C. H. ROTH.

DOMESTIC CLEANING APPLIANCE.

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1,212,815. Patented Jan. 16, 1917.

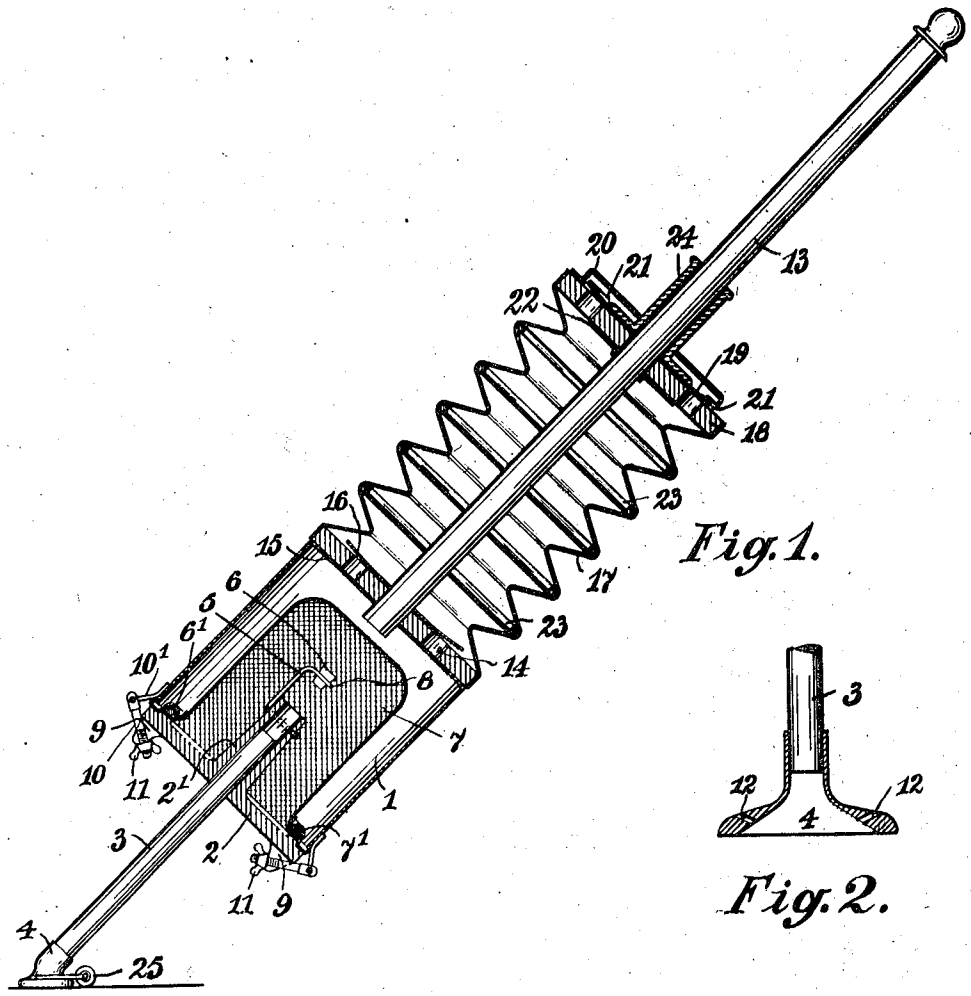


Fig. 1.

Fig. 2.

Witnesses

Grace P. Brereton

B. F. Thompson

Inventor

Carl H. Roth

By Shurtleff & Mason

Attorneys.

UNITED STATES PATENT OFFICE.

CARL HERRMANN ROTH, OF SOUTHPORT, ENGLAND.

DOMESTIC CLEANING APPLIANCE.

1,212,815. Specification of Letters Patent. Patented Jan. 16, 1917.

Application filed June 29, 1914. Serial No. 847,948.

To all whom it may concern:

Be it known that I, CARL HERRMANN ROTH, a subject of the King of Great Britain, residing at Southport, in the county of Lancaster, in the Kingdom of England, have invented certain new and useful Improvements in Domestic Cleaning Appliances, of which the following is a specification.

This invention relates to cleaning devices, applicable for domestic and other like purposes, and has for its object to provide means whereby floors, walls, carpets, pictures and the like may be cleaned or washed with a minimum of labor, and which at the same time forms a compact article, light in construction, easy in manipulation and adapted to various kinds of work.

