April 23, 1940. F. W. PULLEN 2,197,986

BUMPER FOR CARPET SWEEPERS

Filed April 1, 1938

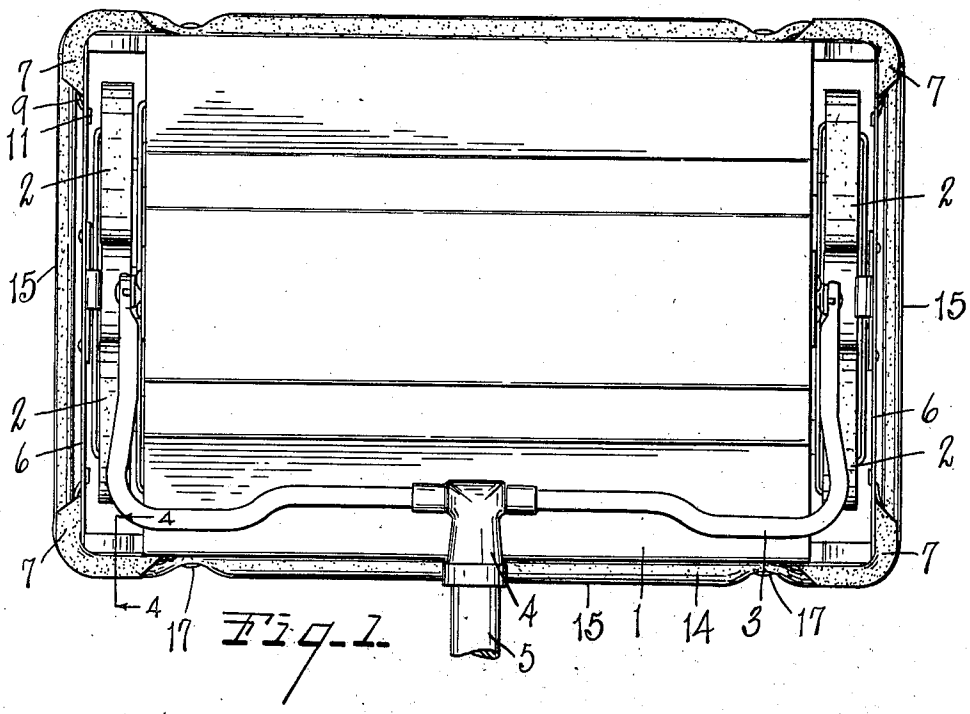


Fig. 1.

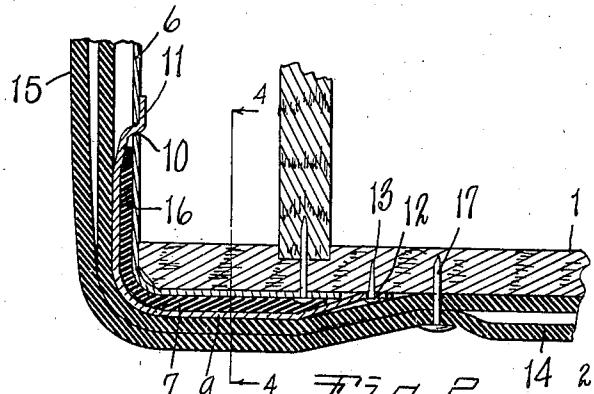


Fig. 2.

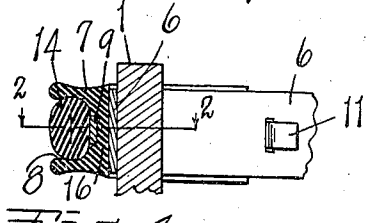


Fig. 4.

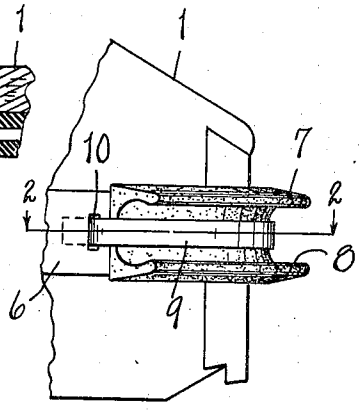


Fig. 3.

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UNITED STATES PATENT OFFICE

2,197,986

BUMPER FOR CARPET SWEEPERS

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Application April 1, 1938, Serial No. 199,382

2 Claims. (Cl. 15—45)

This invention relates to improvements in bumpers for carpet sweepers.

