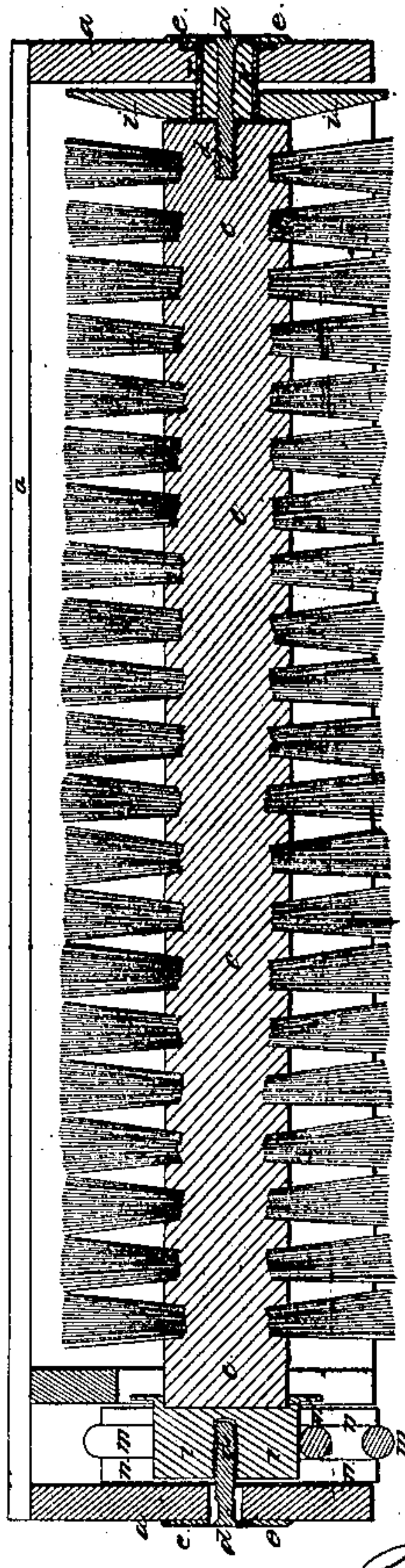
