(Model.)

B. W. JOHNSON.

CARPET SWEEPER.

No. 250,922. Patented Dec. 13, 1881.

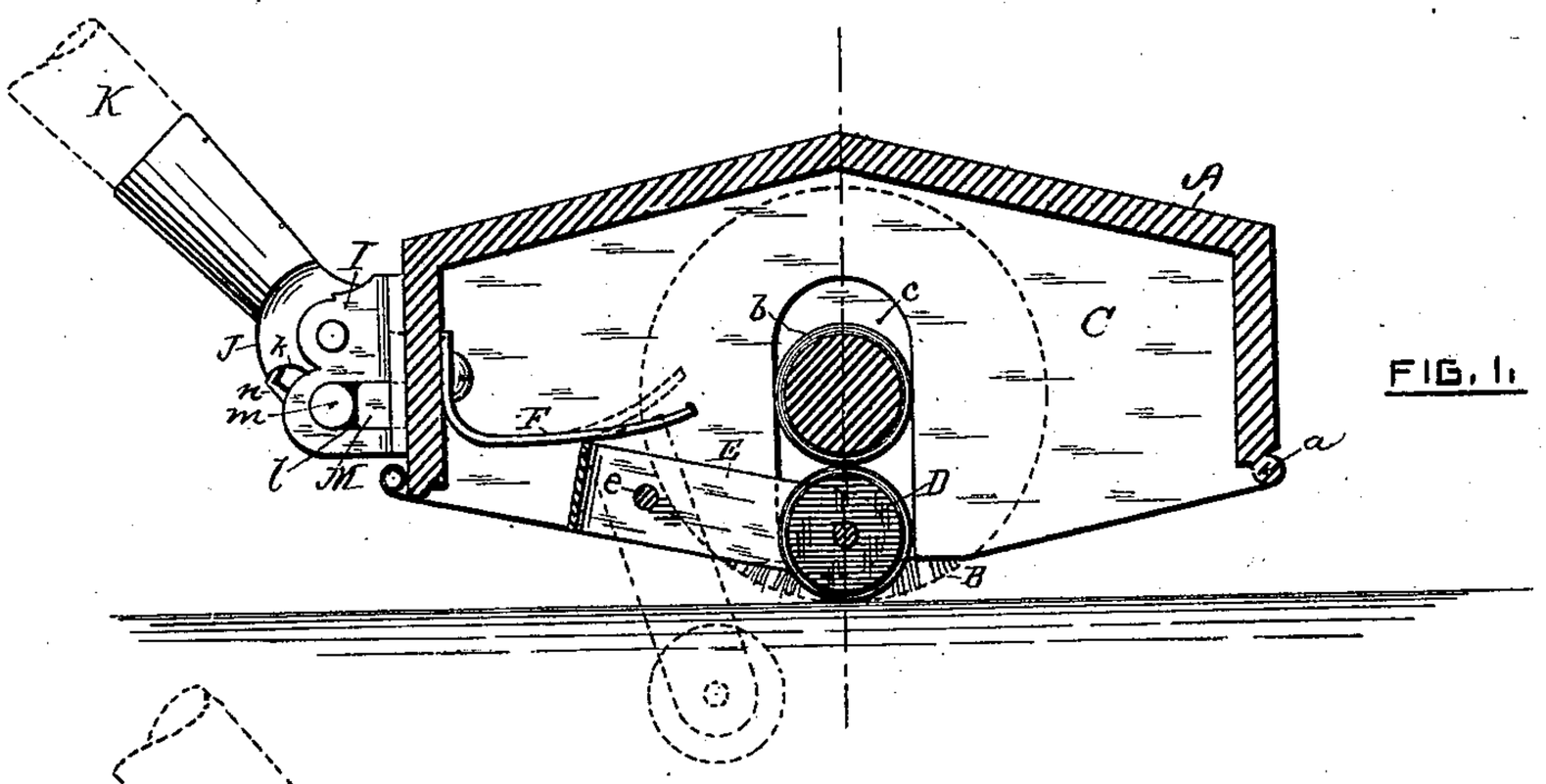

FIG. 1.

