

No. 765,248.

PATENTED JULY 19, 1904.

J. McCOMB.
FLUE CLEANER.

APPLICATION FILED DEC. 17, 1903.

NO MODEL.

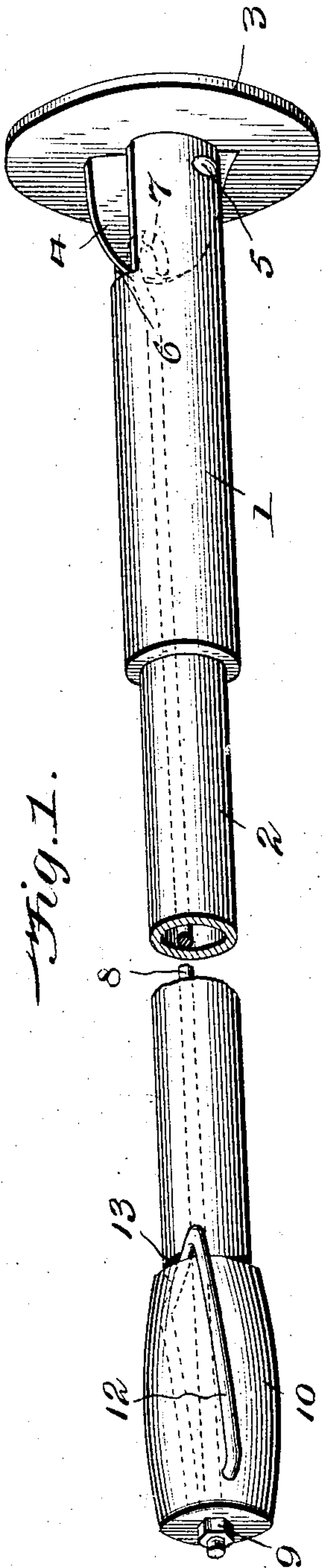


Fig. 1.

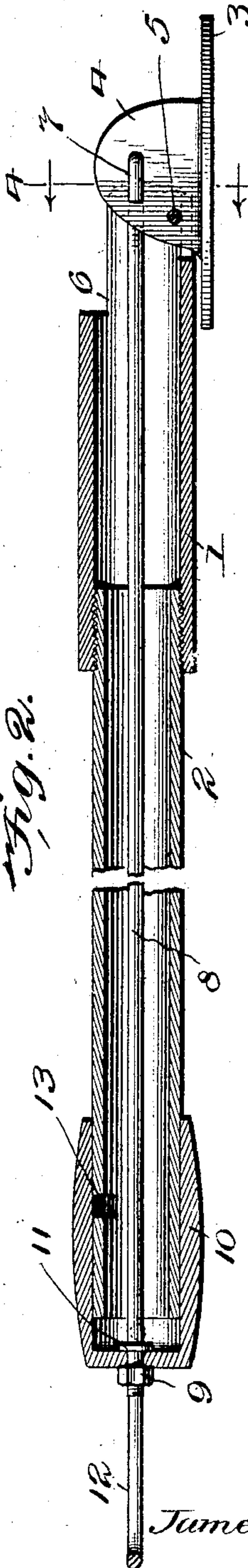


Fig. 2.



Fig. 3.

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JOHN McCOMB, OF SAGINAW WEST SIDE, MICHIGAN.

FLUE-CLEANER.

SPECIFICATION forming part of Letters Patent No. 765,248, dated July 19, 1904.

Application filed December 17, 1903. Serial No. 185,605. (No model.)

To all whom it may concern:

Be it known that I, JAMES McCOMB, a citizen of the United States, residing at St. Charles, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Flue-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 ap-
10 pertains to make and use the same.

My invention has relation to an instrument for cleaning drill-holes, flues, or the like; and it consists of certain novel features of construction and combination of parts, as will be
15 hereinafter clearly set forth, the prime object of my invention, among others, being to provide a simple though reliably efficient appliance of the character specified which while especially intended for cleaning out the pulverized rock or drill dust, so as to fit the hole
20 for receiving the blast, as in mining coal, quarrying rock, &c., but will also be found very desirable and efficient for cleaning boiler-flues and removing therefrom the accumulation of
25 soot, scales, &c.

Other objects and advantages will be hereinafter set forth, reference being had to the accompanying drawings, which are made a part of this application, and in which—

30 Figure 1 shows a perspective view of my invention complete ready for use. Fig. 2 is a longitudinal central section of the parts illustrated in Fig. 1. Fig. 3 is a longitudinal detail section of the end of the handle portion
35 of my appliance, showing the locking device disposed in a locked position. Fig. 4 is a transverse section of parts of my invention as indicated by the dotted lines 4 4 in Fig. 2 and looking in the direction of the arrows.

40 In order to conveniently describe the details of my invention and coöperating elements, numerals will be employed, the same numeral applying to a similar part throughout the several views.