This invention relates to carpet sweepers and particularly to bumpers which surround the case of the sweeper to protect both the furniture and the case of the carpet sweeper when the carpet sweeper is in use. It has for its objects:

First, to produce a new and improved bumper for carpet sweepers.

Second, to produce such a bumper of pleasing and trim appearance.

Third, to provide such a bumper in which rubber is employed almost exclusively.

Fourth, to provide such a bumper in which a minimum amount of rubber is employed.

Fifth, to produce such a bumper which may be easily and simply placed on the case.

Further objects and advantages pertaining to details and economies of construction and operation will appear from the description to follow. A preferred embodiment of my invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a top plan view of a carpet sweeper employing my improved bumper.

Fig. 2 is a detail sectional view of the corner of the bumper taken on line 2—2 of Figs. 3 and 4.

Fig. 3 is a detail view of one of the corner members employed in my bumper construction.

Fig. 4 is a detail sectional view taken on lines 4—4 of Figs. 1 and 2.

Referring to the drawings, 1 is the carpet sweeper case which is of conventional rectangular shape. The carpet sweeper is provided with floor wheels 2, a bail 3 having a handle socket 4, and a handle 5. Metal end bars 6 are fixed to the case and extend along the ends outside of the wheels. At each corner is a rubber corner member 7 which is a section of rubber channel which is formed in continuous length and is provided with a central channel 8. The rubber corner members 7 extend around the corners and are held in place by metal strips 9 which extend through the central channel 8. The end bar 6 is perforated at 10 to receive the offset end or hook 11 on the strip 9. The other end of the strip 9 is perforated at 12 to receive a nail 13. This construction is similar in many respects with that shown in my Patent No. 2,001,745, issued May 21, 1935, for Bumper for carpet sweeper.

Extending around the case 1 and lying in the channels 8 of the corner members 7 is a continuous hollow rubber tube 14 of oval cross section. This tube is disposed on the case with the long axis of its cross section lying parallel to the case. The tube is under slight tension so that the portions of the tube lying in the channels 8 of the corner members 7 are compressed along the short axis of the cross section and the channels 8 are of a depth to receive the compressed tube 14 so that its outer edge will lie flush with the outer edge of the corner member.

The rubber 16 forming the bottom of the channels 8 of the members 7 is of such thickness that when the compressed tube 14 lies in position on the carpet sweeper case the outer edges of the compressed portion of the tube lie substantially flush with the outer edges of the straight flights 15 of the tube extending between the corner members. The tube 14 is anchored in place adjacent each corner member by a nail 17 extending through the tube which slightly compresses the tube at that point only.

With this arrangement it is possible to provide a substantial bumper on the carpet sweeper giving a balanced appearance of considerable width. By employing the single piece oval band extending around the tube, the application of the bumper is greatly simplified and one is assured of a proper appearance. The tube lies with the long axis of its cross section parallel to the case and in applying the tube it is practically impossible to twist the tube. The twisting of a rubber tube such as this under tension produces certain lines on the tube and lines which may have been formed on the tube during its manufacture are also present. If a tube which can be twisted is applied, the appearance of twisting is present in the tube, but by using the oval cross section any possibility of this appearance is eliminated.

The rubber tube being oval in cross section employs less rubber for a given width of protection and still provides the resiliency which is inherent in a hollow tube.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a carpet sweeper or the like having a substantially rectangular case, a bumper construction comprising a rubber tube extending around the case and compressed at the corners thereof, corner members disposed at and extending around the corners of the case, each having a channel extending around the corner of the case to receive the tube and of a depth substantially equal to the width of the compressed tube, the bottom of the channel being spaced from the casing a distance such that the outer side of the compressed portion of the tube lying in the channel lies substantially in the plane of the outer side of the

uncompressed straight flights of tube between the corner members.

2. In a carpet sweeper or the like having a substantially rectangular case, a bumper construction comprising a rubber tube of oval cross section extending around the case with the long axis of its cross section parallel with the sides of the case, and compressed at the corners thereof, corner members extending around the corners of the case beneath the tube and projecting from the case to such an extent that the outer sides of the compressed portions of the tube lie substantially in the plane of the outer sides of the uncompressed straight flights of tube between the corner members.

FRED W. PULLEN.