No. 728,508. PATENTED MAY 19, 1903.

H. M. SHIELDS.

STOVEPIPE FOR FLUE CLEANING.

APPLICATION FILED NOV. 26, 1902.

NO MODEL.

Fig. 1.

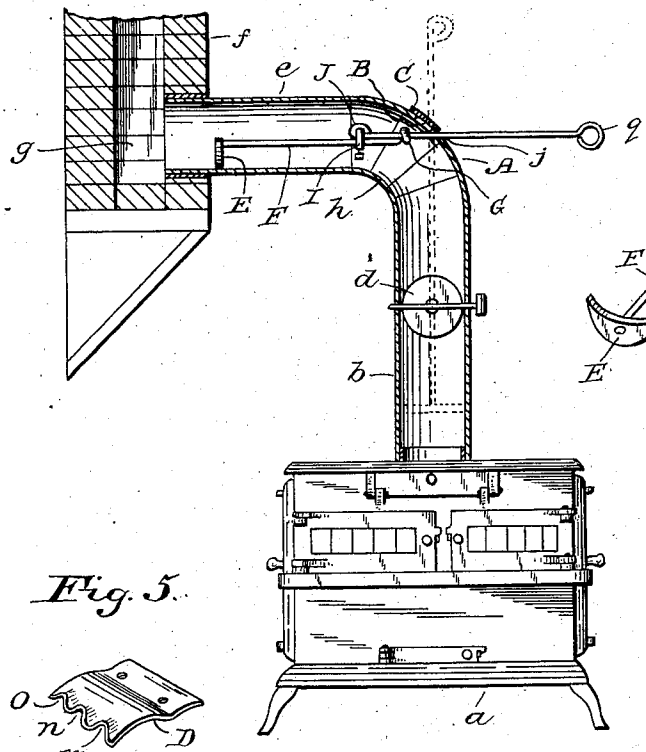


Fig. 2.

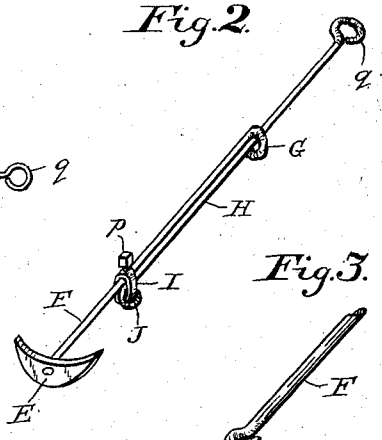


Fig. 3.

Fig. 4.

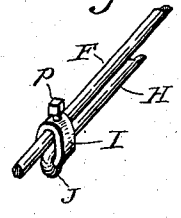


Fig. 5.

Fig. 6.

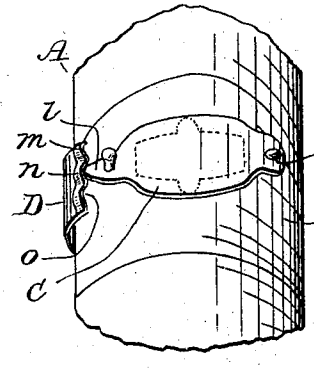


Fig. 7.

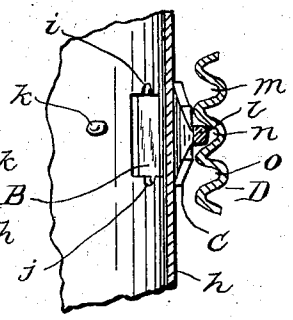


Fig. 8.

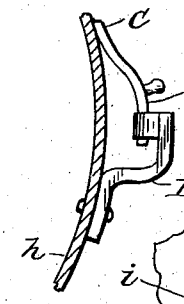
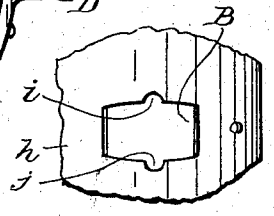


Fig. 9.



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No. 728,508. Patented May 19, 1903.

UNITED STATES PATENT OFFICE.

HATTIE M. SHIELDS, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF TO FRANK W. TUVE, OF INDIANAPOLIS, INDIANA.

STOVEPIPE FOR FLUE-CLEANING.

SPECIFICATION forming part of Letters Patent No. 728,508, dated May 19, 1903.

Application filed November 26, 1902. Serial No. 132,852. (No model.)