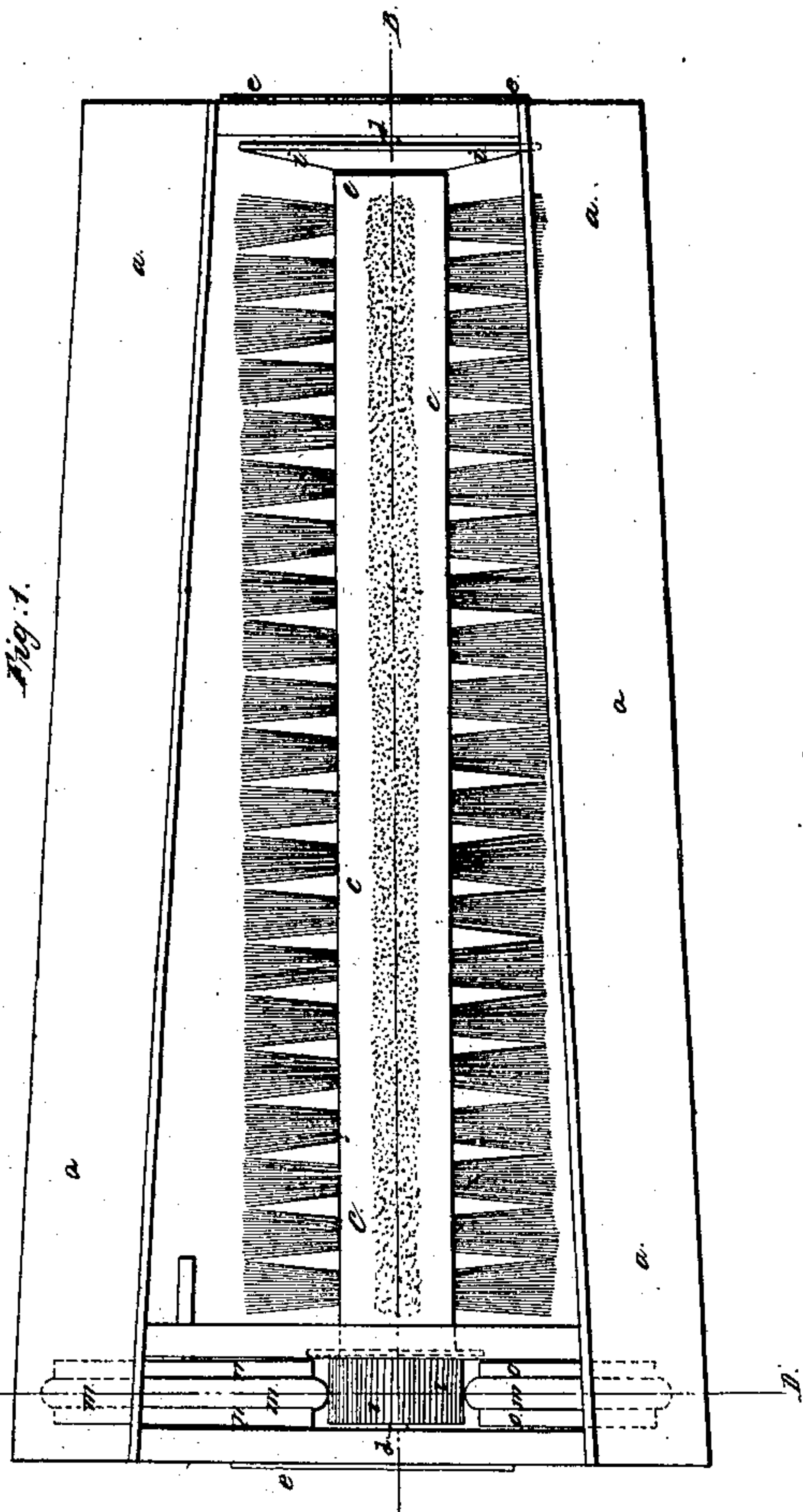
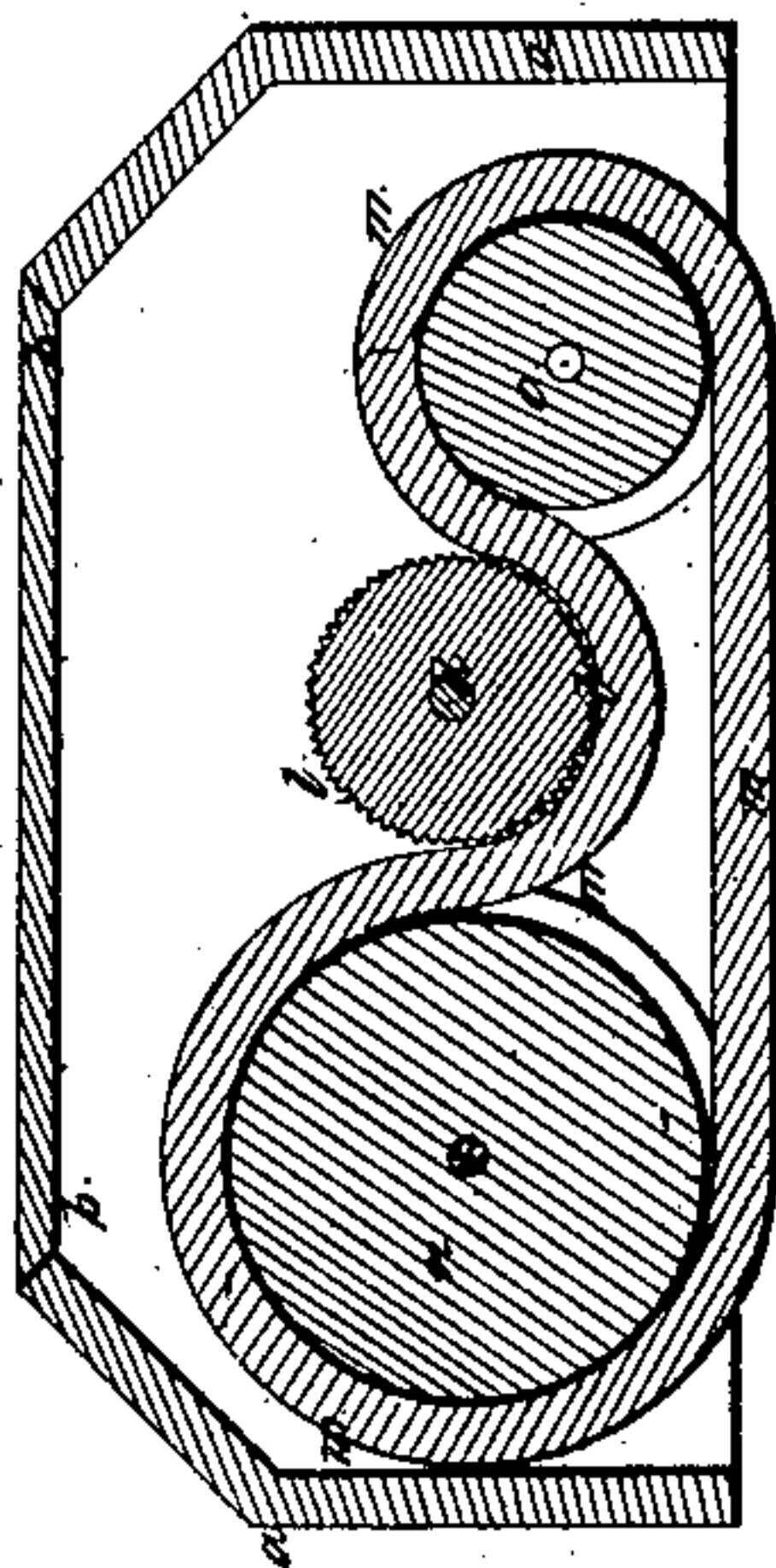