In the drawings Figure 1 is a vertical section of my arrangement as applied to suction cleaning devices, and Fig. 2, a section of the nozzle.

In these 1 is a cylinder open at one end and adapted to be closed by a lid or cover 2, said lid or cover 2 having a hole or aperture in the center thereof, in which a tube or rod 3 is inserted. This rod 3 is provided at one end thereof with a nozzle 4, which slides over the surface of the carpet when in use, the other end of said nozzle 4 being provided with a holder 5 to which is attached a disinfectant 6 either in solid or pulverulent form and suspended inside a bag 7 of canvas or other suitable material, by means of a clip 8 on the boss 2′ of the cover 2. To secure the cover 2 in position and close the mouth of said bag 7 lugs 9 are arranged on the outside of the cover 2, the lugs being adapted to receive a bolt 10 which is pivoted on a wire or the like fixed to the casing 1, and nuts 11 are also provided to screw the cover down forcing the wired edge 7′ of the bag 7 into the groove 6′ of the casing so as to make the casing 1 perfectly airtight. The nozzle or mouthpiece 4 is provided with holes or slots 12 on its upper side, preferably arranged in a slanting position, whereby the air is brought in at an angle and strikes the floor covering causing the dust to rise. The dust is then drawn into the tube 3 and finally into the bag 7. The other end of the cylinder 1 is provided with a central aperture through which a handle or rod 13 may pass. Holes or apertures 14 are provided in the end of the cylinder 1. The holes are covered on the inside of the cylinder by a layer of gauze 15 or other material to prevent any dust entering the bellows 17, the opposite side of the holes being covered by a flap valve 16. Attached to the cylinder is a bellows or the like 17 preferably made of some strong flexible material in the inside of which are provided rings of metal 23. The rings 23 are or may be sewn or otherwise secured in position in the bellows 17. The upper end of this bellows is also provided with a disk 18 having apertures therein, said apertures being covered by flap valves 19. Projecting somewhat above the valves 19, is a casing or protecting covering 20 having holes or apertures 21 at the side thereof, through which the exhaust air passes. Surrounding the said handle 13 on the inside of the bellows a protective covering of gauze or other suitable material 22 is arranged, whereby dust or the like is prevented from getting in between the hand grip 24 and the handle 13. If the handle 13 is a hollow tube a suitable knob or other convenient means is provided to prevent any dust escaping and also as a means for holding and guiding the cleaner. One or more small rollers 25 are secured to the nozzle 4 by means of which the movement of the nozzle 4 is facilitated.

The mode of action is as follows:—The machine is held in one hand by the handle 24 and in the other by the handle 13, the bellows 17 are worked backward and forward by means of the handle 13, the hand grip 24 being held stationary during such working. The nozzle 4 passes over the carpet backward and forward drawing the dust from the floor or the carpet through the nozzle into the bag 7, being retained in the bag until the latter is emptied. The valves 16 and 21 prevent the dust from passing out of the machine. Instead of working the machine backward and forward and manipulating both the handle 24 and 13 together, the handle 13 may be held stationary, and the handle 24 alone operated, the operation being exactly the same in either case, except that by such method of using only a very small area can be gone over at a time. Where carpets or rugs are very thick and it is difficult to cause a suction the holes or slots 12 are useful, as by means of such slots, the air is sucked in slantwise and strikes the carpet, thereby raising the dust and drawing the dust up the tube 3 into the bag 7. To empty the contents of the bag 7 the nuts 11 are unscrewed and the bolts withdrawn from the lugs 10, the cover 22 then being

taken off after which the bag can be removed and either shaken, beaten or brushed. The bag 7 can then be replaced and the cover plate 2 secured in position when the machine is ready for further use. A disinfectant 6 is provided in the bag 7 to disinfect the dust as it is sucked into the bag 7, thereby minimizing any danger of infection and also purifying the exhaust air.

I declare that what I claim is:—

A dust receptacle, an air inlet tube projecting thereinto, and an outlet therefrom, a bracket mounted on said inlet tube within said receptacle and having a portion opposite the end of the tube and adjacent thereto, and a disinfectant supported in said portion of the bracket.

In witness whereof, I have hereunto signed my name this 19th day of June, 1914, in the presence of two subscribing witnesses.

CARL HERRMANN ROTH.

Witnesses:

ERNALD SIMPSON MOSELEY,

MALCOLM SMETHURST.