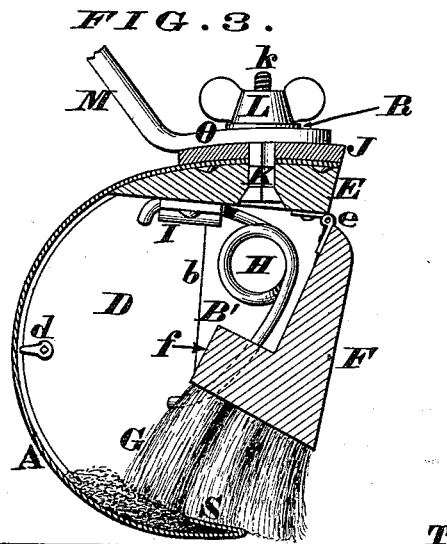
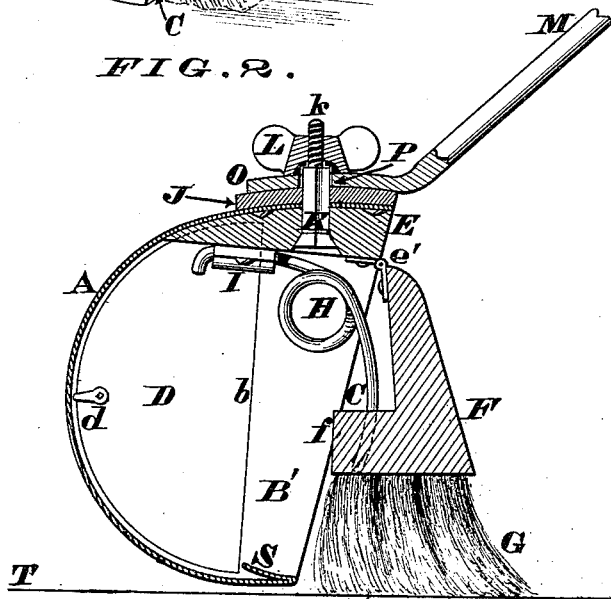
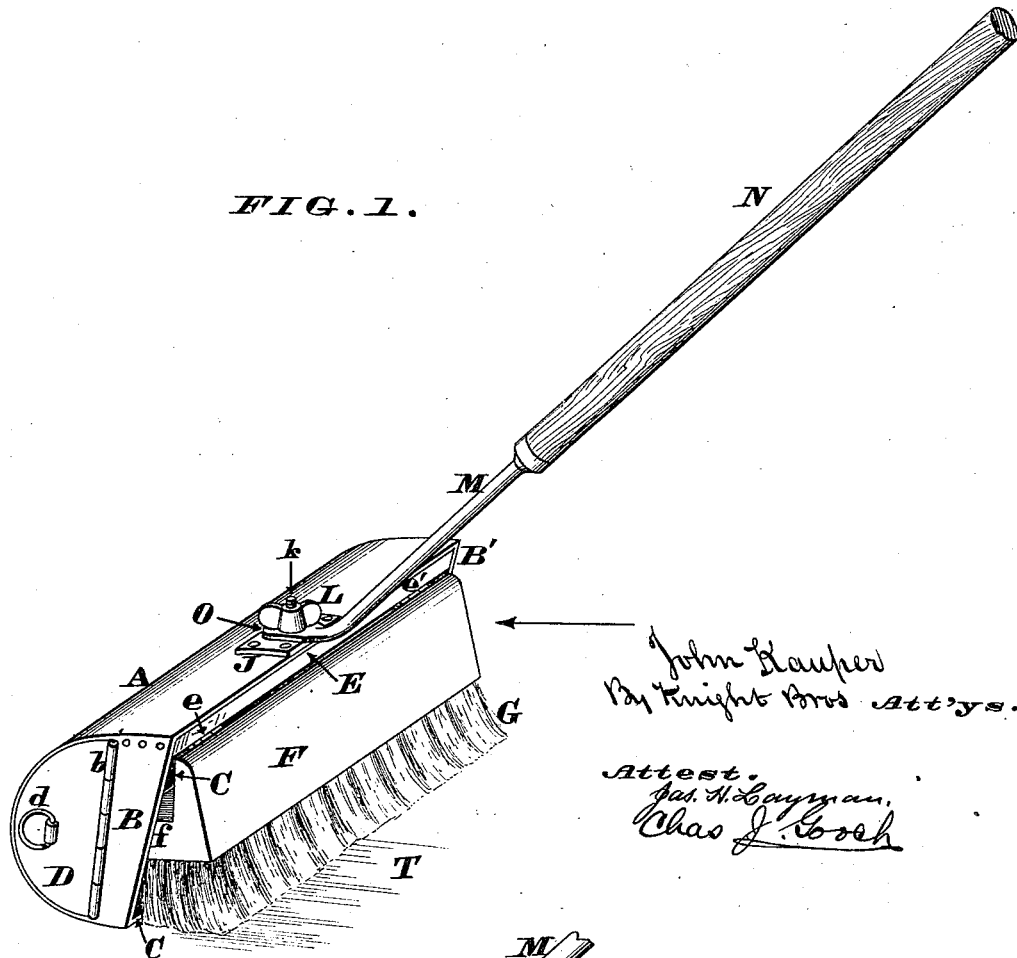


J. KAUPER.
Carpet-Sweepers.

No. 166,388.

Patented Aug. 3, 1875.



UNITED STATES PATENT OFFICE.

JOHAN KAUPER, OF CINCINNATI, OHIO, ASSIGNOR TO WAGNER, KAUPER & DEREMO, OF SAME PLACE.

