

(Model.)

W. J. DREW.
CARPET SWEEPER.

No. 395,960.

Patented Jan. 8, 1889.

Fig. 1.

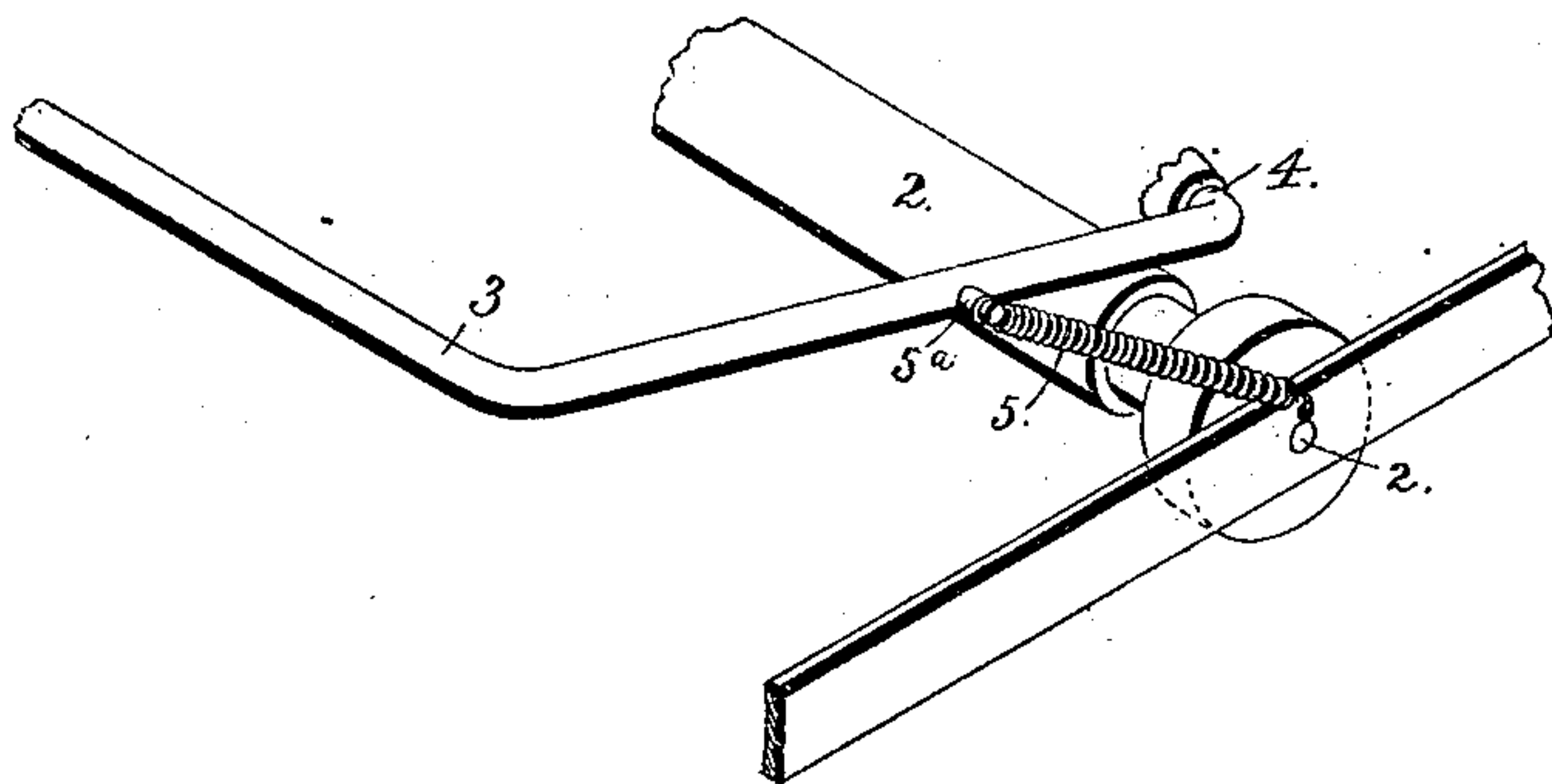
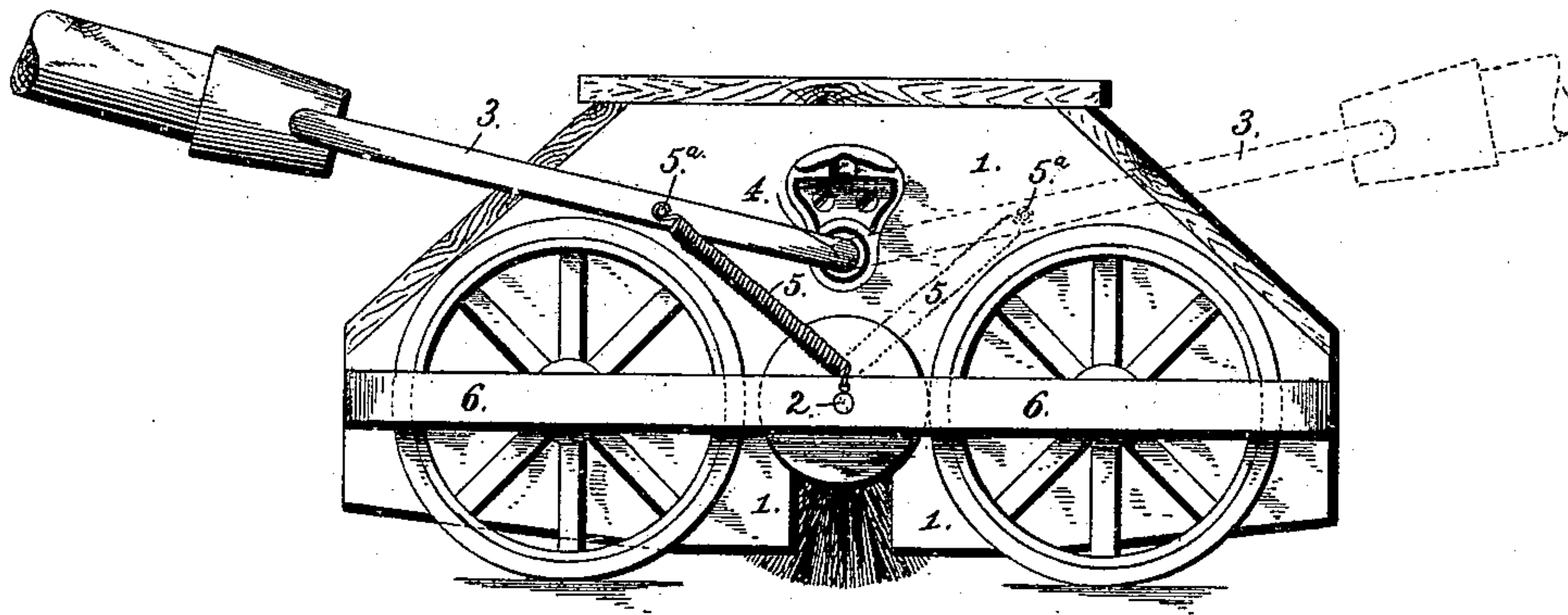


