

No. 610,397.

Patented Sept. 6, 1898.

J. E. & W. J. GEE.  
SCRUBBING MACHINE.

(Application filed Dec. 29, 1897.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

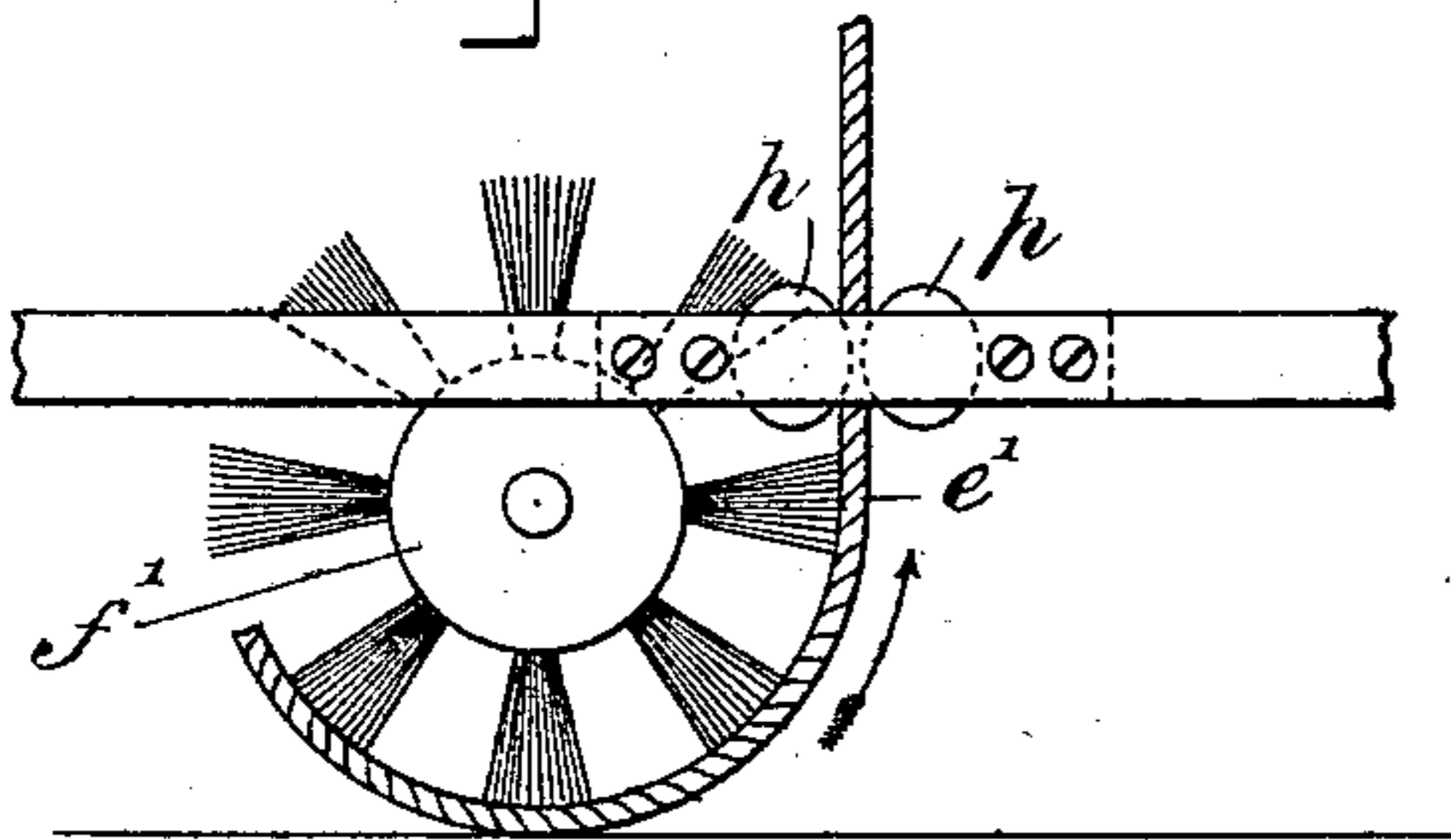


Fig. 3.

