

(No Model.)

A. J. FLUDDER & F. M. SISSON.
BRUSH FOR CLEANING CHIMNEYS OR FLUES.

No. 505,761.

Patented Sept. 26, 1893.

FIG. 2--

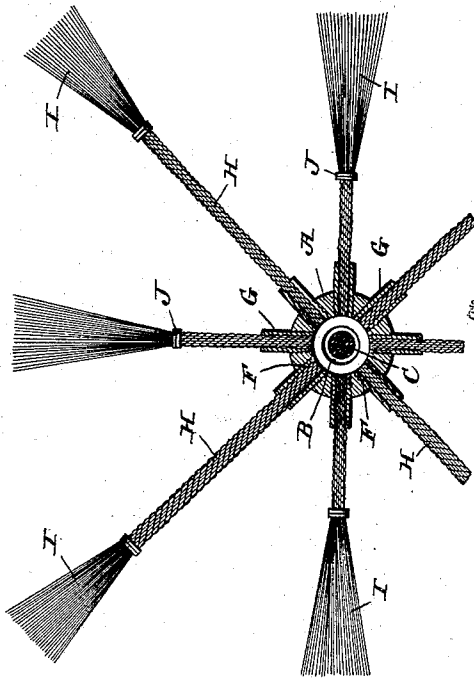


FIG. 3.

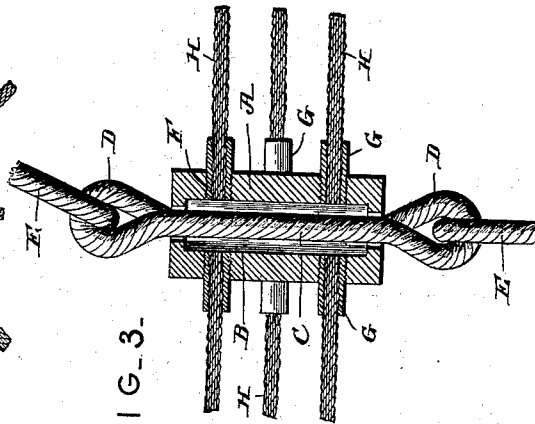


FIG. 1.

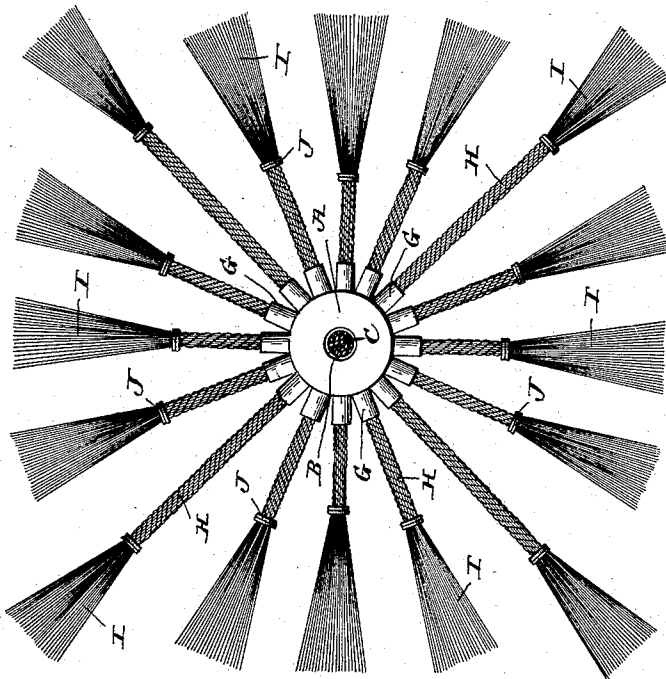
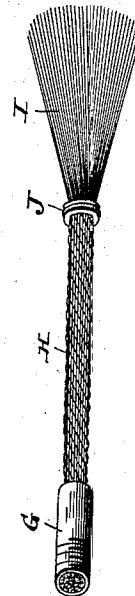


FIG. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

ALEXANDER J. FLUDDER AND FRANCIS M. SISSON, OF NEWPORT, RHODE ISLAND.

BRUSH FOR CLEANING CHIMNEYS OR FLUES.

SPECIFICATION forming part of Letters Patent No. 505,761, dated September 26, 1893.

Application filed March 27, 1893. Serial No. 467,852. (No model.)

To all whom it may concern:

Be it known that we, ALEXANDER J. FLUDDER and FRANCIS M. SISSON, citizens of the United States, residing at Newport, in the county of Newport and State of Rhode Island, have invented a new and useful Brush for Cleaning Chimneys or Flues, of which the following is a specification.

This invention relates to brushes for cleaning chimneys and flues; and it has for its object to provide an improved brush of this character which shall possess exceptional stiffness and durability, as required by the work, and which at the same time shall be so constructed as to provide efficient means for thoroughly and effectively cleaning chimneys and flues of accumulations of soot and other matter, while at the same time being capable of ready adjustment to all sizes and characters of chimneys and flues.

