

L. Smith,

Washing Machine,

N^o 66,181.

Patented June 25, 1867.

Fig. 1.

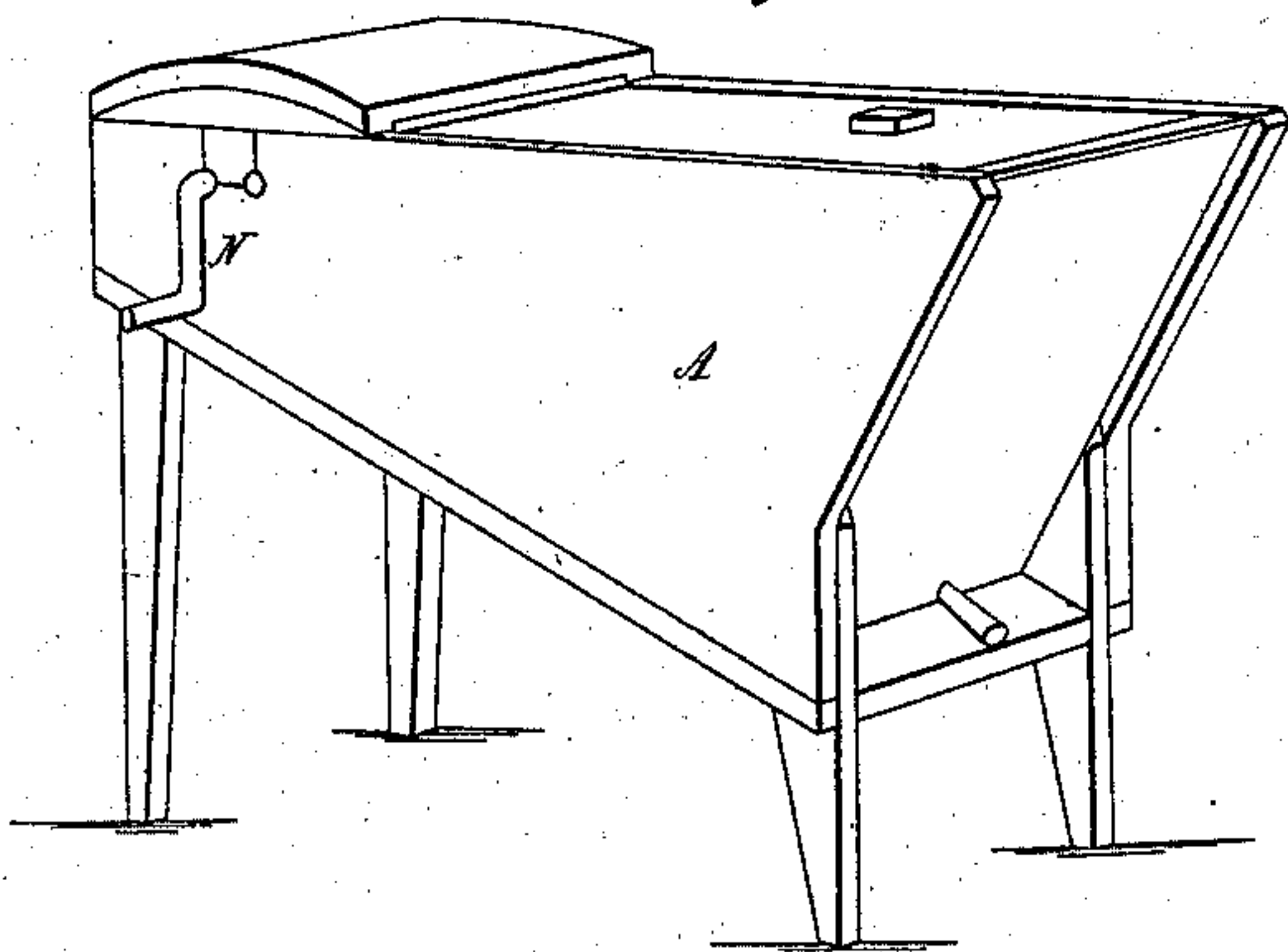


Fig. 4.