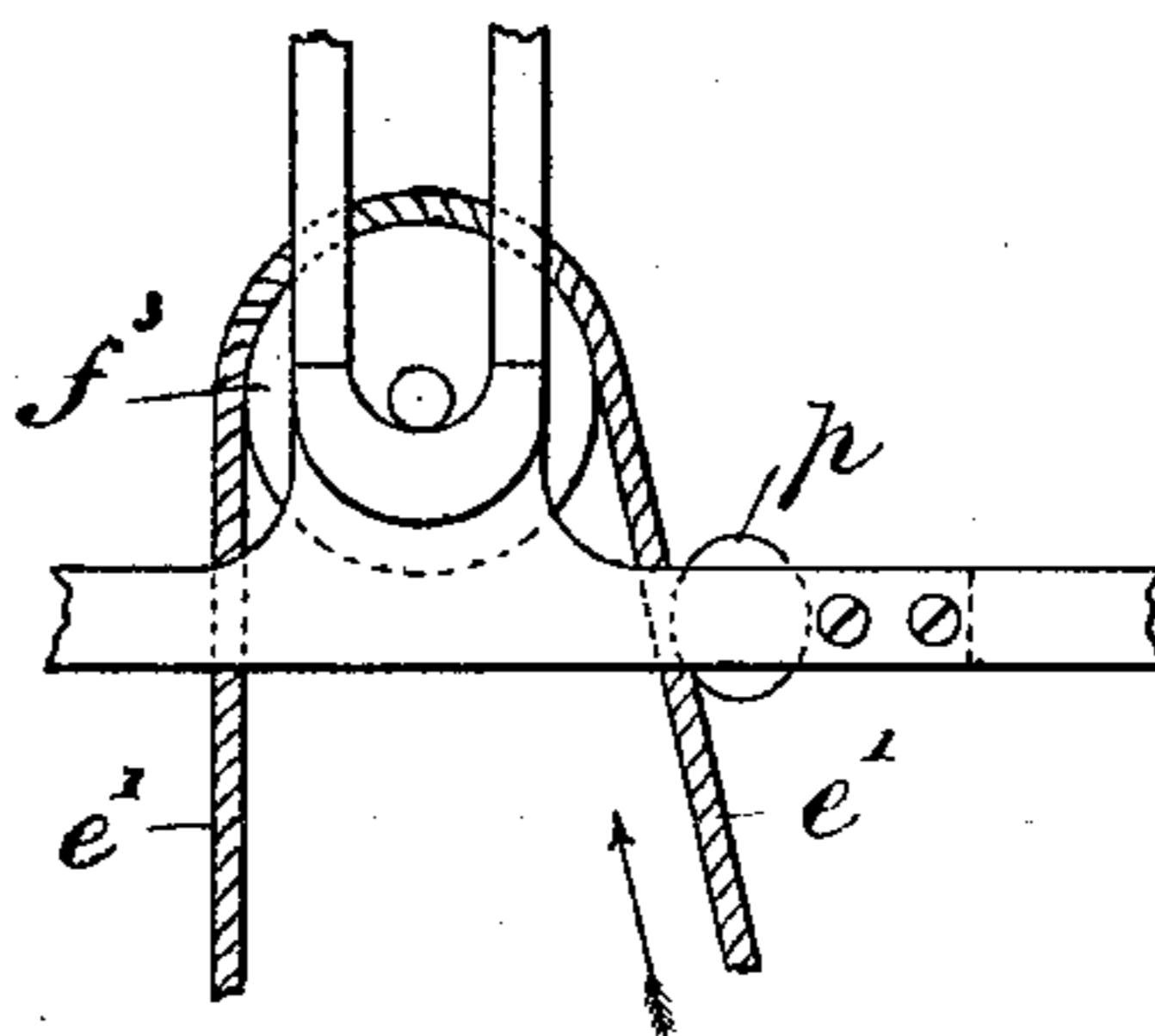


Fig. 2.

