April 27, 1926. 1,582,309

A. V. SATTERBERG

CHIMNEY CLEANER

Filed March 16, 1925

Fig. 3

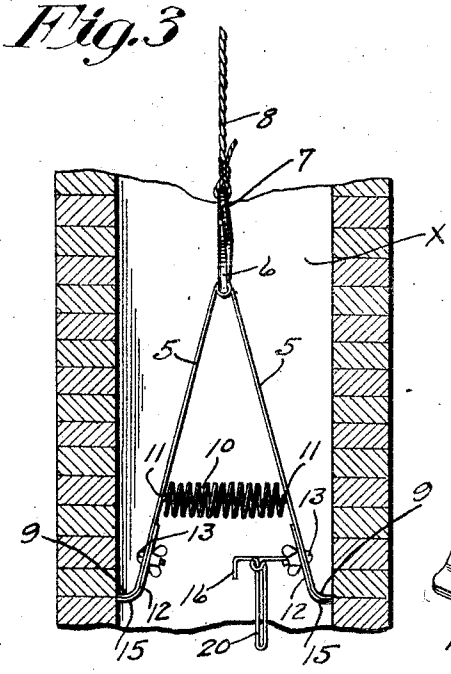


Fig. 1

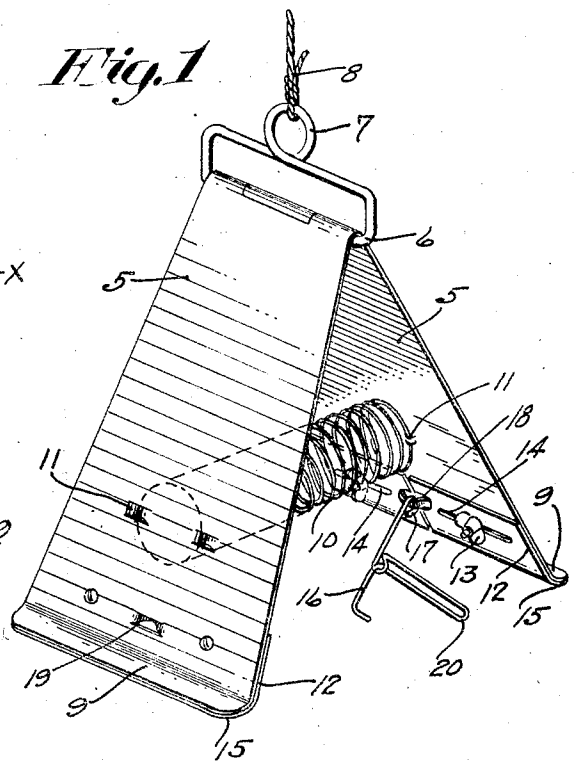


Fig. 2

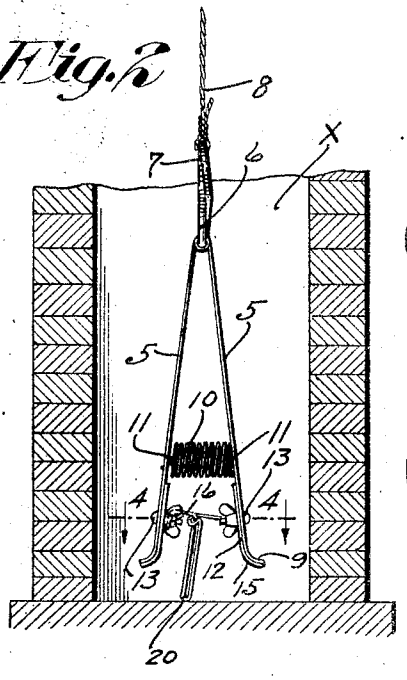
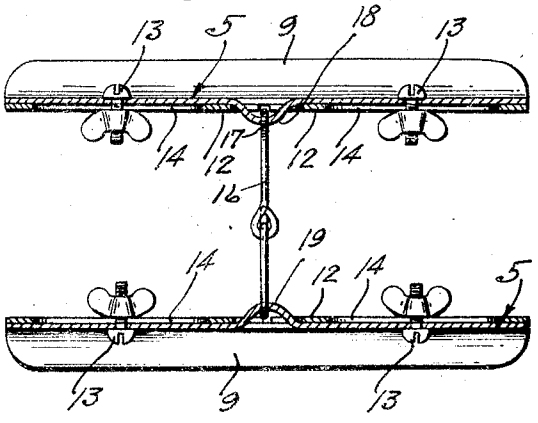


Fig. 4



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UNITED STATES PATENT OFFICE.

AXEL V. SATTERBERG, OF MINNEAPOLIS, MINNESOTA.

CHIMNEY CLEANER.