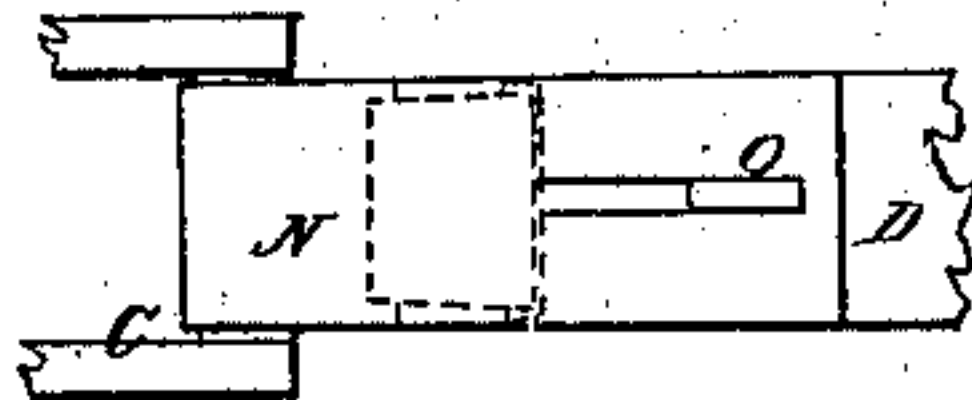


Fig. 5.

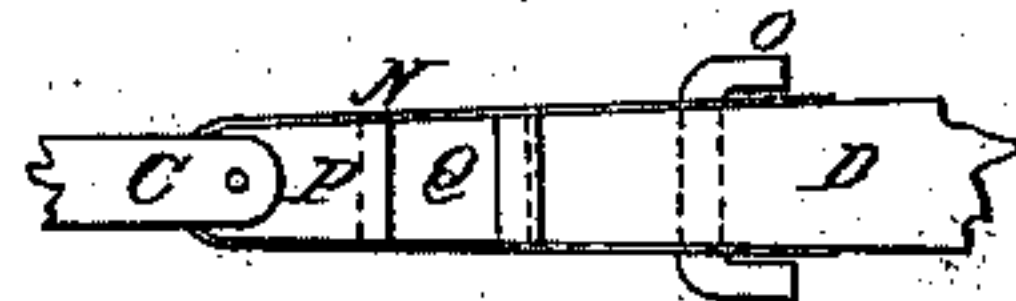


Fig. 2.