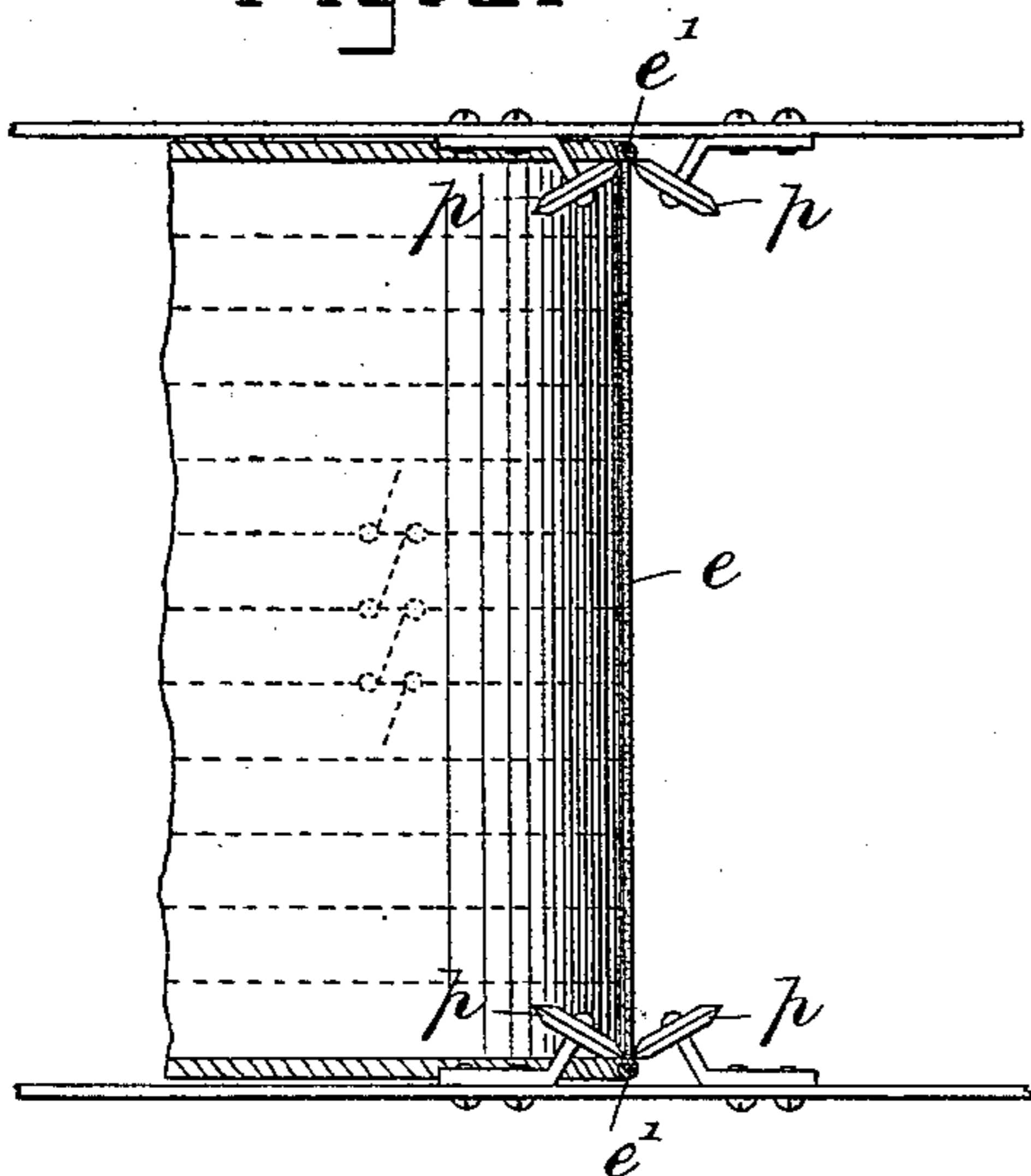


Fig. 4.

