

(No Model.)

M. G. STOLP.
CARPET SWEEPER.

No. 252,402.

Patented Jan. 17, 1882.

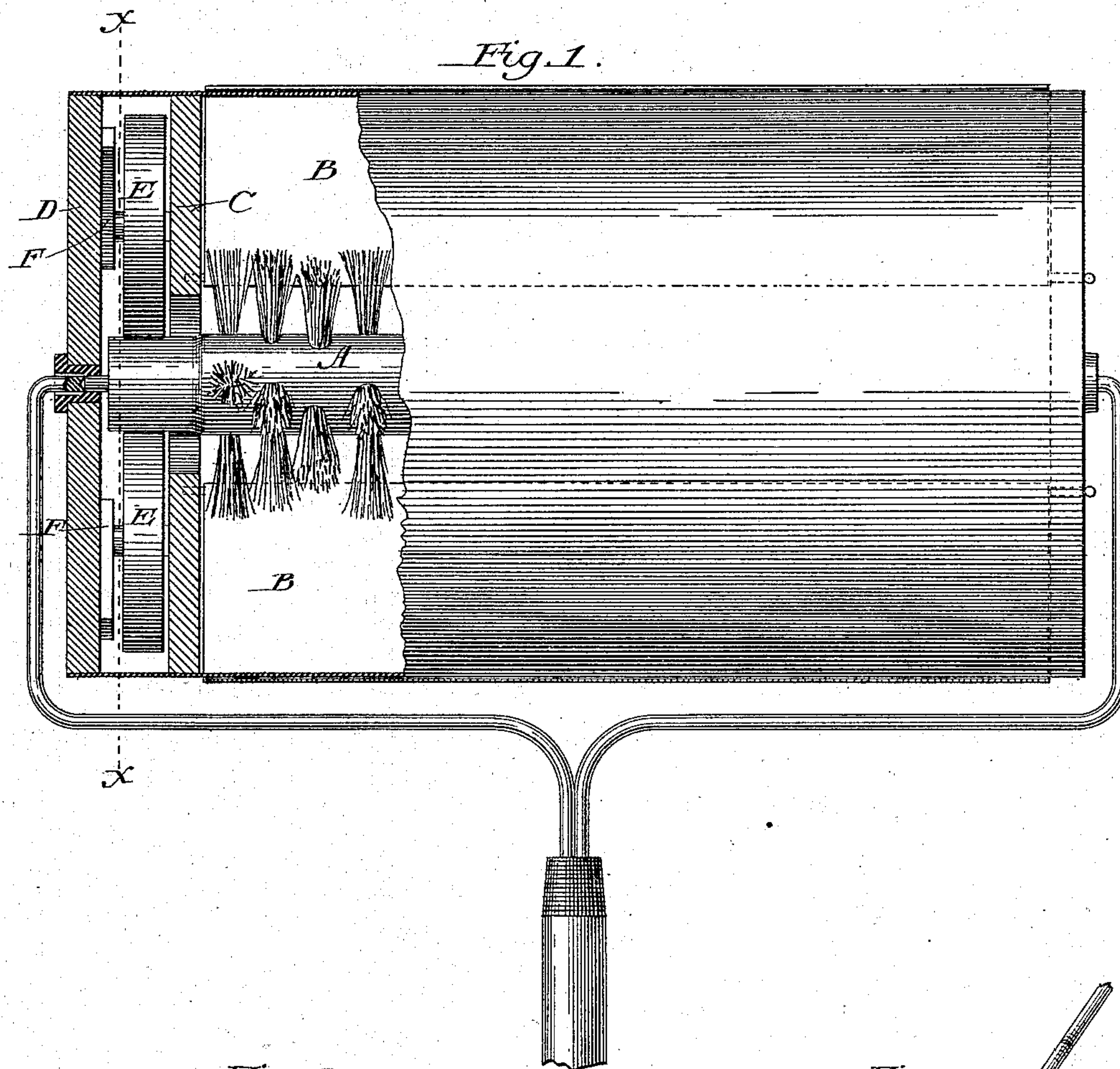


Fig. 3.

