

(No Model.)

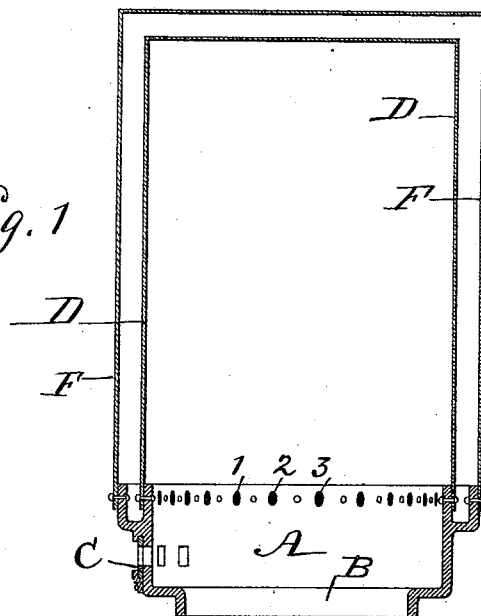
J. H. COON.

DOUBLE WALLED MAGAZINE FOR BURNING HAY.

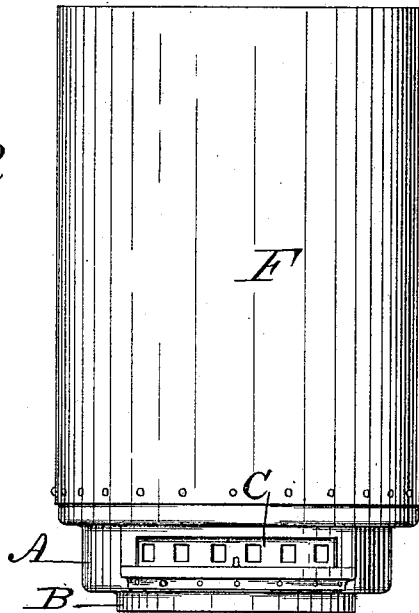
No. 346,985.

Patented Aug. 10, 1886.

*Fig. 1*



*Fig. 2*



Witnesses:

W. H. Anderson,

A. H. Orwig.

Inventor:

James H. Coon,

By Thomas C. Orwig, atty

# UNITED STATES PATENT OFFICE.

JAMES H. COON, OF DES MOINES, IOWA.

## DOUBLE-WALLED MAGAZINE FOR BURNING HAY.

SPECIFICATION forming part of Letters Patent No. 346,985, dated August 10, 1886.

Application filed December 26, 1885. Serial No. 186,816. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. COON, a citizen of the United States of America, and a resident of Des Moines, in the county of Polk and State of Iowa, have invented a Double-Walled Magazine for Burning Hay, &c., of which the following is a specification.

The magazine and hay-burning attachment for stoves, shown in my application for Letters Patent therefor, filed incomplete in the United States Patent Office December 8, 1885, will not radiate heat from its top portion until a sufficient quantity of the fuel packed therein is burned at its bottom to allow the packed mass of fuel to drop down, and by so doing produce a vacant space between the fuel and the wall of the magazine, in which space the heat will ascend and radiate through the top portion of the magazine.

My object is to hasten the radiation of heat from the entire outside surface of a hay-burning fuel-magazine, to maintain a uniform heat, and to improve the general appearance and efficiency of my original hay-burning stove attachment; and my invention consists in the construction and combination of a cast-metal base having a double wall at its top, a fuel-magazine, and a concentric jacket and radiator, as hereinafter set forth, in such a manner that the device will be double-walled, and have an annular vacant space through which heat will ascend and radiate simultaneously from the entire surface of the jacket as quickly as generated by the burning of the fuel in the cast-metal base.

Figure 1 of the accompanying drawings is a vertical section, and Fig. 2 a front elevation, of my double-walled hay-burner adapted to be turned upside down and packed full of hay or other incompact vegetable matter, and then placed upon a stove or other suitable support, through which a draft will be obtained, as required to produce combustion in the base and open end of the magazine.

A represents my cast-metal base formed complete in one piece. It may be circular or oblong in its cross-section and vary in size as desired. It is double-walled at its top, as clearly shown in Fig. 1. It is open at its top and bottom, and preferably partially closed at its bottom, and provided with a rim, B, adapted to fit into an opening of corresponding size and shape in the top of the stove.

C is a register underneath the double-walled

top portion, through which air is admitted to regulate the burning of fuel within the base.

1 2 3 represent a series of perforations in the inner wall of the double-walled top portion, through which heat is allowed to pass from within the base into the annular space between the two walls.

D is a sheet-metal fuel-magazine, open at the bottom and closed at its top, fitted and fixed to the top of the inner wall of the base. It conforms in shape and size with the base, and is preferably of smaller diameter at its top, so as to be tapering, as required, to facilitate the descent of the fuel packed therein by force of gravitation as combustion proceeds in the base.

F is a sheet-metal jacket in concentric position with the magazine D, closed at its top and open at its bottom, and fitted and fixed to the top and outside wall of the double-walled base A, to conceal and protect the magazine D and to produce a vacant space around and over the entire outside surface thereof, into which heat and gases will ascend to aid in promoting combustion, and from whence it will be distributed by radiation from the entire surface of the jacket and radiator as rapidly and uniformly as it is generated by the burning of the fuel in the base A, underneath the magazine.

I claim as my invention—

1. In a hay-burner, the combination of a double-walled fuel-magazine having a closed top and open bottom, with a base having an open top, openings or a register to admit air from the outside, and openings communicating with the space between the two walls of the double-walled magazine, to operate in the manner set forth, for the purposes stated.

2. A hay-burner consisting of a metal base having a double wall at its top and openings in the inner wall, a magazine having a closed top and open bottom, and a jacket and radiator having an open bottom and closed top, to operate substantially as set forth.

3. The base A, having a double wall at its open-top end, perforations in the inner wall communicating with the space between the two walls, a rim, B, at its open bottom, and a register, C, a magazine, D, and a jacket and radiator, F, constructed and combined substantially as shown and described, for the purposes specified.

Witnesses: JAMES H. COON.

A. C. WRIGHT,

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