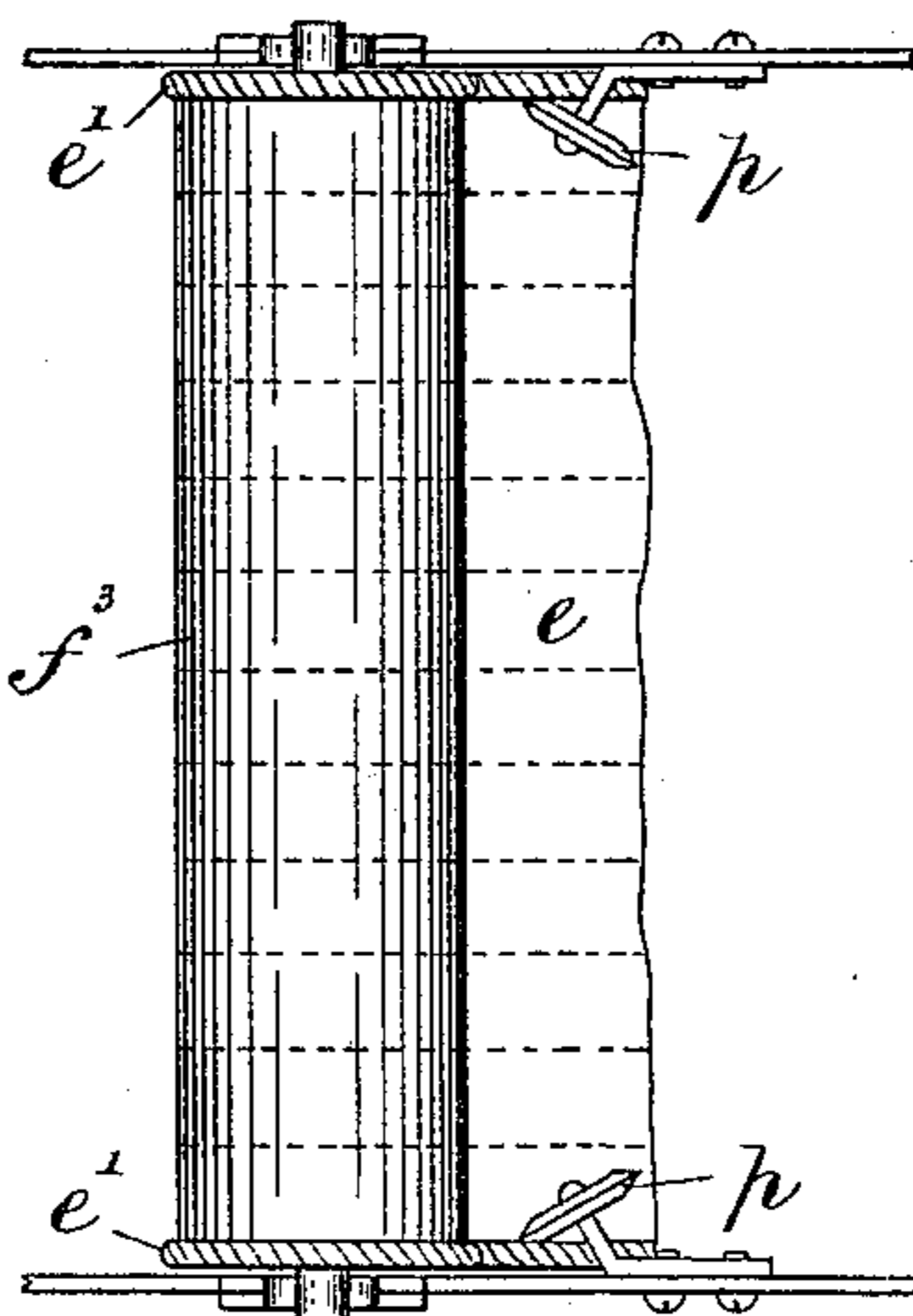
