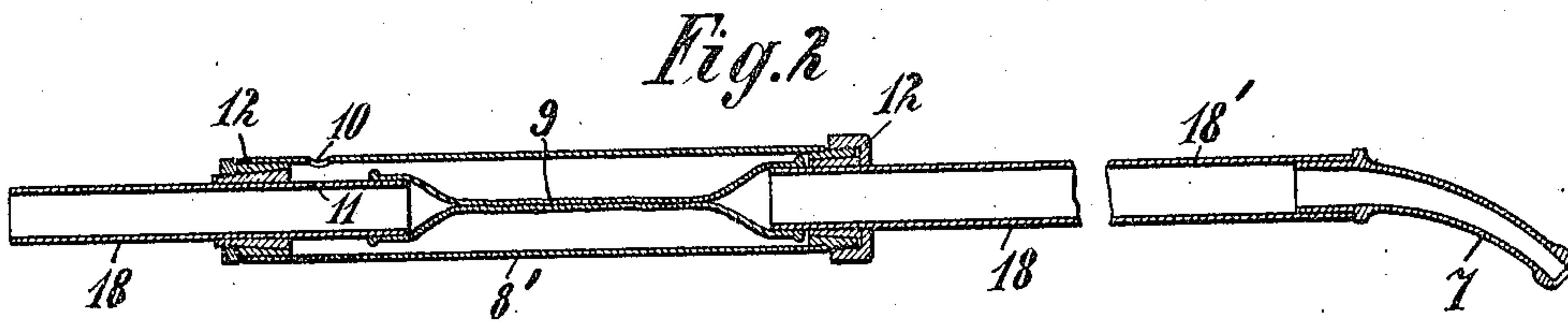
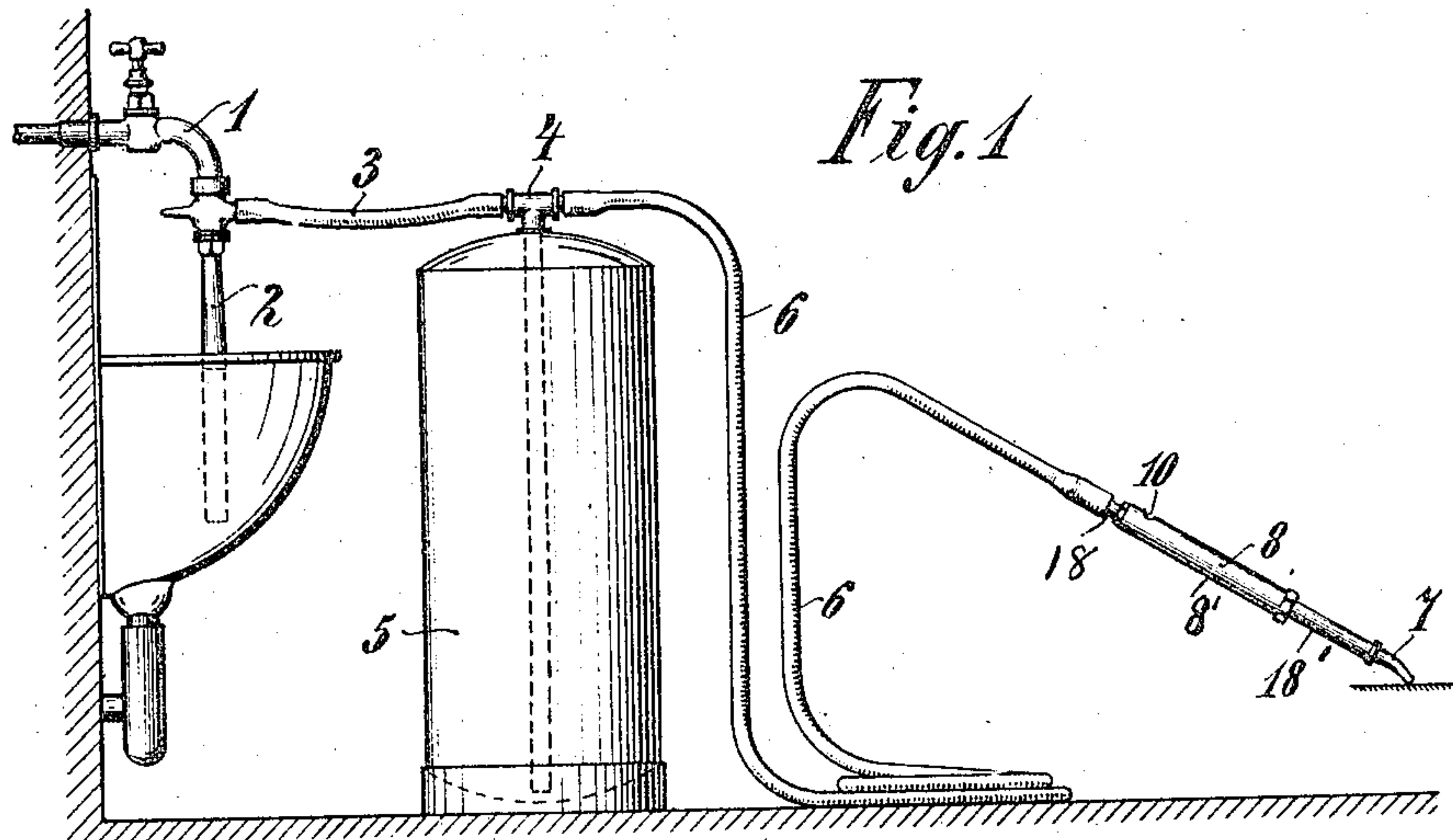


