(No Model.)

C. W. HARRIS.

BAGASSE FEEDER.

No. 346,099. Patented July 27, 1886.

Fig. 1.

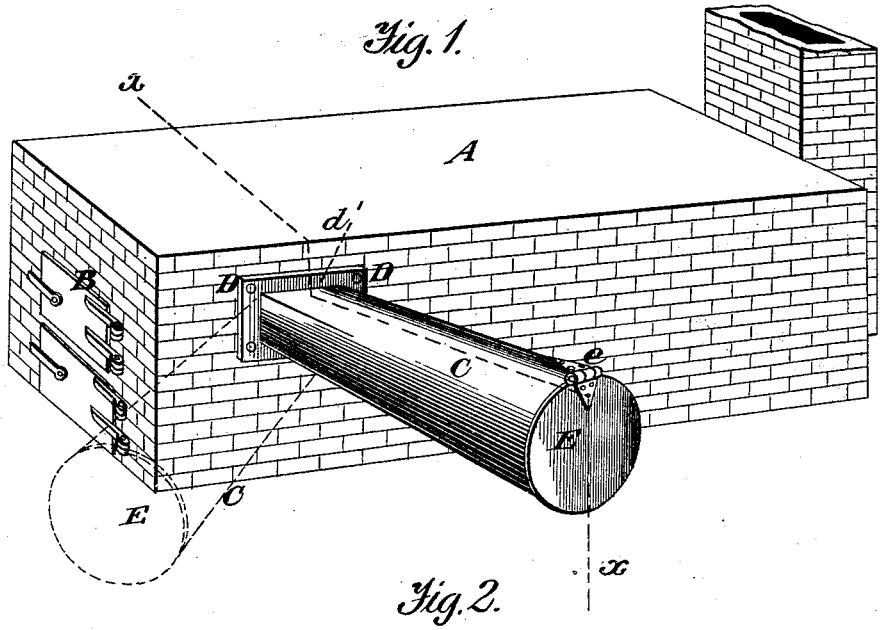


Fig. 2.

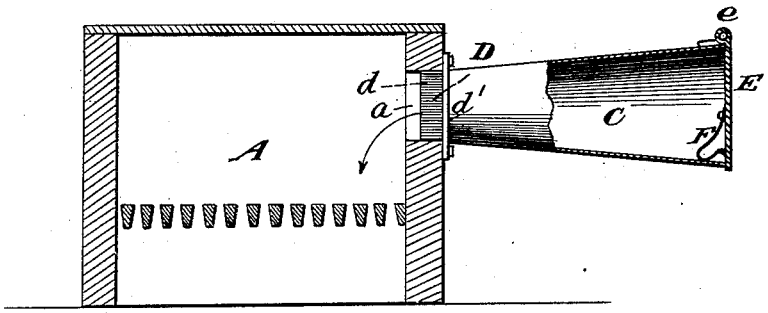
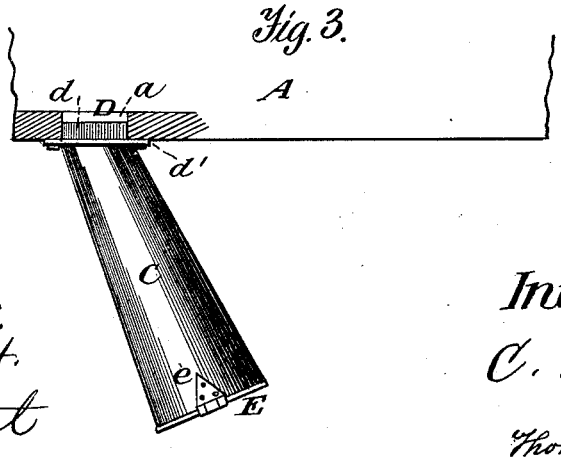


Fig. 3.



Witnesses.
A. Ruppert.
R. E. Grant

Inventor.
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Per
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Atty.

UNITED STATES PATENT OFFICE.

CHARLES W. HARRIS, OF GARNETT, KANSAS.

BAGASSE-FEEDER.

SPECIFICATION forming part of Letters Patent No. 346,099, dated July 27, 1886.

Application filed February 5, 1886. Serial No. 190,946. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. HARRIS, a citizen of the United States, residing at Garnett, in the county of Anderson and State of Kansas, have invented certain new and useful Improvements in Bagasse-Feeders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of my invention is to facilitate the feeding of bagasse or cane-stock as fuel to furnaces, and to do it in such a way that there will be no danger from fire or any necessity to avoid the use of the furnace on windy days.

Figure 1 of the drawings is a perspective view. Fig. 2 is a transverse vertical section on line *x x* of Fig. 1, and Fig. 3 is a horizontal section showing the conjunction of the furnace and feeder.

In the drawings, A represents the furnace, provided with the usual front door, B, and the aperture *a* in the side wall.

C is the feeder, which is preferably tapering from its entrance toward the furnace, and contains a top-hinged door, E, which has the spring-catch F. The top hinge, *e*, is a strap-hinge; but may be of any suitable kind.

The feeder-tube C is made of sheet-iron, but is connected with the furnace by an intermediate casting, D, which has a square or rectangular body, *d*, and at right angles thereto the flange *d'*, which is bolted to the outside of the furnace-wall. The body *d* is made to fit the hole *a*, but forms an obtuse angle with the feed-tube, so that it may be set to incline in two opposite directions, as indicated by the full and dotted lines in Fig. 1 of the drawings. The purpose of this is to prevent the tube from being in line with the direction of the wind. When in position, the upper end of feeder may be a little above a horizontal plane and decline toward the furnace, and, if desired, may be supported by a brace.

By arranging my feed-tube on the side of furnace the feeding of the bagasse does not necessitate the opening of the furnace-door B, as is the case where the feed is in front. The door should be opened as seldom as possible, because it admits a cold-air current under the pan. Again, in feeding the bagasse the latter is dropped in front of the feeder, and often catches fire where the feeder is in front of furnace. Again, in windy weather the furnace with a front feed must stop, because as soon as the door is opened the fire comes out. In feeding from the side the door need not be opened, while the fire cannot come to the outer end of my feeder. Mine is now used on windy days when the mills around in the vicinity have their furnaces closed.

Whenever it is desired to feed the bagasse to the fire, the door E is opened and the fuel pushed into the furnace, a good supply of bagasse being kept in the feed-tube.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

The attachment for furnaces, consisting of the tube C, having door E at the large or outer end and the casting D at the small end, the latter having flange *d'* and a body, *d*, at an obtuse angle to the tube, as set forth.

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

CHARLES W. HARRIS.

Witnesses:

CHAS. WOOD,

M. A. PAGE.