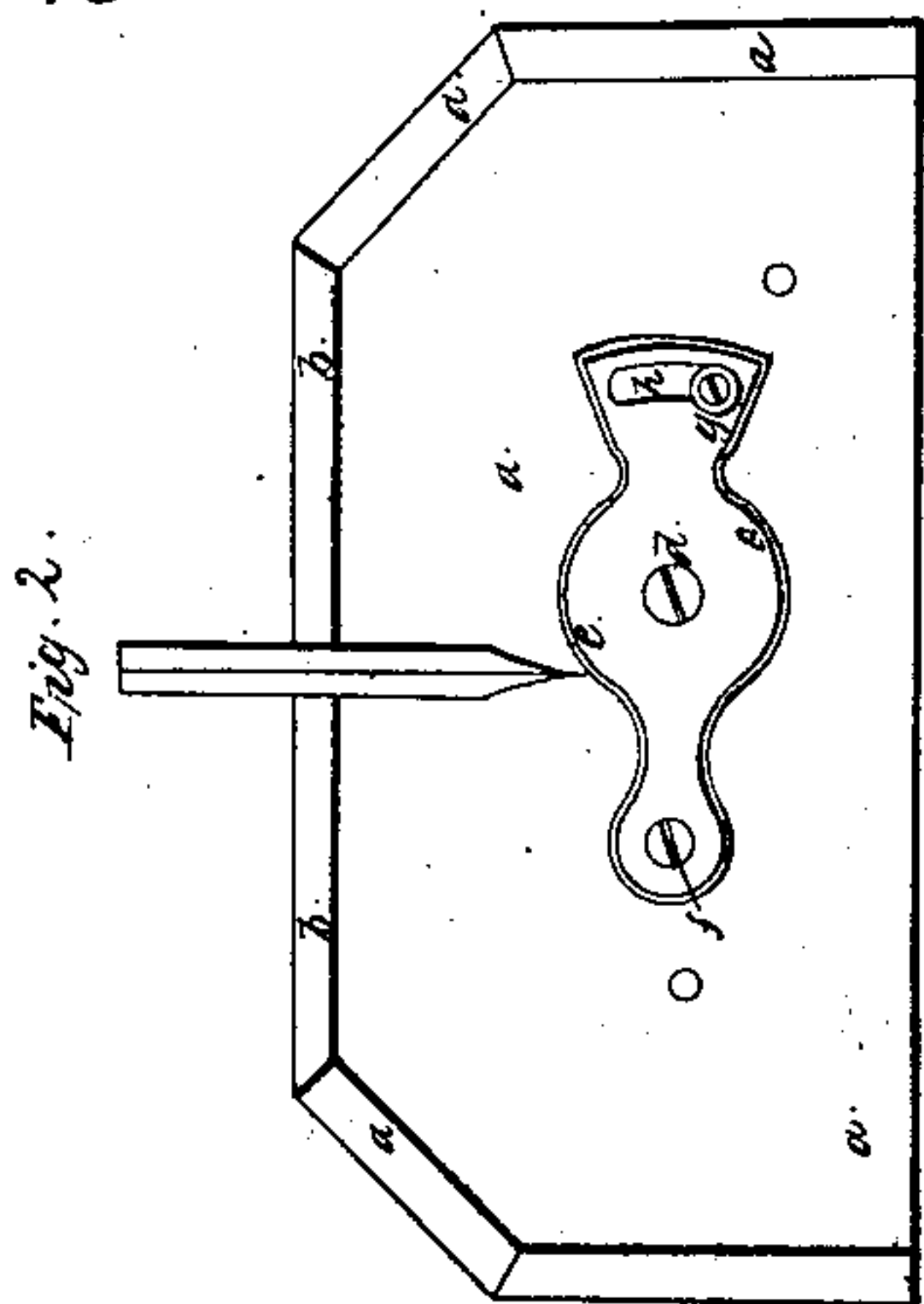


