

2 Sheets—Sheet 1.

No. 367,528.

* Patented Aug. 2, 1887.

Fig. 1.

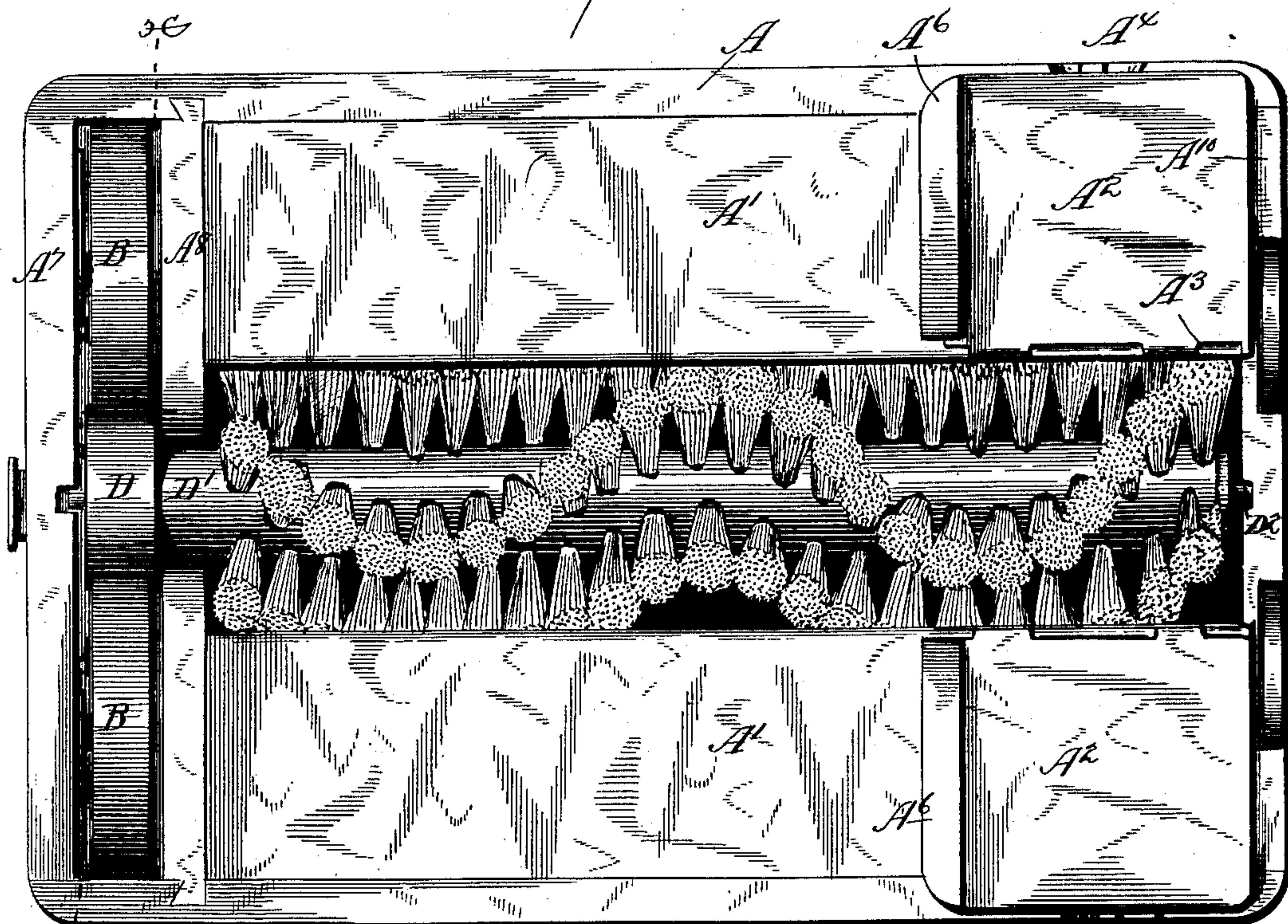


Fig. 2.

