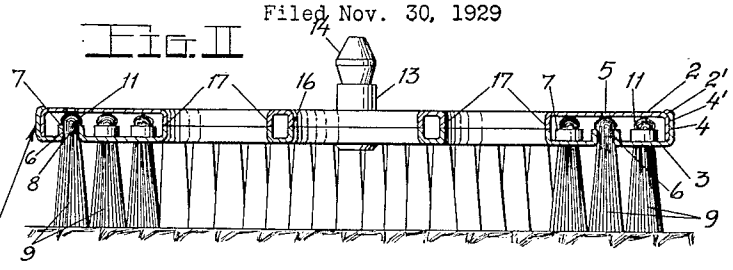
Jan. 3, 1933. T. E. D. BILDE 1,892,926

BRUSH MEMBER

Filed Nov. 30, 1929

Fig. II



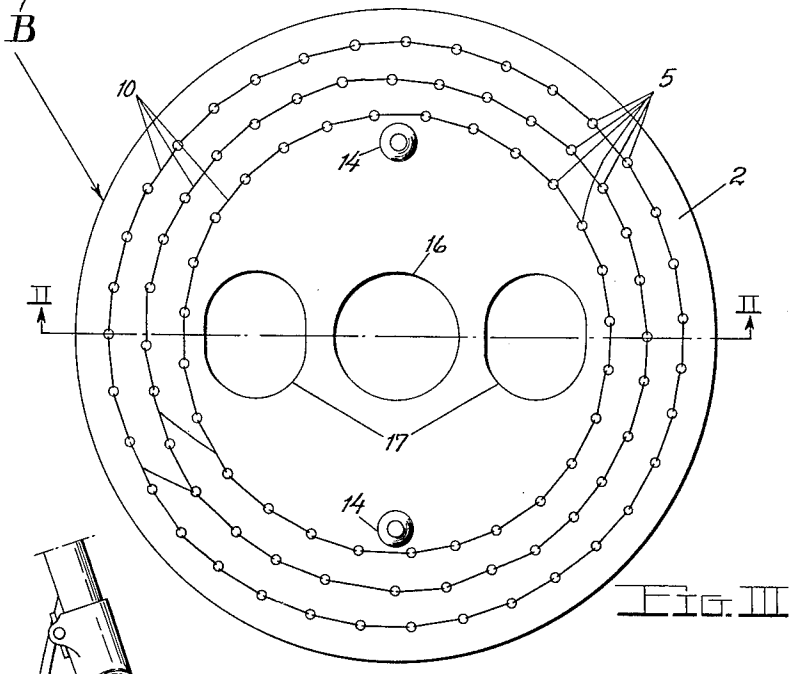




Fig. III

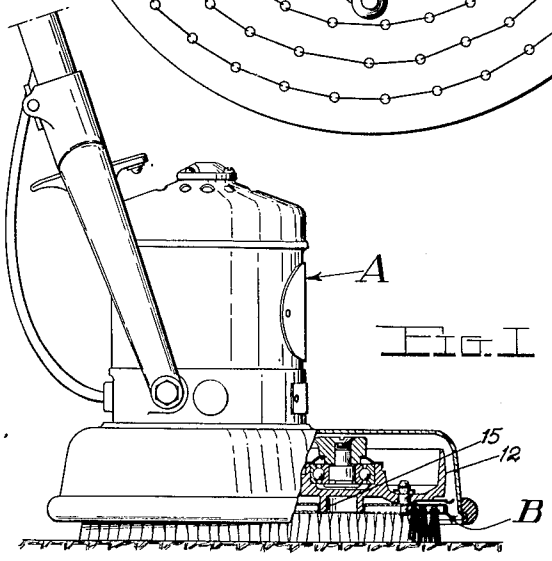



Fig. I

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# UNITED STATES PATENT OFFICE

TORD ERIK DANIEL BILDE, OF STOCKHOLM, SWEDEN, ASSIGNOR TO INVENTIA PATENT-VERWERTUNGS-GESELLSCHAFT, OF SCHAFFHAUSEN, SWITZERLAND, A CORPORATION OF SWITZERLAND

## BRUSH MEMBER

Application filed November 30, 1929, Serial No. 410,687, and in Sweden December 4, 1928.

