

(No Model.)

J. H. LINTON.
HAY OR STRAW BURNING STOVE.

No. 514,086.

Patented Feb. 6, 1894.

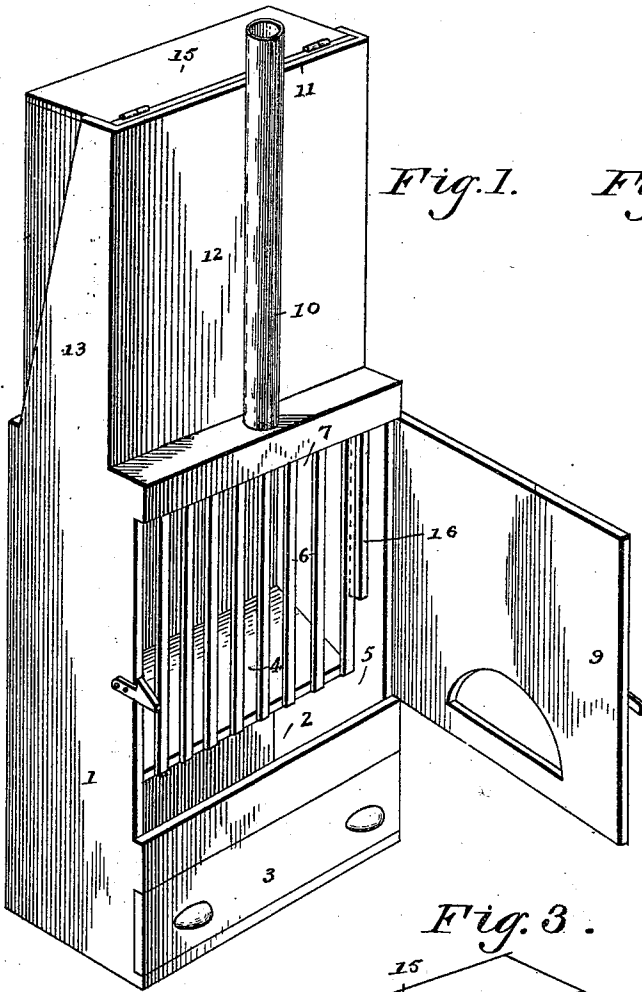


Fig. 1.

Fig. 2.

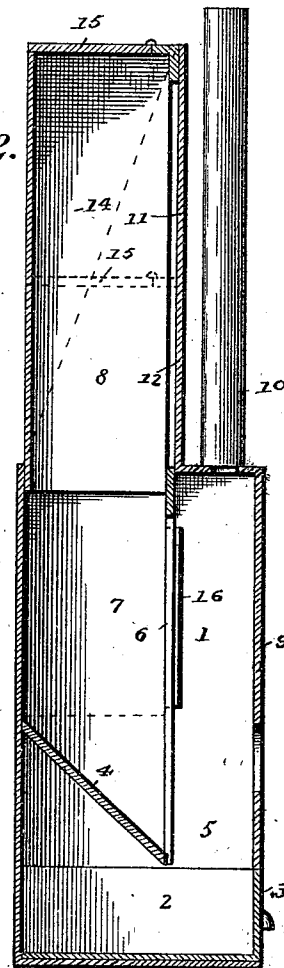
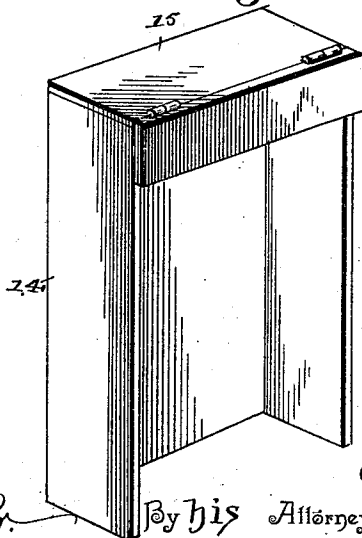


Fig. 3.



Witnesses

Julius Ulke Jr.
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By his Attorneys.

Inventor

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UNITED STATES PATENT OFFICE.

JOSEPH H. LINTON, OF FORT ASSINABOINE, MONTANA.

HAY OR STRAW BURNING STOVE.

SPECIFICATION forming part of Letters Patent No. 514,086, dated February 6, 1894.

Application filed June 30, 1893. Serial No. 479,287. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. LINTON, a citizen of the United States, residing at Fort Assinaboine, in the county of Choteau and State of Montana, have invented a new and useful Hay or Straw Burning Stove, of which the following is a specification.