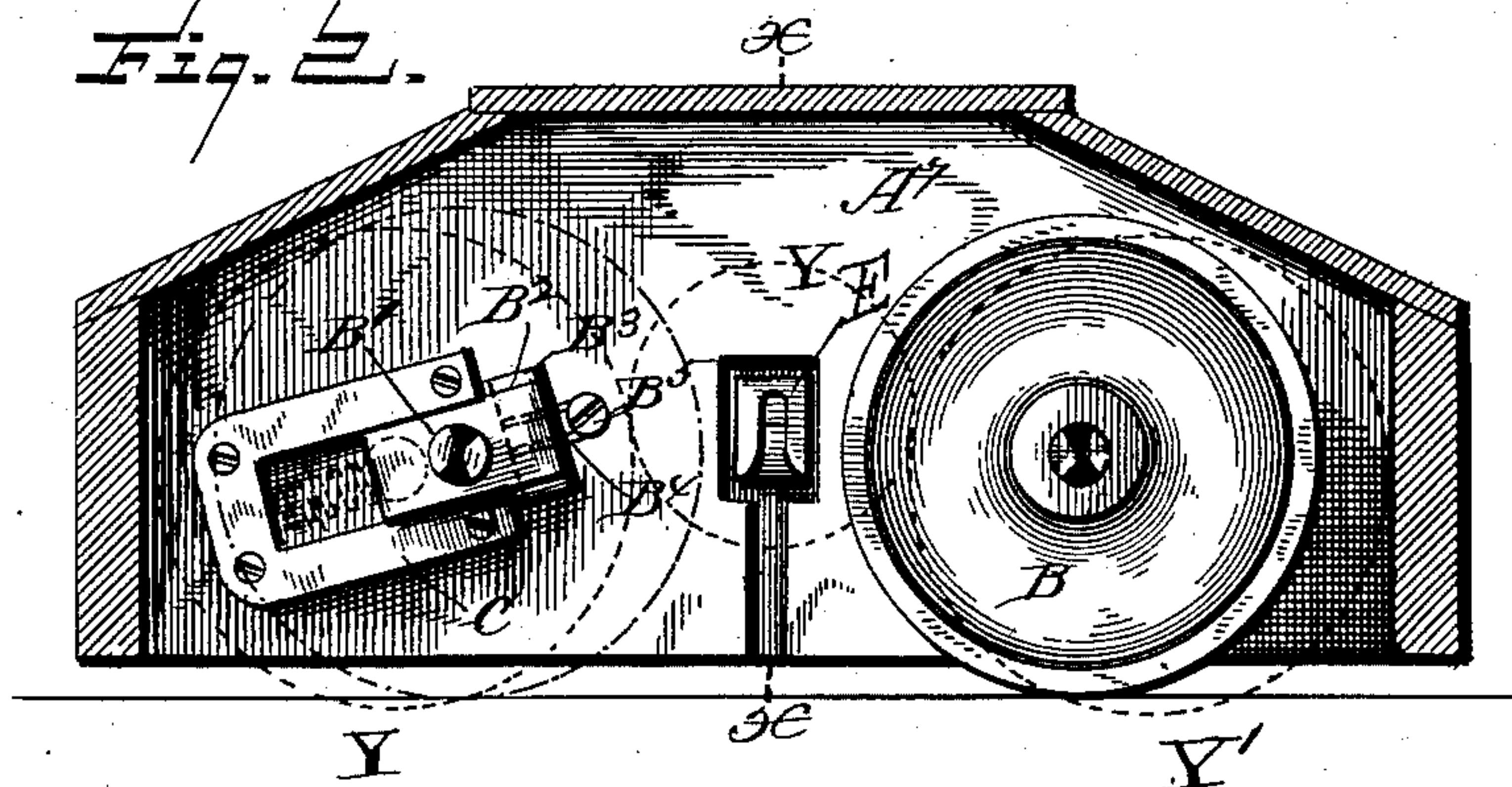
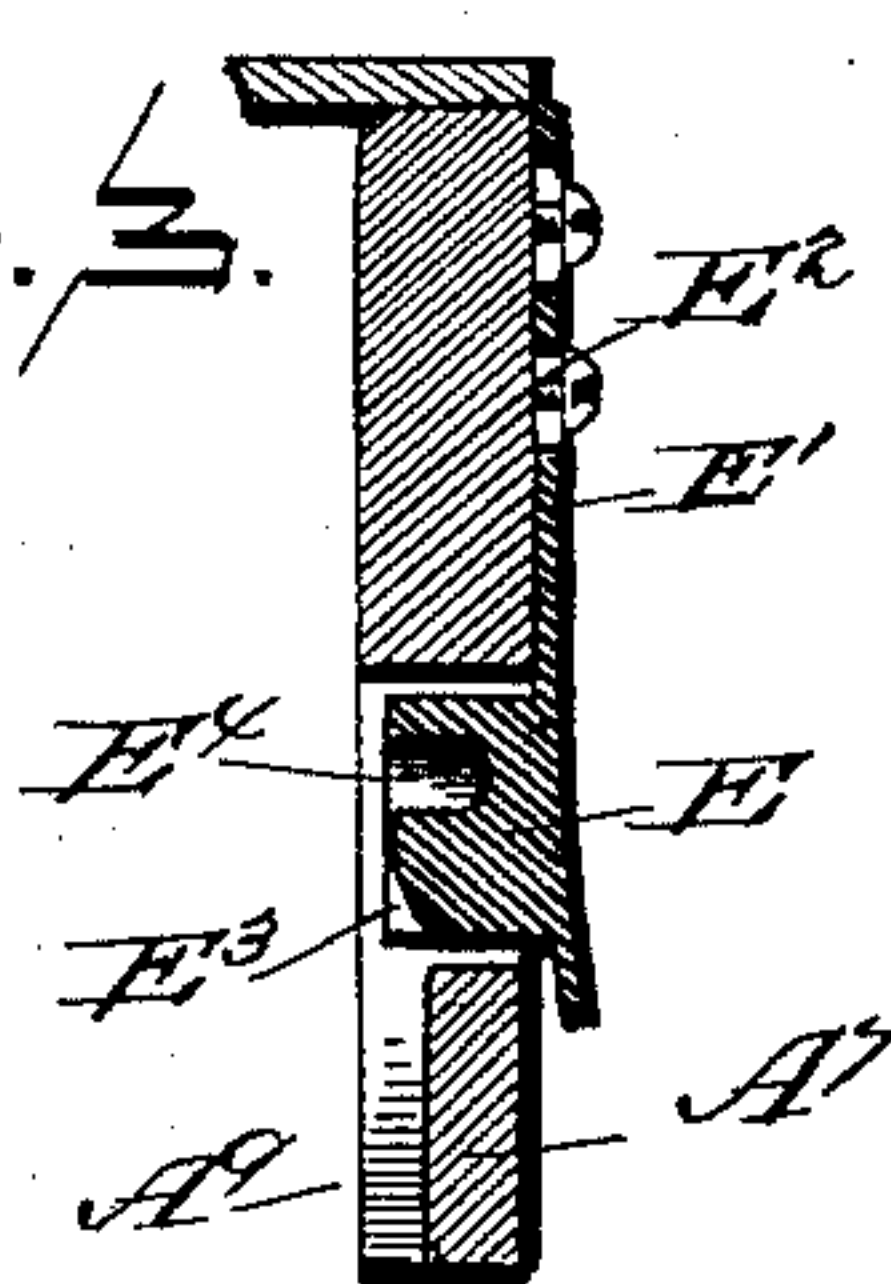


