

No. 609,217.

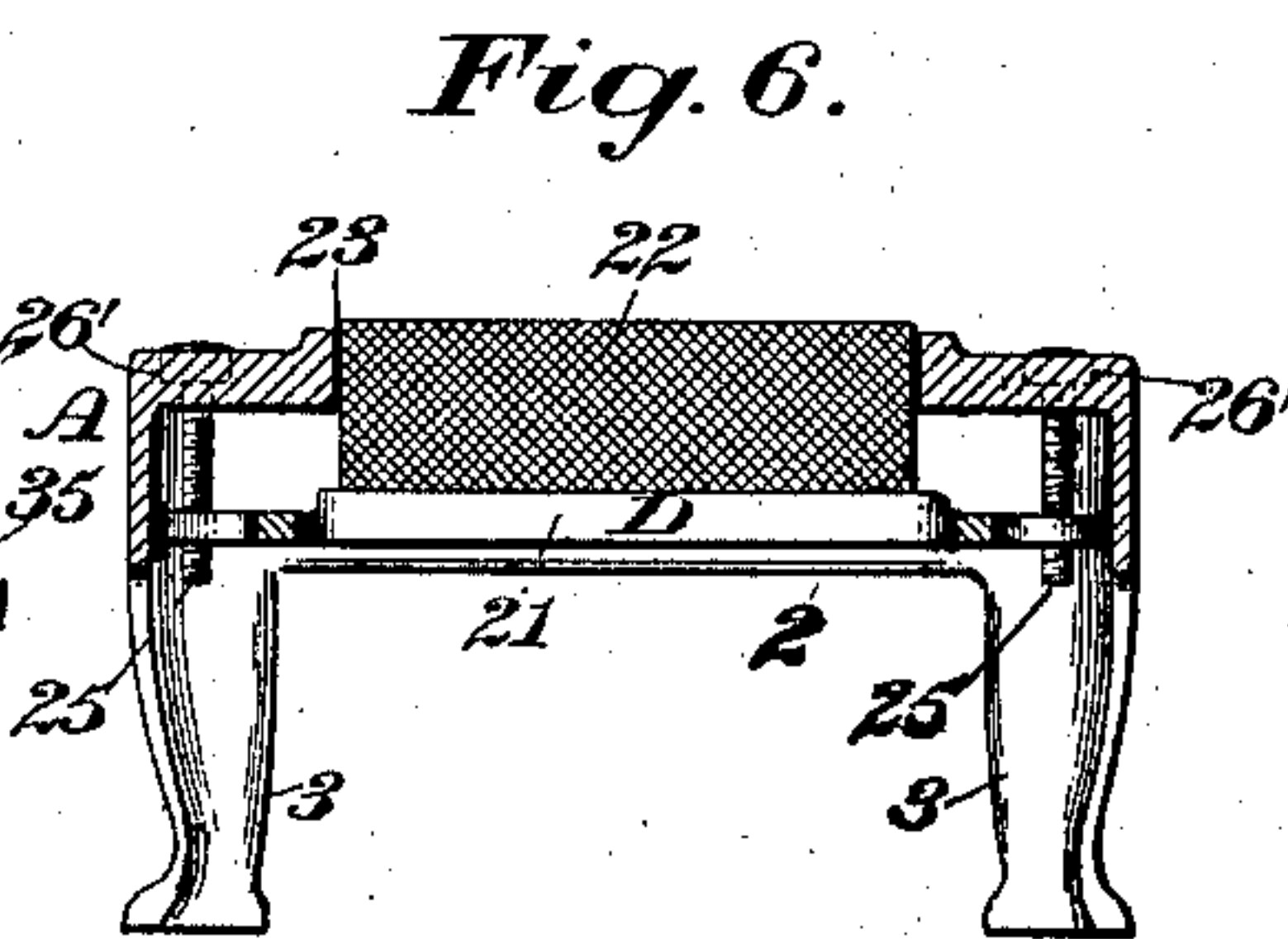