No. 844,410.

PATENTED FEB. 19, 1907.

P. SCHAUER.
PNEUMATIC CLEANER.
APPLICATION FILED MAY 7, 1906.



Witnesses:

Superintendent
Max Kinkel

Inventor:
Paul Schauer
by Eustace W. Neomeier
Attorney

UNITED STATES PATENT OFFICE.

PAUL SCHAUER, OF BERLIN, GERMANY.

PNEUMATIC CLEANER.

No. 844,410.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed May 7, 1906. Serial No. 315,658.

To all whom it may concern:

Be it known that I, PAUL SCHAUER, a citizen of the German Empire, and resident of Berlin, Germany, have invented certain new and Improved Pneumatic Cleaners, of which the following is a full, clear, and exact description.

The present invention relates to devices for cleaning carpets and other articles by means of air-suction, and more particularly to the valves for controlling the action of the device, and consists of the details of construction hereinafter described, and particularly pointed out in the claims.

In order to render the present specification easily intelligible, reference is had to the accompanying drawings, in which similar numerals of reference denote similar parts throughout the several views.

Figure 1 is an elevation showing the arrangement of the apparatus. Fig. 2 is a longitudinal section through a valve arranged in the suction-pipe, not far from the suction-nozzle and drawn on an enlarged scale.

To the top 1 of the ordinary water system of the dwelling is screwed or otherwise attached an ejector 2, through which when the tap is open the water flows and draws the air along the pipe 3 and through the T-piece 4 from the receptacle 5 and also from the pipe 6, which may be of any suitable length and is provided at its end with the dust-extracting nozzle 7 and intermediate valve 8, hereinafter more particularly described. To the flexible pipe 6 is connected a metal tube 18, while the nozzle 7 is carried by a similar metal tube 18', these two tubes being rigidly connected by a tubular metallic sleeve 8', which has its ends rigidly connected to the tubes 18 and 18' by coupling devices 12, which form air-tight joints. The tubes 18 and 18' project within the tube 8', and their ends are connected by a collapsible tubular member 9, which is capable of being collapsed to close the passage therethrough. The tubular member 8' is provided with an aperture 10, which is designed to be closed when desired by the application of the thumb of the operator.

From the foregoing description it is thought the operation of the device will be clear; but it may be briefly stated as follows: The action of the water-tap produces a vacuum in the tank 5 and pipe 6, and as long as the open-

ing 10 is closed by the pressure of the thumb air will be drawn in through the cleaning-nozzle 7. If it be desired to temporarily suspend the passage of air through the nozzle, the opening 10 is uncovered, which permits air at atmospheric pressure to pass within the tube 8', and this pressing on the collapsible tube 9, combined with the partial vacuum or suction therein, collapses said tube to completely close the same to the passage of air. During this time of course the entire suction effect of the tap will be exerted to increase the vacuum in the tank 5.

Instead of operating the valve 8 by the thumb or finger some other suitable means may be employed, which when the valve is not operated are kept off from the orifice 10.

I provide an orifice at 11, leading from the space surrounding the collapsible tube and within the non-collapsible casing, so that the air confined in this space may pass out there-through and into the suction-pipe when the thumb or finger is placed over the opening 10 and it is desired to have the collapsible tube open for the operation of the apparatus.

I claim as my invention—

1. A controlling-valve for the suction-pipes of pneumatic cleaners and the like comprising a collapsible tube forming a part of said suction-pipe, a non-collapsible casing surrounding said collapsible tube and having an air-passage adapted to be closed and opened as desired with means of escape for the air from within said non-collapsible casing when said air-passage is closed, substantially as described.

2. A controlling-valve for the suction-pipes of pneumatic cleaners and the like comprising a rigid tubular member having an air-passage to be opened and closed at will, rigid suction-tube sections projecting into the ends of said tubular member, and a collapsible tube within the rigid tube and connecting the ends of said suction-tube sections with means of escape for the air from within said non-collapsible casing when said air-passage is closed, substantially as described.

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

PAUL SCHAUER.

Witnesses:

HENRY HASPER,
WOLDEMAR HAUPT.