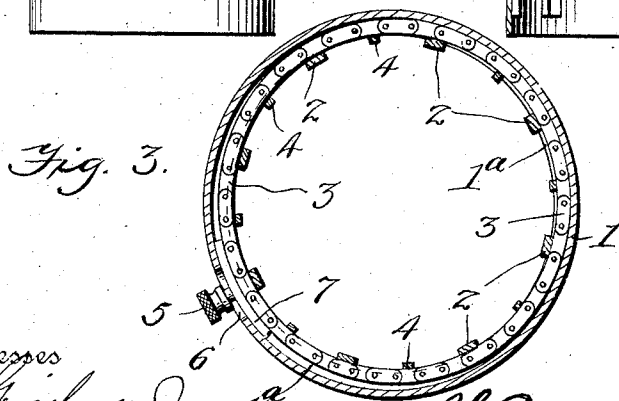
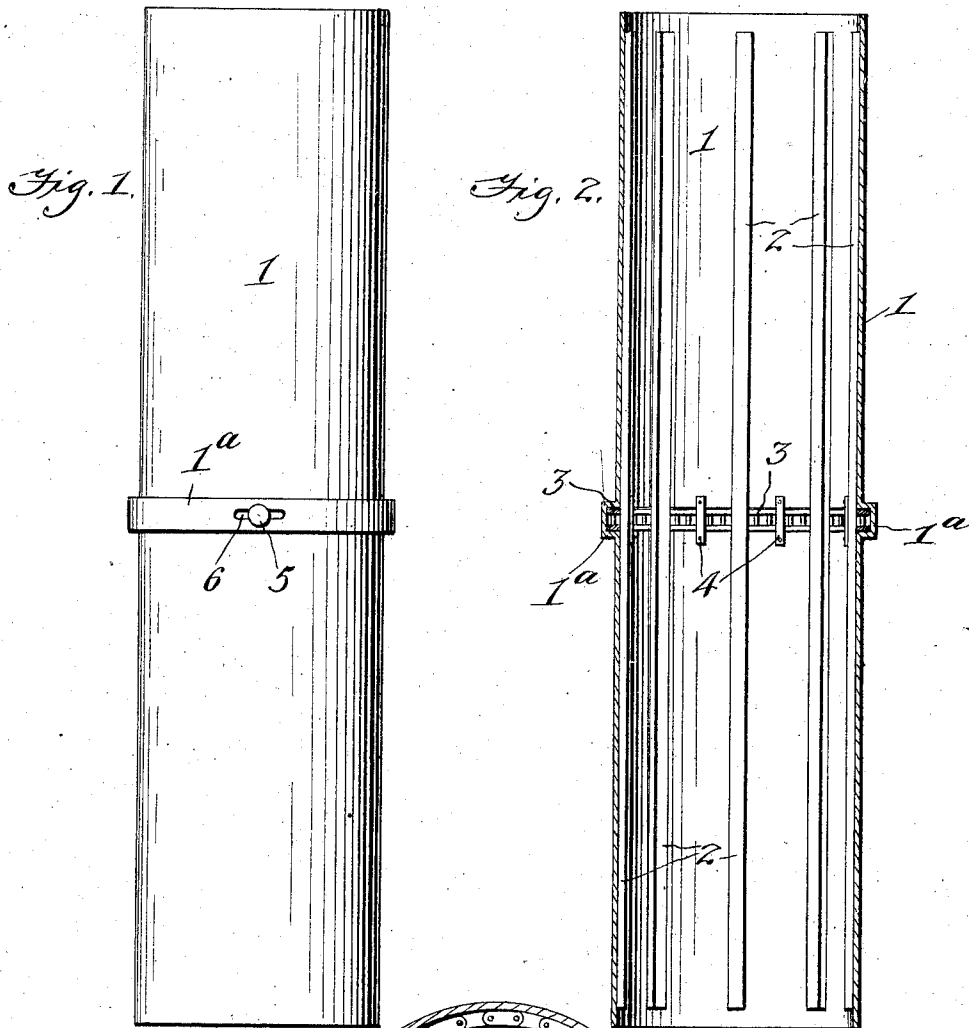


No. 851,134.

PATENTED APR. 23, 1907.

L. C. KLEIDON.
FLUE CLEANER.

APPLICATION FILED OCT. 15, 1906.



Witnesses
J. H. Griesbauer Jr.
C. H. Griesbauer.

