

(No Model.)

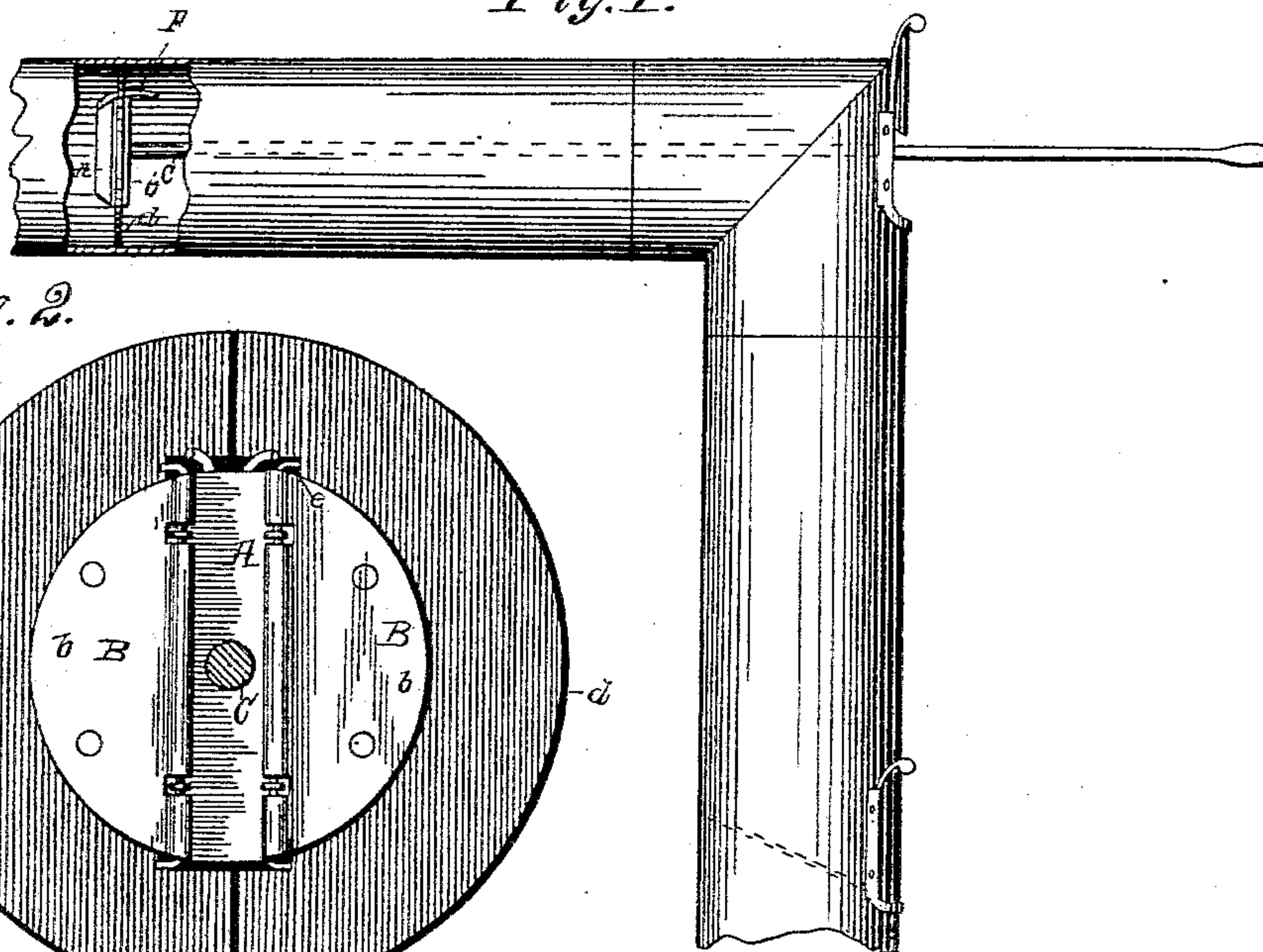
R. G. SMITH.