Fig. 2.



Witnesses:
Jas. E. Hutchinson
J. A. Rutherford

Inventor:
Walter J. Drew,
By James L. Norris,
Attorney.

UNITED STATES PATENT OFFICE.

WALTER J. DREW, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO THE BISSELL
CARPET SWEEPER COMPANY, OF SAME PLACE.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 395,960, dated January 8, 1889.

Application filed March 21, 1888. Serial No. 267,980. (Model.)

To all whom it may concern:

Be it known that I, WALTER J. DREW, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented new and useful Improvements in Carpet-Sweepers, of which the following is a specification.

My invention relates to carpet-sweepers, and the purpose thereof is to provide novel and simple means whereby the bail of the sweeper having its point of pivotal attachment in the central line of the casing may be swung from side to side over the top of the sweeper or vibrated as the sweeper is moved to and fro, and to enable it to be operated in both directions without the tendency to lift or rise upon the front side as the sweeper is drawn toward the operator.

Heretofore a carpet-sweeper has been provided with a shiftable bail pivotally connected to the case in the central longitudinal line thereof; but in such the side of the sweeper farthest from the operator is elevated when the sweeper is drawn backward, as in reciprocating it over the floor. To remedy the defect, the bail has been attached upon one side of the central line, in order to throw the preponderance of weight upon the other side of the casing. While this construction removes the objection specified it gives rise to another, in that such a sweeper cannot easily be operated from both sides. A sweeper has also been devised having a bail so constructed and arranged that as it is shifted from side to side the point of pivotal connection is shifted from one side of the central line of the casing to the other, the point of connection being always upon the side nearest the operator, as shown in the Letters Patent issued to me August 30, 1887, No. 369,047, and September 27, 1887, No. 370,384.

It is my present purpose to provide a sweeper having its bail pivoted in the vertical plane of the axis of the brush-shaft and having an elastic connection with the casing, whereby the shifting of the bail from side to side will throw the preponderance of weight upon that portion of the casing most remote from the operator.

The invention consists in the novel combi-

nation of parts hereinafter fully described, and then definitely pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view showing my invention. Fig. 2 is an end elevation of the same.

In the drawings, the reference-numeral 1 denotes the sweeper-casing, which may be of any suitable or desired form, having a centrally-journaled brush-shaft, 2, driven in any ordinary manner.

The numeral 3 designates the bail, which is also of any ordinary construction, having pivotal bearings or journals 4 connected to the casing centrally, or in the same vertical plane with the axis of the brush-shaft, or substantially so, the points of attachment being thereby in the central longitudinal line of the casing.

Connected to each end of the casing, or to a rigid attachment thereon beneath the pivotal bearings of the bail and in substantially the same central plane therewith, is a spiral spring, 5, having attachment also to the bail at a point, 5^a, removed from the pivotal bearing, the length of the spring being such that it will always be under tension. As the sweeper is operated, the draft of these springs relieves a portion of the weight of the casing upon the side nearest the operator, throwing the preponderance of weight upon the opposite or front side.

For convenience of construction, I connect the ends of the springs 5 to the bands or straps 6, which cross the ends of the casing outside the driving-wheels; but in those sweepers not having those bands the springs may be attached to the casing or to any suitable support projecting therefrom, the latter being only required when the ends of the bail project beyond the ends of the sweeper. It is evident that the same result may be accomplished by spring-power applied in many different ways without departing from my invention.

It is evident that the bail may be pivoted to any part of the casing other than the ends thereof without in any manner departing from my invention.

What I claim is—

1. The combination, with a sweeper-case having a bail pivoted centrally thereto and

shiftable from one side of the case to the other, of a spring acting on the case and bail to raise that side of the case nearest the operator and depress that side farthest from the
5 operator, substantially as described.

2. The combination, with a sweeper-case having a bail pivoted centrally to the ends thereof above the axis of the brush-shaft and shiftable from one side of the case to the
10 other, of a spring connected at one end with the case and at the other end with the bail

above its pivotal bearing, and acting on the case and bail to raise that side of the case nearest the operator and depress that side farthest from the operator, substantially as described. 15

In testimony whereof I affix my signature in presence of two witnesses.

WALTER J. DREW.

Witnesses:

ARTHUR C. DENISON,
FRED MACEY.