45 Referring to the numerals on the drawings, 1 indicates the body portion proper, while 2 designates the handle-section, which may be of any desired extent, both the body and handle sections being tubular, as clearly illustrated in Fig. 2.
50

Pivotally connected to the free end of the body portion is the adjustable scraper 3, which consists, essentially, of a disk provided upon one side with the diametrically-located bracket or ear 4, which is eccentrically pivoted to the
55 end of the body portion, as by the rivet or bolt 5, it being understood that the end of the body portion is properly slotted or recessed, as indicated by the numeral 6, whereby said ear 4 may be loosely received. The ear 4 is
60 of sufficient extent to be provided with a suitable aperture designed to pivotally receive the end 7 of the controlling-rod 8, which latter extends through the bore of the body portion 1 and the handle-section 2, as clearly
65 shown in Fig. 2. The outer end of the controlling-rod 8 is threaded to receive the nut 9 after the end of the rod has been extended through an aperture in the terminal member
70 10, a suitable collar 11 or other form of shoulder being located upon the controlling-rod 8, whereby the nut 9 will lock the rod in secure engagement with the terminal member 10. The terminal member 10 is provided upon its
75 inner end with a bore of sufficient size to loosely receive the outer end of the handle 2, whereby it may be moved longitudinally thereon, as will be hereinafter particularly set forth.

It becomes desirable to lock the cleaning-
80 disk 3 so that it will extend substantially at right angles to the plane of the handle-section, and in order to accomplish this at the expense of a least amount of mechanism I pivotally connect to the terminal member 10 the
85 bail 12 of proper size and shape to reach inward and drop into the transverse recess 13 formed in the handle-section 2, when the member 10 is moved outward upon the handle sufficiently to dispose the cleaning-disk in its
90 operative position or in that position illustrated in Fig. 1. The position occupied by the bail 12 when disposed in a locked condition is fully illustrated in Fig. 3.

By reference to Fig. 2 it will be observed
95 that the cleaning-disk 3 is disposed so as to occupy a plane substantially parallel with the plane of the handle, and it is therefore obvious that when the terminal member 10 is drawn outward the controlling-rod 8 will be
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incidentally extended, causing the cleaning-disk to turn upon its pivot-point 5 and assume a position at right angles to the plane of the body. After the disk 3 has thus been adjusted the locking-bail 12 is adjusted so that the end thereof will occupy the recess 13, which will prevent all inward movement of the controlling-rod 8 until after said bail shall have been swung outward to occupy the position shown in Fig. 2.

It will be understood that the various parts of my invention may be made any desired size and of any suitable material and that said parts may be readily assembled each in its respective operative position.

It is thought from the foregoing description, considered in connection with the accompanying drawings, that the construction and manner of using my invention will be made clearly apparent, though it may be stated that when it is desired to remove the drill-dust or the like from a hole bored into a strata of coal, rock, or the like the drill is withdrawn and my cleaner disposed in the position shown in Fig. 2, whereby the cleaning-disk 3 will lie substantially parallel with the plane of the body and handle portion. The cleaning instrument is then entered until the bottom of the hole is reached, which may be readily accomplished by turning the instrument, if necessary, so that the disk will find its way through the accumulated disintegrated particles of coal or the like, and when the bottom of the hole shall have been reached the member 10 is drawn outward, so that it will move upon the end of the handle-section 2 sufficiently to expose the recess 13, when the locking-bail is swung inward, so that the end of the bail will fit in said recess, thereby preventing casual inward movement of the terminal member 10. The result of this disposition of the terminal member 10 will dispose the cleaning-disk 3 substantially at right angles to the body portion, and it therefore follows that when the instrument is withdrawn the accumulated borings will be withdrawn from the hole, leaving it ready for the reception of the blast.

As hereinbefore stated, my invention will also be found very desirable and efficient for cleaning boiler-flues, it being understood that the instrument shall be entered in the same manner as in cleaning the dust from a drill-hole and that when the end of the flue shall have been reached the disk may be readily thrown so as to occupy a position at right angles to the body-section, thus insuring that when the instrument is drawn toward the operator the scales and accumulated soot or the like on the inner surface of the flue will be scraped away and removed by the cleaning-disk, it being understood that the size of said disk will be substantially the same as the size of the flue to be cleaned.

The handle portion 2 may be made any de-

sired length, so as to reach entirely through the flue to be cleaned, it being understood that any preferred material may be employed in forming the disk 3 and other parts of my invention whereby the least possible wear will result to the peripheral edge of the cleaning-disk when being brought in contact with the incrustation of accumulated matter commonly found on the surface of a flue.

Believing that the advantages and manner of using my invention have been made clearly apparent, further description is deemed unnecessary.

What I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described flue-cleaner comprising a suitable body portion and a handle-section connected therewith and provided near its outer end with a recess, said parts being tubular in form; a disk having an ear or extension 4 upon one side eccentrically pivoted to the end of said body portion; a controlling-rod having one end pivotally connected to said ear whereby the disk may be moved at right angles to the body portion or parallel therewith as desired; a terminal member 10 connected to the outer end of said controlling-rod and having a locking-bail adapted to fit in said recess in the outer end of said handle when the cleaning-disk is disposed in its operative position, all substantially as specified and for the purpose set forth.

2. The herein-described flue-cleaner, comprising a body portion having a slotted end, a handle secured to said body portion, said handle having a recess, a disk having an ear 4 upon one side, said ear being eccentrically mounted in the slotted end of said body portion, a terminal telescopically mounted upon the outer end of said handle-section, means operatively connecting said terminal and disk and additional means carried by said terminal adapted to enter said recess and lock said disk in its operative position as set forth.

3. In a flue-cleaner, the combination with a handle-section having a recess near one end and a body portion 1 having a disk 3 pivotally attached thereto, secured to the opposite end, of a cylindrical terminal 10 having a head at one end, said terminal being telescopically mounted upon said handle-section, a rod secured at one end to said head, and at the opposite end to said disk whereby when said terminal is moved longitudinally said disk will be raised or lowered, and a bail carried by said terminal adapted to enter said recess and lock said disk in its operative position as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

JAMES McCOMB.

Witnesses:

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