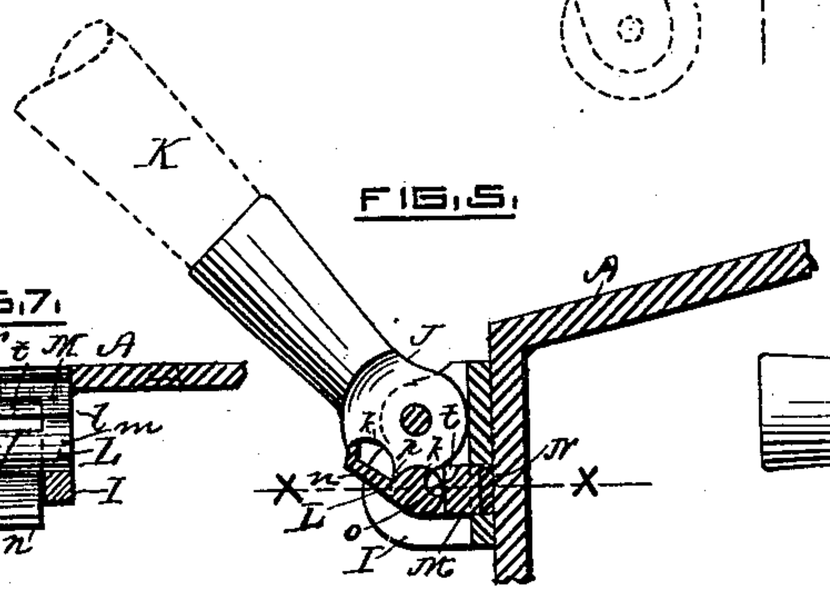

FIG. 5.

FIG. 7.

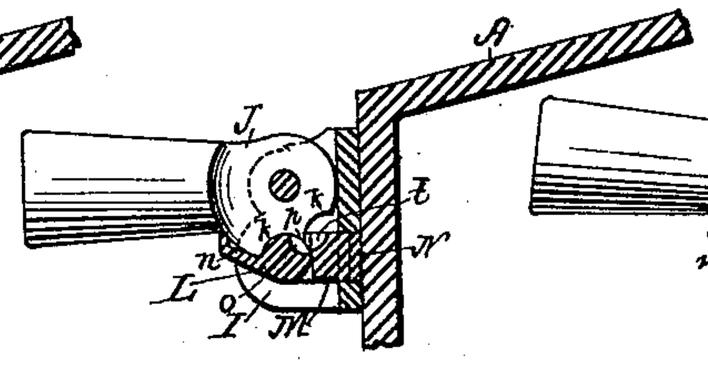

FIG. 6.

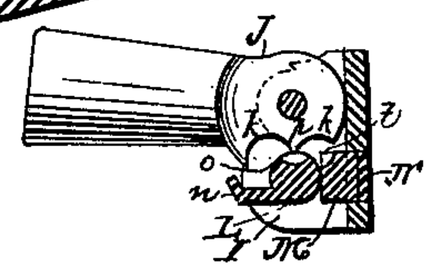

FIG. 8.

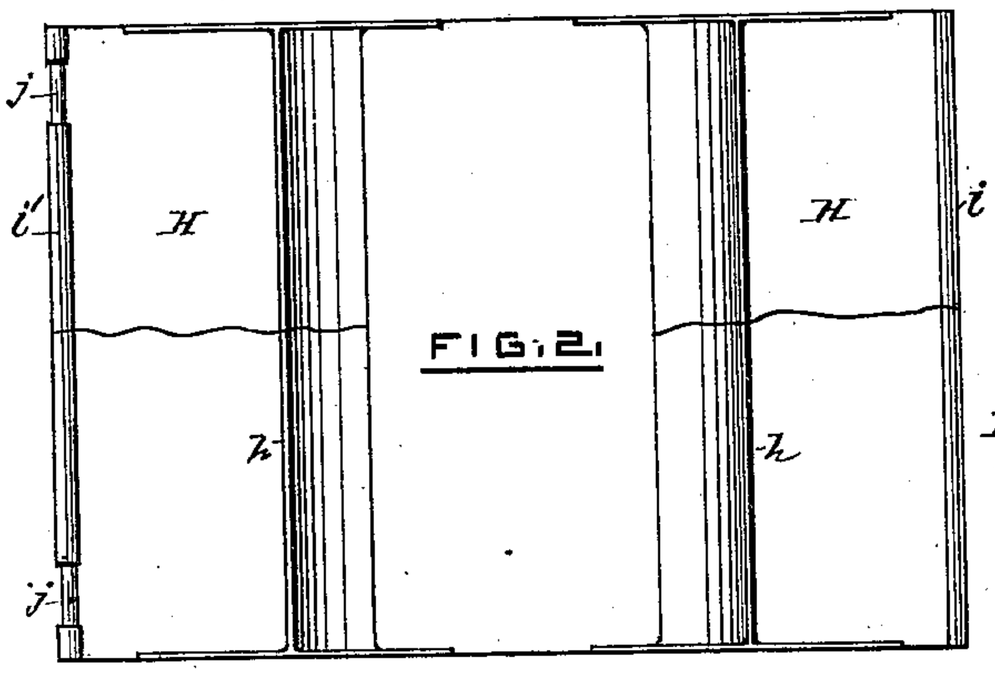

FIG. 2.

