

F. W. Frost,

Coal Screen.

N^o 34,998.

Patented Apr. 15, 1862.

Fig. 1.

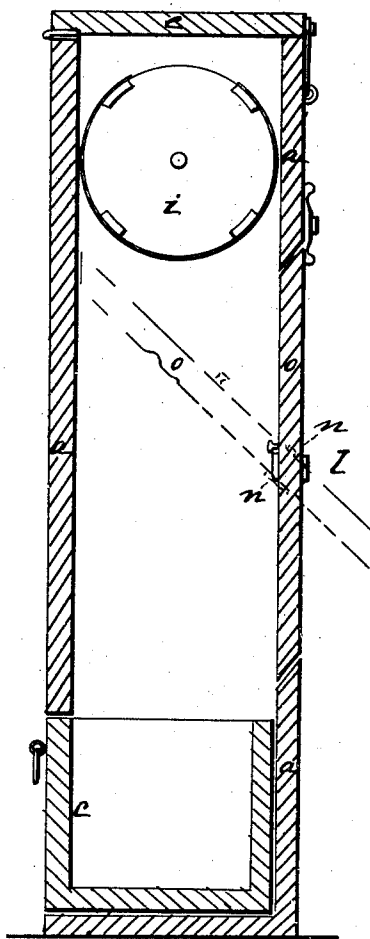
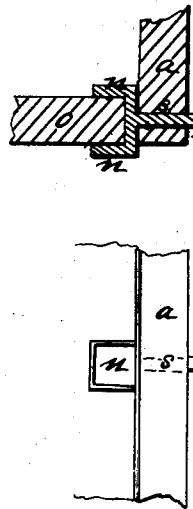


Fig. 2.



Witnesses:

Albert S. Frost
Charles Frost

Inventor:

Francis W. Frost

UNITED STATES PATENT OFFICE.

FRANCIS N. FROST, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO HIMSELF
AND HENRY HASKINS, OF SAME PLACE.

IMPROVEMENT IN COAL-SIFTERS.

Specification forming part of Letters Patent No. 34,998, dated April 15, 1862.

To all whom it may concern:

Be it known that I, FRANCIS N. FROST, of New Britain, county of Hartford, and State of Connecticut, have invented a certain new and useful Improvement in Coal-Sifters; and I do hereby declare that the same is described and represented in the following specification and drawings; and to enable others skilled in the art to make and use the same I will proceed to describe its construction and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

This improvement consists in constructing the door with its hinge or pivot joint in such a manner that it will close up the discharge-opening while the coal is being sifted in a wire cylinder in the ordinary way, after which the upper end of the door is pulled forward and turned down below the fulcrum-pin into an angle of about forty-five degrees, and then slid upward (through the slide-openings formed on the hinge or fulcrum-pin) against the back of the box and near the under side of the cylinder to conduct the coal from the cylinder out of the box and into any desired receptacle. Then it (the door) is by the reverse operation returned to its place and secured by a button or other fastening for another operation, and the ashes removed from the box when desired, thus confining the dust within the box while the sifting is being performed.

In the accompanying drawings is shown a section view of my improvement.

a is the box, in and to which the several parts are arranged and secured, made of any convenient and desirable size.

c is a drawer or ash-box fitted to the bottom or lower end of the box proper in such a manner as to be easily removed when desirable to clear the ashes therefrom.

e is a lid hung to the top of the box, with proper hinges and fastenings to hold it closed.

i is a coarse wire-gauze cylinder provided with an opening to receive and discharge the coal, said opening having a lid or door (secured thereto in any of the ordinary ways) for opening and closing the same. The bearings for the journals of the cylinder are made in the sides of the box, one end of which journals is made to receive a crank for operating the cylinder. The guide fulcrum-pin *n* is made with an opening (see Fig. 2) to receive the thickness or edge of the door *o*, and to allow it to slide back and forth therein, when they (the guides) are secured one in each side of the box, at *z*, by means of their fulcrum *s*. Thus when the coal is deposited into the cylinder and has been riddled in the common way the upper end of the door is brought forward and depressed below the horizontal line of its fulcrum-pin *s* into an angle of about forty-five degrees, and slid upward through the openings *n* against the back of the box and near to the under side of the cylinder, to conduct the coal from the cylinder out of the box, and then by the reverse action replace it (the door) in its former position, ready for further use.

I have endeavored to show the nature, construction, and advantage to be derived from my improvement to enable a person skilled to make and use the same.

What I claim, therefore, and desire to secure by Letters Patent, is—

The fulcrum-guide *n s*, door *o*, in combination with a sifter *i*, substantially in the manner and for the purpose described.

In testimony whereof I have hereunto set my hand and seal this 9th day of January, 1862.

FRANCIS N. FROST. [L. s.]

Witnesses:

ALBERT S. FROST,
CHARLES FROST.