Fig. 3.



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CARPET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 367,528, dated August 2, 1887.

Application filed March 26, 1886. Serial No. 196,612. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. KELLEY, a citizen of the United States, residing at Goshen, in the county of Elkhart, State of Indiana, have invented certain new and useful Improvements in Carpet-Sweepers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has relation to carpet-sweepers, and has for its object to simplify the construction, reduce the cost of manufacture, permit of the insertion and removal of the brush-shaft, and to provide means for the attachment and detachment and retention in a desired position of the handle, and to accomplish these ends by a minimum of hand labor in connection with the manufacture.

Other objects and advantages of the invention will appear in the following description, and the novel features will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a bottom plan view of a sweeper constructed in accordance with my invention. Fig. 2 is a vertical transverse section on the line *x* of Fig. 1. Fig. 3 is a vertical section on the line *x* of Fig. 2. Fig. 4 is an end elevation, and Fig. 5 a plan, of the handle bearing. Fig. 6 is a central longitudinal section of the same. Fig. 7 is an end elevation showing the handle elevated. Fig. 8 is a plan of the bearing with the handle removed. Fig. 9 is a perspective of a detail hereinafter described.

Like letters of reference indicate like parts in all the figures of the drawings.

A represents the case of the sweeper, which is provided with the usual dust-boxes, A', which in this instance are provided at their ends with doors A², hinged, as at A³, and provided with a spring-clasp, A⁴, adapted to take into a recess, A⁵, formed in the case, (see Fig. 4,) so as to retain the door in a closed position, and yet permit of its being opened for the delivery of the dust from the boxes, or other suitable fastening devices may be used, as desired. A flange, A⁶, (see Fig. 1,) is formed on each of the doors to overlap the joint between it and the adjacent edge of the bottom of the dust-box. By this construction dust and dirt is delivered from the boxes more directly, completely, and neatly than where the whole of

the box bottom or top of the case thereover is opened for such purposes.