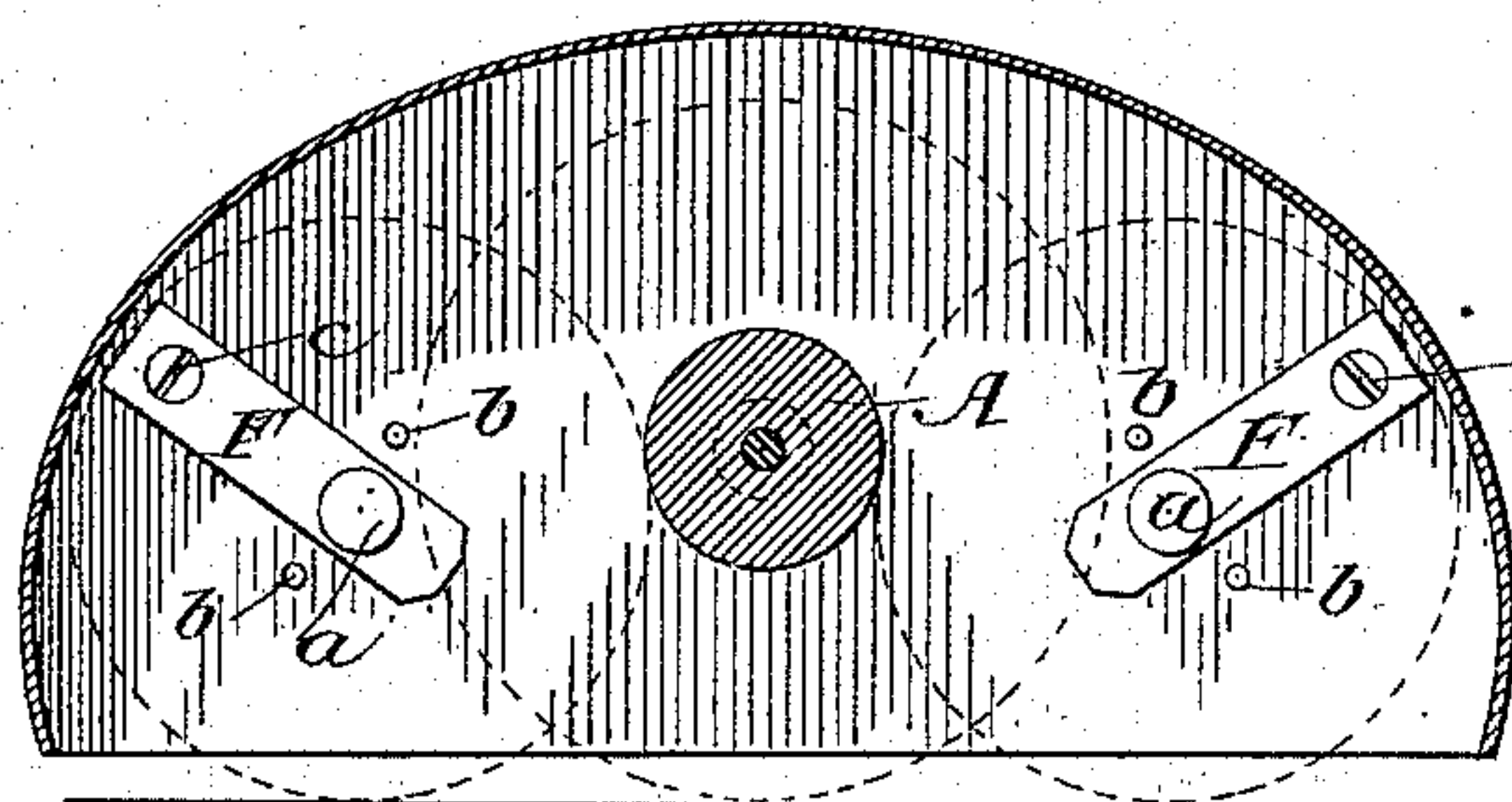
