

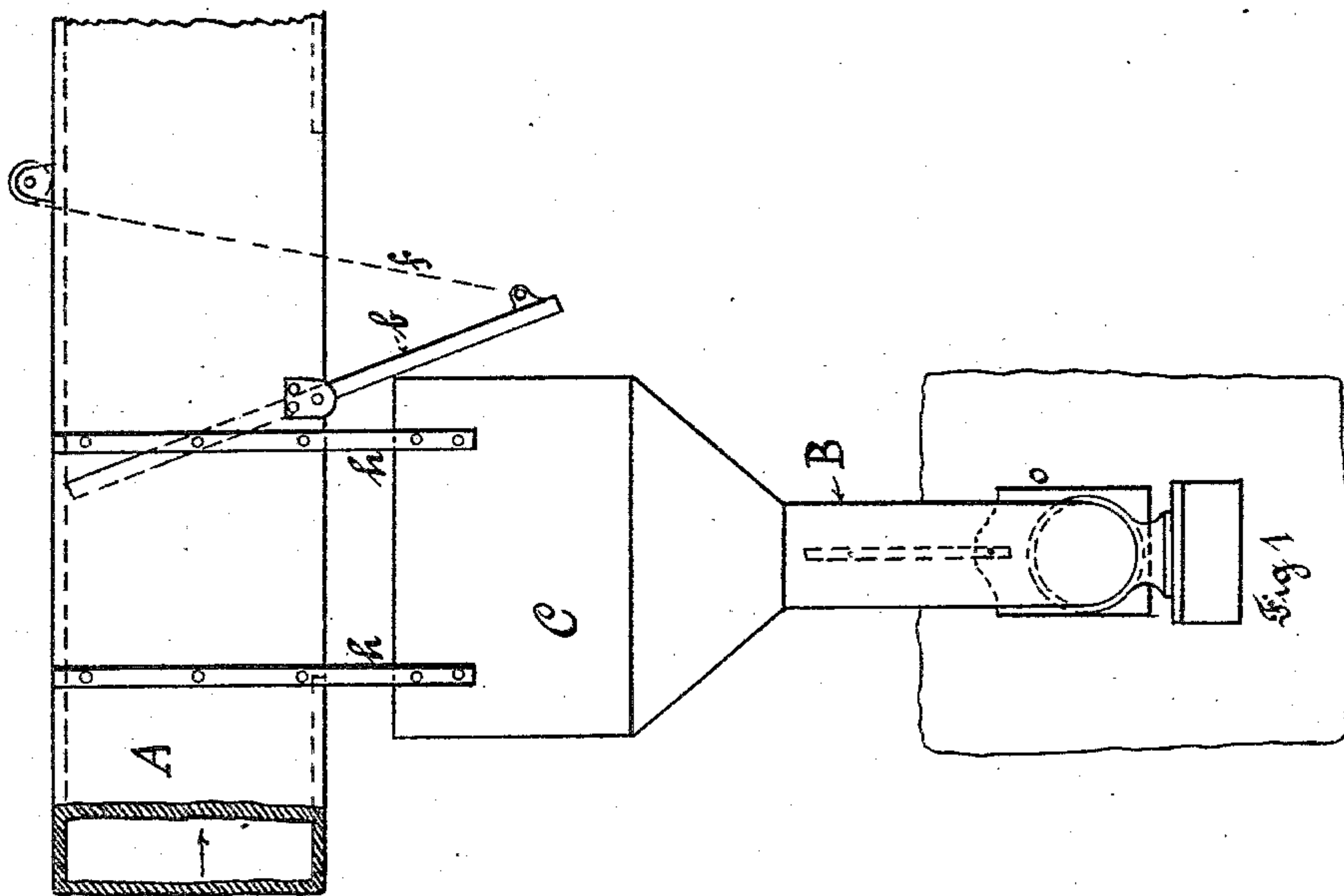