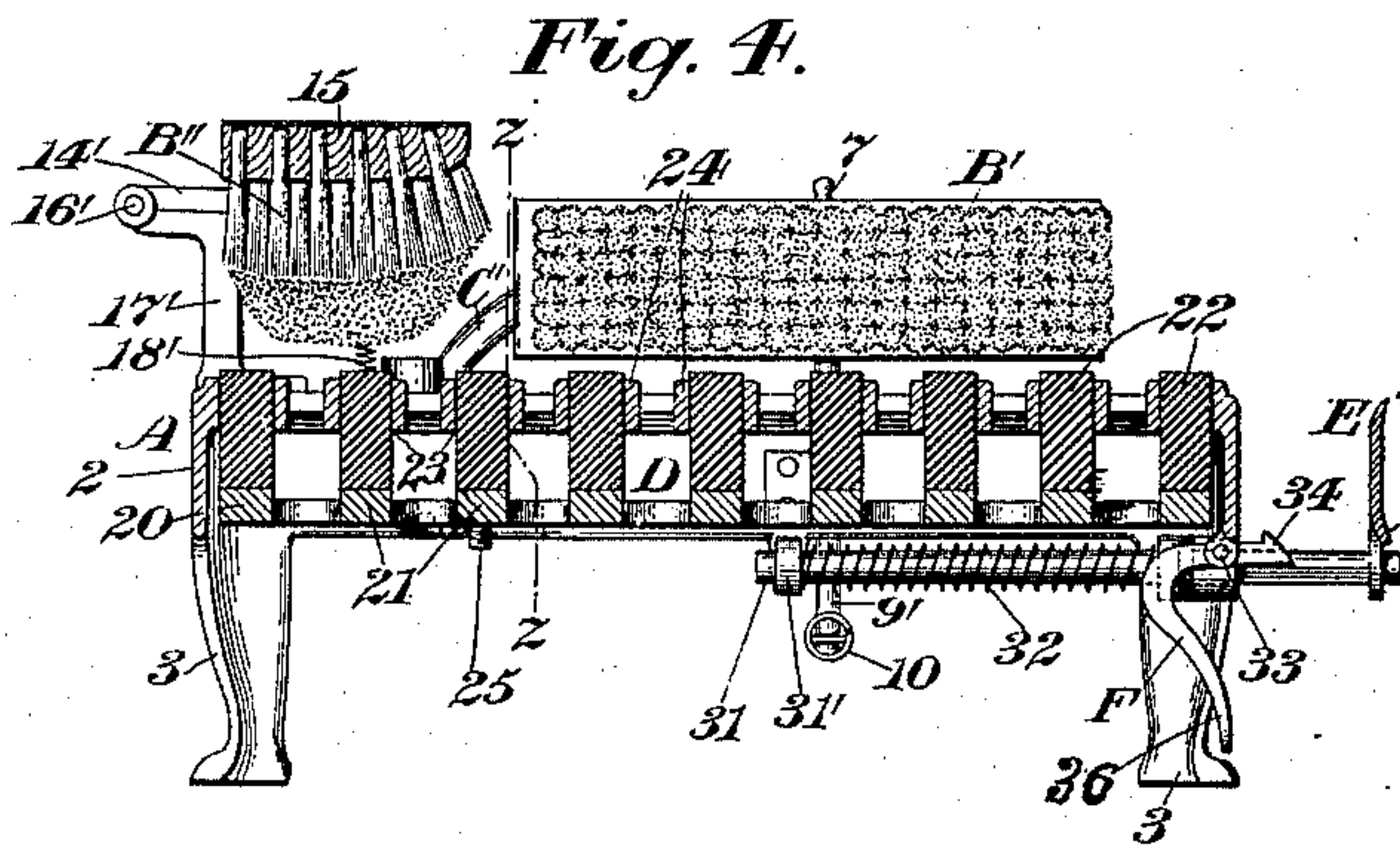
