

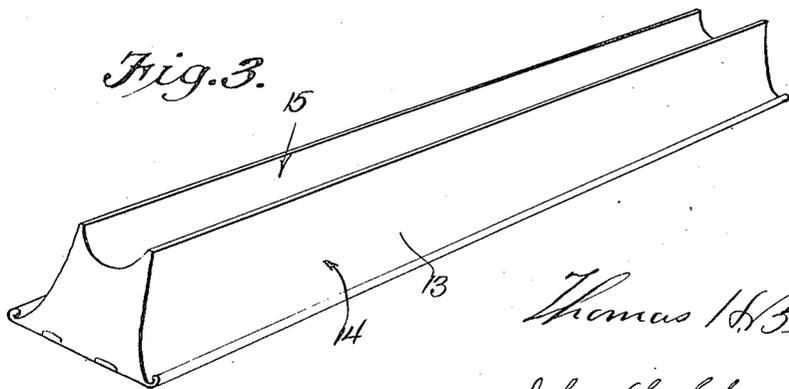
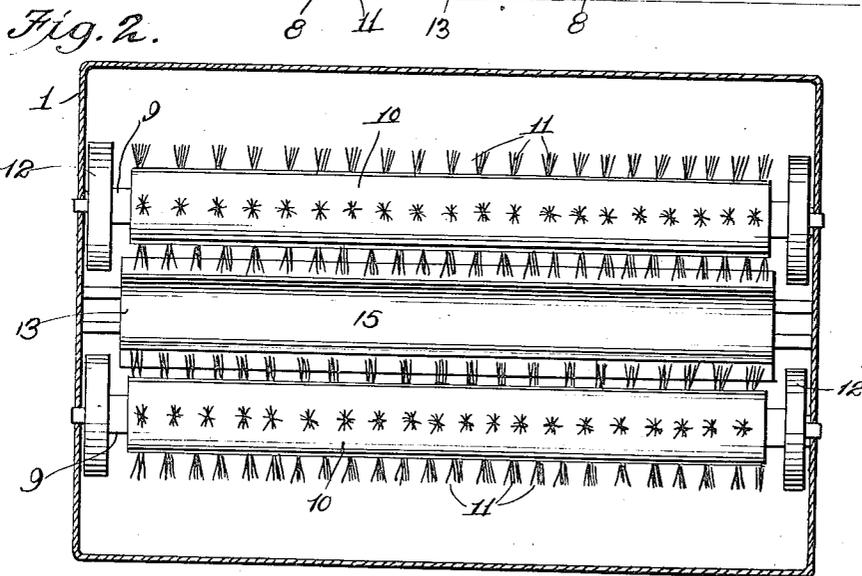
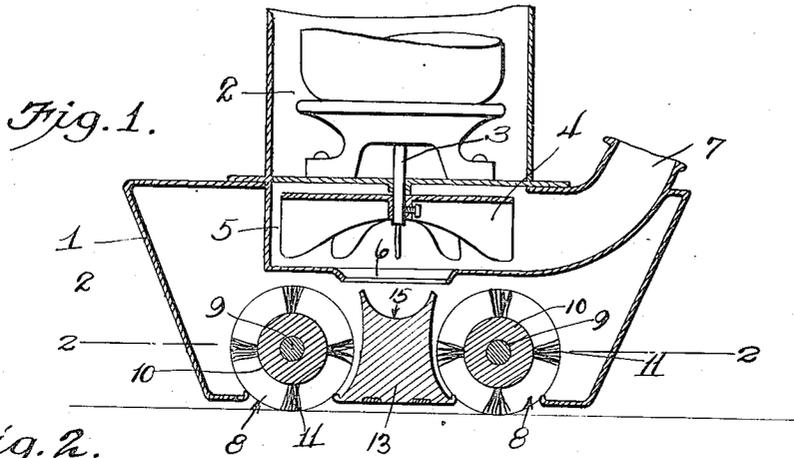
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T. H. BELL ET AL

SWEEPER

Filed March 24 1921



Inventor

Thomas H. Bell.

John G. Schaefer.

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# UNITED STATES PATENT OFFICE.

THOMAS H. BELL AND JOHN G. SCHOENLEBER, OF NEW YORK, N. Y., ASSIGNORS TO  
BELL SCHOENLEBER MANUFACTURING CO. INC., A CORPORATION OF NEW YORK.