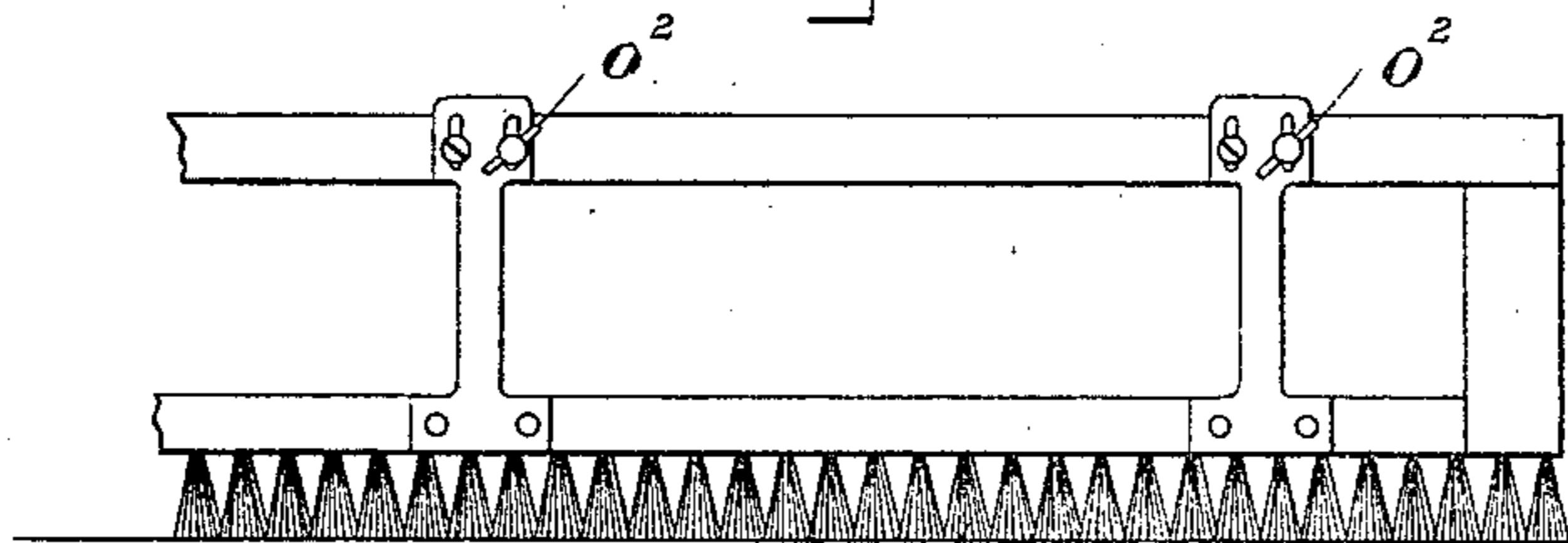


