

T. TOYSON.
Chimney-Cleaner.

No. 213,472.

Patented Mar. 18, 1879.

Fig. 1.

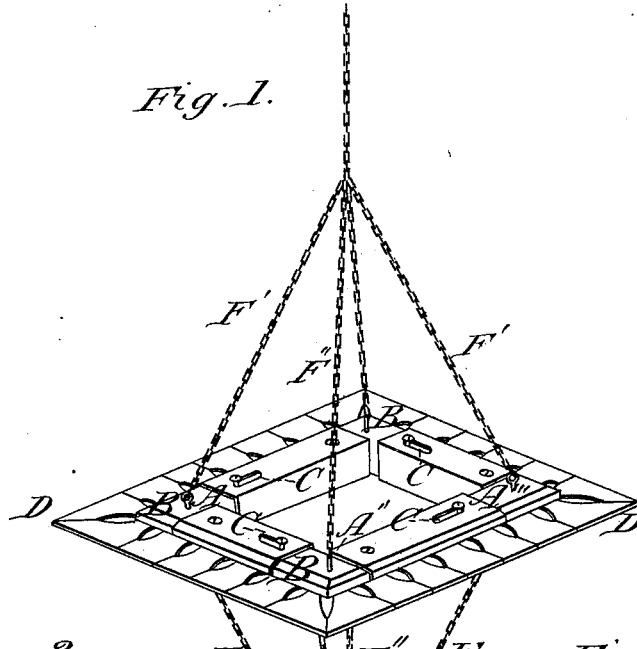


Fig. 2.

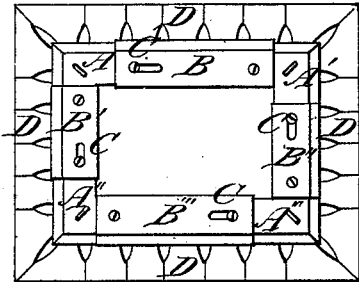
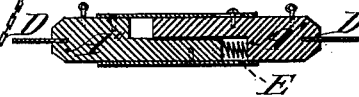


Fig. 3.



F' F'' F'''

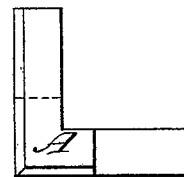
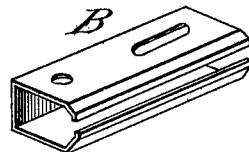


Fig. 5.

Fig. 4.



Attest:

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UNITED STATES PATENT OFFICE.

TOYS TOYSON, OF SPRINGFIELD, ILLINOIS.

IMPROVEMENT IN CHIMNEY-CLEANERS.

Specification forming part of Letters Patent No. **213,472**, dated March 18, 1879; application filed August 2, 1878.

To all whom it may concern:

Be it known that I, TOYS TOYSON, of Springfield, in the county of Sangamon and State of Illinois, have invented a new and useful Device or Apparatus for Cleaning Chimneys, of which the following is a specification:

The invention relates to a frame carrying yielding scrapers upon its outer edge for scraping the sides of chimney-flues.

The object is to provide an apparatus which will scrape the sides of the flue clean, will allow the scrapers to pass by inequalities or protuberances in the wall, and will provide means for keeping the scrapers against the sides of the flue wherever it expands or contracts, and which may be used in different-sized flues.

The invention consists of an arrangement of yielding scrapers, in sections, projecting from the edge of the frame, in which they are firmly fastened. A weight to carry down the apparatus, and also to break through any obstructions, is fastened beneath the frame, and from above extends the rope by which the whole is lowered into the chimney and operated.

The expansion or contraction of the frame is attained by dividing it into sections, the arms of which move in cases and are spread apart by springs.

In the accompanying drawings, in which similar letters of reference represent like parts, Figure 1 is a perspective of a device embodying my invention. Fig. 2 is a view of the frame and scrapers from above. Fig. 3 is a cross-section of one side of the frame lengthwise with scrapers. Fig. 4 is the case in which the arms of the sections move. Fig. 5 is an outline of a section of frame.

A A' A'' A''', Fig. 1, is a frame of wood or metal, of suitable size and proportions, so constructed that yielding plates D D D D, of metal or other material, may be fastened to and project in plane of frame a suitable distance beyond the edge. These scrapers or plates are made in sections, substantially as shown, to permit each section, as it may come to a projection in the wall, to rise and pass, leaving the adjoining ones to remain snug to the wall.

The frame is made substantially as shown and described. It consists of four sections, of shape as shown in Fig. 5, framed or cast and bolted or otherwise fastened together. The arms of these sections slip into four cases of metal, Fig. 4, and B B' B'' B''', Fig. 2, and in manner as shown. In the spaces formed by the sections being partially placed end to end in the cases, as shown, is put a spring, E, one for each of the four cases B B' B'' B''', which bears against the shoulder of one section and the opposing end of the adjoining one, and is kept in place by the case, in which may be a slot, C, through which passes a screw into the frame, by means of which the extent of the operation of the spring is controlled, the effect of which is to keep the sections apart, and to form, with the frames, a parallelogram, which may on all sides be reduced in size by pressure, which compresses each spring. In use the result would be that the narrow parts of the flue would press the sides of the frame in, and so allow it to pass, while the frame would expand as it passed into the wider spaces.

From the four corners of the under side of the frame extend the chains F F F'' to the ring from which hangs the weight W. From the upper side of the frame extend other chains, F' F', to the ring to which the working-rope running to hand of operator at the top of the chimney is attached.

The weight W is of metal, pointed, and is used to carry the frame down, and also to break through any obstructions it may encounter.

What I claim is—

The frame A A' A'' A''', in combination with the springs E, one for each of the four cases B B' B'' B''', with the said cases, and combined with the yielding plates or scrapers D D D D, cut into sections or tongues, substantially as described, and for the purposes set forth.

TOYS ^{his} X TOYSON.
mark.

Witnesses:

GRACE CONKLING,
W. J. CONKLING.