L. HULL. Carpet-Sweeper.

No. 205,748. Patented July 9, 1878. Fig:1. Fi <u>g</u> :2. Fig:3.

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UNITED STATES PATENT OFFICE.

LIVERUS HULL, OF CHARLESTOWN, MASSACHUSETTS.

IMPROVEMENT IN CARPET-SWEEPERS.

Specification forming part of Letters Patent No. 205,748, dated July 9, 1878; application filed May 13, 1878.

To all whom it may concern:

Be it known that I, LIVERUS HULL, of Charlestown, county of Middlesex, State of Massachusetts, have invented an Improvement in Carpet-Sweepers, of which the following is a specification:

This invention relates to carpet-sweepers of the class in which a brush is rotated by cogged wheels resting upon the floor, they engaging pinions on the axle of the brush.

The invention consists in a carpet-sweeper having a divided case, the lower half containing the dust-pans and capable of being dumped, and also having friction-wheels, and the upper half containing the brush and bail, secured to the case by journals and bushings common to all, and also containing pinions on the brush-shaft and gear-wheels for driving the brush, which wheels are arranged upon opposite sides of the brush and mesh into its pinions.

Figure 1 represents, in longitudinal section, a carpet-sweeper constructed in accordance with my invention; Fig. 2, a central cross-section; and Fig. 3, a cross-section on lines x x, Fig. 1, the top of the case being shown as turned over instead of the pan or lower portion being swung backward in the direction of arrow 2, as it will be when the dust is to be emptied.

The sweeper has a case separated in two parts, a b, hinged together at r. The top part a is provided with a brush, c, projecting from an axle, d, held in suitable bearings therein, and provided at each end with pinions f, which are engaged by the teeth of the toothed driving-wheels g h, which rest upon the floor, move with the sweeper, and actuate rapidly the

brush-cylinder at both ends. The base part b of the machine contains the pans h i, into which the dirt and dust are collected, after which the hook l may be disengaged, and the base part b be turned downward and backward until it is inverted, which enables the contents of such pans to be quickly discharged.

The brush-cylinder is supported at each end by a journal, m, which extends through bushing n in the top part, and then into the roller itself. These bushings receive the fixed journals of the brush and save much wear of the case.

The base part b is also provided with friction-rollers j to make the sweeper run easily. The sweeper-bale t, composed of metal, is confined to the case by means of the heads of the journals m of the brush, and turns on the ends of the bushings.

The central portion of this bale has attached to it a cast-metal portion, o, provided with a screw, p. This cast-metal screw portion is very cheap to make, and may be readily and quickly secured to the bail t by means of rivets 4, and the usual handle is applied to the screw.

In Fig. 3 the top portion is shown inverted; but in practice the top portion will remain as in Fig. 2, and the base portion will be turned on the hinge r.

I claim—

1. In a carpet-sweeper, the bushings n, brush d, bail t, and journals m, said journals serving to secure the bail and the brush to the bushings, in combination with the dumping-case a, driving-wheels g, placed at opposite ends and upon opposite sides of the brush, pinions f, and friction-wheels j, all to operate substantially as described.

2. The combination, in a carpet-sweeper, of the case a, bushings n, brush d, bail t, and journals m, said journals serving to secure the bail and the brush to the bushings, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LIVERUS HULL.

Witnesses:

G. W. GREGORY,

N. E. WHITNEY.