Fig. 5.



Witnesses

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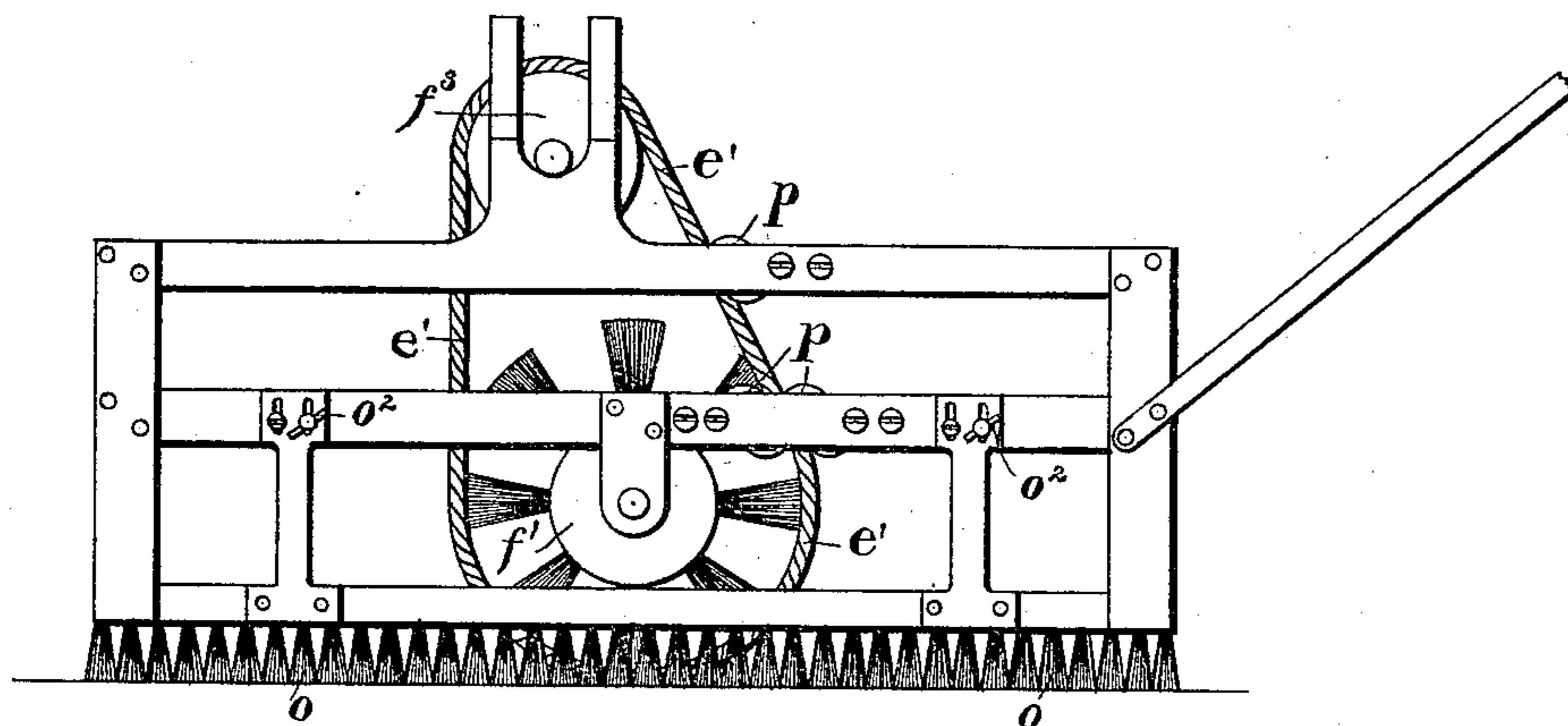
SCRUBBING MACHINE.

(Application filed Dec. 28, 1897.)

(No Model.)

2 Sheets—Sheet 2.

FIG. 6.



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# UNITED STATES PATENT OFFICE.

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## SCRUBBING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 610,397, dated September 6, 1898.

Application filed December 28, 1897. Serial No. 664,079. (No model.) Patented in England February 11, 1895, No. 2,945, and February 18, 1896, No. 3,624; in Austria March 1, 1896, No. 21,470; in New South Wales April 8, 1896, No. 6,497; in New Zealand April 8, 1896, No. 8,392; in Victoria April 10, 1896, No. 13,018; in Cape Colony June 3, 1896, No. 1,191; in France August 17, 1896, No. 246,382; in Belgium August 22, 1896, No. 123,158, and in Canada November 17, 1896, No. 54,071.

*To all whom it may concern:*

Be it known that we, JAMES EDWIN GEE and WILLIAM JOHN GEE, subjects of the Queen of Great Britain and Ireland, residing at Middlesbrough-on-Tees, in the county of York, England, have invented certain new and useful Improvements in Certain Parts of Machines for Washing and Cleansing Floors, (for which we have obtained Letters Patent in the following countries, to wit: England, No. 2,945, dated February 11, 1895, and No. 3,624, dated February 18, 1896; Austria, No. 21,470, dated March 1, 1896; Cape Colony, Folio No. 1,191, dated June 3, 1896; New South Wales, No. 6,497, dated April 8, 1896; Victoria, No. 13,018, dated April 10, 1896; New Zealand, No. 8,392, dated April 8, 1896; Belgium, (patent of addition,) No. 123,158, dated August 22, 1896; France, (patent of addition,) No. 246,382, dated August 17, 1896, and Canada, No. 54,071, dated November 17, 1896;) and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain improvements further conducing to the perfecting of the mechanism comprised in the invention of a portable machine for washing and cleansing floors for which Letters Patent were granted on March 31, 1896, and numbered 557,377. One consequence of these improvements is that the endless towel or slop-cloth is compelled to run true on the rollers and therefore on the floor, all tendency to slip sideways or give trouble through defective construction or fitting up of the rollers, unequal contact with the floor, or improper usage of the machine being obviated by certain devices and construction of the towel hereinafter described.

