

(No Model.)

W. J. DREW.
CARPET SWEEPER.

No. 576,837.

Patented Feb. 9, 1897.

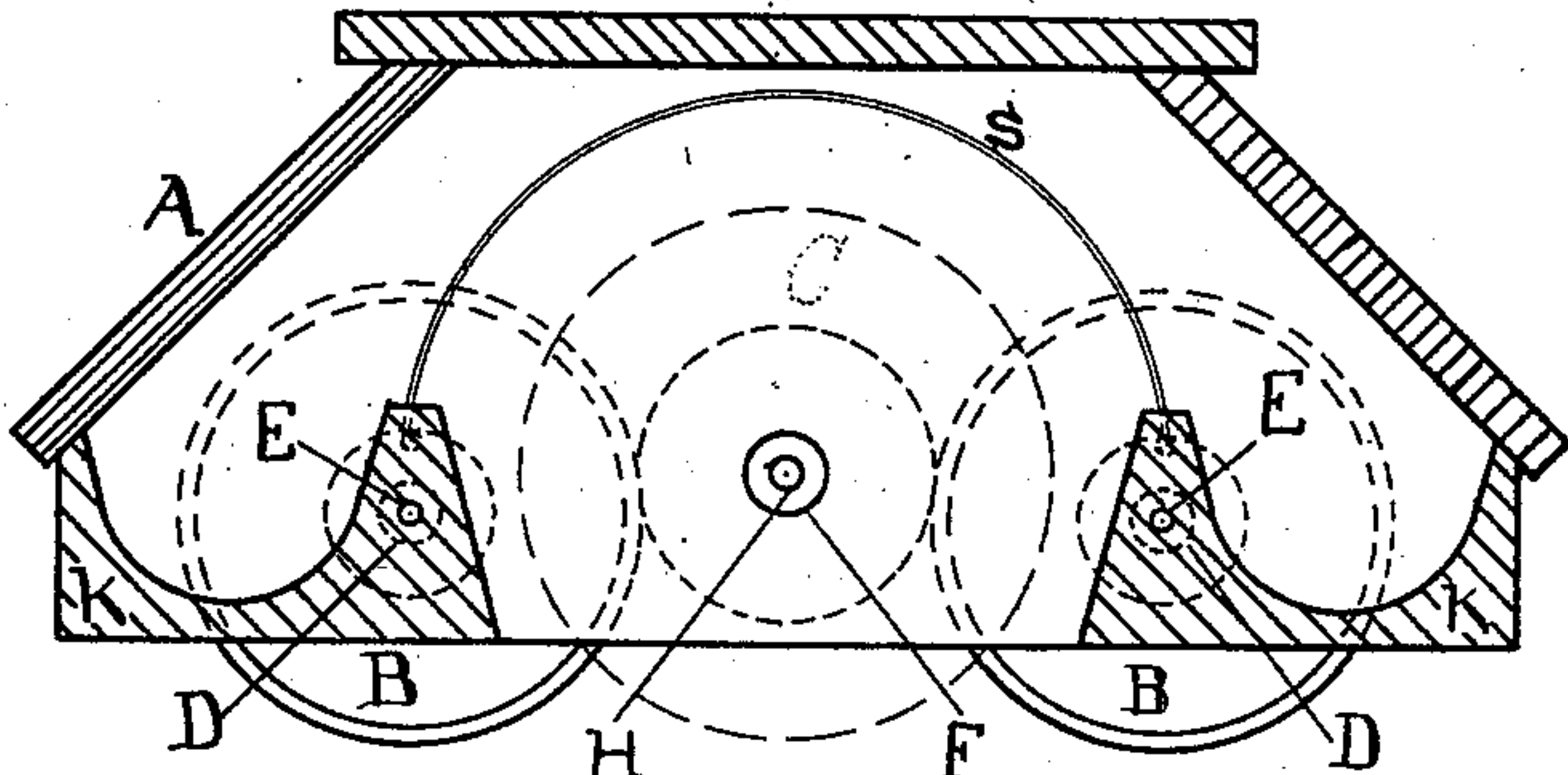


Fig. 1

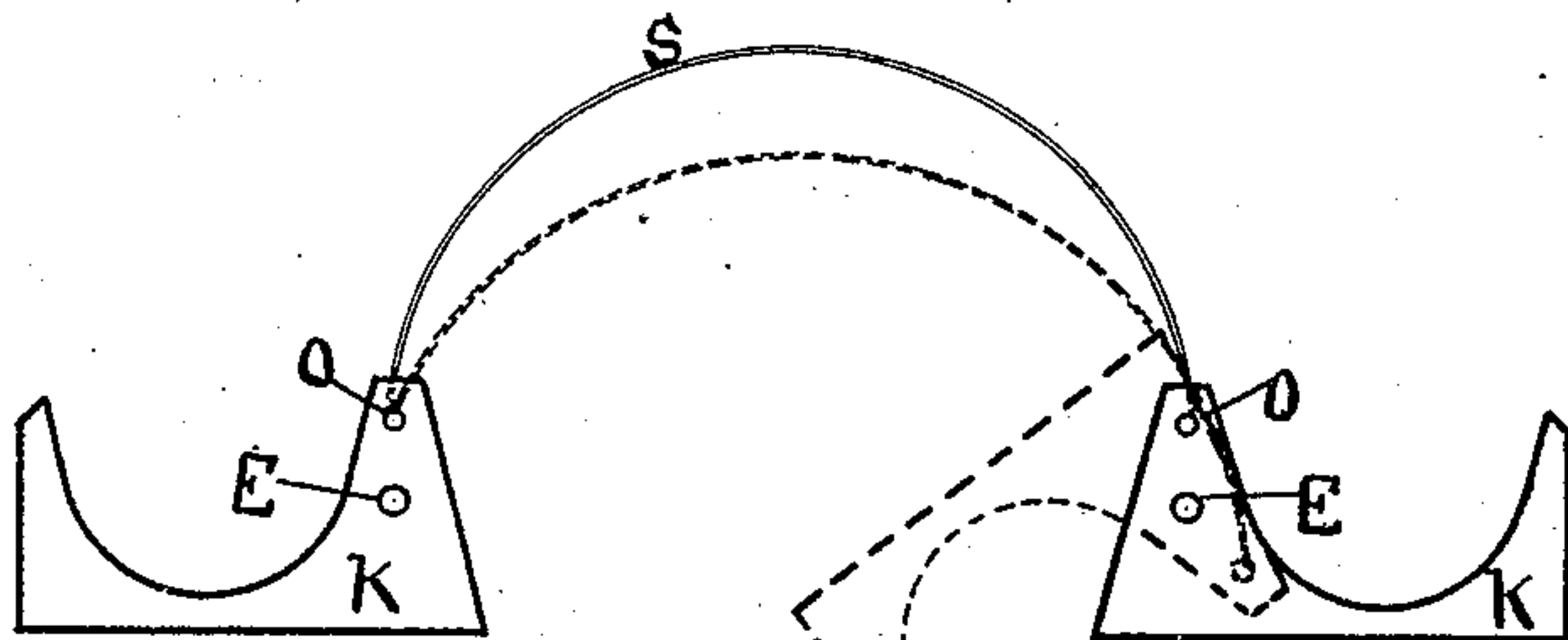


Fig. 2.

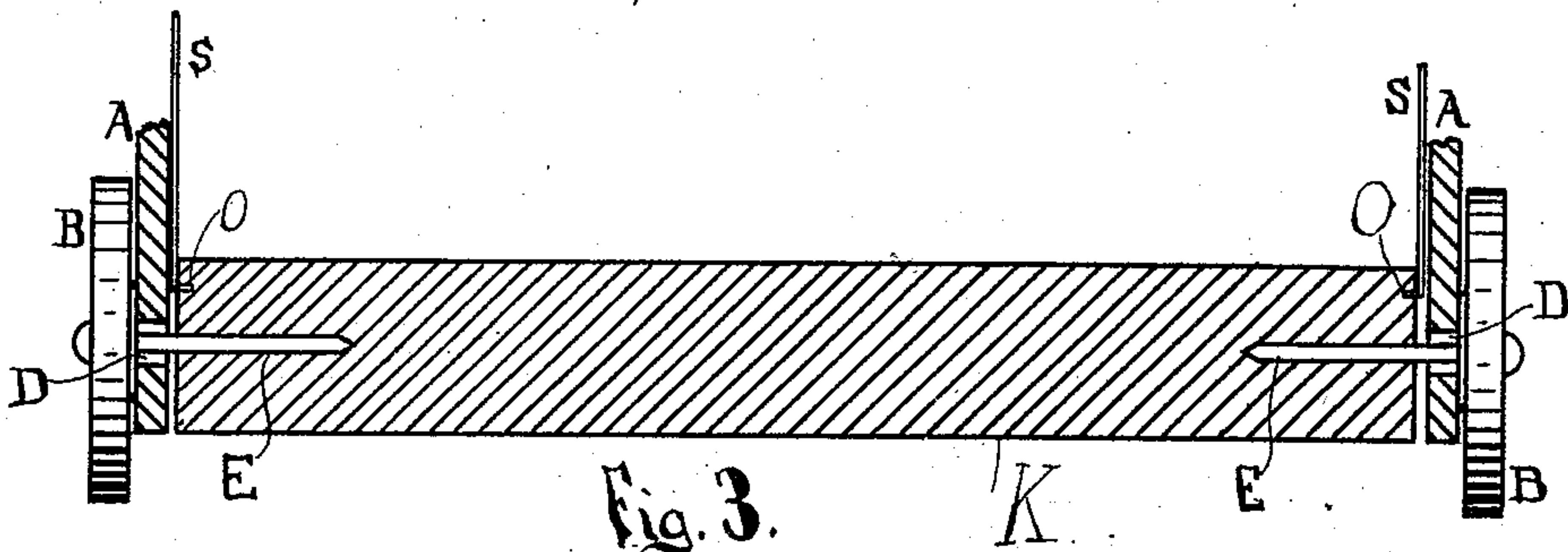


Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

WALTER J. DREW, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO THE
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CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 576,837, dated February 9, 1897.

