arranged opposite to each other, and are connected together, or rather hooked together, as shown. When the reservoir is packed with hay these hooks are joined and the hay prevented from falling too rapidly into the fire-box.

H is the follower, and is arranged to operate within the reservoir, and is adapted to press the hay down upon the fire. It is operated by a rod, *h*, which projects upwardly through the

top of the reservoir, as shown. The rod is provided with notches h' , which engage with a pawl, h^2 , pivoted to the top of the reservoir, and act to prevent the rod from springing back
5 when pressed down upon the hay.

What I claim is—

1. In a stove, the supporting-partition b' , arranged centrally above and behind the oven C, bifurcated at b^2 , forming a smoke-space, b^3 ,
10 having outlet in the smoke-flue a , substantially as shown and described.

2. In a stove, the dampers c and d , the damper c arranged at the mouth of the space b^3 and the damper d at the opening of one side of the flue b , in combination, substantially as shown, and
15 for the purposes set forth.

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

HENRY GOHRMAN.

Witnesses:

A. A. WILSON,
FRANKLIN ENSIGN.