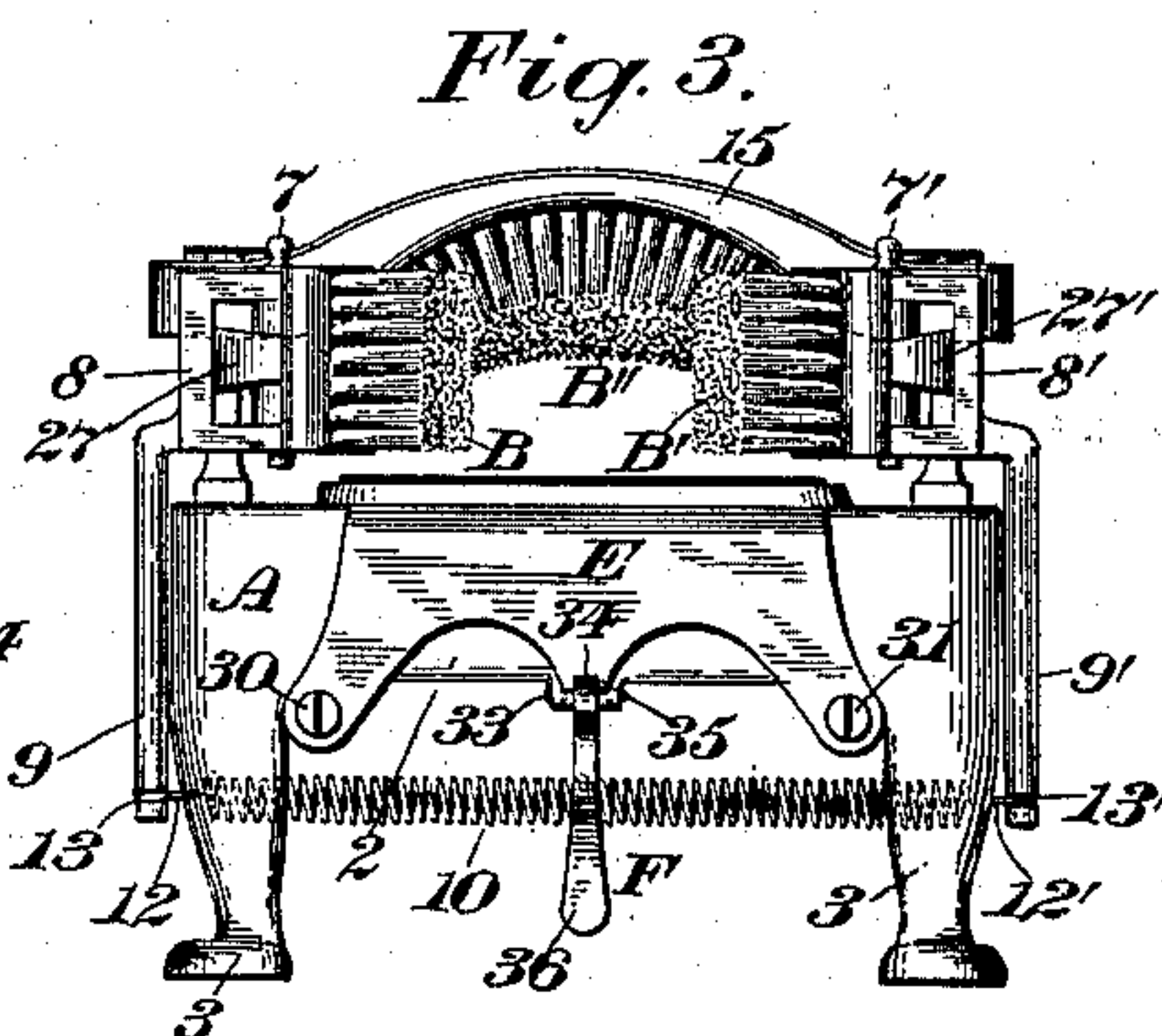
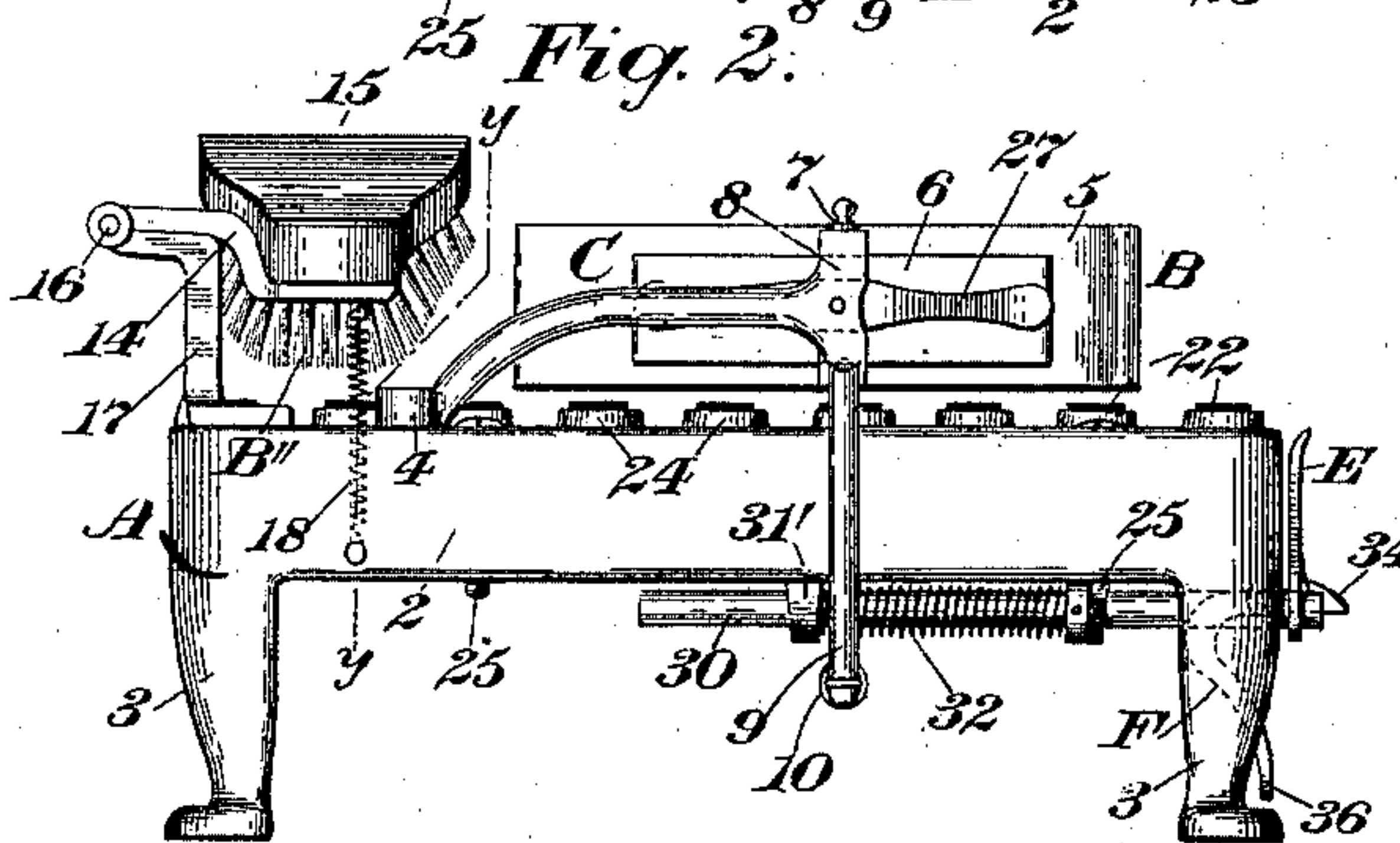
