March 25, 1930. I. H. SPENCER 1,752,034

PNEUMATIC CLEANING TOOL

Filed Aug. 17, 1926

Fig. 1.

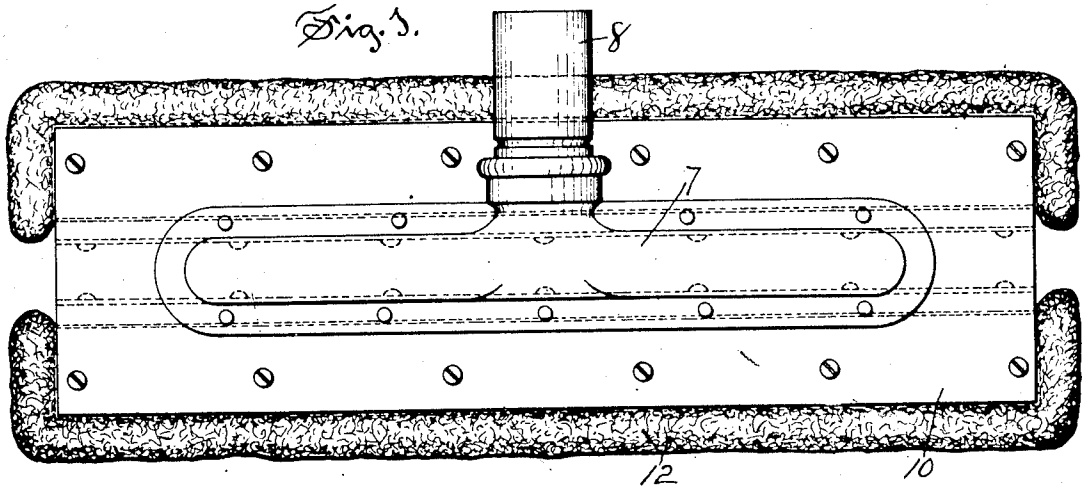


Fig. 2.

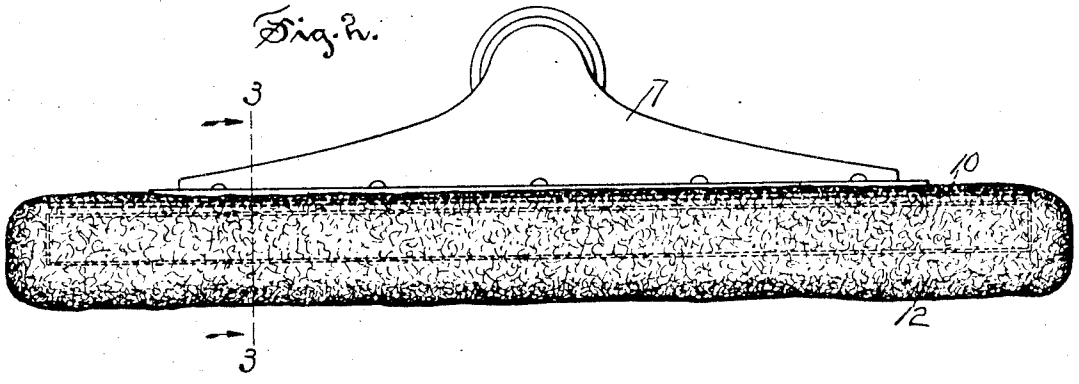
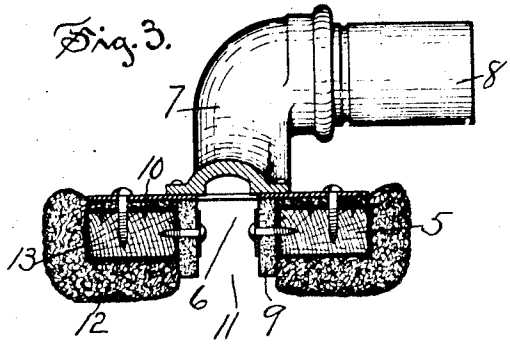


Fig. 3.



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UNITED STATES PATENT OFFICE

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PNEUMATIC CLEANING TOOL

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My invention relates to the class of cleaning tools employed for collecting dirt and dust by means of a current of air traveling inward at the mouth of the tool, and an object of my invention, among others, is to provide a tool of this class that may at the same time be employed for polishing purposes and that will perform the work required of it in a thorough and effective manner.

One form of a tool embodying my invention and in the construction and use of which the objects herein set out, as well as others, may be attained, is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a tool embodying my invention.

Figure 2 is a front view of the same.

Figure 3 is a view in cross section on a plane denoted by the dotted line 3—3 of Figure 2.

In the treatment of floors and similar surfaces at the present time to keep them in a polished and attractive condition, and especially to so treat the surface of linoleum employed as a floor covering, such surface may have certain ingredients applied to give it or them a polish and highly finished condition, and in order to maintain this condition, and whether or not such surfaces are preliminarily treated with any preparation, it is common practice to frequently subject such surfaces to a rubbing or polishing operation, usually by means of a tool having its polishing surface covered with felt or a similar substance, and this is particularly true of linoleum, the more frequent the polishing operation the better the appearance of its surface.

