

UNITED STATES PATENT OFFICE.

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CARPET-SWEEPER.

No. 917,054.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LEWIS P. HALLADAY, a citizen of the United States, residing at Streator, in the county of Lasalle and State of Illinois, have invented a certain new and useful Improvement in Carpet-Sweepers, of which the following is a specification.

My invention relates to carpet sweepers, and has for its object to provide a new and improved device of this description.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is an end view of a carpet sweeper; Fig. 2 is a sectional view taken on line 2—2, Fig. 1; Fig. 3 is a view of the bearing protecting device, as seen from below.

Like letters refer to like parts throughout the several figures.

Referring now to Figs. 1, 2 and 3 I have shown what may be termed a bearing protecting device for carpet sweepers. In the ordinary carpet sweeper the ends of the brush shaft become wrapped with ravelings, threads, hair, and the like, and these ravelings soon interfere with the operation of the brush. This has been one of the serious difficulties met with in practice.

One of the objects of my invention is to obviate this difficulty, and I do this by providing what I have termed a bearing protecting device. As herein shown, this device consists of an inclosing device A which incloses the end of the brush shaft A', and which is stationary during the operation of the sweeper, this preventing material from becoming wrapped about the ends of the shaft. This inclosing device is provided with openings at the sides, as shown at A⁷, through which the periphery of the wheel on the end of the brush shaft projects at each side so as to make contact with the main wheels B of the sweeper. This inclosing device is preferably provided with an inwardly projecting part A² which fits into an opening in the brush shaft or the wheel at the end thereof so as to form a bearing therefor. Said inclosing device fits tightly against the casing of the sweeper at the top, and is preferably arranged so as to project inwardly past the end of the casing at the bottom, as shown at A³, there being provided grooves or slots A⁴, as shown in Fig. 3, for the edges of the casing on each side of the slot C in the end of the casing. This construction stiffens the case and makes the en-

tire construction more rigid. The inclosing device A is arranged so as to be held in position by the end band D which extends across the end of the sweeper. Any suitable means for this purpose may be used. As herein shown, the inclosing device is provided with a groove or the like A⁵ into which fits the end band D. The faces of the inclosing device leading to this slot are preferably beveled, as shown at A⁶, so that the inclosing device may be readily forced into position beneath the end band, and when in position will be secured thereby.

When it is desired to attach the brush to the casing the bearing protecting device is placed at each end of the brush shaft, and then the brush is pushed up into position through the slot C, the beveled faces A⁶ forcing the end bands outwardly so as to permit the passage of the bearing protecting devices, said bands springing back into position in the grooves A⁵ when they come opposite such grooves. These end bands thus keep the anti-raveling device and the brush in proper position during the operation of the sweeper, the brush shaft rotating about the projections A², which act as bearings. It will be seen that by means of this construction the ravelings, threads and the like cannot become wrapped about the ends of the brush shaft, because such ends are protected, and consequently the evils resulting from such material are obviated. These bearing protecting devices are preferably stamped out of sheet metal.

I have described in detail a particular construction embodying my invention, but it is of course evident that the parts may be greatly varied in form, construction and arrangement without departing from the spirit of my invention, and I, therefore, do not limit myself to the particular construction shown.

I claim:

1. A carpet sweeper comprising a case, a rotatable brush in the case having a shaft with a wheel mounted thereon, an inclosing end piece extending over said wheel and provided with a projecting part which projects into an opening in the shaft so as to act as a bearing, an end band extending across the end of the carpet sweeper and separated therefrom by a space, said inclosing end piece adapted to pass between the case and the end band and provided with a

groove into which said end band fits so as to hold said inclosing end piece in position.

2. A carpet sweeper comprising a case, a rotatable brush in the case, the case having an opening in the end for the brush shaft, an inclosing end piece fitting over the end of the brush shaft and provided with an inwardly projecting part having slots at each side into which are received the edges of the sweeper case.

3. In a carpet sweeper, the combination of a casing with wheels on the outside of such casing, such casing having a slot, a brush roll projecting through the slot and

between the wheels so as to be driven thereby, and a removable protecting cap piece on which the roll is journaled, inclosing the end of such roll, such cap piece being cut away so as to allow the wheels to come into contact with the roll, and a flexible band at the end of the casing engaging with the cap piece to hold such cap piece and roll in position.

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Witnesses:

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