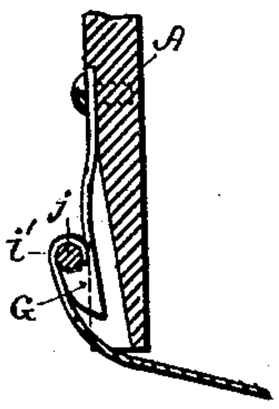

FIG. 9.

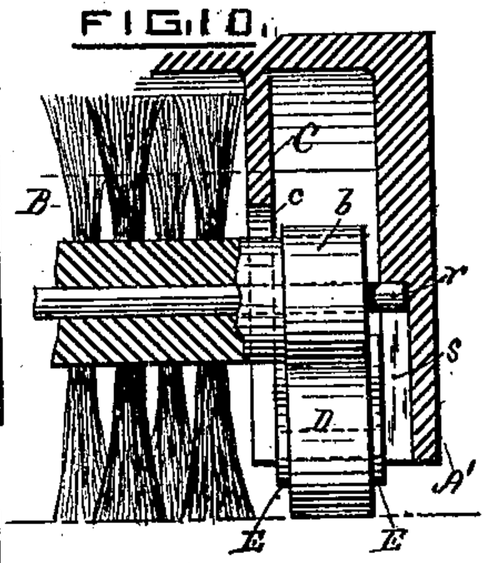

FIG. 10.

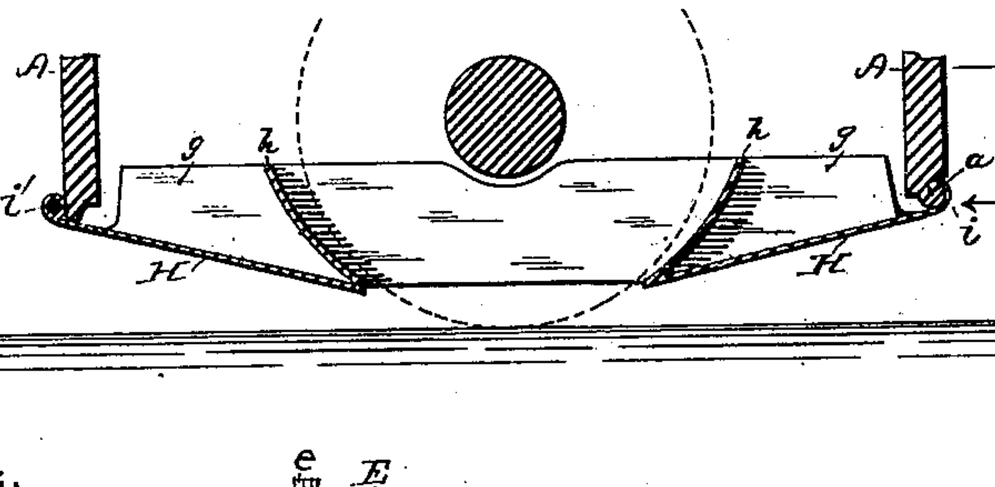

FIG. 3.

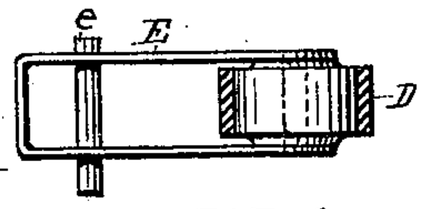

FIG. 4.

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BENSON W. JOHNSON, OF PROVIDENCE, RHODE ISLAND.

CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 250,922, dated December 13, 1881.

Application filed July 29, 1881. (Model.)

To all whom it may concern:

Be it known that I, BENSON W. JOHNSON, of Providence, in the State of Rhode Island, have invented an Improvement in Carpet-Sweepers, of which the following is a specification.

The nature of my invention consists in the employment of a revolving brush removable from the bottom of the case, and supported in its bearing-grooves at each end of the case by means of friction-rolls held in a pivoted frame and forced against the shaft of the brush by means of springs acting against the rear of the pivoted frames with sufficient force to support the brush, so that by simply throwing back the pivoted friction-rolls against the action of their respective springs the brush may be removed from the bearing-slots of the case, and in the improved construction of the adjustable joint for the attachment of the handle of the sweeper.