To all whom it may concern:

Be it known that I, HATTIE M. SHIELDS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented new and useful Improvements in Stovepipes for Flue-Cleaning; and I do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to flue-cleaners for domestic use, and it has reference particularly to devices whereby the bottoms of chimney-flues that have stovepipes connected therewith may be cleaned and also whereby the stovepipe portions of the flues may be cleaned without taking them down from their positions.

The object of the invention is to provide means whereby flues may be cleaned while the stoves or furnaces connected therewith have fires in them and without causing dust to arise in the atmosphere of the rooms and also without causing soot to fall upon the floors.

My invention consists in a stovepipe-elbow having a novel form of opening and a door therefor; and the invention consists also in the novel parts and the combination and arrangement of parts, as hereinafter particularly described and claimed.

Referring to the drawings, Figure 1 represents a cooking-stove in elevation and a stovepipe having my improvements and a portion of a chimney in central vertical section connected with the stove, showing a scraper in operative position in the pipe; Fig. 2, a perspective view of a scraper; Fig. 3, a perspective view of a portion of the extension handle-rod of the scraper; Fig. 4, a perspective view of portions of the handle-rods, showing the means by which the two parts of the rod are connected together; Fig. 5, a perspective view of the latch-plate for the door of the elbow-opening; Fig. 6, a fragmentary perspective view of the elbow, showing the door latched thereon; Fig. 7, a fragmentary sectional view of the elbow, showing the form of the latch-plate in section engaged by the door-latch; Fig. 8, a fragmentary sectional view of the elbow, showing the latch and latch-plate for the door; and Fig. 9, a fragmentary plan view of the elbow, showing the form of the opening therein.

In the drawings, *a* designates the stove, in the construction of which provision is made for removing soot from the bottom thereof, there being passages, as usual, through which soot from the vertical portion *b* of the stovepipe may fall to the bottom of the stove. The pipe part *b* usually has a damper *d* therein. At the top of the part *b* is an elbow A, having an opening B in the portion thereof at the outer side of its curve or so situated that a line entering either end of the elbow may pass through the opening. A horizontal portion *e* of the pipe connects the elbow with the flue *g* of the chimney *f*. In forming the elbow A a central section *h* is usually employed in connection with a suitable number of sections at the sides thereof, and the opening B is most conveniently cut in the central section *h*. At the upper side of the opening a small recess *i* is cut in the metal, and a like recess *j* is cut in the metal at the opposite or lower side of the opening. A door C is connected, by means of a pivotal rivet *k*, to the section *h*, and the door covers the opening B and also the recesses *i* and *j* when properly adjusted to do so, and it is designed that the door may cover only the opening B and one of the recesses *i* or *j* when properly adjusted. The door has a latch *l*, normallly engaging a latch-plate D, secured to the metal adjacently to the side of the opening opposite to the rivet *k*, the latch-plate having three notches *m*, *n*, and *o*, either of which may be used in adjusting the door C in its several possible latched positions. The latch-plate may be made either of sheet metal or of bent wire, as will be obvious, or as a light casting.

A suitable scraper E in plan is of the familiar "crescent" shape, the convex edge being adapted to scrape the concave form of the interior of the flue or pipe and the concave edge being designed to clear the central portion of the damper and also to clear the soot when inserting the scraper into the pipe. The scraper has a suitable handle-rod

which is preferably extensible and when so made comprises a rod F, attached at one end to the scraper and having at the opposite end thereof a side loop G, through which a rod H extends parallel to the rod F. A sliding collar I extends about the two rods between the scraper and the loop G and has a set-screw adapted to engage the rod F. The loop is attached to the rod H suitably, as by means of a hook J, turned over at the end of the rod about the adjacent portion of the collar. The opposite end of the rod H has a handle *q* of suitable form.

In practical use the scraper may be operated somewhat as indicated in Fig. 1, wherein it is shown in full lines and also in dotted or broken lines, illustrating the positions in which it may be operated, the handle-rod working in the recess *j* or the recess *i*, as circumstances may require, the door C being so latched that the proper recess may be uncovered.

Having thus described my invention, what I claim is—

A pipe-elbow having an opening in the wall thereof provided with recesses at opposite sides thereof, a latch-plate attached to the elbow and having a plurality of notches, a door pivoted to the elbow adapted to cover the opening and the recesses, and a latch attached to the door and adapted to coöperate with either one of the notches in the latch-plate.

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

HATTIE M. SHIELDS.

Witnesses:
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E. T. SILVIUS.