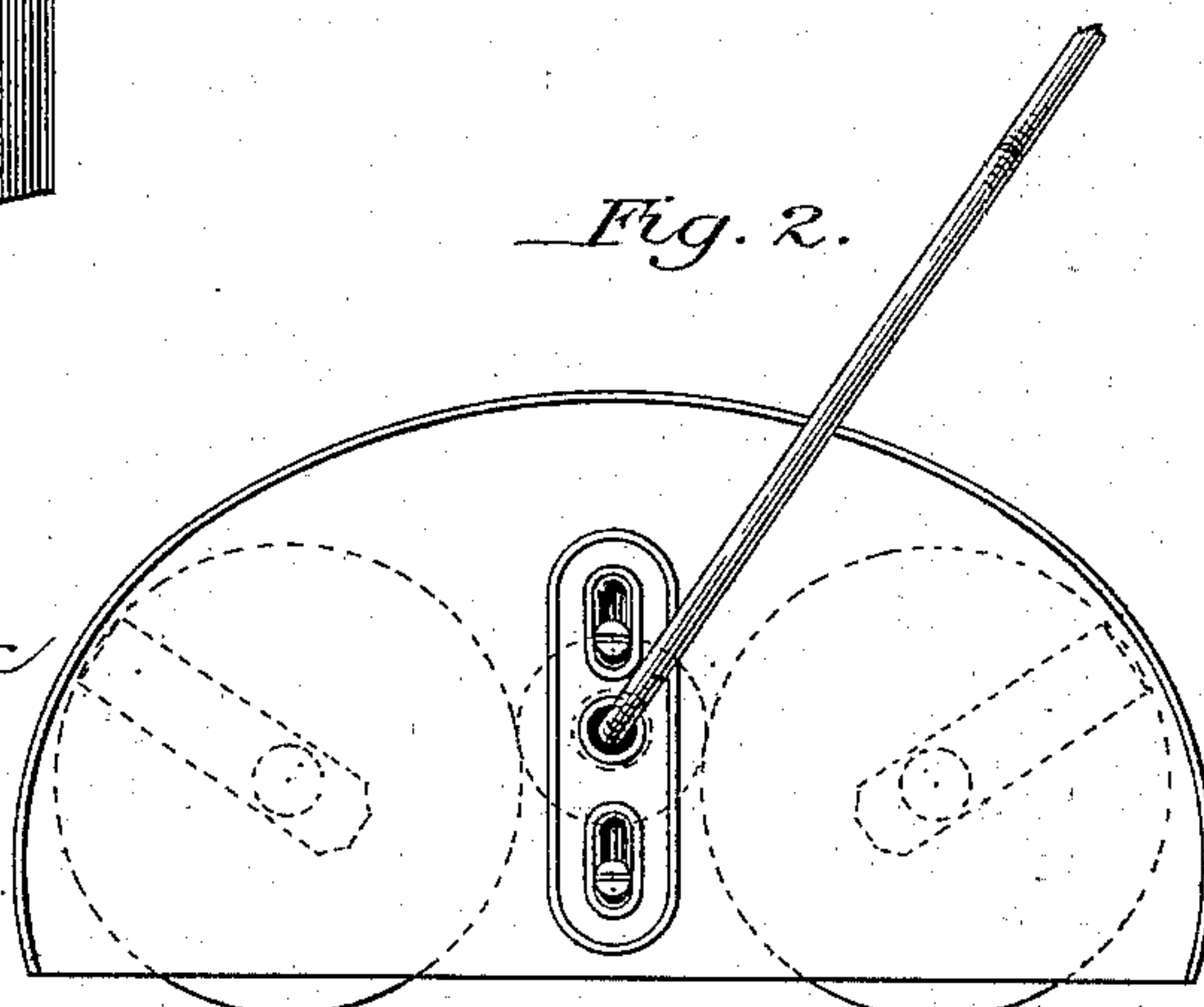