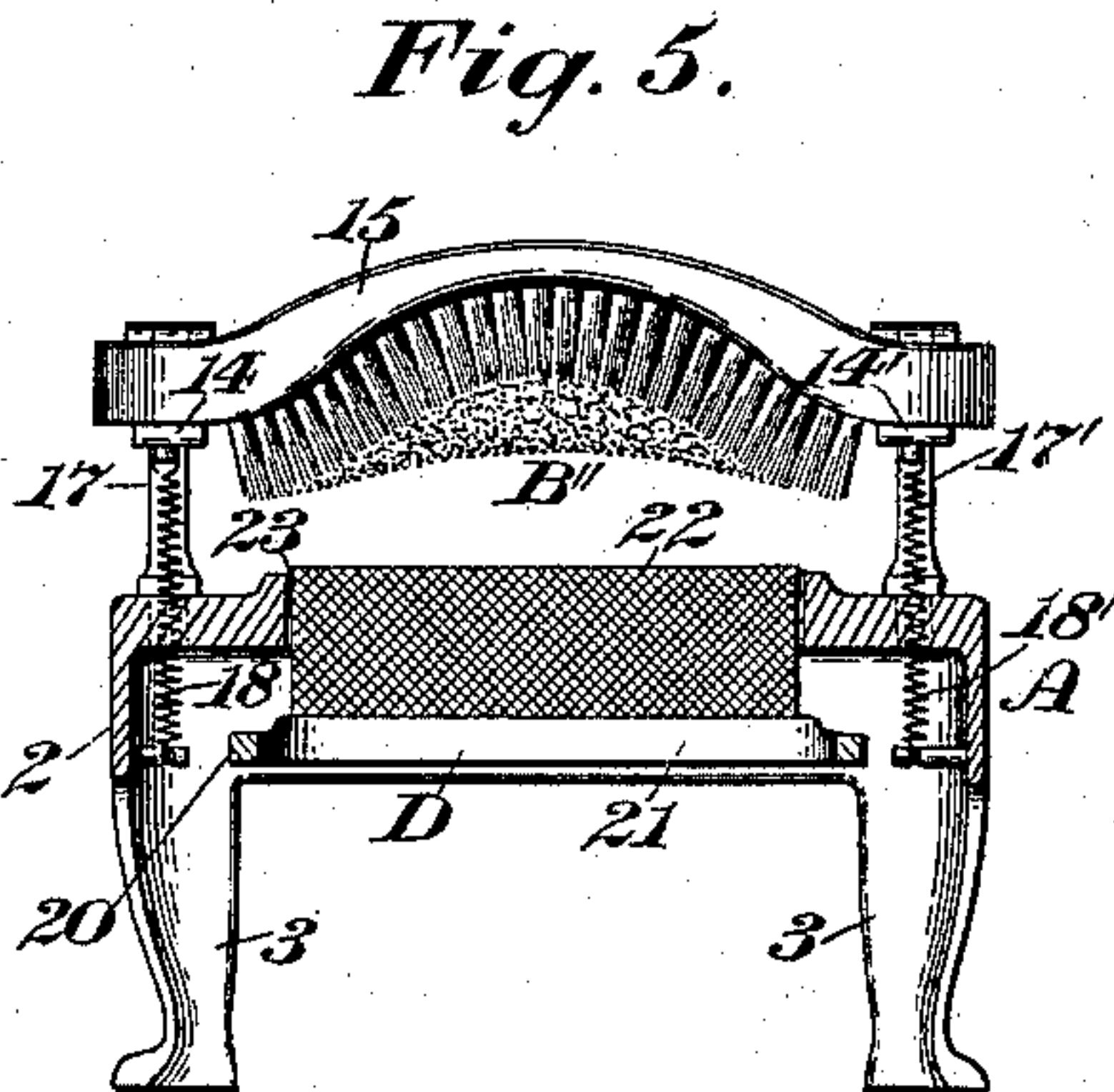