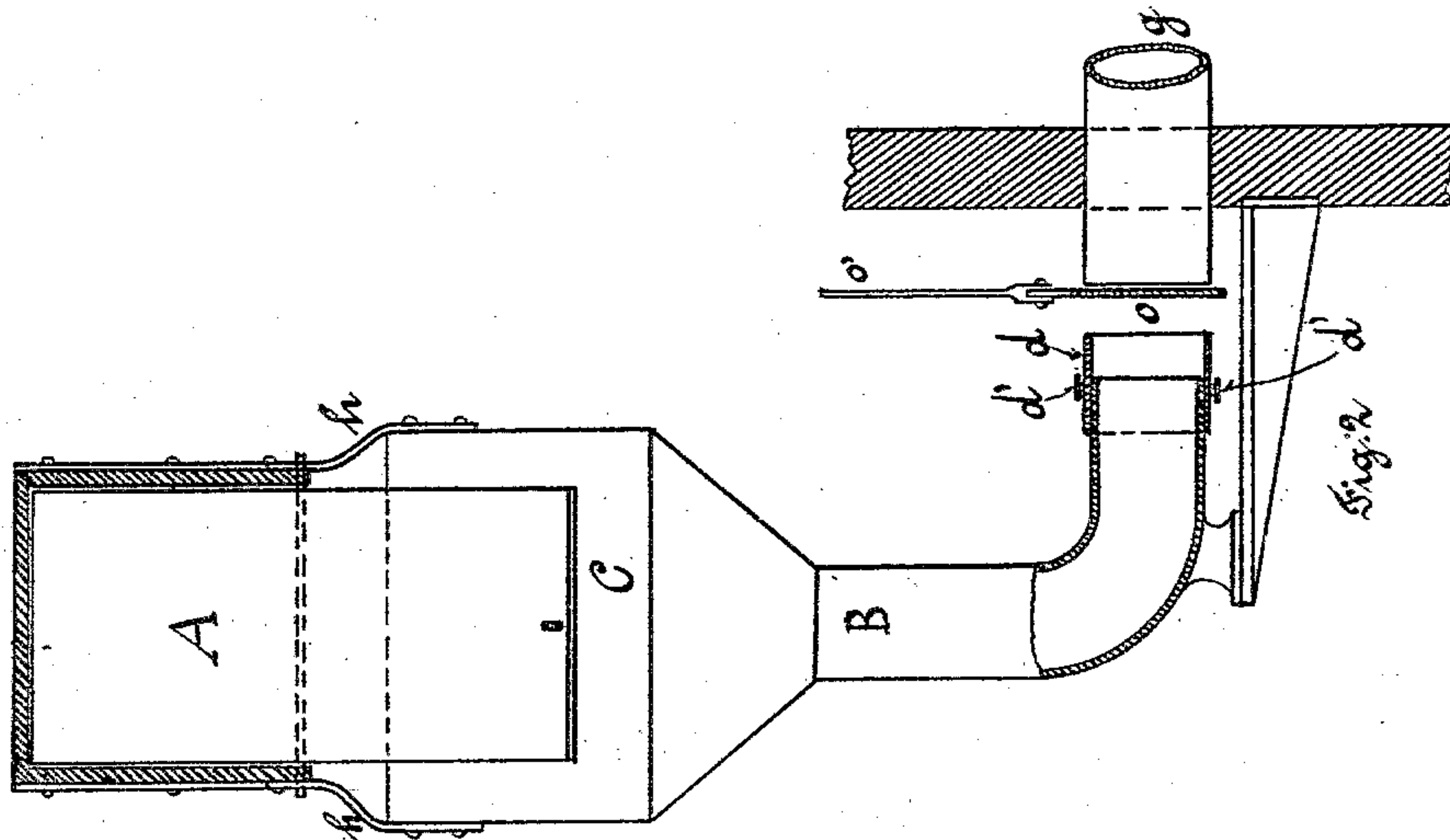
(No Model.)

