

No. 607,340.

Patented July 12, 1898.

C. H. CARRICO.
FLUE CLEANER.

(Application filed Mar. 7, 1898.)

(No Model.)

Fig. 1

Fig. 2

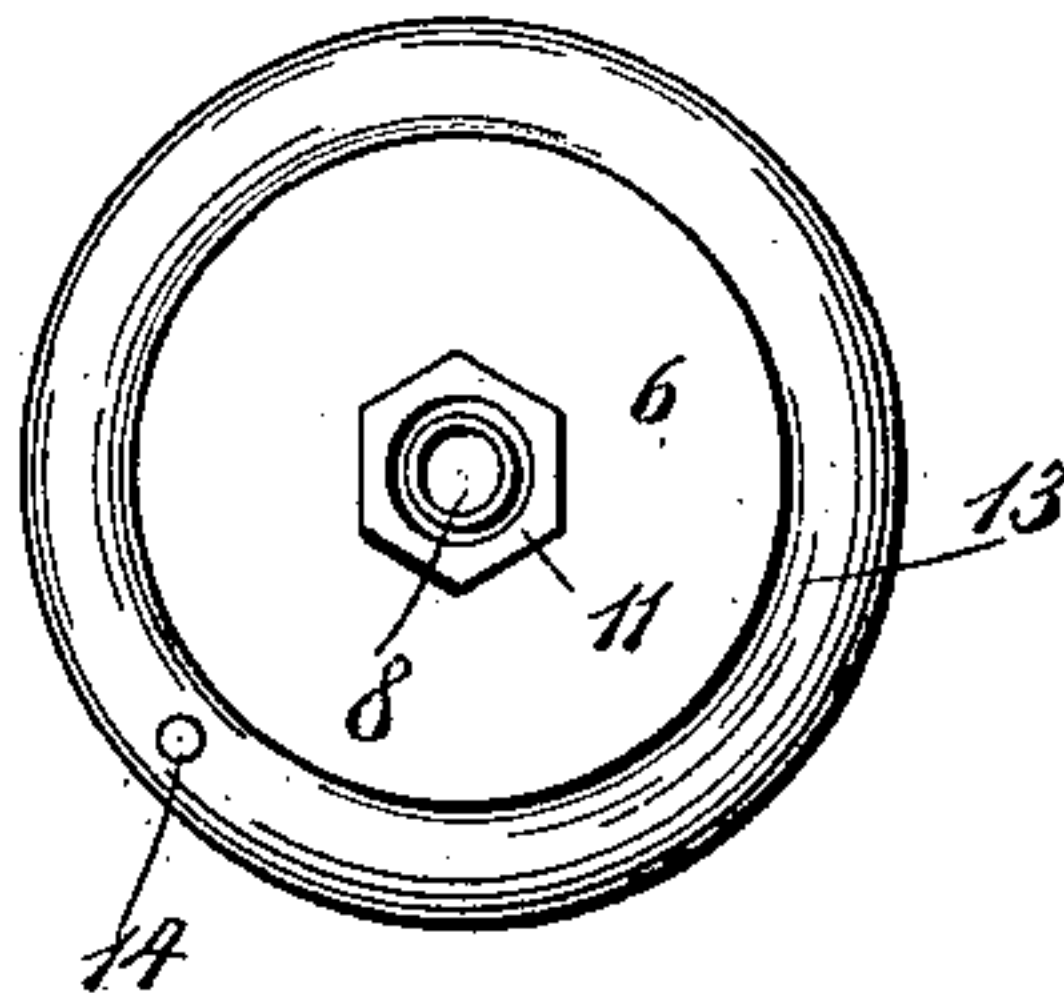
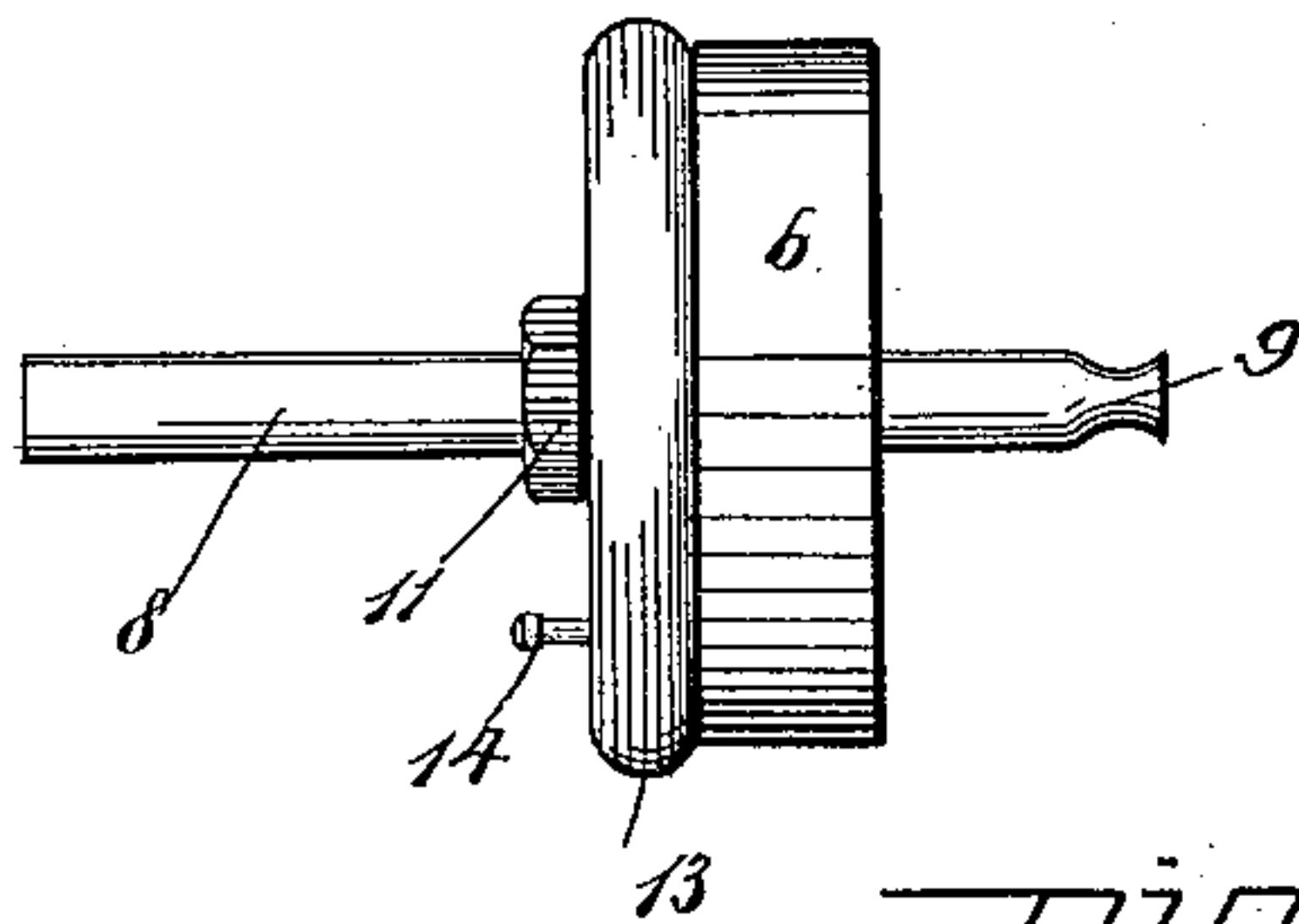