A further improvement consists in the use of suitably-constructed brushes to serve as slop-guards in substitution for the "squeegees" of rubber or the like material, by which the spring attachments of the slop-guards are

done away with. In order that our invention may be fully understood and readily carried into effect we will now proceed to describe the same with reference to the accompanying drawings, in which the same letters of reference are used to indicate the same parts, so far as required, as were used in the main or principal patent granted on March 31, 1896, and numbered 557,377.

Figure 1 is a side elevation of the part of the under frame of a machine embodying our improvements, and Fig. 2 is a plan view thereof with the bottom roller removed. Figs. 3 and 4 are similar views of the upper frame of the machine, and Fig. 5 is a side elevation of the brushes employed as slop-guards. Fig. 6 is a side elevation of our complete machine.

In order to compel the slop-cloth or endless towel *e* to run true on the rollers, and therefore on the floor, and to prevent all tendency to slip sideways or give trouble through defective construction or fitting up of the rollers, unequal contact with the floor, or improper usage of the machine, we provide the detent-wheels *p p*, mounted on spindles secured in pairs to the under frame of the machine, where the slop-cloth is running away from the roller *f'*, in the manner shown in Figs. 1 and 2, and singly to the upper frame, as shown in Figs. 3 and 4, where the slop-cloth is running toward the roller *f*<sup>3</sup>. The slop-cloth *e* is provided with edging-cords *e'*, of a diameter greater than the thickness of the cloth, so that by the use of detent-wheels *p* of the form shown and placed in pairs at the opposite sides of the machine's under frame to meet each other near enough to pass the cloth *e* between them, but not the edging-cord *e'*, which runs along these detent-wheels at the back or pulling side thereof, a slop-cloth of the right width is strained and controlled transversely as it leaves the rollers in the manner required to make it run true on the said rollers; but where the slop-cloth is running toward the roller *f*<sup>3</sup> one detent-wheel is found sufficient to strain each edge of the cloth, the edge of the roller *f*<sup>3</sup> serving in the place of

the other detent-wheel attached to the under frame. The best position for these detent-wheels is that in which they are shown in Figs. 1 and 2—that is, on a level with and secured to the under frame of the machine, so that the slop-cloth *e* passes through them as it leaves the floor and the bristles of the roller *f'*—and that shown in Figs. 3 and 4, in which each wheel *p*, in conjunction with the corresponding circumferential edge of the roller *f*<sup>3</sup> at the opposite sides of the machine, is found sufficient to guide the cloth onto the roller *f*<sup>3</sup>. The action and durability of the cloth are improved by lacing into it endless wires properly strained and set about an inch apart, as shown in Figs. 2 and 4.

In substituting brushes *o* for squeegees of rubber or the like material the attachments to the main frame are rigid, but preferably adjustable by the set-pins *o*<sup>2</sup>, as shown in Fig. 5. The advantage of the use of brushes is simplicity of construction. The spring attachments hitherto required to enable the slop-guards of the squeegee pattern to accommodate themselves to the inequalities of the floor are dispensed with, the soft and yielding character of the bristles being sufficient for this purpose, as well as for confining the slop within the track of the machine in the

manner required for the purposes of this invention. 30

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a machine for washing, scrubbing and cleaning floors, the combination with a frame, of rollers journaled in said frame, and means for controlling and straining transversely the slop-cloth, consisting of edging-cords on the cloth running behind detent-wheels secured to opposite parts of the machine, substantially as and for the purpose described. 35 40

2. In a machine for washing, scrubbing and cleaning floors, the combination with a frame, of rollers journaled in said frame, an endless slop-cloth, carried by said rollers, having thickened or beaded edges formed of cords, and detent-wheels engaging said cords and mounted upon the said frame, substantially as described. 45 50

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES EDWIN GEE.  
WILLIAM JOHN GEE.

Witnesses:

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