Figure 1 represents an end elevation of the sweeper, with the end board removed. Fig. 2 represents a plan view of the metallic dust-receptacle. Fig. 3 is a section of the dust-receptacle, showing its connection with the outer case. Fig. 4 is a plan view of the pivoted frame for holding the driving-rolls. Figs. 5, 6, 7, and 8 are detail section views of the attached adjustable handle. Figs. 9 and 10 represent sectional details.

In the drawings, A is the wooden case of the sweeper; B, the revolving brush; C, the wooden partition at the ends of the revolving brush. *c* is a slot made in the wooden partition C, whereby the brush may be inserted and removed from the bottom of the sweeper-case.

At each end of the shaft of the brush B, outside of the partitions C, are placed rubber-covered rolls *b*. The journals *r* of the shaft of the brush enter the open groove *s*, made on the inner surface of the end board, A′, of the wooden case, as shown in Fig. 10.

The brush-driving roll D is hung in the pivoted frame E, the pivot *e* being held in the end A′ of the case A and in the partition C. The spring F acts upon the rear of the frame E to throw the roll D upward, thus serving to retain the axis of the brush in place at the upper portion of the slot *c* and groove *s*. The roll D and frame E may be moved upon the pivot *e*, as shown by the dotted lines in Fig. 1.

Upon one side of the wooden case A is made the longitudinal rounded bead *a*, and upon the opposite side of the case are placed one or more spring-catches, G, as shown in the section view, Fig. 9.

The dust-receptacle H is made of sheet metal, provided longitudinally with the partitions *h h*, made to curve with the brush and with the raised ends *g g*. One longitudinal edge, *i*, of the dust-receptacle H is turned in hook form, so as to clasp the rounded bead *a* of the case A, and the opposite edge, *i′*, is turned around a longitudinal wire, *j*, exposed at one or more points, as shown in Fig. 2, in order that the wire may engage with the spring-catch G, thus securely holding the receptacle H to the case. The dust-receptacle H is made to extend between the two partitions C of the sweeper, and is thus equal in length to the revolving brush B, and is readily removed from the case for the purpose of taking out the accumulated dust, by simply pressing back the catch or catches G and dropping the edge *i′* below the edge of the case A; and the revolving brush B may then be conveniently removed by simply throwing back the pivoted frames and driving-rolls, as shown by the dotted lines in Fig. 1, thus allowing the brush to be removed downward from the open slot *c* and bearing-groove *s*.

Upon one side of the case A are secured the metallic ears I I, between which is pivoted the socket J of the handle K. The flattened joint portion of the socket J is provided at its lower edge with two adjoining circular notches, *k k*. The ears I I are provided with the slots *l l*, opening to the back of the ears, as shown in section in Fig. 7, which represents a horizontal section taken in the line *x x* of Fig. 5, with the pawl L and friction-block M in elevation. The rounded bearings *m m* of the pawl L rest against the rounded end of the slots *l l*, and are held in close contact therewith by means of the friction-block M, pressed forward by means of the rubber spring N, so that the pawl L will be firmly held in any position in which it may be placed. The pawl L is provided with a groove, *o*, made of sufficient width and depth to permit the passage of the point *p* between the notches *k k*, and is also provided with a short arm, *n*, for the purpose of convenient

manipulation. The upper corner of the friction-block M is cut away at *t* to provide for the edge of the pivoted end of the socket J. When the handle and pawl are turned, as shown in Fig. 5, the handle K will be firmly held in an elevated position, and will be also firmly held in a lower position when turned, as shown in Fig. 6; and when the pawl is turned, as shown in Fig. 8, the handle will be loosely connected to the sweeper-case, the point *p*, between the notches *k k*, passing freely across the groove *o* in the pawl, which is being firmly held in position by the friction-block M.

I claim as my invention—

1. In a carpet-sweeper, the revolving brush, removable from bearing-grooves made open to the bottom of the case, in combination with friction-rolls supported in pivoted frames operated by springs adapted to prevent the brush from dropping from the open bearing-grooves, substantially as described.

2. In a carpet-sweeper, the pivoted handle provided at its end with the adjoining circular notches *k k*, separated from each other by the point *p*, in combination with the circular pawl L, provided with the notch *o*, for the passage of the point *p*, friction-block M, and spring N, for holding the pawl in position, substantially as described.

BENSON W. JOHNSON.

Witnesses:
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HARMON S. BABCOCK.