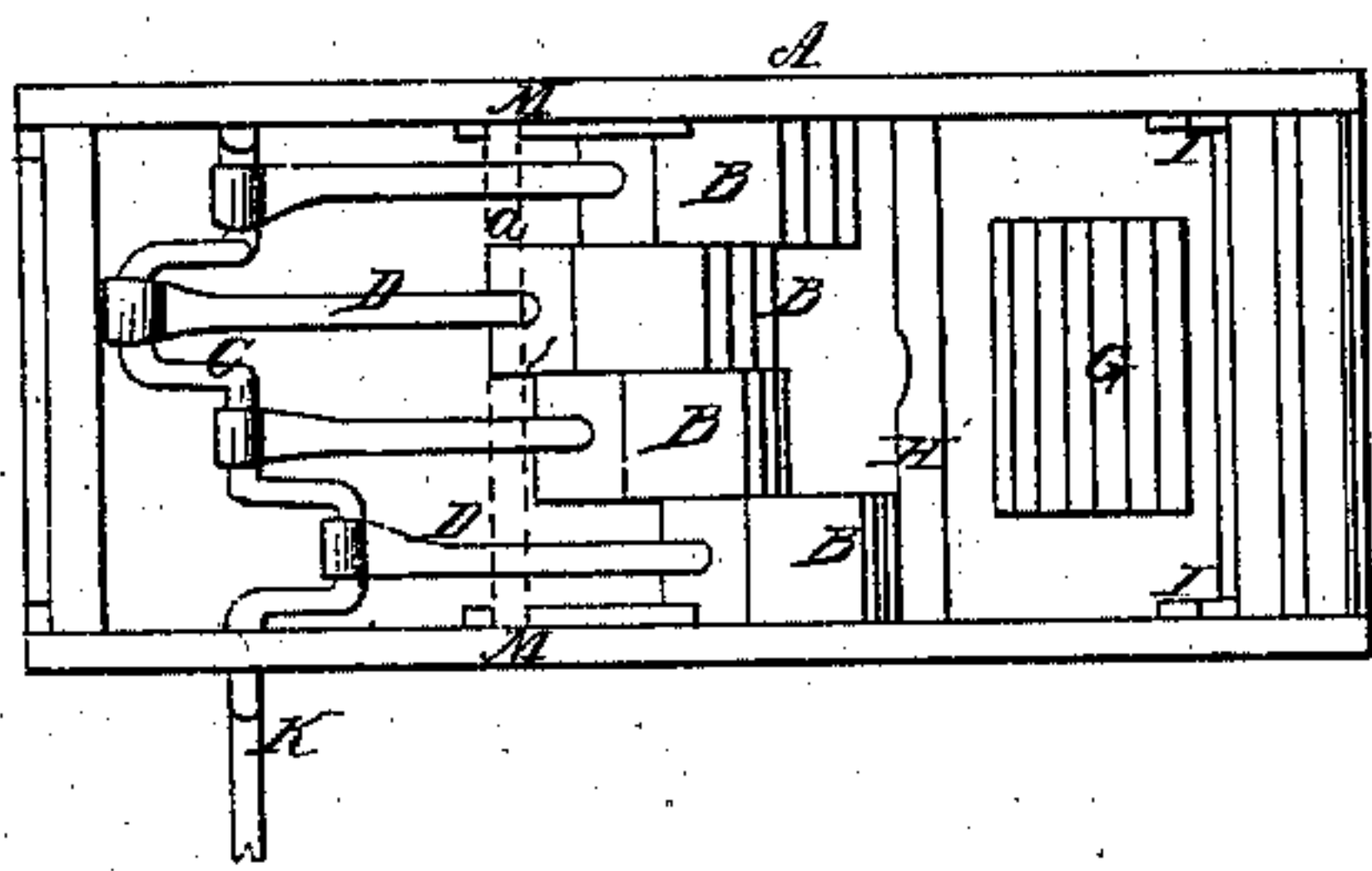
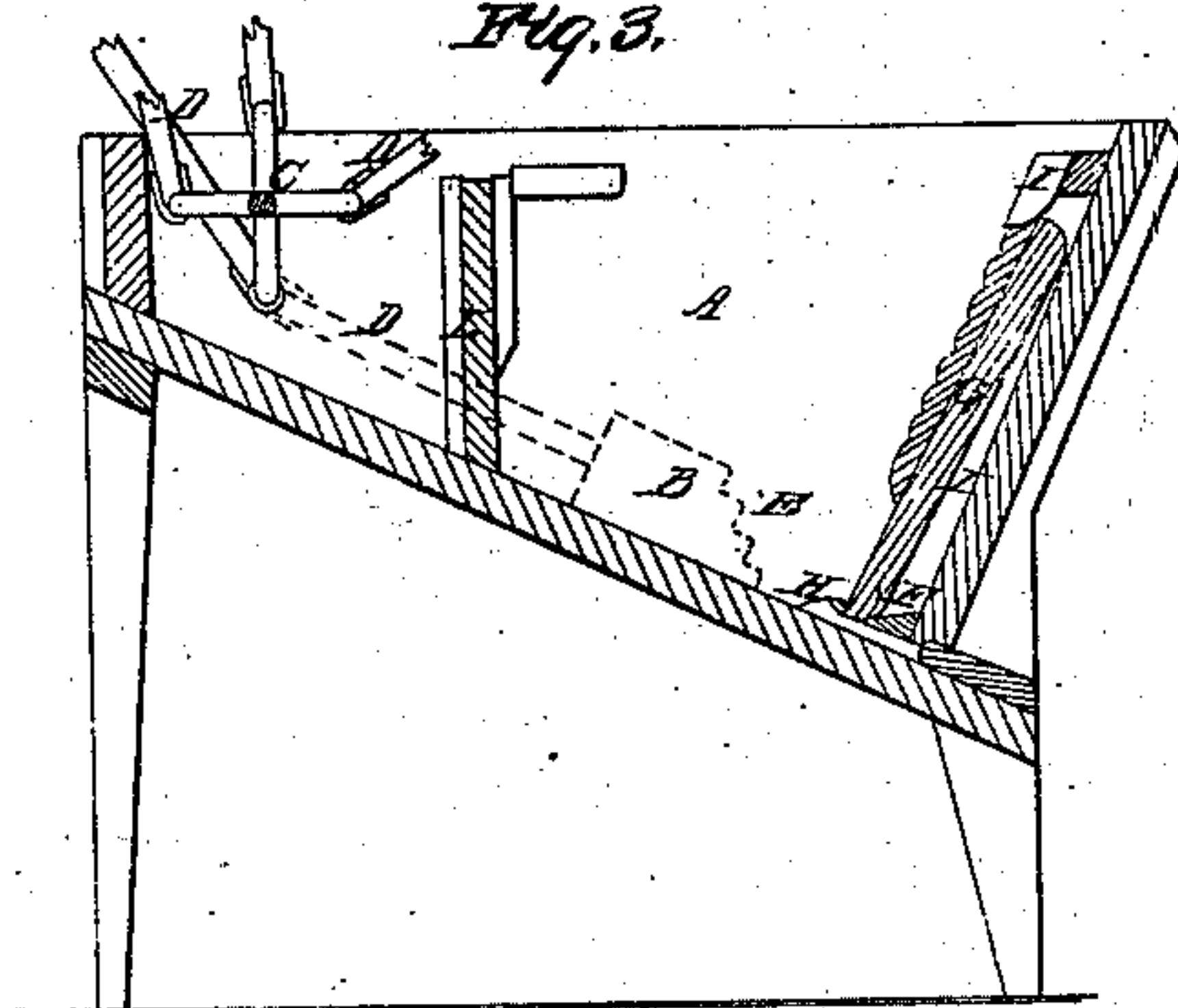


Fig. 3.