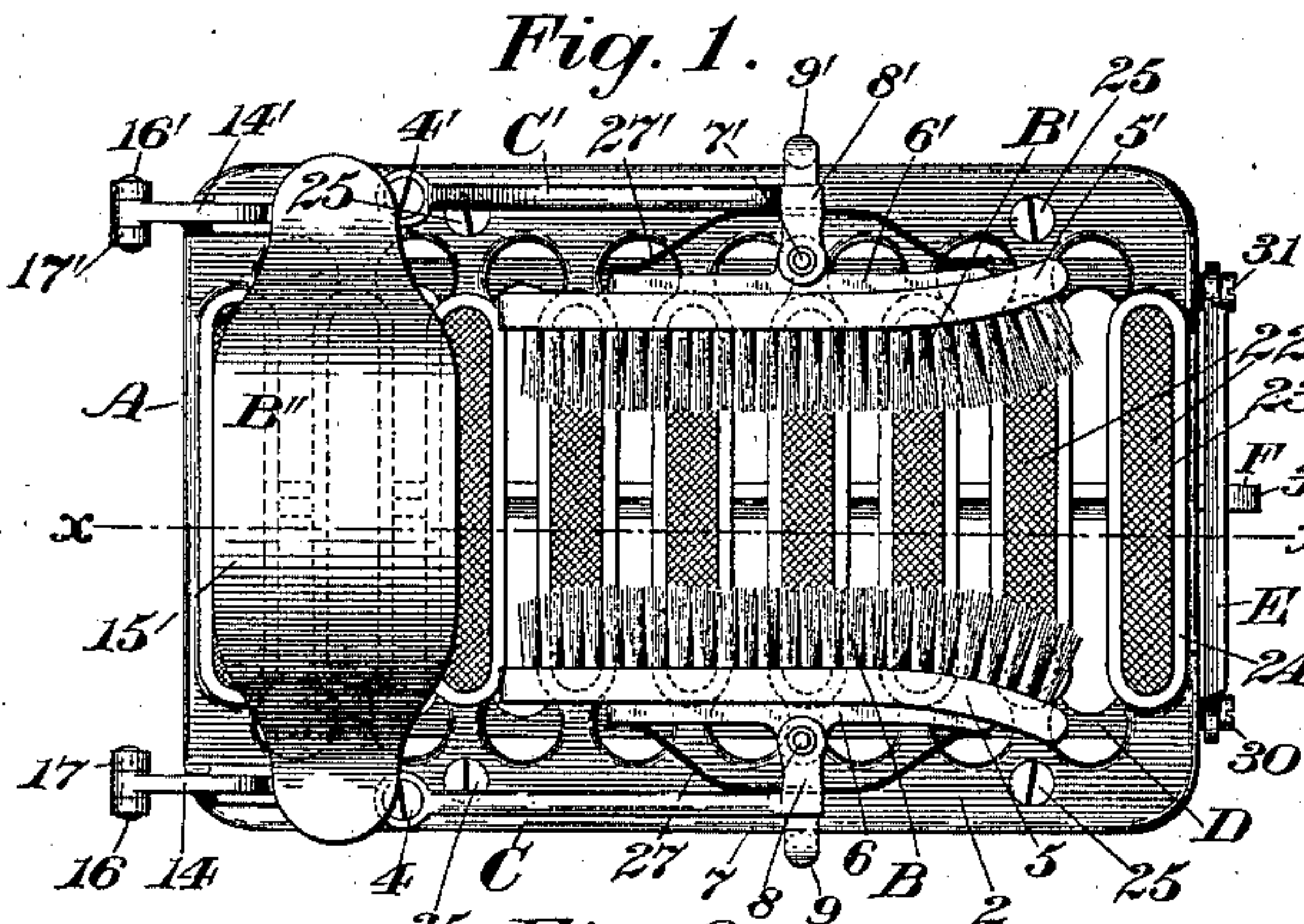
Patented Aug. 16, 1898.

