

DANIEL MURPHY.

Improvement in Stove-Pipe Cleaners.

No. 114,181.

Patented April 25, 1871.

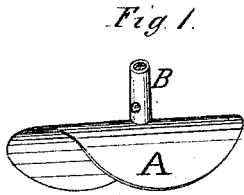


Fig. 2.



Fig. 5.

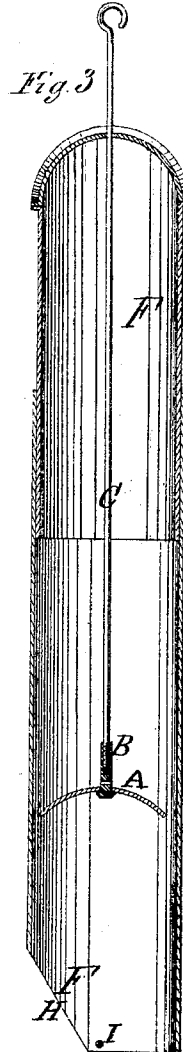
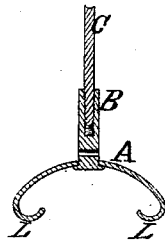
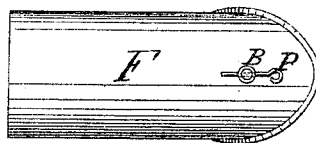


Fig. 4.



Witnesses.

H. J. Stetz
John C. Cox

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United States Patent Office.

DANIEL MURPHY, OF RICHMOND, VIRGINIA.

Letters Patent No. 114,181, dated April 25, 1871.

IMPROVEMENT IN STOVE-PIPE CLEANERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DANIEL MURPHY, of the city of Richmond, in the county of Henrico and State of Virginia, have invented a new and useful Improvement in Stove-Pipe Cleaners, of which the following is a specification, reference being had to the accompanying drawing.

Nature and Objects of the Invention.

The invention relates to that class of stove-pipe cleaners which consists in providing a stove-pipe with a concavo-convex disk, intended to be drawn or forced toward or from the flue, or up or down in the pipe by means of an attachable and detachable rod, the convexity of the disk conforming to the concavity of the pipe, against which it is secured at the elbow by a rigidly-attached standard passing through and fitting snugly in a small aperture in the pipe directly opposite the center of the disk, it being provided outside of the pipe with a hole and pin, to secure the disk in place when not in use.

The extremity of that part of the standard outside of the pipe has a threaded cavity, into which the rod is screwed.

The chimney end of the pipe has a wire stretched across its diameter, to prevent the egress of the disk when forced in that direction.

A section on one side of the same end of the pipe is removed, to allow draught when the disk is permitted to remain at that end of the pipe.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of the disk A and standard B.

Figure 2 is a view of the shaft C, joint D, and threaded sleeve E.

Figure 3 is a vertical longitudinal section through the stove-pipe, and the invention placed therein.

Figure 4 is an end view of the pipe, showing the method of securing the disk when not employed.

Figure 5 is a vertical central section of shaft C, standard B, and disk A, showing the disk provided with the flanges L.

General Description.

A in the accompanying drawing is a concavo-convex disk of metal or other suitable material, the convexity of which should conform to the concavity, and its diameter be nearly equal to that of the stove-pipe F.

The disk is provided at its center with a standard projecting therefrom at right angles to the tangent of its convexity.

This standard is secured to the concave face of

the disk by a flat head or button, its opposite parts passing through and nicely fitting in an aperture in the stove-pipe directly opposite the center of the disk, and is secured by a pin, so that the disk is held closely in contact with the pipe, thus preventing any interruption of the draught.

The extremity of the standard B is provided with a threaded cavity, into which the male screw on the end of the shaft C or joint D fits.

When it is desired to lengthen the shaft C the joint D may be attached to it by means of the threaded sleeve E.

By the invention, if intended to be used in the specific manner illustrated in the drawing, a wire, I, should be stretched across the diameter of the upper or chimney end of the pipe, so as to prevent the disk A passing into the flue, and if it be desired to allow the disk to remain at such end of the pipe, a section thereof should be removed, as shown at H, and the pipe forced into the flue so far that the section removed is therein.

In this case the disk may be forced against the wire I and allowed so to remain without obstructing the draught.

In order to facilitate the movement of the disk A in the stove-pipe F, it may be provided with the curved flanges L, as shown at fig. 5.

Operation.

The stove-pipe is provided with an aperture of proper size at a point directly opposite the axis of that portion of pipe opposite, through which aperture the standard B is passed, and when the invention is not in use the pin P is inserted in the hole in the standard contiguous to the exterior of the pipe, thus holding the disk A in close relation with the concavity of the inside, and preventing any obstruction to the draught of the stove.

When it is desired to clean the pipe, it having been properly secured to the stove and so inserted in the chimney-flue as that the section H is wholly therein, the disk A being properly placed, attach the shaft C by screwing it into the cavity in the extremity of the standard B, or, if more length of movement be required, connect the joint D by means of the threaded sleeve E; then force the disk upward or forward, according as the invention is constructed to operate vertically or horizontally, whereby the soot is detached from the inside of the pipe and pressed into the chimney.

When it is preferred to draw the soot into the stove or down the pipe, the disk may be allowed to remain in contact with the wire I, any suitable attachment being affixed to that part of the shaft C outside of the

pipe to sustain it. This attachment being removed, the disk A may be drawn down or forward, thus cleaning the pipe by a reverse movement from that above indicated.

Claims:

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the extension-rod, composed of the shaft C, joint D, and threaded sleeve E, with the concavo-convex disk B, provided with the standard A and curved lips L, as shown at fig. 5.

2. The above, in combination with a stove-pipe provided with a wire passed across its chimney end, and having a transverse section of said end removed, as shown and described.

3. A stove-pipe provided with the cleaner herein described, when a transverse section of the chimney end of the pipe is cut out, and the extremity of said pipe provided with a wire passed across its opening, as shown, and for the purposes described.

In testimony that I claim the foregoing improvements in stove-pipe cleaners as above described I have hereunto set my hand and seal this 1st day of February, 1871.

DANIEL MURPHY. [L. s.]

Witnesses:

P. KINNY,
ALEXANDER GENTRY.