Fig. 3

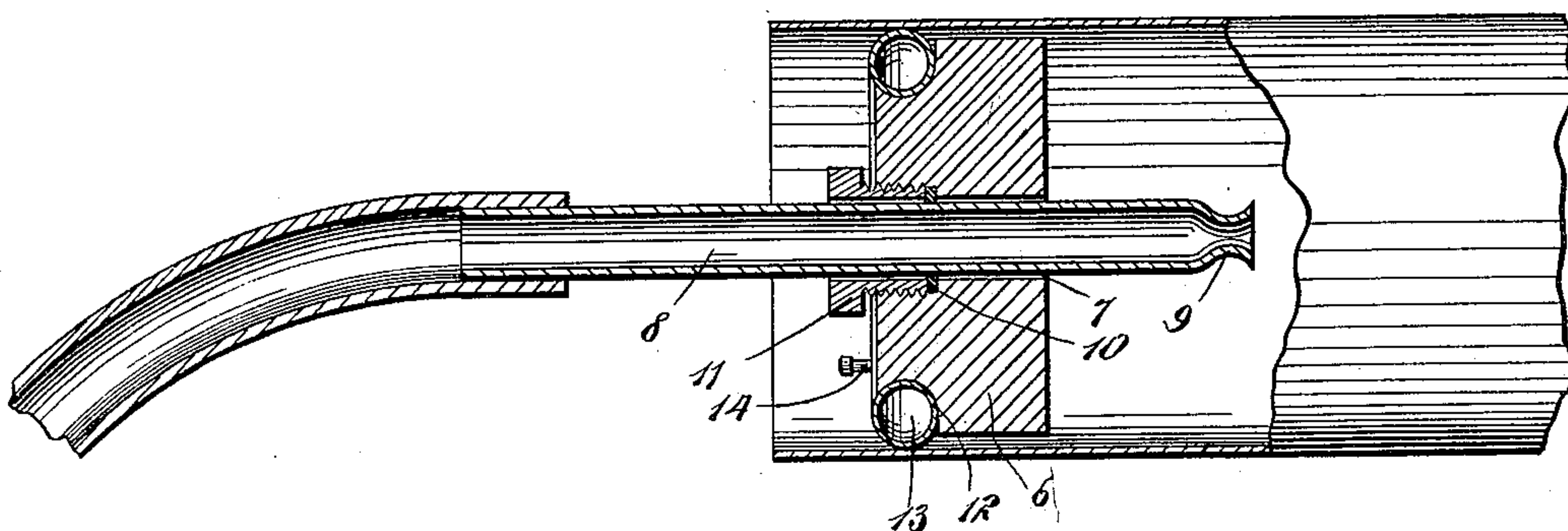


Fig. 4

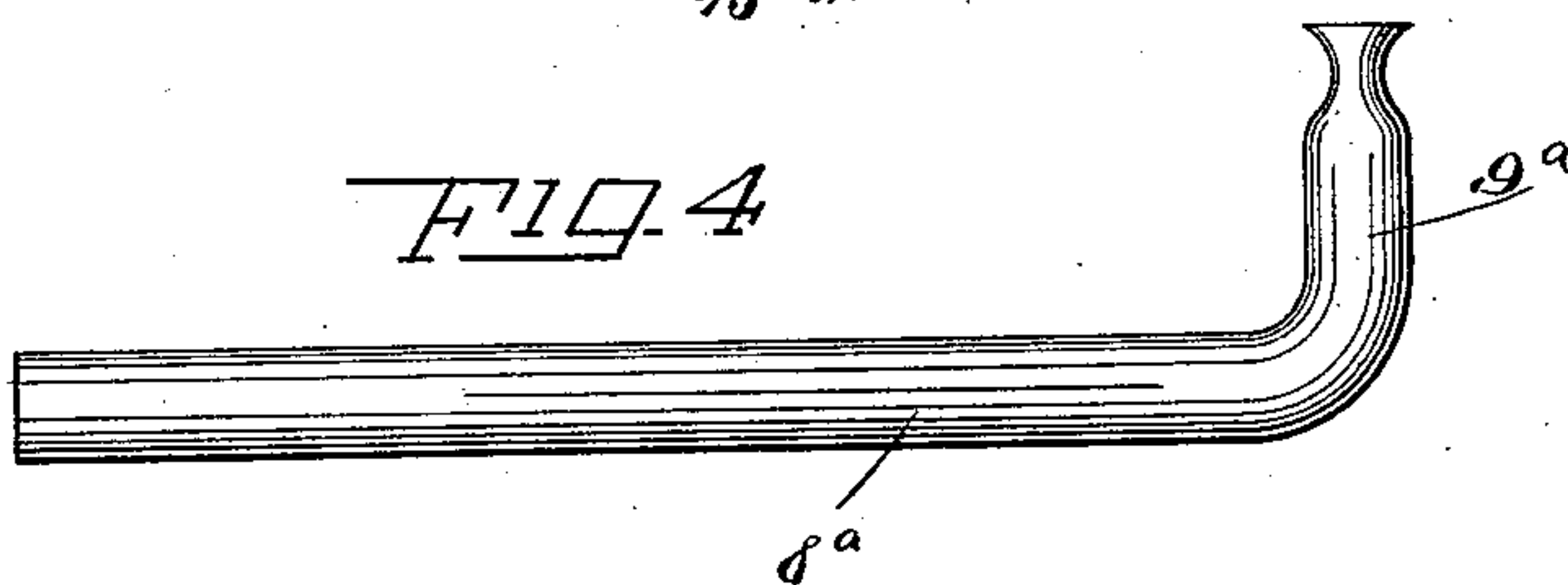
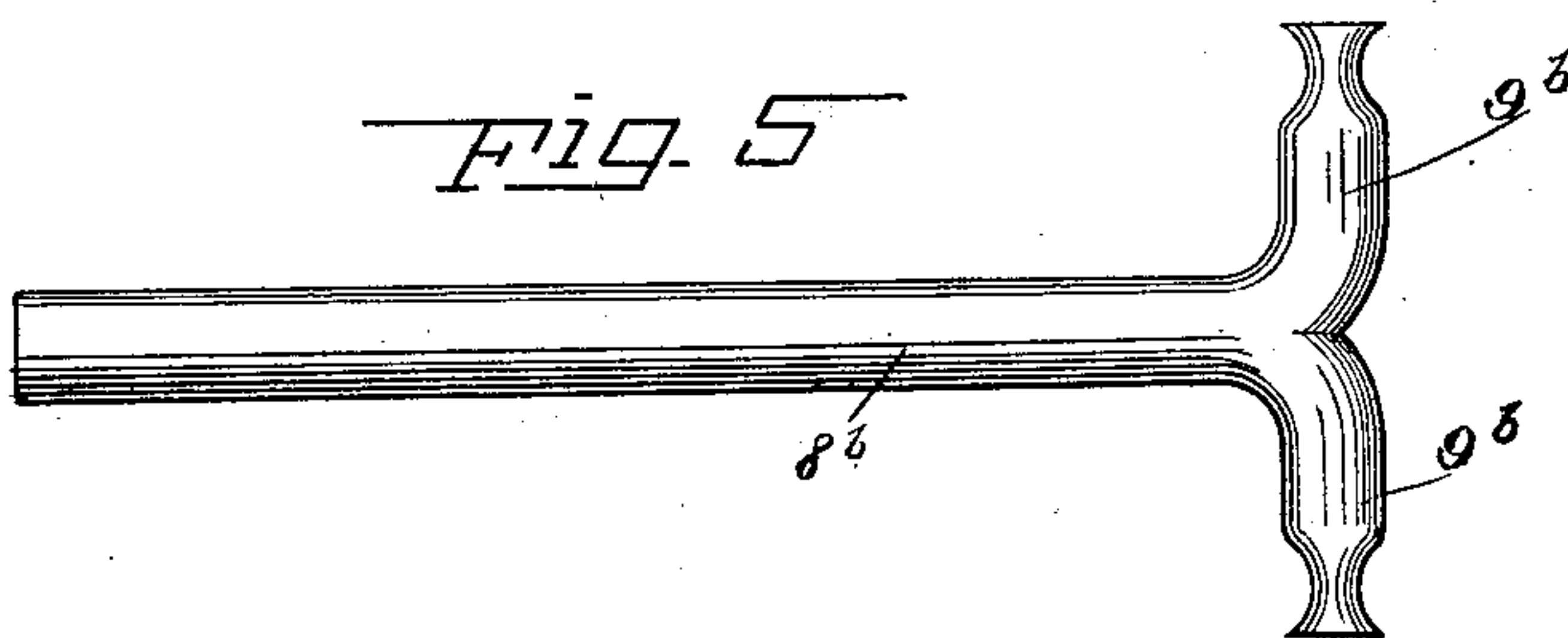


Fig. 5



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CHARLES H. CARRICO, OF SALT LAKE CITY, UTAH.

FLUE-CLEANER.

SPECIFICATION forming part of Letters Patent No. 607,340, dated July 12, 1898.

Application filed March 7, 1898. Serial No. 672,895. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. CARRICO, of Salt Lake City, in the county of Salt Lake and State of Utah, have invented a new and Improved Flue-Cleaner, of which the following is a full, clear, and exact description.

