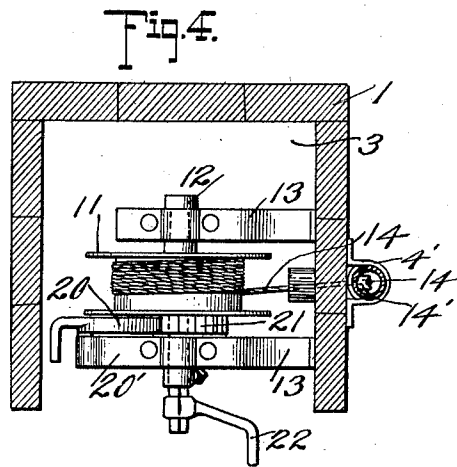
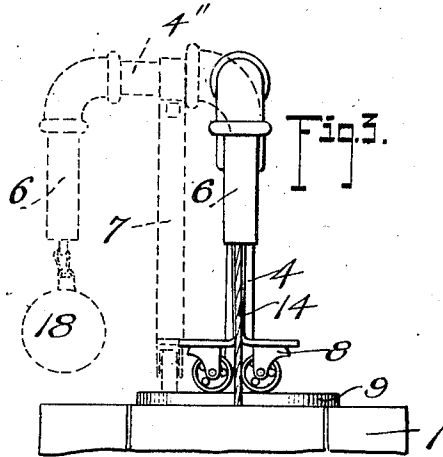
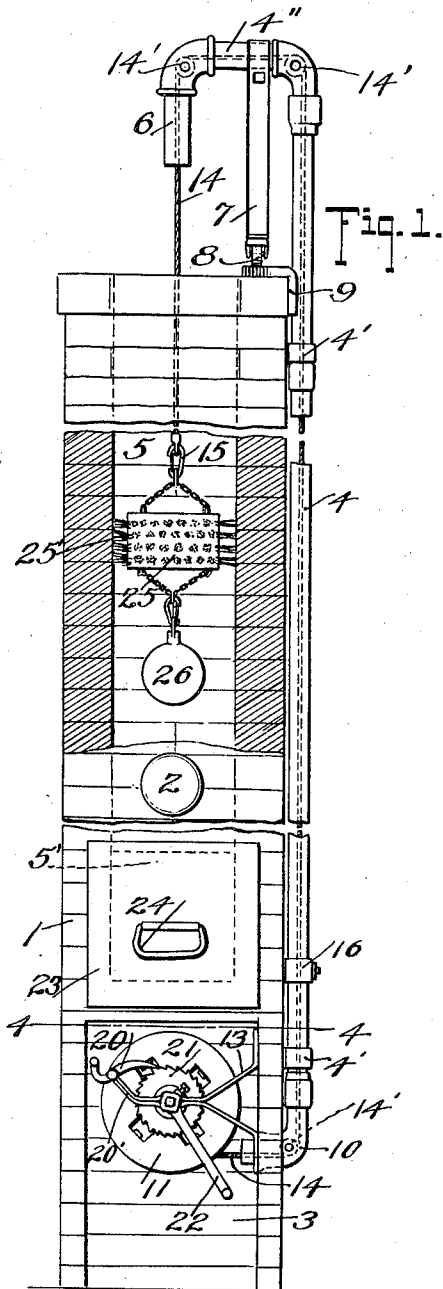


D. JOHNSTON.
CHIMNEY CLEANER,
APPLICATION FILED FEB. 8, 1912.

1,030,733.

Patented June 25, 1912.

2 SHEETS-SHEET 1.



Witnesses

E. H. Wagner
J. M. Kirkley

Inventor
D. Johnston

By *Reuben Robt*
J. Robt

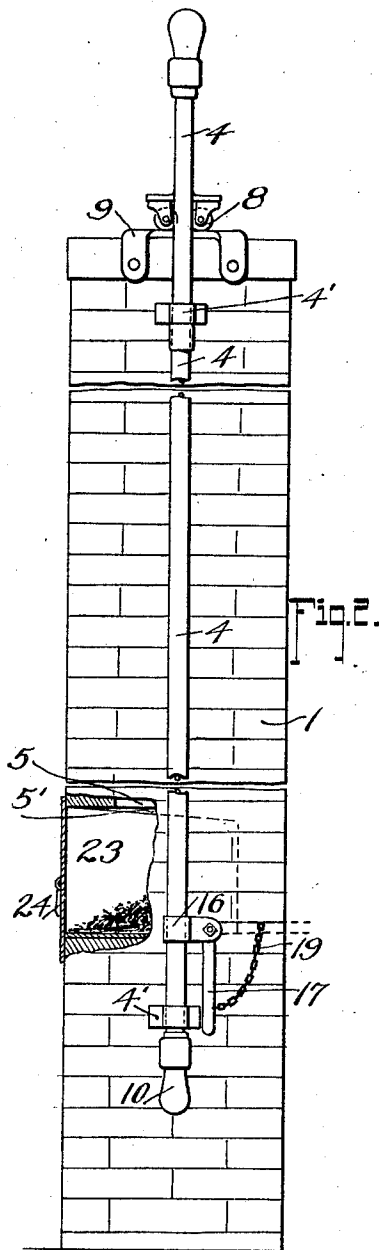
Attorneys.

