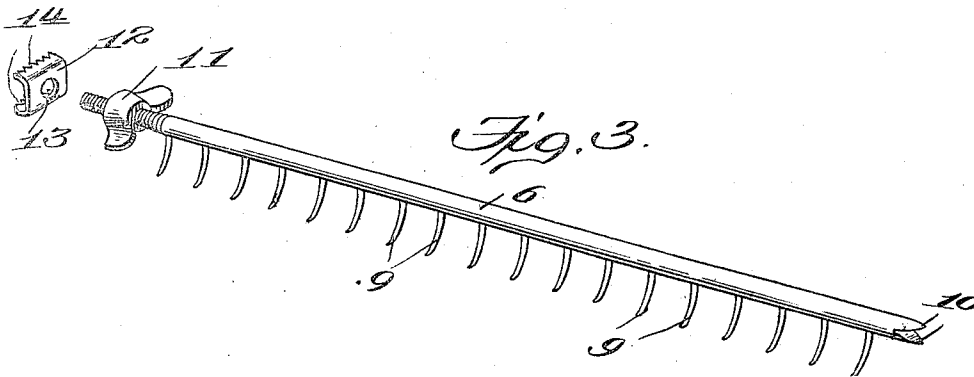
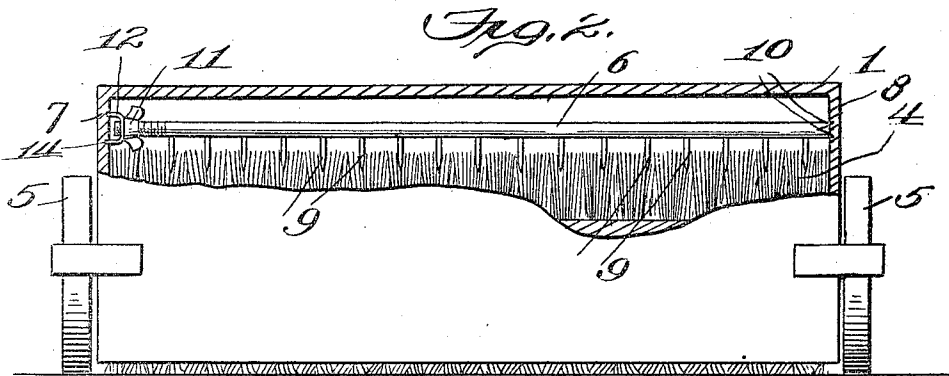
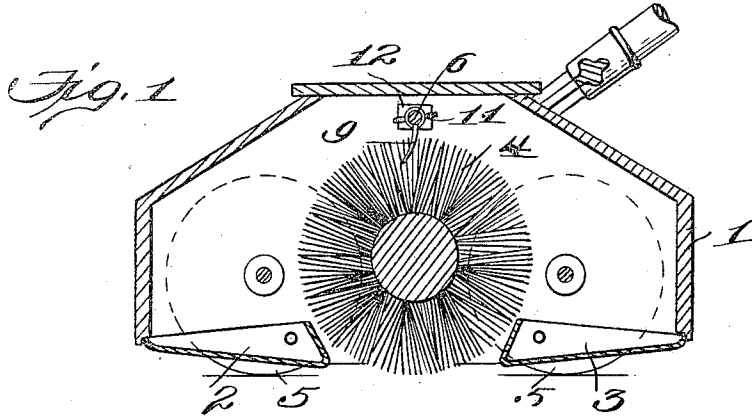


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BRUSH CLEANING DEVICE FOR CARPET SWEEPERS.
APPLICATION FILED MAR. 10, 1909.

949,694.

Patented Feb. 15, 1910.



Witnesses,
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UNITED STATES PATENT OFFICE.

HERBERT S. ARMOR AND LEWIS C. COLLNER, OF ST. PETERSBURG, PENNSYLVANIA.

BRUSH-CLEANING DEVICE FOR CARPET-SWEEPERS.

949,694.

Specification of Letters Patent.

Patented Feb. 15, 1910.

Application filed March 10, 1909. Serial No. 482,491.

To all whom it may concern:

Be it known that we, HERBERT STANLEY ARMOR and LEWIS CLARK COLLNER, citizens of the United States, residing at St. Petersburg, in the county of Clarion and State of Pennsylvania, have invented new and useful Improvements in Brush-Cleaning Devices for Carpet-Sweepers, of which the following is a specification.

Our present invention relates to improvements in carpet sweepers of the class involving a rotary brush, and it has for its object to provide a novel and improved device for automatically cleaning the brush of hair or other materials picked up from the floor and which ordinarily have a tendency to mat upon the brush and thereby impair its efficiency, the cleaning device according to the present invention operating to automatically remove hair and such other materials from the brush while the latter revolves in passing over the floor.

More specifically, the invention consists in providing a brush cleaning device which is so constructed that it may be quickly fitted into sweepers already in use, or it may be supplied as a part of sweepers at the time they are manufactured, the securing means for the cleaning device serving to effectually hold the device so that its prongs stand at a proper angle with reference to the brush, and gripping devices are used which cooperate with opposed walls of the sweeper casing and thereby effectually prevent turning or displacement of the cleaning device.

To these and other ends, the invention consists in certain improvements, and combinations and arrangements of parts, all as will be hereinafter more fully described, the novel features being pointed out particularly in the claims at the end of the specification.