W. F. WAGNER & O. B. OLIN.

BOOT CLEANER.

(Application filed Feb. 25, 1898.)

(No Model.)



Witnesses:

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UNITED STATES PATENT OFFICE.

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BOOT-CLEANER.

SPECIFICATION forming part of Letters Patent No. 609,217, dated August 16, 1898.

Application filed February 25, 1898. Serial No. 671,686. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM F. WAGNER and OTTO B. OLIN, citizens of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Shoe-Cleaning Machines, of which the following is a specification.

This invention relates to a machine for cleaning boots or shoes; and the object of the invention is to provide a simple and efficient device of this character the several parts of which can be manufactured and assembled at a low cost.

In the drawings accompanying and forming part of this specification, Figure 1 is a plan view of our improved shoe-cleaning machine. Fig. 2 is a side elevation of the machine. Fig. 3 is a front elevation. Fig. 4 is a longitudinal central section taken in the line $x x$, Fig. 1. Fig. 5 is a transverse section taken in the line $y y$, Fig. 2; and Fig. 6 is a transverse section taken in the line $z z$, Fig. 4, with the brushes removed.

Similar characters designate like parts in all the figures of the drawings.

Our improved machine includes a base, a pair of brushes mounted to permit the entrance of a shoe between the same, a pair of carriers for the brushes, supported upon the base, and a spring connecting the carriers; and the said two brushes are adapted to polish or clean the sides of a shoe, a third brush, the working surface of which is transverse to the others, being employed to polish the tip or front part of the shoe.

The base upon which the different parts of the machine are mounted is designated by A, and it consists of a substantially grid-like frame 2 and a series of legs 3, depending therefrom, which may be secured to a floor or other support.

The machine includes in its construction three brushes, as B, B', and B'', the brushes being yieldingly mounted to permit the entrance of shoes or boots of different sizes between the same, the shoe resting upon a support, hereinafter described, and the brushes B and B' being adapted to polish the opposite sides of the shoe or boot, while the brush B'', the surface of which is located substantially

at right angles to the other two, is intended to clean and polish the tip.

The carriers for the brushes consist, preferably, of levers C and C', pivoted near the opposite sides of the base A, as at 4 and 4', respectively, and they are mounted for lateral movement and are preferably spring-actuated, a single spring connecting said carriers and serving to hold the brush-surfaces firmly against the shoe.