D. JOHNSTON.
CHIMNEY CLEANER.
APPLICATION FILED FEB. 8, 1912.

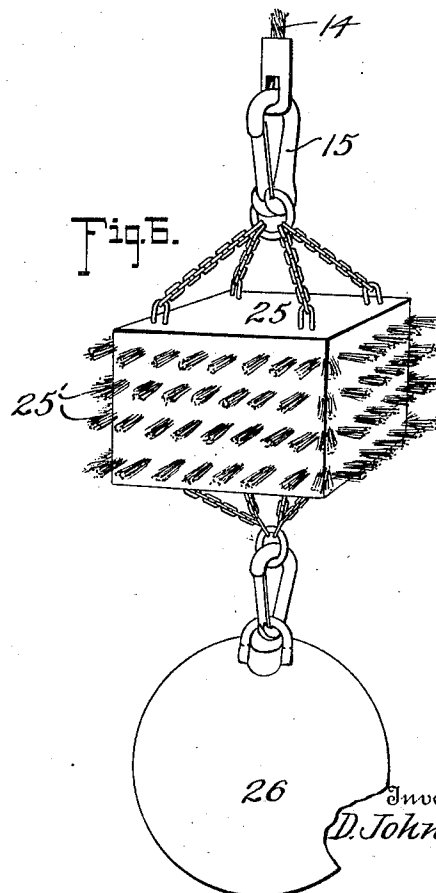
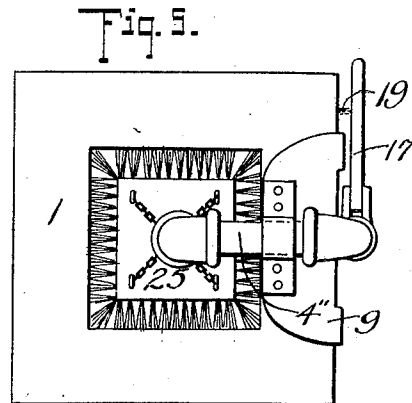
1,030,733.

Patented June 25, 1912.

2 SHEETS-SHEET 2.



Witnesses
Edw. Wagner.
J. W. Kirkley



Inventor
D. Johnston
By *Deepest P. Robb* Attorneys

UNITED STATES PATENT OFFICE.

DANIEL JOHNSTON, OF MARQUETTE, MICHIGAN.

CHIMNEY-CLEANER.

1,030,733.

Specification of Letters Patent.

Patented June 25, 1912.

Application filed February 8, 1912. Serial No. 676,409.

To all whom it may concern:

Be it known that I, DANIEL JOHNSTON, a citizen of the United States, residing at Marquette, in the county of Marquette and State of Michigan, have invented certain new and useful Improvements in Chimney-Cleaners, of which the following is a specification.

This invention relates to improvements in chimney cleaning apparatus and its principal object is to provide a novel device to most effectively remove the accumulation of soot and dust from the chimney flues.

A further object of my device is to provide a simple construction readily attachable to chimneys whereby the operator may insert a cleaning brush in the flue and operate said brush in the chimney from a convenient place, provision being made for the collection of soot and dust removed by the brush.

Another object of my device is to provide means for retaining the operating cable in position for use and removed from the path of the chimney flue.

For a full understanding of the present invention, reference is to be had to the following description and the accompanying drawings, in which—

Figure 1 is a front elevation of a chimney having my invention applied thereto, said chimney being broken away and partly in section. Fig. 2 is a side elevation. Fig. 3 is a detail view showing the horizontal arm of the supporting member in its operative and inoperative positions. Fig. 4 is a cross section taken about on the line 4—4 of Fig. 1, and showing most clearly the winding drum for the cable. Fig. 5 is a top plan view, and Fig. 6 is an enlarged detail view showing the form of brush and weight used with my device.

Throughout the following detail description, and on the several figures of the drawings, similar parts are referred to by like reference characters.