Application filed March 16, 1896. Serial No. 583,400. (No model.)

To all whom it may concern:

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

This invention relates to certain new and useful improvements in carpet-sweepers; and the invention consists in combining a dust-pan and a drive-wheel in a carpet-sweeper case in such a manner that both the drive-wheel and dust-pan revolve upon the same pivotal point; also in the construction of a new and improved pan to be used in combination with the brush-roller, case, and driving-wheels; also in the use of a dust-pan, driving-wheels, and a spring, said spring adapted to operate the pan, produce the frictional contact between the drive-wheels and the brush-roller, and also to allow certain automatic adjustment of the driving-wheels; also in other details of construction and operation hereinafter described; and the objects of my invention are, first, to produce a very cheap and efficient sweeper; second, to journal the drive-wheels upon the dust-pan pivot; third, to construct a dust-pan which may be used in connection with the case and having the novel features hereinafter described; fourth, to combine with the dust-pans, the drive-wheels, and their pivots a brush-roller, said wheels having an automatic adjustment and said spring adapted to maintain frictional contact between the brush-roller and the dust-pan; fifth, to construct a wooden dust-pan having open ends and a pivot made rigid therewith, which pivot also serves as a journal for the driving-wheel. Other objects are particularly pointed out in the specification and claims, as hereinafter set forth. These objects I accomplish by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 shows a sectional view of a sweeper through the middle. Fig. 2 shows an end view of the pans, spring, &c., detached from the case; and Fig. 3 is a longitudinal sectional view taken through one of the dust-pans and the driving-wheels.

Similar letters refer to similar parts throughout the several views.

A represents the sweeper-case.

B represents the driving-wheels.

C represents the brush-roller.

E represents the pintle, extending through the enlarged opening D of the case, rigidly secured in the dust-pan, as shown in Fig. 3. The pintle D furnishes a journal on which the drive-wheels revolve, and also furnishes the pintle on which the pan is partially revolved for the purpose of discharging the dust from the pan. Thus the turning-point or center of the drive-wheel and the center of revolution of the pan are the same and in the same straight line, as shown in said Fig. 3.

H shows the pintle of the brush-roller, which pintle passes, preferably, through an enlarged opening F, said enlarged opening F being fully shown in Fig. 1. This construction allows the brush-roller to have a certain amount of automatic vertical adjustment. The enlarged openings D also allow for a certain amount of automatic vertical adjustment for the driving-wheels.

S represents a spring which in the example of my invention shown in the drawings is curved and attached at the points O O, each point being eccentric with the turning-point of the dust-pan. This spring serves the purpose of maintaining friction between the driving-wheels and brush-roller and also the purpose of closing the pans when thrown open.

The pans are shown by K, and when either pan is opened it is turned back into the position shown by dotted lines in Fig. 2.

The pan K is shown as made of a single piece of wood having open ends. By this construction the pans can be made very cheaply, inasmuch as the strip composing the pan may be perfected by one operation, excepting the operation of cutting it off to the required length. These pans preferably fit snugly between the end pieces, as shown in Fig. 3, so that the ends of the case, when the pans are closed, furnish a part of the dust-receptacle. Other styles of pans may, however, be used. For the sake of cheapness the pivot or pin E is preferably made of a round nail or brad provided with

barbs or roughened portions, so as to cause the same to be very securely affixed in the wooden pan. In constructing the sweeper, after the case is put up, the wheels may be
5 attached by merely driving the pivot through the wheel into the wood, as shown in Fig. 3.

The amount of vertical adjustment of the driving-wheels is gaged by the size of the openings D.

10 The above construction is cheap and yet adapted to make a practical and efficient sweeper, all parts thereof being cheaply constructed and readily and quickly put together.

Having thus described my invention, what
15 I claim to have invented, and desire to secure by Letters Patent, is—

The combination of a sweeper-case, the drive-wheels placed on the outside of said case, a pivot or journal passing through en-

larged openings in said case and supporting 20 the wheel on the outside and entering into the dust-pan and rigidly connected therewith, a brush-roller, a pair of dust-pans, each dust-pan turning upon the same pivot as its
25 corresponding drive-wheel, a spring attached to each dust-pan at a point eccentric the turning-point of said dust-pan, said spring adapted to retain the dust-pans closed, and also to produce frictional contact between the drive-
30 wheels and the brush-roller, substantially as described.

In witness whereof I have hereunto set my hand and seal in the presence of two witnesses.

WALTER J. DREW. [L. S.]

Witnesses:

CHAS. B. JUDD,

MARY BRIEZA.