Between the end A⁷ of the case A and the dust-boxes there is arranged the usual partition, A⁸, which forms the chamber for the usual driving mechanism. The driving mechanism comprises rubber-tired wheels B B, each of which is mounted upon a shaft, B', projecting from a sliding block, B², flanged, as at B³, to fit a frame, C, secured to the inner surface of the end A⁷ of the case. The block B² and the shaft B' thereof are yieldingly retained in a position to cause the driver B to bear upon the friction-wheel D of the brush-shaft D' by means of a rubber band, B⁴, secured at one end to the block and at the other end to a screw or pin, B⁵, projecting from the end A⁷, said screw or pin also acting as a stop to limit the movement of the block in one direction. Either one or both of the drivers B may be thus mounted, so that the brush-shaft D' and the pinion thereon may be passed between the drivers for the purpose of removing the brush from the case.

If desired, a coiled spring (see dotted lines, Fig. 2) may be inserted between the end of the block and cross-bar of the frame C to serve the function of the rubber spring B⁴. The dotted circle Y, Fig. 2, represents the friction-wheel D of the brush-shaft, and the dotted lines Y' represent the relative positions of the driving-wheels B when in contact with the wheel D, when in the act of removing the brush-shaft, the drivers B, their shafts, and shaft blocks being forced apart.

E represents the bearing-block for the journal of the brush-shaft at that end thereof which carries the friction-wheel D. Said block is secured to or formed as a part of a spring, E', adjustably secured to the outer surface of the end of the case by screws E² passing through slots in said spring. The lower end of the block is cut away, as at E³, to form a groove to lead the journal into the bearing E⁴, formed in the block. The end wall, A⁷, is also grooved, as at A⁹, for the passage of said journal upwardly into the block, which yields when the journal enters the groove E⁴ and returns to position when the journal enters the bearing. By reason of the adjustability of the spring E' the brush-roll may be elevated to adapt the

brush to different kinds of surfaces or carpet. The opposite end, A^{10} , of the case has formed therein recesses A^{11} for the reception of the rollers F , which support the case slightly above the floor.

G represents a casting secured to the end A^{10} of the case and provided with arms G' , having journals G^2 , upon which the wheels F are mounted.

By the construction just described it will be seen that the wheels F are arranged wholly within the end walls, and that therefore the sweeper and its brush may be brought into close contact with the walls of the room.

H represents a casting which is secured to the top of the box or casing, and is constructed with a recess, H' , in which is arranged a spring, H^2 . The top of the casting is provided with a turn-buckle, I , pivotally secured by a screw or bolt, I' . Apertures H^3 are formed at each end of the casting, for a purpose hereinafter specified.

J represents a bail having a tang, J' , to which a handle may be secured in any suitable manner. The bail J is provided with lugs J^2 , adapted to pass through openings H^4 , (see Fig. 8,) formed in the top of the casting and communicating with the recess H' thereof, and to come into contact with the ends of the spring H^2 within the recess, which spring is so formed as to exert an upward pressure upon the lugs J^2 , so as to force them out of the casting and into recesses I^2 in the under surface of turn-buckle, holding it in position and preventing rattling. In order to retain the lugs, bail, and handle in connection with the casting, the turn-buckle I is swung upon its pivot until its ends rest over the lugs J^2 . The bail J is extended beyond the lugs J^2 , as at J^3 , so that when the handle is elevated to assume an upright or nearly upright position with relation

to the sweeper, said extensions J^3 come in contact with the end walls of the recesses H^3 or with lugs H^5 , formed at said end walls. By this construction the handle can be conveniently attached to or detached from the sweeper and as conveniently maintained in an upright position, whereby the same will not necessarily occupy as much room as it would otherwise.

In order to allow for variation in length of case, I have provided at one or both ends of the same a screw-threaded pintle, D^2 .

Having thus fully described my invention and its operation, what I claim, and desire to secure by Letters Patent, is—

1. In a carpet-sweeper, a handle provided with lugs, in combination with a recessed casting provided with a spring and with a turn-buckle, substantially as specified.

2. As a means for attaching a handle to a carpet-sweeper, a recessed casting, a spring arranged therein, and a turn-buckle mounted thereon, substantially as specified.

3. The combination, with the case A , of the frame C , the sliding block B^2 , carrying the exterior stub, shaft B' , projecting from one side thereof, and the spring B^4 and stop B^5 of the driver B , substantially as specified.

4. The combination, with the case A , having the recess A^5 , of the dust-box A' , having the hinged portion A^2 , provided with the catch A^4 , substantially as specified.

5. The combination of the casting H , having the recess H' , apertures H^3 H^4 , the spring H^2 , the handle or bail J , provided with the lugs J^2 , and extensions J^3 , substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE W. KELLEY.

Witnesses:

THEODORE T. EVANS,
THOMAS A. GILMORE.