Application filed March 16, 1925. Serial No. 15,874.

To all whom it may concern:

Be it known that I, AXEL V. SATTERBERG, a citizen of United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Chimney Cleaners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an extremely simple and highly efficient chimney cleaner, and to this end it consists of the novel devices and combinations of devices hereinafter described and defined in the claims.

In the accompanying drawings, which illustrate the invention, like characters indicate like parts throughout the several views.

Referring to the drawings:

Fig. 1 is a perspective view of the invention;

Fig. 2 is a view partly in elevation and partly in section showing the chimney cleaner lowered into a chimney and about to be released to an operative position;

Fig. 3 is a view corresponding to Fig. 2 with the exception that the chimney cleaner has been released to cause its scraper blades to engage opposite faces of the chimney flue; and

Fig. 4 is a view principally in horizontal section taken on the line 4—4 of Fig. 2, on an enlarged scale.

The numeral 5 indicates a pair of main plates hingedly connected at their upper ends by a rod 6 that is extended above the chimney cleaner and bent to form a cable-attaching member which is in the form of an eye 7 to which is secured a rope 8. The lower ends of the main plates 5 are curved outward to form scraper blades 9. It will be noted that the plates 5 are upwardly tapered so that the scraper blades 9 are considerably longer than the width of the chimney cleaner at the top thereof.

The main plates 5 are held spread by a coiled spring 10 anchored to the inner faces of said plates by having its end convolutions threaded through retaining loops 11 cut and pressed from the said plates. Supplemental sectional plates 12 are secured to the inner faces of the main plates 5 by thumb nut-equipped stove bolts 13 that extend through bores in the main plates 5 and horizontal slots 14 in the supplemental plates 12. The lower ends of the supplemental plates 14 are bent to form supplemental scraper blades 15 that underlap the main scraper blades 9, as best shown in Fig. 1. Obviously, by adjusting the sectional plates 12 away from each other, their supplemental scraper blades 15 are projected to form extensions of the main scraper blades 9 so that the chimney cleaner may be adjusted to clean the chimney flues of different sizes.

To hold the main plates 5 drawn together against the tension of the spring 16 so that the chimney cleaner may be lowered into the chimney flue X, I provide a latch in the form of a hook 16. This hook 16 is flexibly attached to one of the main plates 5 by an eye 17 that is interlocked with the retaining loop 18 cut and pressed from said main plates and arranged to interlock with a retaining loop 19 cut and pressed from the other main plate 5, as shown in Figs. 2 and 4. The latch 16 is provided with a tripping finger for releasing said latch at the time the chimney cleaner is lowered to the bottom of the flue X so that the spring 16 will separate the main plates 5 and thereby cause their scraper blades 9 and the supplemental scraper blades 15, if extended, to engage opposite sides or faces of the flue X. This tripping finger 20 extends below the scraper blades 9 so as to engage the bottom of the flue X and forces the latch 16 upward out of the keeper loop 19 under the lowering movement of the chimney cleaner. It will be noted that the latch is formed from a single rod bent to form the hook 16 and tripping finger 20.

After the latch has been released, the chimney cleaner is drawn upward through the flue X to cause the scraper blades to scrape soot from the walls of said flue with which they engage. After two of the walls of the chimney have been cleaned, the chimney cleaner is again lowered to the bottom of the flue in such a position so that when the latch is released the scraper blades 9 will clean the other two walls of the flue X as the chimney cleaner is drawn upward therethrough.

By tapering the main plates 5 so that the upper end of the chimney cleaner is considerably narrower than the lower end thereof, soot, as the same is scraped from the walls of the flue X, will pile up on the scraper blades and then escape between the edges of the chimney cleaner and walls of the flue

and be precipitated onto the bottom of the flue. By arranging the supplemental scraper blades 15 so that they underlap the main scraper blades 9, said main scraper blades are materially reinforced.

What I claim is:

1. A chimney cleaner comprising a pair of scraper blades under spring tension to separate, and a hook attached to one of the scraper blades and adapted to be interlocked with a part on the other of said blades for holding said blades drawn together, said hook having an intermediate releasing finger that extends below the scraper blades when said blades are held drawn together by the hook.

2. A chimney cleaner comprising a pair of hinged main plates having main scraper blades,. a spring operative to spread said main plates, a latch for holding said main plates drawn together against the tension of the spring, means for releasing the latch, and supplemental plate sections adjustably mounted on the main plates and having supplemental blade sections.

3. A chimney cleaner comprising a pair of members having scraper blades, and a rod hingedly connecting the plates at their upper ends, said rod being extended above said plates and bent to form a cable-attaching member.

In testimony whereof I affix my signature.

AXEL V. SATTERBERG.