STOVE PIPE OR FLUE CLEANER.

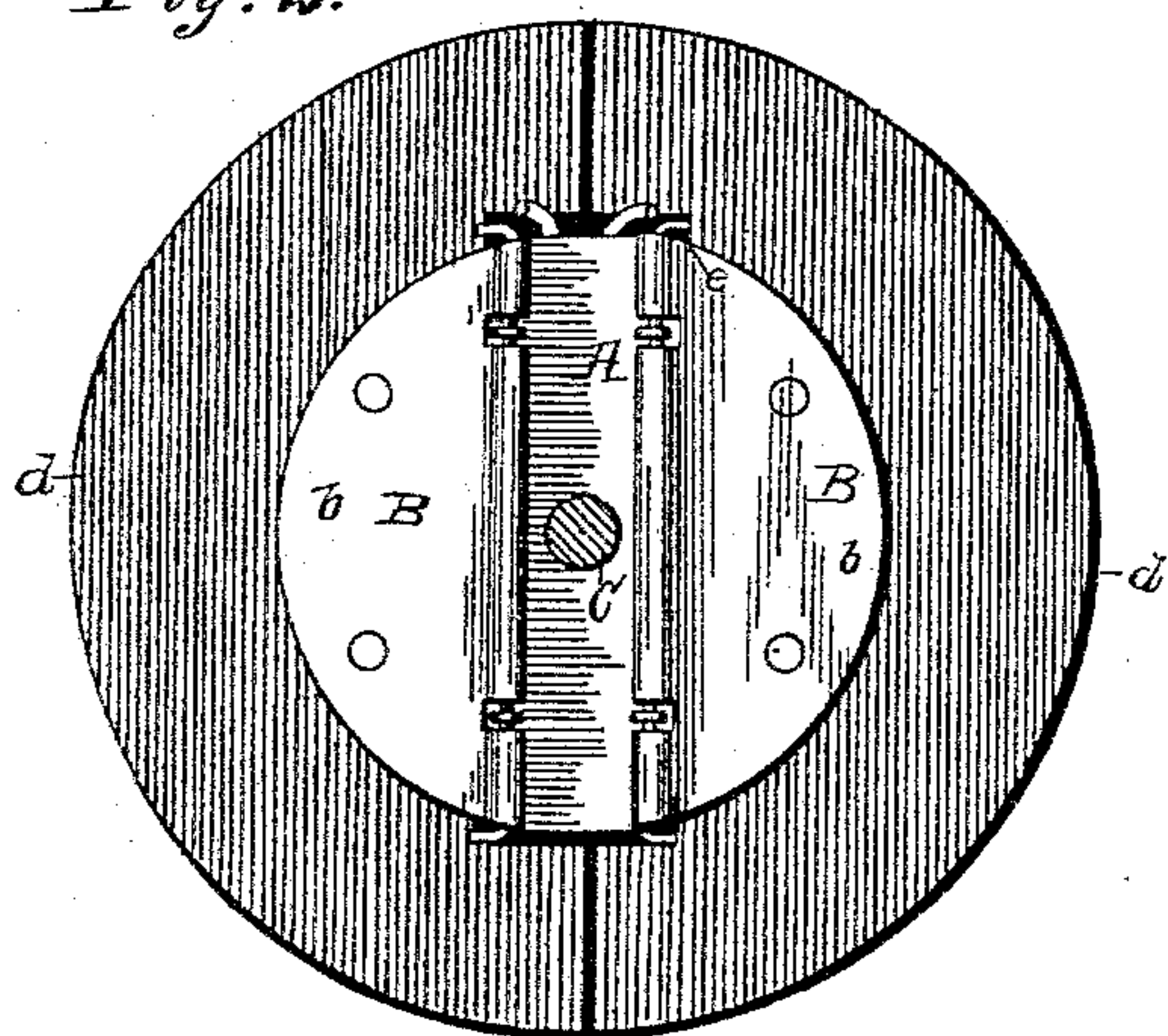
No. 388,794.