My invention relates to hay and straw burning stoves or furnaces, the objects in view being to provide a simple, inexpensive, and effective device in which the ashes are dropped outside of the grate to avoid choking the latter; and to provide improved means for feeding the fuel continuously.

Further objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings: Figure 1 is a perspective view of a heating stove embodying my invention. Fig. 2 is a vertical central sectional view of the same, showing the magazine slide elevated in full lines and depressed in dotted lines. Fig. 3 is a perspective view of the magazine slide detached.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

The stove comprises a shell 1, provided at the bottom with an ash-pit 2, fitted with an ash-door 3. Above the ash-pit is arranged an upwardly and rearwardly inclined deflector or partition, 4, the front edge of which is spaced from the front wall of the casing to form an opening 5. The grate 6 rises vertically from the lower edge of the said deflector or partition in rear of the opening 5, thus forming a combustion chamber 7, between the grate and the front wall of the casing and separating therefrom the space above the deflector to form a magazine 8. The front side of the combustion chamber is fitted with a door 9, and to the top of said chamber is connected a pipe or flue 10, to carry off the gaseous products of combustion.

The magazine extends vertically above the upper edge of the grate to form a guide 11, comprising a front plate 12, and side wings 13. Within this guide is fitted the magazine slide 14, having a closed rear side, an open

front side which is closed when the slide is in its elevated position, as shown in full lines in Fig. 1, by the front plate of the guide, an open lower end which communicates with the magazine, and an open upper end provided with a cover 15.

In operation the magazine slide is elevated to the position shown in full lines in Fig. 2, thus forming an extension to the magazine proper, and the thus extended magazine is filled with fuel, such as hay, straw, corn-stalks, &c., and the cover 15 is closed. The fuel is now lighted in front of the grate, whereby the flame rises in the shallow combustion chamber adjacent to the front wall of the casing. As the fuel is consumed it is fed to the grate by the depression of the slide and is pressed forwardly by the inclined deflector at the bottom of the magazine. Guides 16 are fixed to the side walls of the casing to hold the slide in place in its depressed position, and if desirable weights may be employed to depress the slide automatically as the fuel is consumed. The ashes, as will be apparent, drop through the opening in front of the deflector into the ash-drawer.

From the above description it will be understood that the inconvenience ordinarily experienced in the use of hay and straw burning stoves, namely, the necessity for frequent fueling, is overcome by the construction which I have described for automatically feeding the fuel, as it is consumed, and causing the waste to fall outside of the grate and directly into the ash-receiver. Furthermore, it will be seen that the draft is not through the fuel stored but is in front of the grate, and therefore does not char the fuel. Furthermore, the fuel burns only at the surface and the draft passing over the front side of the grate is unimpeded and insures complete combustion.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention. In this connection it may be said that the construction illustrated is applicable, with a slight modification, to cooking-stoves by connecting the draft flues and passages of such stove to the combustion chamber.

Having described the invention, what I claim is—

1. In a stove, the combination of a vertically-disposed fuel magazine provided with an imperforate, forwardly and downwardly inclined floor or bottom, a combustion chamber located in front of the lower part of said fuel magazine, a grate disposed vertically between the fuel magazine and the combustion chamber, and terminating at the front edge of the floor or bottom of the former, and a smoke flue communicating with the combustion chamber at its top, substantially as specified.

2. In a stove, a vertically-disposed fuel magazine provided with a forwardly and downwardly inclined floor forming a deflector, a grate arranged in front of said fuel magazine and rising from the front edge of said floor, a combustion chamber arranged in front of the grate, and an ash-pit communicating with the bottom of the combustion chamber in front of the grate, substantially as specified.

3. In a stove the combination with a vertically-disposed fuel magazine, a combustion chamber in front of said magazine, and an

interposed grate, of a magazine slide fitting and vertically movable in the magazine and having an open front side to communicate through the grate with the combustion chamber when the slide is depressed, substantially as specified.

4. In a stove, the combination with a vertically-disposed fuel magazine provided at its lower end with a forwardly and downwardly inclined deflector, a vertically disposed grate rising from the front edge of said deflector, and a combustion chamber arranged in front of the grate, of a magazine slide fitting in said magazine and having an open front side and lower end, said slide being adapted to descend by gravity as the subjacent fuel is consumed, substantially as specified.

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

JOSEPH H. LINTON.

Witnesses:

J. F. MORRISON,
A. D. NISKERN.