IMPROVEMENT IN CARPET-SWEEPERS.

Specification forming part of Letters Patent No. **166,388**, dated August 3, 1875; application filed May 31, 1875.

To all whom it may concern:

Be it known that I, JOHAN KAUPER, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Carpet-Sweeper, of which the following is a specification:

My invention relates to a light, cheap, and simple implement, which is capable of being either drawn or pushed along upon the surface of a floor or carpet, so as to sweep the same in the most thorough and expeditious manner, the dirt and litter, as fast as liberated from the carpet by the action of the broom, instead of being swept over and rubbed again into the carpet, or scattered in the form of dust over the apartment, being all collected in a suitable receiver, from which it can be discharged at will, as hereinafter more fully explained.

In the accompanying drawing, Figure 1 is a perspective view of my carpet-sweeper, a portion of the handle being broken away. Fig. 2 is a transverse section of the same in the plane of the handle, the brush or broom proper being shown in contact with the carpet or floor. Fig. 3 is another section in the same plane, but with the handle reversed, and the brush shown in the act of discharging the sweepings into the receptacle or dust-pan of the implement.

Of the above illustrations Figs. 2 and 3 are drawn on an enlarged scale.

The principal member of my sweeper consists of a receiver, receptacle, or dust-pan, A, which is preferably of the approximately semi-tubular form, as shown, although it may be of any other suitable shape. In order to combine strength with lightness this receiver is composed of tin or sheet-iron, or other appropriate material. The ends of this receiver are closed with heads B B', while the rear side thereof is open, as at C. Hinged to either or both of these heads, at *b*, is a flap or door, D, which may be provided with any convenient locking device, *d*. Secured to the top of the receiver, and running longitudinally of the same, is a wooden strip or cleat, E, which performs the double purpose of stiffening said receiver, and of affording a means of attaching the various operative parts of the sweeper. Hinged to this cleat or stretcher, at *e e'*, is a

pendent swinging block, F, which constitutes the head of the brush or broom G, said brush being composed of bristles or other elastic materials. The head F and its brush G are of such height and length as to nicely fit the opening O at the back of the dust-pan A, as clearly shown in Fig. 1. Projecting inwardly from the brush-head F is a ledge, *f*, with which is engaged one end of a spring, H, whose other end is secured in a loop or staple, I, that is attached to the under side of a cleat, E, and near the mid-length of the same. The stress of this spring has a constant tendency to draw the head F forward, so as to force the brush G into the receiver A, as seen in Fig. 3. In the drawing the aforesaid spring is represented as a coiled one, with suitable end projections for its attachment; but it is evident that a plate-spring or other retractor may be employed, if preferred. Secured on top of the dust-pan A is a stiffening-plate, J, that is traversed by a bolt, K, of any form but circular, whose head is embedded in the cleat E. This bolt has a screw-threaded termination, *k*, for engagement of a thumb-nut, L. M is an iron shank or stem, one end of which is fitted into the wooden shaft or handle N, while the other end of said shank is flattened at O, so as to fit down snugly upon the plate J, and to be maintained in contact therewith by the nut L. This flattened portion of the shank has an eye, P, fitting the bolt K, and through which it passes, as seen in Fig. 2. A leather or other compressible washer, R, may be interposed between the nut L and the flattened part O of the shank, so as to compensate for any unequal bearing between the members L and O. Projecting inwardly from the rear bottom edge of the receptacle A is a curved lip, S, for a purpose that will presently appear. T may represent the floor or carpet to be swept. When the implement is to be used with a pushing or thrusting motion the handle M N is applied to the receptacle in the manner shown in Figs. 1 and 2, the bolt K effectually preventing twisting of said handle either to the right or left. The operator then proceeds to push the implement along in the direction indicated by the arrow in Fig. 1, taking care to avoid such excessive pressure

as would bring the bottom of the pan in contact with the ground. By properly inclining the handle N N the implement will be supported entirely upon the brush G, and the frictional contact of the brush with the carpet will swing the head F and its attachments rearward or toward the operator. After having made a brisk stroke or sweep in this manner, the operator slightly relaxes the pressure upon the handle, when the stress of the spring H causes the brush to swing toward and partly into the pan A, and to deposit its debris in the receptacle A, as seen in Fig. 3. By again bringing a slight pressure to bear upon the handle the brush swings outwardly for another stroke, the curved lip S acting as a cut-off to clear the bristles of any dirt that may adhere to them, and thereby prevent the contents of the pan being thrown out through the opening C. After the room has been swept the dust-pan can be emptied of its contents by simply opening the door D *d* and turning the implement over endwise. When it is desired to use the sweeper with a pulling motion the handle is secured in the reverse

position shown in Fig. 3. The attaching devices J K L O P may be omitted, and the pan furnished with a socket for the insertion of an ordinary broom-handle.

I claim as my invention—

1. The combination, substantially as described, of the dust-pan A, provided with closed ends B B' D and a rear opening, C, covered by the hinged and vibrating brush *e e'* F G, which latter is retracted by a concealed spring, H, said dust-pan having rigidly attached to it the handle N, for the purpose stated.

2. In combination with the dust-pan A B B' C and its hinged vibrating brush *e e'* F G H, the bolt K *k*, nut L, and eye P, where-with the shank M of handle N may be rigidly secured in either of two positions to said pan, substantially as herein described.

In testimony of which invention I hereunto set my hand.

JOHAN KAUPER.

Attest:

GEO. H. KNIGHT,
JAMES H. LAYMAN.