No. 817,319. PATENTED APR. 10, 1906.

W. HOFFA.

FLUE CUTTER.

APPLICATION FILED NOV. 9, 1905.

FIG. 1

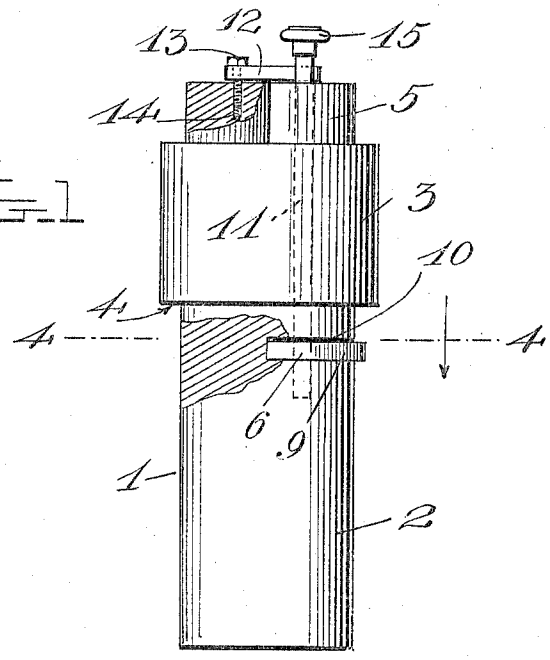


FIG. 2

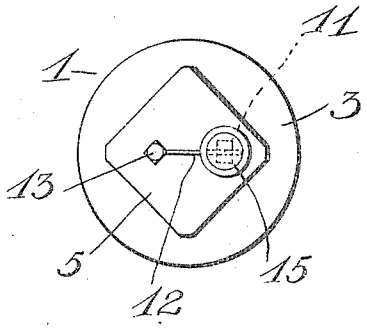


FIG. 3

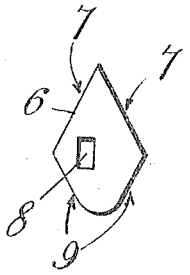
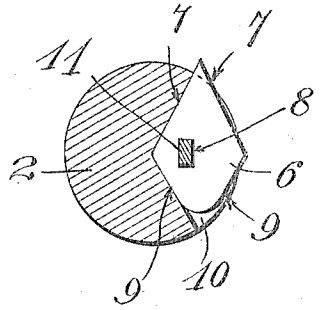


FIG. 4



Witnesses

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FLUE-CUTTER.

No. 817,319. Specification of Letters Patent. Patented April 10, 1906.

Application filed November 9, 1905. Serial No. 286,567.

To all whom it may concern:

Be it known that I, WILLIAM HOFFA, a citizen of the United States, residing at St. Paul, in the county of Howard and State of Nebraska, have invented certain new and useful Improvements in Flue-Cutters; 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.

This invention relates to flue-cutters, and one of the principal objects of the same is to provide a simple and efficient device for this purpose in which the cutter-blade may be adjusted in the body of the tool, so that its cutting edge will operate in either direction.

Another object is to provide a flue-cutter in which the cutter may be quickly adjusted and firmly held in place.

These and other objects are attained by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a flue-cutter made in accordance with my invention. Fig. 2 is a plan view of the same. Fig. 3 is a plan view of the cutter-blade, and Fig. 4 is a sectional view on the line 4 4 of Fig. 1 looking in the direction indicated by the arrow.

Referring to the drawings for a more particular description of my invention, the numeral 1 designates the body portion of the flue-cutter, having a reduced portion 2, an enlarged portion 3, and shoulder 4, against which the outer end of the flue is adapted to bear in the operation of the tool. The outer end of the tool is provided with a squared portion 5, with which a ratchet handle or wrench is adapted to be engaged for turning the tool in the act of cutting the flue. The cutter 6 consists of a flat plate of steel having diverging edges 7, a squared aperture 8, and inner edges 9. This cutter is secured to the body of the cutter in the slot 10 by means of a squared rod or holder 11, said holder extending down through an aperture in the body and through the aperture in the cutter. To hold the cutter in place, a spring 12 extends into or through an opening near the upper end of the holder 11, and the opposite end of said spring is connected to a set-screw 13, fitted in a threaded recess 14 in the top of the squared portion of the body of the cutter. A knob or operating-handle 15 is provided on the end of the tool-holder 11.

The construction and operation of my flue-cutter will be readily understood from the foregoing and may be described as follows: The tool is placed within a flue, and the cutter is rotated by means of a ratchet handle or wrench fitting the squared portion of the tool. If it is desired to use the opposite edge of the cutter, the holder 11 is withdrawn by releasing the set-screw and spring from said holder, withdrawing the same from the body of the cutter, and reversing the blade when the parts are again secured in position, as will be understood.

From the foregoing it will be obvious that my device is of simple construction, the blade can be readily reversed to cut either way, and that the adjustment of the cutter can be quickly made and the latter will be firmly held in position when adjusted.

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

1. A flue-cutter comprising a body portion having a squared end for a ratchet handle or wrench, an aperture in the body of the tool for a cutter-blade, a cutter-holder extending through said aperture and through the cutter, a spring for holding said tool-holder in place, and a set-screw secured to the spring, substantially as described.

2. A flue-cutter comprising a body portion having a recess therein, a cutter having diverging cutting edges seated in said recess, and a spring-seated holder for holding said cutter in place and for permitting it to be reversed in position, substantially as described.

3. A flue-cutter comprising a body portion having one end reduced in size and the opposite end squared for the engagement of a handle or ratchet-wrench, an intermediate enlarged portion provided with shoulders to bear against the ends of the flues, a recess in the reduced portion, a double-edged cutter-blade seated in said recess, a square cutter-holding rod extending into the body of the tool and through the cutter, a spring for holding said cutter-holder in place, and a set-screw for holding said spring, substantially as described.

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

WILLIAM HOFFA.

Witnesses:
PETER EBBESON,
PAUL ANDESON.