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 252,402, dated January 17, 1882.

Application filed December 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, MYRON G. STOLP, residing at Aurora, in the county of Kane and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Carpet-Sweepers, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a top view, a portion of the case being cut away, some parts being shown in section. Fig. 2 is an end elevation. Fig. 3 is a section taken at line *x* of Fig. 1, the driving-wheels being removed.

My invention relates to that class of carpet-sweepers in which the wheels which support the sweeper at one end also serve the purpose of driving the brush-shaft, to which motion is given by the frictional contact of such wheels, without the aid of springs or levers to force the wheels into contact with the shaft.

The object of my invention is to render the action of the brush-driving wheels more efficient and certain than has heretofore been done, which I accomplish by arranging the arms which carry the driving-wheels and the driving-wheels in such manner relatively to the brush-shaft that the principle of the toggle-joint is introduced into the sweeper when in use.

In the drawings, A represents the brush-shaft of the carpet-sweeper. B are the dust-pans. C is a partition. D is one of the end pieces. E are two driving-wheels located between the partition C and the end piece, D. F are swinging arms, the lower end of each of which is provided with a pin, *a*, upon which pins the wheels E are placed. The upper and outer ends of these arms F are pivoted to the inside of the end piece, D. *b* are pins which serve the purpose of stops to limit the movement of the lower ends of the swinging arms F. These arms are so located that the pins *a*, which carry the wheels E, will be at all times below the horizontal plane in which the center of the brush-shaft is located, and so that the peripheries of the wheels E will come in contact with the brush-shaft, the upper and outer end of each swinging arm F being in a plane somewhat above the horizontal plane in

which the pins *a a* are located, and in such a position that a line drawn from the pin *a* to the center of the brush-shaft will form a very obtuse angle with a line drawn from the pin *a* to the pivotal point *c* of the arm F.

The operation is as follows: If pressure be exerted upon the bottoms of the wheels E in operating the sweeper, the tendency will be to force the wheels E in an upward direction. In consequence of the described arrangement of the wheels E and swinging arms F, which carry them, the pressure of the wheels upon the brush-shaft will be very great in proportion to the power exerted—much greater than if the swinging arms F were pivoted at a point below the brush-shaft; and this result follows because, by the described arrangement, I have introduced into the carpet-sweeper the principle of the toggle-joint, the arm F being in effect one arm of a toggle-joint and that part of the wheel which extends from its center to the brush-shaft being in effect the other arm of such a joint.

By the described construction and arrangement of the wheels and swinging arms I render the action of the wheels E more certain and efficient than has heretofore been done, and produce a sweeper in which a small force exerted upon the driving-wheels will be sufficient to bring them into frictional contact with the brush-shaft with sufficient force to secure the rotation thereof.

I do not limit myself to pivoting the outer ends of the arms F in the exact position shown in the drawings, it only being necessary that the pivotal point should be so located that the angle which the arm makes with a line drawn from the center of the wheel to the center of the brush-shaft shall be a very obtuse angle, having its apex so located that pressure upon the wheel will force it against the brush-shaft, the operation being similar to that of a toggle-joint.

I am aware that carpet-sweepers have been constructed provided with supporting-wheels, which also operate as driving-wheels to give motion to the brush-shaft, unaided by springs or levers, and I do not claim, broadly, such construction.

What I claim as new, and desire to secure by Letters Patent, is as follows:

5 In a carpet-sweeper, in combination with the brush-shaft, a friction-wheel, E, pivoted on a swinging arm, F, with the center of the wheel below the horizontal plane in which the brush-shaft is pivoted, and having the outer end of such arm E pivoted to the case in such

a position that this arm will form an obtuse angle with a line drawn from the center of the wheel E to the center of the brush-shaft, substantially as and for the purpose specified.

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Witnesses:

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