My invention refers to brush members and has particularly reference to brush members adapted to be used in connection with floor polishers.

Among the objects of my invention is to provide a sturdy brush member which is cheap and simple to manufacture and which may be easily placed on, and removed from, a floor polisher.

Further objects and advantages of my invention will be apparent from the following specification considered in connection with the accompanying drawing which forms a part thereof and on which:

Fig. 1 is an elevational view, partially in cross-section, of a floor polisher provided with brush members according to the invention.

Fig. 2 is a cross-section of a brush member according to the invention on a larger scale, and

Fig. 3 is a top view of the brush member shown in Fig. 2.

In the drawing A denotes a floor polisher and B a brush member embodying the invention. Brush member B consists of two thin discs 2 and 3 of plane circular shape which at their circumferences are joined together by means of a rim 4 extending in a right angle from disc 3 which rim 4 is rolled over the edge 2′ of disc 2. Discs 2 and 3, which preferably are manufactured from thin aluminium sheets but also may consist of other material, such as "papier-mâché" or the like, are kept at a certain fixed distance from each other by means of a further rim 4′ extending inside rim 4 in a right angle from disc 2 and abutting against disc 3. Thus by means of discs 2 and 3 and telescoping rims or flanges 4 and 4′ a hollow casing is formed. In disc 2 holes 5 are provided forming three circular and concentric rows. Disc 3 is formed with corresponding holes 6 having a larger diameter than holes 5. Holes 5 are stamped whereas holes 6 are pressed in such manner that annular flanges 7 extend into member B around each of the holes 6 as shown in Fig. 2. Said flanges 7, which extend to about half the height of the casing, are adapted to surround the necks 8 of bristle bunches 9. When the bristle bunches 9 are pulled up through holes 6 by means of a fastening string or wire 10, the uppermost part of said bunches will expand so that bristle heads 11 are formed which aid wire 10 in retaining bristle bunches 9 in position. The wire, or wires, 10 is drawn through holes 5 in disc 2. Flanges 7 are provided in order to prevent the cutting off of bristles 9 during use of the brush member.

The casing formed by plates 2 and 3 is further provided with means for fastening the same to a carrier disc 12, Fig. 1, said means consisting of pins 13 having double conical heads 14 adapted to engage resilient fastening means in carrier disc 12. Carrier 12 is provided with a centrally disposed circular part 15 adapted to be received, on application of member B, by a corresponding circular opening 16 arranged in the casing. Casing 2, 3 is further provided with two diametrically positioned openings 17 by means of which a hand grip for member B is formed which grip facilitates its removal from and application to carrier 12. Openings 16 and 17 are arranged in such manner that the material of the discs 2 and 3 surrounding said holes is bent inwardly as shown in Fig. 2 so that the edges will abut against each other, whereby smooth surfaces surrounding said holes are obtained and the whole casing is reenforced.

While I have described one more or less specific embodiment of my invention, it is to be understood that modifications thereof fall within its scope, which is to be limited only by the appended claim viewed in the light of the prior art.

What I claim is:

A brush member comprising a first circular sheet metal disc having a plane portion, a second circular sheet metal disc having a plane portion, said discs having telescoping edge flanges, the flange on either disc extending toward the other disc, said flanges holding the disc together with the plane portions thereof in parallel spaced relation to form a thin cylindrical structure, said first disc having holes therein and flanges surrounding said holes, said last-mentioned flanges extending inwardly toward but terminating

short of the second disc, bristle bunches in said holes having inner ends between the ends of the last-mentioned flanges and the second disc, said second disc having holes therein, fastening means for said bristle bunches extending through the last-mentioned holes, said discs having centrally disposed registering openings, flanges formed on each of said discs around said openings, the last mentioned flanges extending toward, and abutting against each other to form a smooth walled passageway, and means comprising similarly formed passageways for gripping the brush members between the centrally disposed openings and the bristle bunches.

In testimony whereof I affix my signature.

TORD ERIK DANIEL BILDE.