The brush-backs 5 and 5' have the plates 6 and 6' fixed thereto, and said plates are pivoted substantially centrally thereof, as at 7 and 7', to the cross-pieces 8 and 8' at the ends of the carriers or levers C and C', and the latter are provided at their free ends with the downwardly-extending arms 9 and 9', the extremities of which are disposed below the frame 2 and are connected by a coiled spring 10, terminating in loops 12 and 12', lying in the annular grooves 13 and 13', respectively, near the lower ends of the carrier-arms 9 and 9', the coiled spring being of such strength as to hold the two brushes B and B' against the shoe, which is reciprocated back and forth between them and under the brush B''.

The brush B'' is supported as follows: A pair of arms is shown at 14 and 14', these being fixed to the under side of the brush-back 15 and pivoted at their rear ends, as at 16 and 16', to the risers 17 and 17', fixed to the upper side of the frame 2, the surface of the brush B'' being held against the shoe by coiled springs, as 18 and 18', secured to the brush and frame, respectively.

The shoe is placed upon a rest or support, as D, preferably adjustably mounted, thereby to compensate for wear on the upper surface thereof, and it consists, preferably, of a skeleton or open frame, as 20, to the cross bars or ribs 21 of which a corresponding series of blocks or pads 22, of rubber or other suitable material, are attached, these pads or blocks extending through and fitting snugly in elongated slots, as 23, formed in the cross bars or ribs 24 of the grid-like frame 2 and projecting a sufficient distance above the same to prevent the foot from coming in contact with said frame.

The foot-rest D is upheld by a series of screws, as 25, in threaded engagement there-

with, the heads of which are located in suitable seats, as 26', in the upper side of the frame 2, and by turning the screws in the proper direction the shoe rest or support D as a whole can be raised.

In connection with the pair of side brushes B and B' we provide bowed springs, as 27 and 27', secured, preferably at their middle, to the cross-pieces 8 and 8' of the brush-carriers, and the free ends of said bowed springs bear against the opposite ends of the plates 6 and 6', so that the opposite ends of the brushes are held against the shoe with sufficient pressure to polish the same, and whereby the brushes conform to variations in form of different shapes of shoes.

In connection with the base A we prefer to mount upon the same a scraper, which is intended to remove mud, &c., from the soles of the shoe, the scraper being preferably spring-actuated or forced outward by the power of a spring or springs of suitable strength and being held in its retracted position and against the action of said spring or springs and beyond the reach of the foot when not in use by a trigger.

The scraper is designated by E, and it consists, preferably, of a plate fixed to the bars 30 and 31 and is situated when in its retracted position contiguous to the base A, and the bars 30 slide through openings in the guides or lugs 31', depending from the base, and are encircled by coiled springs, as 32, one end of each spring being attached to a bar and the opposite end thereof fitting against the rear-most guide 31'.

The trigger or detent for holding the scraper E in its retracted position is designated by F, and it consists of a dog or lever pivoted, as at 33, to the base and provided with a hook 34, adapted to engage the catch 35 on the under side of the scraper, said trigger being also provided with a tailpiece, as 36, which

may be operated by the foot to disengage the hook 34 from the catch 35, whereby the coiled springs 32 will shoot the scraper F outward into position for use.

The trigger F is a gravity device, the tail-piece 36 thereof being of sufficient weight to throw the hooked end 34 of said trigger into engagement with the catch 35 on the scraper-plate E when the latter is retracted.

Having described our invention, we claim--

1. The combination, with a base, of a pair of levers pivoted to the base and having transverse arms; a spring connected to said arms; brushes pivoted to the levers; and springs also carried by the levers and bearing at their free ends against the brushes.

2. The combination, with a base, of a spring-actuated scraper-plate supported thereby, and a trigger located to hold the plate in its retracted position.

3. The combination, with a base, of a spring-actuated scraper-plate; a series of bars fixed to said plate; guides for the bars, on the base; a spring acting against the scraper-plate and tending to force the same outward; and a trigger in position to hold the plate in its retracted position.

4. The combination, with a base, of a spring-actuated scraper-plate supported thereby, and a gravity-trigger pivoted to the base and having a hook to engage the scraper-plate to hold it in its retracted position.

5. The combination, with a base, of a foot-rest consisting of a skeleton frame and a series of blocks fixed to the ribs thereof and extending above the base; a series of screws in threaded engagement with the foot-rest; and a brush or brushes mounted on the base.

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