SWEeper.

Application filed March 24, 1921. Serial No. 455,349.

*To all whom it may concern:*

Be it known that we, THOMAS H. BELL and JOHN G. SCHOENLEBER, citizens of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Sweepers, of which the following is a specification.

This invention relates to floor and carpet sweepers, and more particularly to an improved structure involving a combination of floor engaging rollers and brushes adapted for co-operation with a suction fan whereby an effective brushing and sweeping of the floor or carpet will be accomplished.

Another object of the invention is to provide an improved sweeping apparatus of this character which will be designed to be readily operated in close corners and close to the side walls of a room.

A still further object of the invention is to provide an improved sweeping device of this character which will contain a central removable dust collector arranged between the sweeping brushes in a manner that will cause a more effective operation of the apparatus.

Other objects of the invention will appear upon consideration of the following detail description and accompanying drawings, wherein:—

Figure 1 is a transverse section taken through the device showing our improvement applied to the sweeper.

Figure 2 is a cross section taken approximately on the line 2—2 of Fig. 1,

Figure 3 is a detail perspective view of the dust collecting element.

Referring to the drawing by numerals, the housing 1 may be of any preferred construction and is provided on its top with a chamber 2 within which a motor may be mounted for connection to a fan shaft 3 which has mounted thereon a suction fan 4 operable in a horizontal position whereby the blades will tend to draw the dust and dirt upwardly into the fan chamber 5 through an opening 6 in the lower wall of the fan chamber as shown to advantage in Fig. 1. A spout or nozzle 7 projects from the fan chamber and may be connected in any convenient manner to a bag or receptacle for receiving the dust and dirt.

The bottom wall of the housing 1 is provided with two longitudinal openings 8 and

above these openings horizontal shafts 9 are provided upon which brush rollers 10 are arranged. The brush rollers 10 are provided with the bristles 11 and each end of each shaft 9 is provided with traction rollers 12 which are adapted to engage the floor so that rotary motion will be imparted to the brush rollers when the traction rollers are moved across the surface of the floor.

Disposed centrally within the housing 1 and located between the brushes is a dust collector shown in detail in Fig. 3 and indicated at 13. This is a removable element which is mounted in the housing 1 and projects from one end to the other thereof and has its side walls curved as indicated at 14, whereby the curvature will conform to the path of the bristles 11 of the brush element when the brushes are in operation. The top of the dust collector is provided with a longitudinal channel or groove 15 which serves as a receptacle for a quantity of the dust and dirt while the device is in operation. This receptacle 15 is located directly below the opening 6 and below the fan in the fan chamber so that the tendency of the fan will be to draw the dust upwardly through the opening 6 but will permit a quantity of dirt to collect in the longitudinal channel 15.

In operation, the device will be moved across the surface of the floor or carpet and the traction rollers will, by virtue of their rotary movement, impart rotary movement to the brush rollers whereby the bristles will engage the surface of the floor to thoroughly sweep and clean the same. The dust will be deposited in the channel 15 of the dust collector and the suction fan will be operated by the motor to draw the dust and eject it through the nozzle 7 where it will be received in a bag or receptacle as is well known in the art.

Minor changes may be made in the details of construction without departing from the spirit of the invention or the scope of the claims hereunto appended.

What is claimed is:—

1. In sweeping apparatus of the class described, the combination of a housing, spaced parallel brush rollers in said housing, a dust collector removably mounted between the brush rollers having its opposite sides concaved, said dust collector having on its top a longitudinal channel to act as a dust receptacle, and a suction fan arranged above the

dust collector to withdraw the dust from said receptacle.

2. In a sweeping apparatus of the character described, the combination of a housing, spaced parallel brush rollers in said housing, a chamber positioned on said housing, an electric motor in said chamber, said housing having a depression formed in the top thereof, a fan in said depression to be operated by said electric motor in said chamber, a dust collector removably mounted between the brush rollers, the side walls of said dust collector being concaved and having a longitu-

dinal channel formed on its top surface for receiving the dust, and said housing being provided with an opening for removing the dust from the longitudinal channel and dispensing same from the housing under the influence of the electric operated fan.

In testimony whereof, we have affixed our signatures in the presence of two witnesses.

THOMAS H. BELL.

JOHN G. SCHOENLEBER.

Witnesses:

FRANK J. VAN PELT,  
MARGARET CHAPMAN.