

UNITED STATES PATENT OFFICE.

FRANK B. THAYER, OF JACKSON, MICHIGAN.

STOVEPIPE-CLEANER.

No. 919,395.

Specification of Letters Patent.

Patented April 27, 1909.

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To all whom it may concern:

Be it known that I, FRANK B. THAYER, a citizen of the United States, residing at Jackson, in the county of Jackson and State of Michigan, have invented a new and useful Stovepipe-Cleaner, of which the following is a specification.

This invention has relation to stove pipe cleaners and it consists in the novel construction and arrangement of its parts as herein shown and described.

The object of the invention is to provide a stove pipe cleaner of special construction which is simple and cheap and at the same time of a durable nature.

The cleaner consists primarily of a handle rod to the end of which is reversibly secured a disk having rearwardly extending flanges. Against the outer surface of said disk is clamped a plate which is provided with a plurality of radially and forwardly extending arms to the ends of which are attached curved scrapers. The said scrapers, arms, and plate are integral and made from spring metal so that the edges of the scrapers may overlap or spread apart in order that they may be used to advantage in pipes of different diameters.

In the accompanying drawing:—Figure 1 is a longitudinal sectional view of the end of the pipe showing the cleaner located therein. Fig. 2 is a perspective view with the cleaner removed.

The cleaner comprises a handle 1 having one end threaded at 2 and its other end provided with a loop or eye by which it may be manipulated. Mounted upon the threaded end of the handle is a disk 4 that is provided with rearwardly extending flanges 5, and constitutes a shield to prevent the soot that is loosened by the tool from being discharged upon the hands or the clothing of the operator. The threaded end of the handle further carries a scraper head comprising in an integral structure a disk 6, three radially and forwardly-extending arms 8 and a like number of longitudinally curved scrapers 9, each having its outer margin 10 arcuate, thus to present a gouge-shaped scraping edge to the interior of the pipe being cleaned. The shield and scraper head are held assembled with the handle by two nuts 2 and 7 that bear, respectively, against the rear face of the shield and the

front face of the disk 6. By this arrangement the position of the shield and scraper head may be reversed relatively to the handle to convert the tool from a push operated one, as shown, into a pull operated one.

It will be observed by reference to Fig. 1 that the terminals of the scrapers overlap when the scraper head is inserted in a stove pipe. The object of this arrangement is to cause the combined outer edges of the scrapers to present a continuous cutting edge so that the entire inner surface of the pipe over which the scrapers pass will be freed from soot, thereby avoiding the turning or rotating the implement in the pipe which would be necessary if there were gaps or spaces left between the terminals of the scraper elements.

It will be further noted that owing to the angular disposition of the arms 8 relatively to the disk 6, only the extreme outer edges of the scrapers contact with the pipe. The object of this arrangement is to reduce the frictional contact between the scrapers and the pipe to a minimum and also to cause the scrapers to be self sharpening.

A final point to be considered is that by the provision of the shield, escape of soot from the pipe and thus onto the hands or clothing of the operator is largely prevented, whereby an objection common to many of such implements is obviated.

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

The combination with a handle, of a shield, a scraper head comprising a disk, a handle projecting through the shield and the disk, nuts threaded on the handle and bearing against the disk and the shield, outwardly diverging arms integral with the disk, longitudinally curved outwardly flaring scrapers carried by the arms and having their outer margins arcuate and their terminals disposed to overlap when the head is inserted in the pipe, thereby providing a continuous scraping edge.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRANK B. THAYER.

Witnesses:

HARRY EADES,
GEO. POPP.