Referring now to the drawings, 1 denotes a chimney provided with the usual flue opening 2 to receive a stove pipe not shown. While my device is applicable to any form of chimney, I have shown in the drawings the construction adaptable to a chimney having its lower front portion open as designated at 3. Preferably mounted for rotation in the brackets 4' on one side of the chimney 1 is a tubular supporting member

4, which in this instance is composed of piping, the supporting member extending a suitable distance above the top of said chimney and having a horizontal arm 4'' secured to its upper extremity. The arm 4'' is of sufficient length to extend over the central portion of the flue 5 in the chimney 1 and is provided with a depending portion 6. Secured to the arm 4'' is a depending supporting standard 7 having secured to its lower extremity in any suitable manner roller bearings 8 resting on a plate 9 secured to one side of the top of the chimney, said plate permitting easy movement of the bearings thereon, as will be hereinafter more fully described. The lower end of the supporting member 4 is provided with an extension 190 in which said member is revolutely mounted, the extensions projecting into the opening 3 of the chimney.

In the opening 3 is mounted a winding drum 11, the shaft 12 of which has its bearings in the brackets 13 secured to the side of the chimney in any suitable manner. A rope or cable 14 extends from said drum up through the tubular supporting member 4 and the arm 4'' passing over pulleys 14'. The extremity of the rope 14 is provided with a snap hook 15 for attaching a weight or brush thereto according to the desire of the operator. On the lower extremity of the supporting member 4 is rigidly secured a sleeve 16 and pivotally mounted in said sleeve is a handle 17 by means of which the supporting member 4 may be rotated.

Under normal conditions a small weight 18 is attached to the hook 15 and serves to hold the cable 14 from being withdrawn from the supporting member 4 as most clearly shown in Fig. 3 of the drawings. The arm 4'' is turned into an angular position away from the flue 5 by means of the handle 17, and I preferably provide a chain 19 connecting the end of the handle 17 with the chimney, the length of said chain being sufficient to permit the arm 4'' to be turned to its proper inoperative position and forming a limit of movement of the standard 7 on the plate 9.

In the operation of my device, when it is desired to remove the accumulations from the chimney, the pawl 20 pivotally mounted in an extension 20' of one of the brackets 13 is disengaged from the ratchet plate 21 secured to the drum 11, and the arm 4'' having been turned so as to permit the weight 18 to de-

scend the chimney, the operator holds the crank 22 connected to the shaft 12 until said weight has reached the lower portion of the flue 5. The lower portion of said flue 5 is preferably provided with an opening 5' through the front side of the chimney in which is adapted to be inserted a dust box 23, the outer end of which forms a closure for said opening and carries a handle 24. The box 23 having been removed, the weight 18 is replaced by a brush 25, the sides of said brush being provided with flexible bristles 25' which are of a suitable length to conform to the size of the flue 5 of the chimney. The box 23 is then replaced in the opening 5' and by turning the drum 11 said brush is caused to move up and down in the flue 5 and the accumulation of dust and soot will fall into said box 23 for removal and disposition after use of my invention. To properly facilitate the downward movement of the brush in the reciprocation thereof in the flue I provide a suitable weight 26 detachably suspended from the brush aforesaid. When the flue has thus been properly cleaned the brush 25 and weight 26 are lowered to the bottom of the flue and detached from the rope 14 and the weight 18 replaced therefor. Said weight is then drawn to the top by the rotation of the drum until said weight abuts against the descending portion 6 of the arm 4'. The pawl 20 is then engaged with the ratchet plate 21 and the arm 4' turned into angular position by means of the handle 17.

Having thus described the invention, what is claimed as new is:

1. In a chimney cleaning apparatus, the combination of a rope supporting member,

an arm secured thereto adapted to extend over the top of the opening in the chimney, a standard connected with the arm and adapted to rotatably support the member aforesaid on the chimney, a brush adapted to be received in said chimney, a rope carried by said supporting member and arm and connected with the brush, a handle pivotally connected to the supporting member, and a connecting member adapted to be secured to the chimney and handle to limit the rotation of the rope supporting member.

2. In a chimney cleaning apparatus, the combination of a vertical supporting member adapted to be secured to the chimney, a horizontal arm secured to the supporting member and adapted to extend over the opening at the top of said chimney, a depending supporting standard secured to the arm aforesaid, roller bearings mounted on the standard and adapted to rest upon said chimney, a handle secured to the supporting member aforesaid whereby the arm may be moved from over the opening in the chimney, a rope mounted in the supporting member, a brush secured to the end of said rope and adapted to be received in the chimney, a winding drum about which the rope aforesaid is adapted to be wound, and a crank connected with the drum whereby the brush may be caused to move upward and downward in the opening aforesaid.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL JOHNSTON.

Witnesses:

C. L. BRAINERD,
WESLEY SWEET.