Patented Aug. 28, 1888.

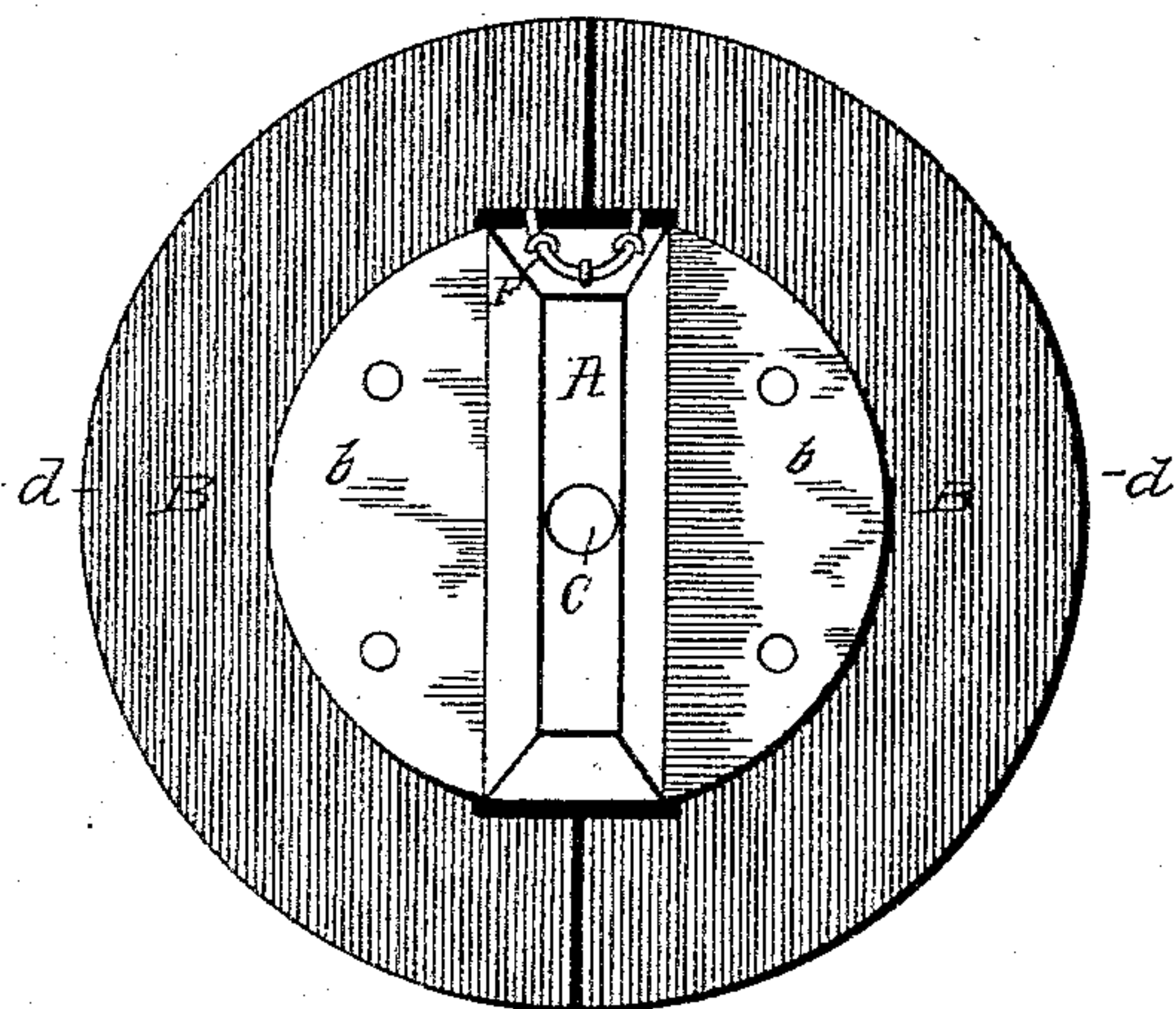
*Fig. 1.*



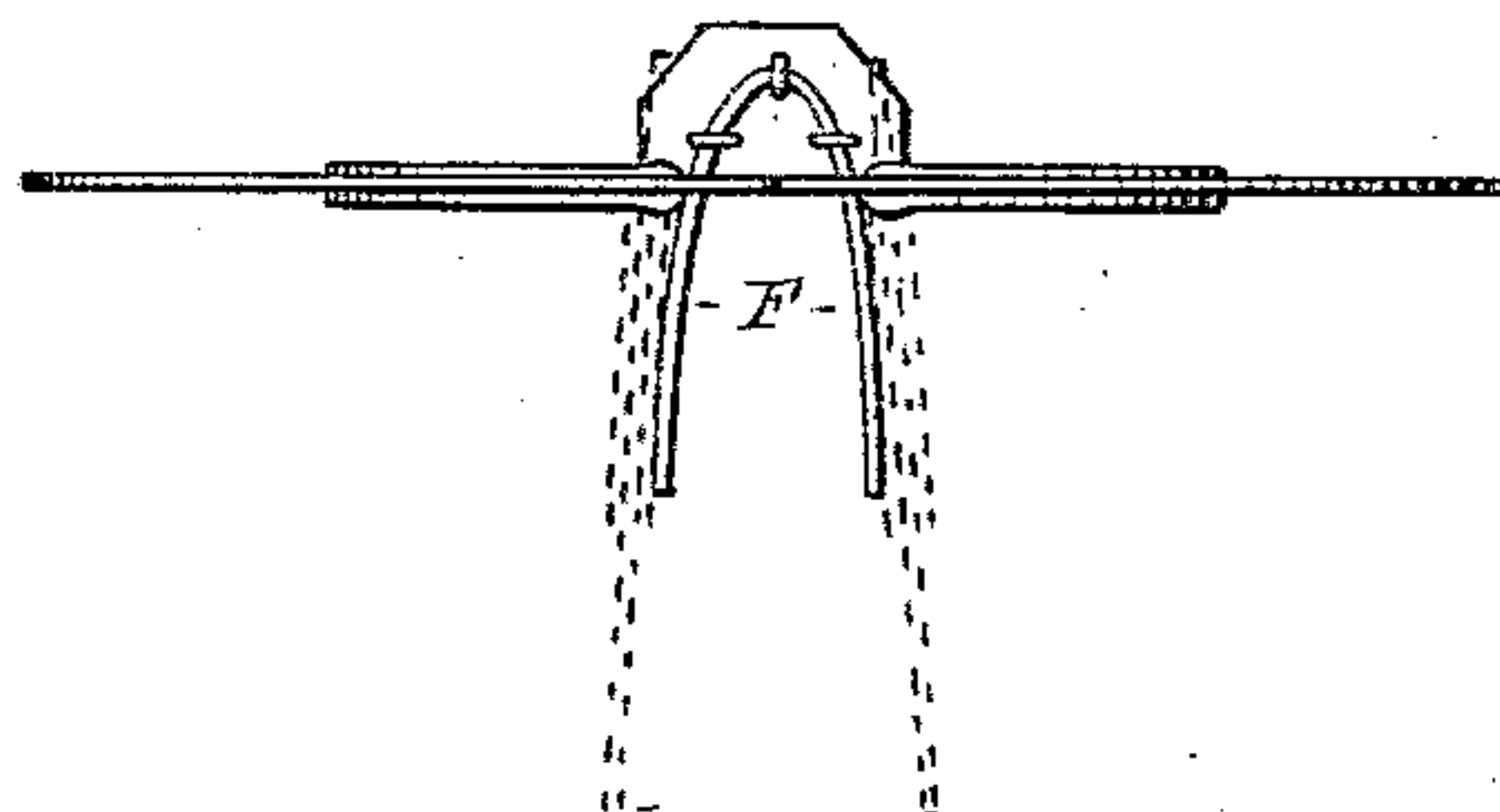
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses

M. A. Barnes.

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Inventor.

