

March 7, 1939.

J. H. SMITH

2,149,556

ELECTROSTATIC CLEANER

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Fig. 1.

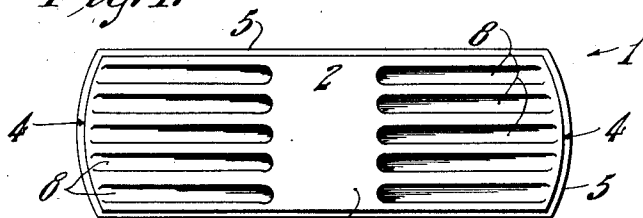


Fig. 2.

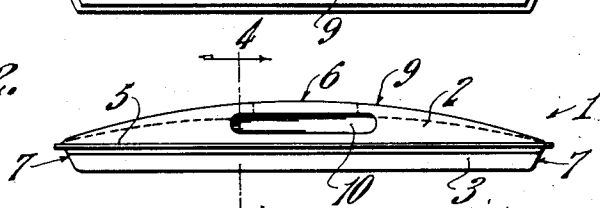


Fig. 3.

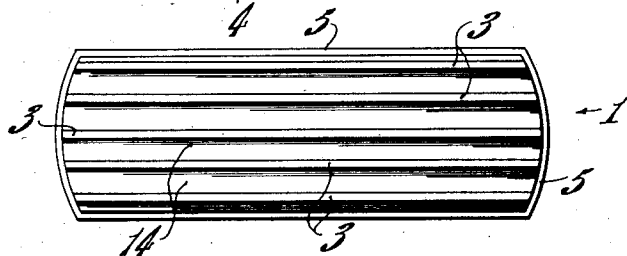


Fig. 4.

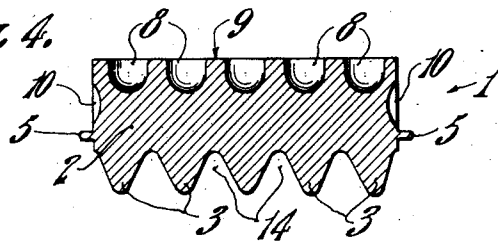
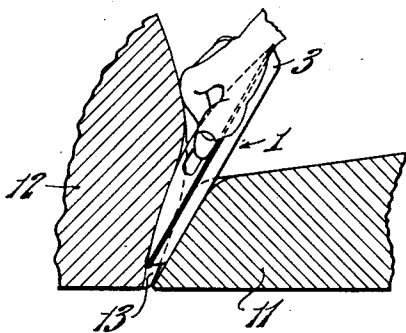


Fig. 5.



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ELECTROSTATIC CLEANER

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Application November 9, 1936, Serial No. 109,919

1 Claim. (Cl. 15—104)

My invention relates to improvements in electrostatic cleaners, and is particularly pertinent to that type of cleaner intended for use in the cleaning of fabrics, upholstery, etc.

5 An object of my invention is to provide an electrostatic cleaner adapted for use in the cleaning of ordinarily inaccessible surfaces, such as the opposed fabric surfaces in the crevice at the juncture of a seat and back construction, as in a chair, divan, or motor vehicle. In upholstered 10 furniture or automobile seats, a deep crevice is formed at the juncture of horizontal and vertical surfaces which is rarely cleaned of its accumulated dust because of the difficulty and lack of 15 facilities for accomplishing the work efficiently. Consequently, these crevices provide ideal conditions for the propagation of moths which are injurious to the fabrics in the upholstery. It is an object of this invention to provide an instrument by means of which the opposed surfaces of 20 fabric in these locations may be quickly, easily, and efficiently cleaned, at the same time and in the same operation.

25 A further object of this invention is to provide a cleaner having opposed working surfaces, whereby either surface may be used separately, or both surfaces may be used at the same time.

These, and other objects and advantages of this invention will be more completely disclosed 30 and described in the following specification, the accompanying drawing, and the appended claim.

35 Broadly, this invention comprises an approximately rectangular body, relatively longer than its width, tapering in thickness from the center toward each end, with a plurality of parallel longitudinal fins projecting from its under surface and with a plurality of parallel longitudinal 40 grooves formed in its upper surface.

A preferred embodiment of this invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a top plan view of the cleaner.

Fig. 2 is a side elevational view.

45 Fig. 3 is an underside plan view.

Fig. 4 is a cross sectional view on the line 4—4 of Fig. 2 and

Fig. 5 is a diagrammatic view illustrating a use of the cleaner.

50 Referring now to the drawing in detail, in which like numerals refer to like parts throughout:

The cleaner 1 is made of any suitable material which will readily collect static electricity when subjected to friction, and is a unitary

structure comprising a body portion 2 formed with a plurality of downwardly projecting parallel longitudinal ribs 3. The portion 2 is preferably rectangular in shape, relatively longer than its width, formed preferably with arcuate ends 4, and provided with a thin flange 5. The portion of the body 2 above the flange 5 is crowned to provide a taper from the thickest part at the center 6 downwardly toward each end 4, as indicated in Fig. 2. The ends 7 of the ribs 3 are also tapered, as indicated in Fig. 2. This tapering construction provides a relatively thin, wedge-like nose at each end 4, which may be easily inserted in a crevice, as indicated in Fig. 5. The top of the body portion 2 is formed with a plurality of parallel, longitudinal grooves 8 which are recessed inwardly from the top surface 9. The grooves 8 are interrupted at the center of the body portion 2 to provide a smooth, unbroken surface as a pressure area for the finger tips of a person using the cleaner. Finger grooves 10 are formed in the sides of the body 2 to assist in gripping the cleaner.

25 In cleaning a confined space, such as the juncture of two articles of upholstery 11 and 12, as indicated in Fig. 5, the cleaner 1 is projected or pushed into the crevice 13. Transverse movement of the cleaner 1 in the crevice 13 causes static electricity to accumulate on the surfaces of the cleaner. Dust and foreign matter in the fabric is attracted to the cleaner and collects in the grooves 8 and spaces 14 between the ribs 3. After the removal of the cleaner 1, the grooves 8 and spaces 14 may be cleared by wiping with an oiled cloth or brush.

35 It will be noted, in Fig. 5, that the surfaces of the members 11 and 12 are simultaneously cleaned by engagement of the cleaner 1, with both surfaces at the same time.

What I claim is:

40 An electrostatic cleaner comprising a substantially oblong body formed with arcuate ends and tapering in thickness from the center to each end and formed with a plurality of parallel longitudinal fins projecting from its under surface, 45 each of said fins being formed with downwardly converging ends, said body being also formed with a plurality of parallel longitudinal grooves recessed into its upper surface, said grooves being interrupted at the center of said body, to provide 50 a smooth pressure area for the finger tips of an operator.

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