I have, therefore, provided a tool by the use of which this polishing operation, as a separate operation, may be dispensed with, my improved tool enabling such polishing operation to be performed at the same time and contemporaneous with a cleaning operation. To effect this purpose I construct my improved cleaning tool with a polishing element so made that it will effectually impart a polishing action to all parts of a surface, whether such surface be perfectly flat or whether it be more or less uneven or rolling, such improved tool comprising a body 5 that may be formed of wood, metal or other suitable material, this body being preferably of rectangular, oblong shape with a passage 6 extending lengthwise therealong and having an opening at about its lengthwise center into a chamber in a head 7, which chamber opens into a passage in a nipple 8 that is adapted to be attached to a handle, that in turn is adapted to be attached to a hose for the conveyance of air currents to a suitable receptacle into which the dirt and dust are deposited in a manner that will be readily understood by those skilled in the art and for which reason a more specific illustration and description of this part of the tool are omitted herein.

The walls of the passage 6 may be lined with strips 9 of felt, and a plate 10 comprising the upper surface of the tool to which the head 7 is secured in any suitable manner as by rivets, said plate in the structure herein shown, securing two strips 5, comprising the body, in fixed relation.

Prior to my invention, cleaning tools of this type have been provided at their edges surrounding the mouth 11 with felt, but I have found that a tool thus constructed will not make contact with all parts of a surface if such surface be at all uneven, this owing to the comparative rigidity of the felt. I have also found that if a flexible material be employed as a substitute for, or in connection with, such felt the polishing face of the tool will make contact with all parts of an uneven surface. The fleece side of lambs' or sheep's wool is composed of fibers disposed generally crosswise of the face of the skin, and they will, therefore, be disposed crosswise of any surface to which the hide may be applied. For this reason I have found that such material is particularly good as a polishing material to effect my purpose. I therefore attach to the polishing face of the tool a piece or pieces 12 of lambs' or sheep's wool as shown in Figure 3 of the drawings, the face of this material extending below the edges of the strips 9 at the mouth of the tool. The sensitiveness of the fibers of this material in the matter of flexibility not only per-

mits, but actually effects the contact of the wool with all parts of a surface being cleaned and polished and no parts are, therefore, left untouched and unpolished.

A material feature of my improved tool resides in the employment of the wool faced polishing surface in connection with the strips 9 of felt. It often happens that certain parts of a surface will require more rubbing in order to remove dull spots than will be required by other parts of the surface to be polished, and such a rubbing as could with difficulty to obtained with the wool faced polishing part of the tool. When such a condition arises by exerting a little extra pressure on the tool, the wool face will be depressed sufficiently to permit the edges of the felt strips 9 to make contact with the surface being polished and owing to the greater stiffness of this felt dull surfaces may be readily removed and given the required degree of polish without resort to a different tool, and after such dull surfaces has been removed by the application of extra pressure, such pressure may be released and the polishing operation continued.

The lambs' or sheep's wool may be secured in place in any suitable manner, as herein shown the skin 13 being wrapped around the strips 5, to which it is secured, and underneath the plate 10 by means of which it may be held on its upper surface.

In accordance with the provisions of the patent statutes I have described the principles of operation of my invention, together with the device which I now consider to represent the best embodiment thereof; but I desire to have it understood that the device shown is only illustrative and that the invention may be carried out by other means and applied to uses other than those above set out.

I claim—

1. A pneumatic cleaning and polishing tool including a body having an air passage therethrough and means for attachment of a air conducting element thereto and a polishing face composed of a comparatively firm polishing material and a comparatively flexible material, the latter comprising fibers extending in various directions across lines perpendicular to the plane of the face of the tool.

2. A pneumatic cleaning and polishing tool including a body having an air passage therethrough and means for attachment of an air conducting element thereto, and a polishing face composed of a comparatively firm polishing material and sheep's wool surrounding said firm polishing material and projecting below the latter.

3. A pneumatic cleaning and polishing tool including a body having an air passage therethrough and means for attachment of an air conducting element thereto, and a polishing face composed of felt and sheep's wool surrounding the felt and projecting below the latter.

4. A pneumatic cleaning and polishing tool including a body having an air passage therethrough and comprising a plate with blocks of non-pliable material secured to the under side of the plate and spaced apart, strips of flexible material secured to the lateral surfaces of said blocks and projecting below the lower surfaces thereof, and a polishing face comprised of pieces of sheep's wool secured to the outer and under sides of said blocks and projecting below the lower edges of said strips.

5. A pneumatic cleaning and polishing tool including a body having an air passage therethrough and means for attachment of an air conducting element thereto, an elongated plate secured to said body, a pair of blocks secured to the under surface of the plate on opposite sides of the air passage through the body, a piece sheep's wool encircling each block and having its fibers exposed on the outer faces of its respective block and having uncovered skin portions arranged between the block and the plate to secure the said piece in place, and strips of felt secured to the adjacent faces of the blocks, the said strips of felt being arranged to project beyond the lower surfaces of the blocks and the fibers of the pieces of wool being of sufficient length to project beyond the lower surfaces of the block to a greater extent than said strips of felt.

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