To this end the main and primary object of the present invention is to provide an improved chimney and flue cleaning brush which renders chimney and flue cleaning much more thorough and more easily accomplished.

With this and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts, hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a plan view of a cleaning brush constructed in accordance with this invention. Fig. 2 is a horizontal sectional view through one set of cleaning bristles. Fig. 3 is a central vertical sectional view of the brush. Fig. 4 is an enlarged detail in perspective of one of the cleaning bristles.

Referring to the accompanying drawings, A represents an elongated cylindrical hub having a central longitudinal perforation B, in which is loosely arranged the attaching rope C, terminating at its ends in the loops D, to which are attached the operating ropes E, shown in Fig. 3, which provide means for drawing the brush up and down and out of chimneys and flues for cleaning the same.

The elongated cylindrical hub A, is cast out of any suitable metal, preferably brass which is not affected by soot, and is provided

in the body thereof with separate circular series of threaded openings F, which removably receive the threaded ends of the bristle ferrules G. The exteriorly threaded and cylindrical bristle ferrules G, removably connected to the body of the cylindrical hub A, in separate circular series or sets, are firmly secured on the inner ends of the brush bristles H so as to form a retaining band for such inner ends of the bristles. The brush bristles H, are each thus removably attached to the cylindrical hub, so that different lengths of bristles can be placed in position, according to the size of the chimney or flue to be cleaned, and the said brush bristles are preferably made out of a suitable size of wire rope, the outer extremities of which are frayed into brush tips I, which are sufficiently stiff and springy as to provide an efficient brush contact for brushing out soot and other matter from chimneys and flues. The bristles H, are embraced at a point which may be termed the base of the brush tips, by the binding rings J, which are soldered firmly in position, and which thus prevent the bristles from unraveling up to the ferrule, it being clearly shown in the drawings that the wire rope forming the bristles is tightly twisted from the binding rings up to the ferrules. This construction provides brush bristles which have their bodies or shanks sufficiently rigid and strong to stand the work, while their outer brush tip extremities present a wide yielding brush contact, which is efficient to secure the proper cleaning of the chimney or flue.

Now by reference to Figs. 1 and 2 of the drawings particularly, it will be seen that the brush bristles in each separate circular series or set, are arranged out of line with the bristles in the adjacent sets, so that the frayed brush tips I, leave no intervening spaces therebetween in which the brush would not sweep or clean. It is to be further observed that the brushes in each set are formed in such lengths that the periphery of the brush is rectangular in shape, so as to correspond with the usual shape of ordinary chimneys, and owing to the fact that the bristles of the brush are removable, various sized chimneys can be cleaned by placing the proper length of bris-

bles in position on the hub, and it will be further apparent that even if the chimney or flue was not perfectly square, the brush bristles could be arranged on the hub in proper
 5 lengths so as to form an oblong periphery, or even a circular shape if necessary, thus adapting the brush for use in connection with all chimneys and flues of any size.

In operation it will be apparent that by
 10 means of the ropes E, and persons at the top and bottom of the chimney, or at both ends of the flue, the brush can be drawn up and down the chimney or flue to thoroughly scrape and clean its sides.

15 From the foregoing it is thought that the construction, operation and many advantages of the herein-described brush for cleaning chimneys and flues will be apparent, and we would have it understood that changes in the
 20 form, proportion and the minor details of construction as embraced within the scope of the appended claims, may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

25 Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a chimney and flue cleaning brush, an elongated cylindrical hub having a central longitudinal opening and a series of
 30 threaded openings formed in the body thereof, a series of rigid brush bristles having outer frayed ends, cylindrical exteriorly threaded band ferrules bound on the inner ends of said

bristles and adapted to removably engage the
 35 threaded openings of the hub, and an attaching rope loosely arranged in the central longitudinal opening of the hub and having attaching loops D, at its extremity, substantially as set forth.

2. In a chimney and flue cleaning brush, an elongated cylindrical hub having separate
 40 circular series or sets of threaded openings, and separate sets of rigid brush bristles having at their inner ends threaded ferrules
 45 adapted to removably engage the threaded openings in said hub, said rigid brush bristles being also provided with outer frayed brush
 tip ends, and binding rings affixed thereon at the base of said frayed ends, substantially as
 50 set forth.

3. In a chimney and flue cleaning brush, the combination with the hub; of the brush
 bristles removably attached to and radiating
 from said hub, said bristles comprising suitable
 55 lengths of wire rope having frayed brush tip ends, and binding rings soldered thereon at the base of the frayed ends, substantially as set forth.

In testimony that we claim the foregoing as
 60 our own we have hereto affixed our signatures in the presence of two witnesses.

ALEXANDER J. FLUDDER.
 FRANCIS M. SISSON.

Witnesses:

CHAS. J. MOORE,
 JAMES FLUDDER.