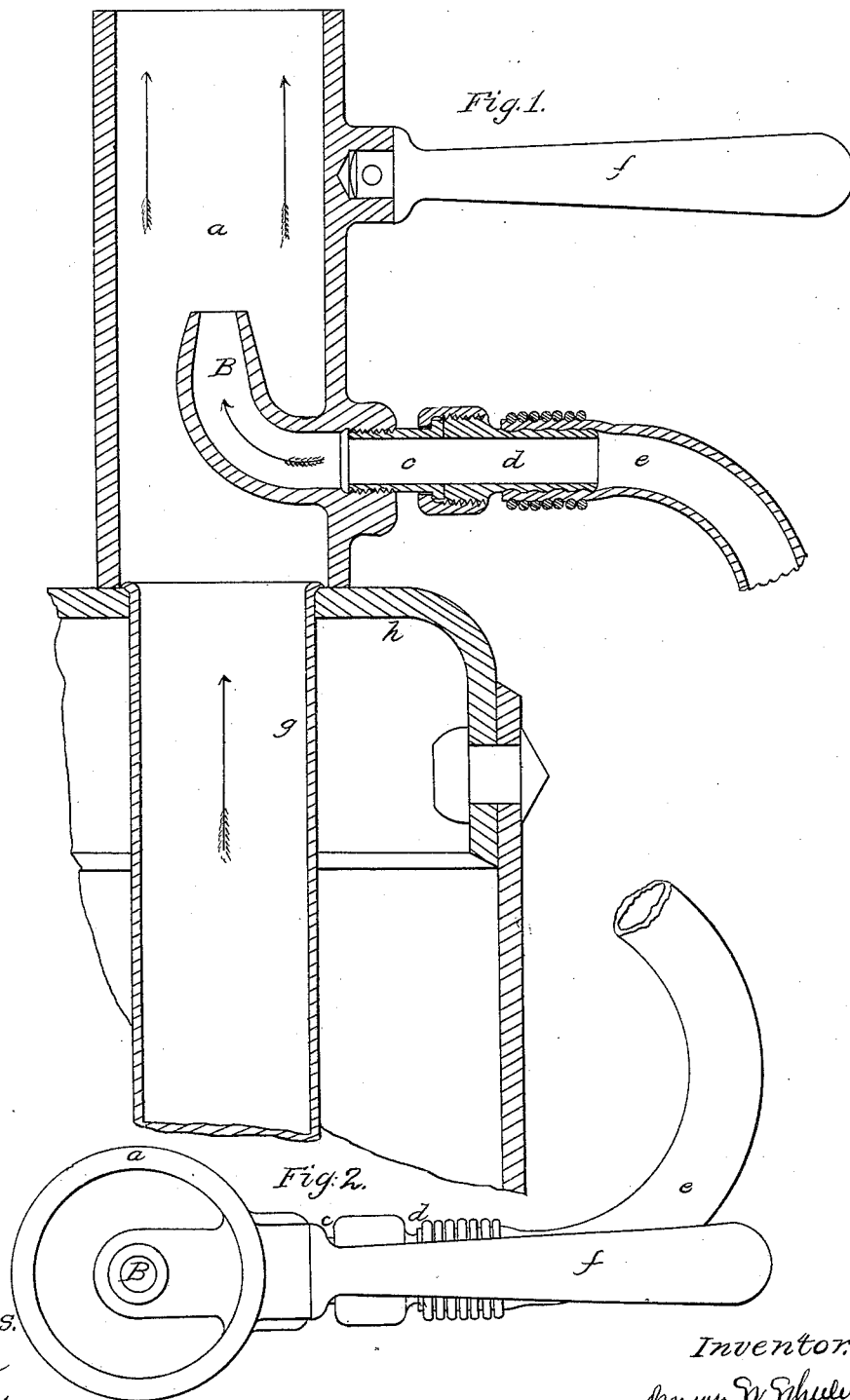


W. W. Wheeler,
Steam-Boiler Cleaner.

No 51,249.

Patented Nov. 28, 1865.



Witnesses.
Attest
Edwin C. Chandler

Inventor.
Wm. W. Wheeler

UNITED STATES PATENT OFFICE.

NORMAN W. WHEELER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN FLUE-CLEANERS.

Specification forming part of Letters Patent No. 51,249, dated November 28, 1865.

To all whom it may concern:

Be it known that I, NORMAN W. WHEELER, of the city of Brooklyn, county of Kings, and State of New York, have invented a new and useful Flue-Cleaner, an instrument used for the purpose of cleaning the flues of steam-boilers; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, having letters of reference marked thereon, forming a part of this specification, in which—

Figure I represents a sectional elevation of the instrument as applied to a flue, and Fig. II a plan, like letters indicating the same parts in both figures.

The usual way of cleaning the flues of steam-boilers is to sweep them out with a brush fixed to the end of a long handle, the use of which requires that no object shall be in the line of the flues within their own length of the flue-sheet. Another way is to fix the brush upon the end of a jointed rod and unfold the joints as the brush is inserted, and vice versa, which is a troublesome and dirty operation. Another way is to fix the brush to one end of a rope and a weight to the other, the weight being thrown through each flue by one person, while another receives it and hauls the brush through—a more troublesome and dirty operation than the other. And yet another plan has in some instances been resorted to—viz., to fix a steam-nozzle in the chimney in such a way that by a heavy jet of steam directed up the chimney a very strong draft would be created through the flues; but this last plan is defective, inasmuch as the flues will seldom or never be equally clogged, and those most clogged get the least draft to clear them.

My invention consists in the pipe *a*, open at

both ends, made of such diameter and form that the ends will fit upon the flue-sheet and inclose one or a limited number of flues, the pipe *a* being fitted with a handle, *f*, of any convenient length and form, a steam-nozzle, *B*, with its final axis parallel, or nearly so, with that of the pipe *a*, and a flexible or jointed steam-pipe, *E*, connected by a stop-cock with any steam-boiler having a pressure within it greater than one atmosphere. The part of the pipe *a* below the nozzle *B* may be of any curve to accommodate the direction of the chimney in relation to the flue-sheet. Now, if the instrument be connected, as above said, and steam turned on, so that a strong jet issues from the nozzle *B*, a strong current of air or gas will be produced, flowing through the pipe *a* in the direction of the arrows, and if the cleaner be placed in the position shown in Fig. I a strong current will be produced through the flue *g*, sufficient to clear it of any ordinary lodgment of soot, and by means of the handle *f* and accommodation of the flexible or jointed pipe *E* the instrument may be applied quickly and easily to every flue in a boiler, and applied to either end, if within reach, and induce the current in either direction.

Having described my invention, I will proceed to indicate that which I consider new and useful, and for which I desire to secure Letters Patent, viz:

The combination of the pipe *a*, nozzle *B*, handle *f*, and flexible or jointed pipe *E*, constructed substantially as described, and for the purposes set forth.

NORMAN W. WHEELER.

Witnesses:

EDWIN C. SHOARDS,
F. C. PRINDLE.