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# UNITED STATES PATENT OFFICE.

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## STOVE-PIPE OR FLUE CLEANER.

SPECIFICATION forming part of Letters Patent No. 388,794, dated August 28, 1888.

Application filed December 8, 1887. Serial No. 257,239. (No model.)

*To all whom it may concern:*

Be it known that I, RUSSELL G. SMITH, a citizen of the United States, residing at Watertown, in the county of Codington and Territory of Dakota, have invented certain new and useful Improvements in Stove-Pipe and Flue Cleaners; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 This invention relates to pipe and flue cleaners.

The object of the invention is the production of a scraper which will close and ride over the soot, &c., in traveling in one direction, and which will open and press against the soot and remove it in traveling in the opposite direction. The scraper is so constructed that while it will stand out with sufficient stiffness to remove all foreign matter capable of being readily removed it will yield and ride over rigid projections and the joints between the several sections of pipe.

30 The improvement consists in having two wings hinged to a head-block, the outer edges of the wings being flexible, and the inner portions being stiff, and composed of two plates, between which the flexible material is clamped.

35 The improvement further consists of the novel features presently to be described, claimed, and more particularly pointed out in the claims.

40 In the drawings, Figure 1 is a side view of a stove-pipe, showing the application of my improved scraper; Fig. 2, a front view of the scraper; Fig. 3, a top plan view; and Fig. 4, an edge view of the scraper, showing the operation of the wings by dotted lines.

45 The head-block A, oblong in form and centrally apertured for the insertion of the handle C, is provided with the two wings B, which are hinged to the face of the block at a short distance from its edges in such a manner that the wings can fold when the scraper

is advancing in one direction and open when the scraper is advancing in another or opposite direction. That part of the block extending out from the hinge-connection of the wing and block forms a stop and limits the outward movement of the wing, as shown most clearly in Fig. 4. The two wings are counterparts of each other, and a description of one will suffice for both. The wing is composed of two parts—a rigid center, *b*, and a flexible edge, *d*. The edge piece *d* is composed of any suitable yielding or flexible material, rubber being best adapted for the purpose, which is fastened to the center *b* in any desired manner. The center *b* is made of two plates, between which the edge piece *d* is clamped. These two plates are an integral part of a sheet, which is folded on itself and embraces the sides of *d*. The inner edge of *b* is cut away to form a hinge-butt, and is hinged to a corresponding part, D, by the rod or pivot *e*, fastened to the head-block.

70 The spring F, secured to the head-block and extending outward, limits the inward movement of the wings when folded and assists in opening the wings when the scraper is moved to detach the soot, &c. This spring is V shape, and is preferably secured to the end of the head-block, although this exact location is not essential.

80 The elbow of the stove-pipe will be provided with a door, which is to be moved out of the way when it is desired to clean the pipe. The wings of the scraper may be arranged to open out when the scraper is pushed into the pipe, or they may be disposed so as to fold on inserting the scraper and open out when the scraper is withdrawn.

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

1. In a chimney-cleaner, the combination, 90 with the head-block adapted to have a handle applied thereto, and the two wings hinged thereto, of the spring to limit the inward movement of the wings and assist in opening them, substantially as and for the purpose specified.

2. The combination, with the head-block, 95

of the wings composed of a rigid center, which is hinged to the head-block, and the flexible edge, substantially as described.

3. The combination, with the oblong-shaped  
5 head-block apertured to receive a handle, and the two wings hinged to the head-block near its opposite edges and held open by said head-block, of the spring for limiting the inward

movement of the wings, substantially as and for the purpose described. 10

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

RUSSELL G. SMITH.

Witnesses:

F. E. VAN LIEU,  
ALBERT ABBOTT.