J. SWITTER.

APPARATUS FOR FEEDING SHAVINGS TO FURNACES.

No. 286,344.

Patented Oct. 9, 1883.



Witnesses:
Fred W Bond
Frank H Brown

J. Switter
Inventor:

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UNITED STATES PATENT OFFICE.

JOSEPH SWITTER, OF MASSILLON, OHIO, ASSIGNOR OF ONE-HALF TO GEORGE J. WAGNER, OF SAME PLACE.

APPARATUS FOR FEEDING SHAVINGS TO FURNACES.

SPECIFICATION forming part of Letters Patent No. 286,544, dated October 9, 1883.

Application filed June 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH SWITTER, a citizen of the United States, residing at Massillon, county of Stark, and State of Ohio, have invented certain new and useful Improvements in Apparatus for Feeding Shavings to Furnaces; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to letters and figures of reference marked thereon, in which—

Figure 1 is a front elevation of my improved device. Fig. 2 is a side view, showing an end view of shavings box or way.

This invention relates to that class of apparatus for feeding shavings and like fuel to furnaces in which the fuel is conveyed by means of a fan from a shavings box or way to the furnace; and its nature consists in providing a funnel-shaped hopper, and in providing suitable pipes to convey said shavings or like fuel to the furnace, and in the several parts and combination of parts hereinafter set forth as new.

Similar letters of reference indicate corresponding parts in the drawings.

The shavings box or way A may be of the form shown in the drawings, and is made of boards in the ordinary manner of making shavings boxes or ways of this kind. One end of said shavings box or way is provided with a fan, such as is in common use for blowing shavings and like fuel through a box or pipe of this class. This shavings box or way is held in proper position by posts, standards, or other suitable frame-work; or it may be placed in the upper story or stories of a building, as desired. This shavings box or way is provided with the valve *b*, which is hinged at or near its center to the bottom or under side of the box A, and is for the purpose of regulating the passage of shavings. When it is desired to have the shavings feed to the furnace, the valve *b* is placed in the position shown in Fig. 1 of the drawings; and when it is desired to have the shavings conveyed to any other desired point within the limits of the shavings box or way, said valve *b* is closed by means of the rope or chain *f*.

The hopper C is of the form shown in the

drawings, and may be made of boards, and is attached to the shavings box or way A by the hangers or strips *h*, as shown in the drawings. To the bottom or lower end of said hopper C is attached the pipe B. Said pipe is bent or curved, as shown in Fig. 2 of the drawings. The forward end of the curved portion of the pipe B is provided with a sliding or slip piece, *d*, which fits on the end of said pipe, as shown in Fig. 2, and is held at any desired point by means of the thumb-screws *d'*, and is for the purpose of regulating the space between the pipe B and the pipe *g*, and at the same time regulating the current of air and the supply of shavings to the furnace. The pipe *g* is attached to the front plate of a furnace, as shown in Fig. 2. The pipe *g* may be of any length desired, the end of which, next to the pipe B, is provided with a valve or cut-off, O. This valve or cut-off O is hinged at any convenient point, and is operated by the lever or handle O'. This valve or cut-off O is for the purpose of stopping the supply of shavings to the furnace.

When it is desired to feed shavings or like fuel to the furnace, the valve or cut-off O is opened, thereby permitting the shavings to pass through the pipe *g* and into the furnace; and when it is desired to have the shavings and like fuel to fall into a vault or other receptacle, said valve or cut-off is closed and the sliding piece *d* slipped back on the pipe B a distance that will permit the shavings to fall into said vault or other receptacle. By means of the sliding piece *d* it will be seen that I am enabled to regulate the supply of shavings or like fuel to the furnace, and at the same time to regulate the current of air. It will also be seen that by means of the sliding piece *d*, I am enabled to take all the shavings from the pipe B to supply the furnace or any quantity desired.

I am aware that it is not new to supply furnaces with shavings and like fuel by means of a pipe or pipes leading from a shavings box or way to a furnace, and hence do not claim the same, broadly.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fuel-feeding device, the pipe B, hav-

ing sliding pieces *d*; in combination with the hopper C and the valve or cut-off O, substantially as and for the purpose specified.

2. In a fuel-feeding device, the valve or cut-off O, attached to the outer end of the pipe *g*, and provided with the handle or lever O', in combination with the sliding piece *d*, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH SWITTER.

Witnesses:

FRED W. BOND,

FRANK A. BROWN.