

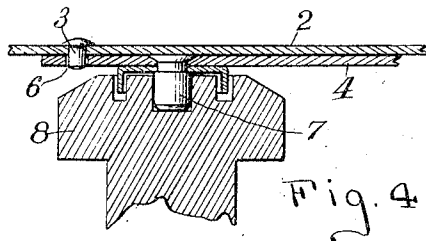
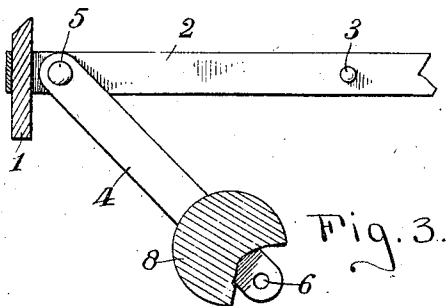
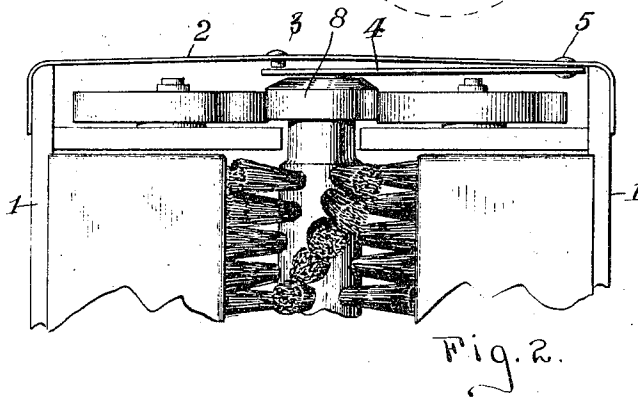
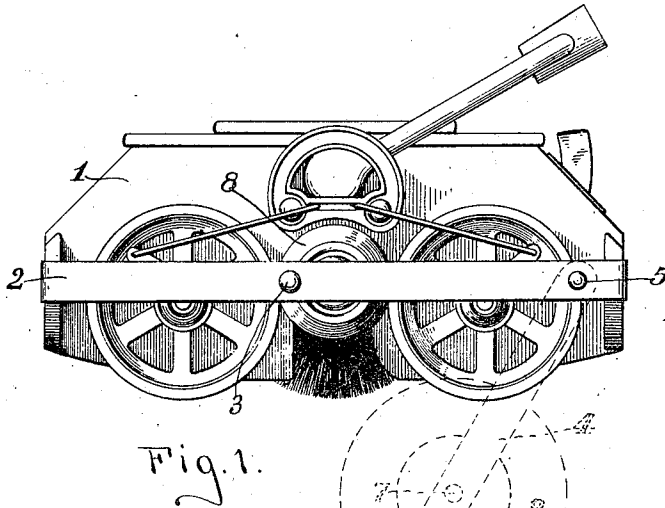
J. W. SHANAHAN & W. E. GILL.

CARPET SWEEPER.

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1,012,726.

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UNITED STATES PATENT OFFICE.

JOHN W. SHANAHAN AND WILLIAM E. GILL, OF GRAND RAPIDS, MICHIGAN, ASSIGN-
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CARPET-SWEEPER.

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To all whom it may concern:

Be it known that we, JOHN W. SHANAHAN and WILLIAM E. GILL, citizens of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Carpet-Sweepers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in carpet sweepers, and more particularly to the means for detachably supporting the brush therein, and its object is to provide a device that will permit the brush shaft to be carried in place within the case and will also permit the same to be readily moved wholly outside of the case and more easily detached from the support, to provide a device that will permit the use of longer bearings for the shaft than heretofore possible in sweepers having the journal bearings of the brush shaft either fixed in the end guard or permanently held opposite the same, this requiring that the end guards be sprung outward to release the brush shaft, and to provide the device with various new and useful features hereinafter more fully described and particularly pointed out in the claim.

The device consists essentially of arms pivoted at one end to the end guards and adapted to swing close to the inner surface thereof, each arm being provided with a detachable fastening at its free end to hold the same extended along the inner surface of the guard and a journal bearing for the brush shaft attached to each arm whereby the brush is held in operative position and the arms can be detached and freely swung downward, the brush shaft carried outside the case and readily detached therefrom, as will more fully appear by reference to the accompanying drawings in which:—

Figure 1 is an end elevation of a carpet sweeper with our device applied thereto; Fig. 2 an inverted plan view of one end of the same; Fig. 3 a detail in elevation of our device with the arm turned downward; and Fig. 4 a detail in horizontal section with the arm in operative position.

Like numerals refer to like parts in all of the figures.

1 represents the case of a carpet sweeper having the usual resilient metallic guard extending across the end of the same outside of the supporting wheels and the end of the brush shaft, both as usually constructed.

Our invention in the form shown consists of flat metallic strips 4, forming arms pivotally connected at one end to the inner surface of the guard near one end thereof as at 5 and extending horizontally along the inner surface of the guard when in operative position to somewhat beyond the middle thereof and provided with an opening 6 at this end adapted to detachably receive a lug 3 fixed in the guard to support the arm extended along the inner surface of the guard. Opposite the middle of the guard, the arm is provided with an inwardly projecting journal 7 on which the brush shaft 8 is rotatively and detachably mounted. By springing the guards 2 outward the lugs 3 will be detached and the arms can then be swung downward as indicated by broken lines in Fig. 1, with the brush outside the case. The arms can then be readily separated to withdraw the bearings from the ends of the brush shaft. By this construction a considerably longer and better bearing for the brush shaft can be used because of the greater resilience of such arms than that of the guard itself on which the journals for the brush are usually mounted, and the brush more easily removed and replaced.

What we claim is:—

A carpet sweeper comprising a case, resilient end guards on the case, flat strips pivoted at one end to the end guards and extending along the inner surface of the same, each strip also having an opening in the free end, a lug fixed on each guard to detachably enter said opening and a journal bearing mounted on each arm to receive and support the brush shaft.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN W. SHANAHAN.
WILLIAM E. GILL.

Witnesses:

PALMER A. JONES,
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