In the accompanying drawing: Figure 1 represents a transverse section of an ordinary carpet sweeper equipped with a brush cleaning device constructed in accordance with our present invention; Fig. 2 represents a front elevation of the sweeper as shown in Fig. 1, the upper portion of the casing being broken away to illustrate the cleaning device which is mounted therein; and Fig. 3 is a perspective view of the cleaning device together with the means for

mounting and securing it within the sweeper casing.

Similar parts are designated by the same reference characters in the several views.

In the accompanying drawings, we have shown the cleaning device as applied to a carpet sweeper of the ordinary well known form comprising a casing 1, the front and rear dust-collecting pans 2 and 3, the revolvable bristle brush 4 which is mounted between the pans, and the wheels 5 which roll upon the floor and serve to revolve the brush in opposite directions as the sweeper is moved toward and from the operator.

The brush cleaning device may, according to our invention, be constructed in different ways whereby the lint, hair or other similar substances clinging to the brush shall be automatically removed therefrom while the brush revolves in one direction, and when the direction of rotation of the brush is reversed, such material as has been removed from the brush by the cleaning device will be removed from the cleaning device and deposited into one of the dust-collecting pans.

In the accompanying drawing, the cleaning device comprises a rod 6 which may be composed of wire of an appropriate gage to insure the requisite rigidity, and this rod is approximately of a length corresponding to the width of the space between the two end walls 7 and 8 of the sweeper casing. This rod is provided with a row of depending spurs or forks 9 which are spaced about half an inch apart and they are all curved in a direction laterally of the rod.

According to the present invention, the cleaning device is equipped with devices whereby it may be readily mounted between the end walls of the sweeper, and for this purpose, one end of the rod is formed with a pair of spaced prongs 10 which are sharpened so that a longitudinal pressure of the rod will cause these prongs to enter the wood composing one of the end walls of the sweeper casing, the relative spacing of these prongs enabling them to obtain such a hold upon the material as to prevent a turning of the rod. The opposite end of the rod is threaded and provided with a nut 11, a wing nut being preferred as shown, owing to the fact that it may be manipulated by hand instead of a wrench which could not be easily

operated within the casing, and a gripping device 12 is provided for the threaded end of the rod, this gripping device comprising a substantially U-shaped member the intermediate portion of which is apertured as at 13 so as to fit loosely over the threaded end of the rod 6, and the two edges of the member are provided with rows of sharpened teeth 14 which are adapted to obtain a firm hold against the adjacent end wall of the sweeper casing.

We claim as our invention:—

1. A brush cleaning device for carpet sweepers comprising a rod having a row of suitably spaced prongs adapted to engage the brush, and means for detachably mounting the device between the side walls of the sweeper casing embodying gripping devices arranged at the opposite ends of said rod, one of said gripping devices having means for moving it longitudinally of the rod.

2. A brush cleaning device for carpet sweepers comprising a rod provided with suitably spaced prongs adapted to clean the brush and having pointed gripping devices at opposite ends, and means for producing a relative separating movement between said gripping devices in a direction longitudinally of said rod to cause the gripping devices to engage the inner surfaces of opposed walls of the sweeper casing and thereby secure the cleaning device therein.

3. A brush cleaning device for carpet sweepers comprising a rod having a row of suitably spaced prongs adapted to engage the brush, one end of the rod being provided with laterally spaced pointed projections to non-turnably engage one wall of the sweeper casing, and a gripping device arranged at and movable longitudinally with respect to the opposite end of said rod and provided with means for moving it longitudinally of said rod to force it into gripping engagement with an opposed wall of the sweeper casing.

4. A brush cleaning device for carpet sweepers comprising a bar provided with a row of suitably spaced prongs to engage the brush, a gripping device at one end of the bar adapted to obtain a hold against the inner surface of a wall of the sweeper casing, and means carried by the bar and cooperating with said gripping device for forcing said gripping device into engagement with the said inner surface of a wall of the

sweeper casing and for maintaining it in such engagement whereby said bar will be supported in operative position.

5. A brush cleaning device for carpet sweepers comprising a bar provided with a row of suitably spaced prongs to engage the brush, a pair of relatively movable gripping devices at the opposite ends of the bar, and means movable longitudinally on said bar and adapted to move one of said gripping devices for increasing the distance between said gripping devices to cause said devices to obtain a hold upon opposed walls of the sweeper casing.

6. A brush cleaning device for carpet sweepers comprising a bar having a row of suitably spaced prongs to clean the brush, one end of the bar being provided with a pair of pointed prongs and the opposite end of the bar being threaded, a toothed gripping device movable with respect to the threaded end of the bar and having out-turned teeth thereon, and a nut cooperating with the threaded portion of the bar and with said gripping device and serving to move the latter toward the free end of the bar to produce an expansion thereof.

7. The combination of a carpet sweeper having a casing, a revoluble brush mounted therein, and a device for removing hair, lint and other material from the brush comprising a bar extending longitudinally between the end walls of the casing above the brush and having a row of suitably spaced prongs depending from the bar all of said prongs being curved laterally thereof and in the same direction to cause a lifting of the material from the brush when the latter revolves in one direction and permitting removal of the material from the prongs when the direction of rotation of the brush is reversed and devices arranged at the opposite ends of said bar and having means for expanding them against the inner surfaces of opposed walls of the sweeper casing for securing said bar in position.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

HERBERT S. ARMOR.
LEWIS C. COLLNER.

Witnesses:

W. O. ASHBAUGH,
L. M. QUIRK.