Inventor
L. C. Kleidon

by *A. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

LEO C. KLEIDON, OF PHILADELPHIA, PENNSYLVANIA.

FLUE-CLEANER.

No. 851,134.

Specification of Letters Patent.

Patented April 23, 1907.

Application filed October 15, 1906. Serial No. 339,068.

To all whom it may concern:

Be it known that I, LEO C. KLEIDON, a subject of the Emperor of Germany, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Flue-Cleaners; and I do 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 relates to devices for cleaning flues and smoke pipes, and it consists in certain novel features of construction, combination and arrangement of parts herein-after described and claimed.

The object of the invention is to provide a simple, durable and efficient device of this character, which is permanently mounted in a pipe or flue, and by means of which the same may be quickly and effectively cleaned of soot and the like, without taking the sections of the pipe or flue apart.

The above and other objects, which will appear as the nature of the invention is better understood, are accomplished by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of a section of a stove-pipe or flue, with my improved cleaning device mounted therein; Fig. 2 is a longitudinal sectional view through the same; and Fig. 3 is a transverse sectional view.

The embodiment of my invention illustrated in the accompanying drawings is particularly adapted for use in the sections of the smoke pipe of a stove or kitchen range, but it will be understood that the same may be mounted in smoke flues of any description.

The device, as shown, is permanently mounted in a section 1 of a cylindrical sheet metal stove-pipe, and comprises a plurality of longitudinally-extending scrapers 2, which are arranged around and connected to a substantially annular ring or band 3. The latter is preferably mounted midway between the ends of the pipe section 1, and it is adapted to be rotated or oscillated to cause the scrapers 2, which engage the inner face of the pipe section, to scrape or remove the soot from the same. The scrapers 2, as shown, are in the form of metal rods of rectangular shape, in cross-section, and of slightly less length than that of the pipe section, so as not to interfere with the engagement of the ends of the latter with the ends of the adjoining

pipe sections. These scrapers 2 may be riveted or otherwise secured to the connecting band or element 3, which latter is preferably flexible and in the form of a metallic chain. This flexible band or chain is mounted in an annular groove or seat 1^a formed in the pipe 1, and it is retained therein by straps 4, which are arranged between the scrapers so as to permit the chain to have a slight rotary or oscillatory movement. In order to oscillate the chain or strip 2, I provide upon the outside of the pipe 1, a hand-piece or knob 5. The latter has its reduced end projecting through a transversely extending slot 6 formed in the guide groove 1^a and secured to a plate 7, which is in turn secured to the chain or band 3 and adapted to slide in said groove. Said plate 7 slides in contact with the inner face of the slotted portion of the groove and is adapted to close the slot or opening 6 to prevent the escape of smoke and soot therefrom. Said plate is of greater length than the slot, so that it will close the same at all times.

The construction, operation and advantages of the invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings. It will be seen that when it is desired to remove the soot from the inner face of the pipe, the knob 5 is moved back and forth in the slot, so as to oscillate the chain or band 3 to cause the scrapers 2 to scrape the soot from the inner face of the pipe. When each section of a stove-pipe is provided with a cleaning device of this character, it will be seen that the pipe may be readily cleaned without separating said sections.

While I have shown and described the preferred embodiment of my invention, it will be understood that I do not wish to be limited to the precise construction herein set forth, since various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention, as defined by the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters-Patent is:

1. The combination with a stove-pipe section, of a cleaning device comprising an endless flexible band, a guide in said section to permit said band to oscillate therein, longitudinally-disposed scraper rods carried by

said band, and means for oscillating said band.

2. The combination with a stove-pipe section, of a cleaning device permanently mounted therein and comprising a flexible band, a guide in said section to engage said band and permit the latter to oscillate, longitudinally-disposed scrapers carried by said band, a hand-piece projecting through a slot in said section, and a plate connecting said hand-piece and said band and adapted to close said slot.

3. The combination with a smoke pipe section having an annular groove therein and a transversely disposed slot in said groove, of a cleaning device permanently mounted in said

section and comprising an endless chain guided in said groove, means for retaining said chain in said groove, scraper rods secured to said chain and engaged with the inner face of said pipe section, a plate secured to said chain and adapted to cover said slot, and a hand-piece projecting through said slot and carried by said plate and chain, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LEO C. KLEIDON

Witnesses:

HERMAN F. VOSS,
JOHN A. KLEIDON.