J. Edson.

Carnet Sweeper,

N^o 25,104.

Patented Aug. 16, 1859.



Witnesses:
Laph Garrett
Albert M. Brown

Inventor:
Jacob Edson

UNITED STATES PATENT OFFICE.

JACOB EDSON, OF BOSTON, MASSACHUSETTS.

CARPET-SWEEPER.

Specification of Letters Patent No. 25,104, dated August 16, 1859.

To all whom it may concern:

Be it known that I, JACOB EDSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Sweepers, and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The figures of the accompanying plate of drawings represent my improvements.

Figure 1 is a plan or top view of my improved sweeper, with the cover removed. Fig. 2 is a view of the larger end. Fig. 3 is longitudinal vertical section taken in the plane of the line A B, Fig. 1. Fig. 4 is a section taken in the plane of the line C D, Fig. 1.

My improvements in carpet sweepers are designed to accomplish the following objects, viz: First, to convey the driving power to the brush without the aid either of gears, which wear out the carpet to be swept and are noisy in their operation, or of a long roller which takes up a great deal of room and necessitates the making of a large and heavy machine, and, second, to so arrange the guiding wheel on which the machine runs that the brush may be raised or lowered without a corresponding alteration of the position of the guiding wheel, thereby insuring the true running of the machine and preventing the friction produced by bearing down upon the guiding wheel in running the machine, from being conveyed to the axle of the brush which would thereby cause the brush to run hard.

By my improvements, I drive the machine by means of a belt of rubber or gutta percha interposed between a pulley or roller, around which it passes, and the surface to be passed over or swept, the belt being arranged in such a manner that it is brought to bear and is always retained upon the pulley, and by its soft elastic qualities clings sufficiently to the carpet to produce the necessary friction, and conveys motion to the brush without noise and without wear upon the surface to be swept, and by its own movement upon and passage over the said

surface. I am aware that rubber tires and wheels have been used but these do not serve the purposes of my invention, as by driving the machine in the manner described I am enabled to dispense with gears or cumbersome rollers and obtain all the advantages of getting the motion by means of a belt, which results cannot be secured by the devices referred to.

a a in the drawings represent the box or casing of the machine, of which *b* is the cover, *c c* is the brush shaft, the axles *d d* of which have bearings in plates *e, e* at each end of the machine. The bearings in the ends of the box through which the axles *d d* pass, are sufficiently large to allow the brush to be moved up and down, the plates *e e* in order to allow of the adjustments of the brush, swinging upon fixed points *f, f* and fastened in any desired position by means of set-screws *g, g*, over which the slots *h, h*, in the plates *e e* travel. At one end of the machine is placed a guiding wheel or roller *i* which instead of having a bearing upon the axle *d d* of the brush shaft, is placed upon a stationary hollow shaft or bushing *k*, through which the axle *d* passes, the diameter of which is much smaller than that of the hollow shaft *k*. By this arrangement, the raising and lowering of the brush does not alter the position of the wheel *i*, and does not convey the friction brought to bear upon the said wheel in running the machine, upon the axle of the brush shaft which would otherwise be the case.

Upon one end of the brush shaft *c c* is placed a fluted collar *l* over which passes a belt *m m* of rubber or gutta percha. This belt then passes around two pulleys or wheels *n, o*, as shown in the drawings, in such a manner that the belt is interposed between the pulleys and the surface to be swept, so that the friction of the belt upon the said surface will communicate a revolving motion to the brush, as the belt passes along, and at the same time keep the belt, by its pressure upon the carpet, strained or drawn tightly upon the pulley or wheel and thereby prevent its being run off the same.

It will be evident that instead of using the two pulleys *n, o*, that one only may be used, the belt in that case being crossed and passed directly around the collar *l*.

Having thus described my improvements I shall state my claim as follows:

Although I have described the belt *m m*

as passing around the pulleys *n* and *o*, and the corrugated collar *l*, yet I do not intend to claim this arrangement or particular method of arranging the belt, as this feature
5 is claimed by J. H. Crane, but

What I do claim as my invention and desire to have secured to me by Letters Patent is—

1. Producing the motive power of the
10 machine by means of a belt of rubber or gutta percha interposed and running be-

tween the pulley or roller *n* and the surface to be swept or passed over, as set forth.

2. I also claim arranging the guiding wheel *i* upon the stationary hollow shaft or
bushing *k*, through which the axle of the
brush shaft passes as described and for the
purposes specified. 15

JACOB EDSON.

Witnesses:

JOSEPH GAVETT,
ALBERT W. BROWN.