This invention is an apparatus of peculiar construction for blowing out chimneys, smoke-stacks, and other flues; and it relates to that class of devices in which a steam-pipe is passed into the flue and held by a stopper or dam, which closes the flue or an orifice therein to prevent the reaction of the steam, and causes the steam to pass out the mouth of the flue and carry with it the soot and other foreign matter.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the invention. Fig. 2 is an end elevation thereof. Fig. 3 is a sectional view showing the invention in use, and Figs. 4 and 5 are views illustrating modified forms of the steam-pipe.

The stopper or dam is adapted to be placed either in one end of a flue or pipe, as shown in Fig. 3, or to be placed in an orifice in the side of the pipe. In either event the stopper closes hermetically the end of the pipe or the orifice. The stopper comprises a body portion 6, constructed, preferably, of hard wood and having a central passage 7 formed therein, through which the metallic pipe 8 for carrying the steam is passed. The inner or discharge end of the pipe 8 is provided with a nozzle 9 for concentrating the steam-jet as it is discharged. The pipe 8 is held rigidly in place, and the space between the pipe and the walls of the passage 7 is closed by a rubber gasket 10, which encircles the pipe 8 and bears against a shoulder formed in the passage 7. The gasket 10 is wedged firmly in place against said shoulder and against the pipe 8 by means of a screw-plug 11, which is hollow to encircle the tube 8 and which projects into the body portion 6 to engage the gasket, as shown. The body portion 6 is pro-

vided near its inner end with an annular peripheral groove 12, wherein is fitted an elastic expansible tube 13, provided with a suitable valve 14, by which air may be introduced into the tube 13 for the purpose of expanding the same. The tube 13, being expanded, bears against the inner walls of the pipe or of the orifice in the side thereof, so as to hermetically seal the opening.

In using the invention the pipe 8 is connected with a source of steam and the stopper is introduced into the flue. The tube 13 should now be expanded by means of a suitable pump, so that the tube is pressed against the flue to effect a hermetic closure of the end thereof in which the stopper is placed. A jet of steam passing through the pipe 8 and injected into the flue will blow the flue out thoroughly in the manner commonly known. The action of the expansive tube 13 may be made so forcible as to hold the stopper in place with all security and avoid the possibility of its blowing out by a reaction of the steam-pressure against it.

The straight pipe or tube 8 (shown in Figs. 1, 2, and 3) is adapted for use with the device when placed in the end of a flue or pipe, as illustrated in Fig. 3. Should the dam or stopper be placed in an opening in the side of a flue, the steam-pipe must be turned to direct the jet laterally in the proper direction. Fig. 4 shows a pipe or tube 8^a, with its terminal 9^a turned upward, so that the steam will be thrown up from the tube. The pipe 8^a may of course be turned with the end 9^a turned downward, if desired. Fig. 5 shows a pipe or tube 8^b with two oppositely-disposed terminals 9^b, which will throw the steam oppositely in two lateral jets. The form of the steam-pipe may be further varied, if desired, so that the device may be adapted to any construction of flue.

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

1. A flue-cleaner, having a dam or stopper provided with an expansible tube running around its periphery, and capable of holding the dam or stopper in place and of effecting hermetic connection between the dam or stopper and the opening in which it is placed.

2. A flue-cleaner, having a dam or stopper comprising a circular body portion provided with a peripheral groove, and an expansible endless tube seated in said groove and projecting beyond the periphery of the body portion.

3. In a flue-cleaner, the combination of a dam or stopper comprising a circular body portion and also comprising an expansible endless tube encircling the body portion, a steam-pipe projecting centrally through the body portion, a gasket encircling the steam-pipe and bearing against a shoulder formed on the body portion, and a hollow screw-plug encircling the steam-pipe and pressing the gasket, to hold the steam-pipe in place and

to effect a hermetic connection between the steam-pipe and the body portion.

4. In a flue-cleaner, the combination of a dam or stopper comprising a body portion with a passage run therethrough, a steam-pipe extending through the passage, the body portion having a shoulder formed in the walls of the passage, a gasket encircling the steam-pipe and bearing against the shoulder, and a hollow screw-plug encircling the steam-pipe and pressing the gasket against the shoulder and against the steam-pipe.

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Witnesses:

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