Witnesses:
W. H. Burnidge
J. Burnidge

Inventor:
L. Smith.

United States Patent Office.

L. SMITH, OF STRONGSVILLE, OHIO.

Letters Patent No. 66,181, dated June 25, 1867.

IMPROVED WASHING MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, L. SMITH, of Strongsville, in the county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Washing Machines; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the machine.

Figure 2 is a top view with the cover detached.

Figure 3 is a vertical longitudinal section.

Figures 4 and 5, sections to which reference will be had.

Like letters of reference refer to like parts in the several views.

A, fig. 1, is the box or body of the machine, in which is arranged a gang of pounders or beaters, B, fig. 2, connected to the multiplied crank C by the links D. The peculiar shape of these pounders is shown in fig. 3, in which it will be seen that the lower end is cut biasing downward and provided with a number of rectangular notches, E. In the lower angle of the box is a fillet, F, upon which stands the lower end of the wash-board G, which is also supported by the projecting rib H. This board is kept in position by the depending finger I, under which the upper end of the board is slipped, as shown in fig. 3, and is prevented from being forced back against the end of the machine by the springs J, which may be of rubber or other suitable material. It will be observed that the front end of the bottom of the machine is considerably elevated above the rear end, thus making the bottom an inclined plane from the cranks downward, and upon which the beaters or pounders lie upon their longest side, as shown in fig. 3. The rear end of the machine being planed at right angles with the bottom gives it thereby an inclination backward from a vertical line, and thus makes the approach to the machine much more convenient to the operator than if the same were straight or perpendicular also. This construction and position of the body or box give the most favorable shape for receiving and washing the clothes, as by this construction a small single article can be washed with a very small quantity of water, as well as a larger one or number of articles, with a proportionate quantity of water. It will be seen that the cranks by which the beaters are operated are so arranged in relation to each other as to act at right angles or quartering, the result of which is that the pounding or rather the blows are given in successive single strokes; hence the working of the machine is attended with much less effort than if two or more blows were given at the same time. It also favors the lateral dashing of the water and motion of the clothes, and thus facilitates the washing.

Having thus described the construction and arrangement of the machine, the practical operation of the same is as follows: The clothes are thrown into the machine with the proper quantity of soap and water, and which is then covered, as shown in fig. 1. The pounders are then operated by the crank K, each giving a single and successive blow, striking the clothes at the bottom and thereby forcing them to roll upward and over toward the pounders, and thus presenting their top to each blow, which carries it down and under to the top again in a continuously rolling manner during the operation of the machine. The clothes on being sufficiently pounded, the covers are then removed and the pounders either detached or turned up out of the way, as indicated in fig. 3. When thus removed out of the way a board, L, fig. 3, also indicated by dotted lines *a*, fig. 2, is then dropped into the grooves M, and thus is provided a convenient tub, in which the clothes are finished off by the use of the wash-board referred to, if found needful, sudsing and rinsing the same without taking them from the machine and putting them into tubs for that purpose, and thus the use of tubs, the labor of lifting, emptying, and removing the clothes for wringing, is dispensed with and avoided, as the wringer is attached to the side of the machine and the clothes run through it without the necessity of removing them from the washer. By the introduction of the springs J between the wash-board and the end of the machine, an easy springing movement is given to the board, which adds much to lessen the labor of rubbing. This board may be removed, if so desired, and thereby increase the capacity of the machine, so that a larger article can be washed or a greater number of articles. Figs. 4 and 5 are enlarged views of the connections by which the pounders are attached to the cranks, and which consists of a metallic strap, N, surrounding the crank, and brought back over the end of the link and then secured by a clamp, O, inserted through the link, and a strap, in the manner and position shown in fig. 5. Between the end of the link and the block P is a rubber cushion, Q, the purpose of which is to give

elasticity to the pounders, so that they may be allowed to yield to any unusual resistance that may interpose between them and the end of the machine, and thus the danger of breaking or causing any extra effort of working them is avoided.

The advantages of this machine are, simplicity of construction, strength and durability in all its parts, ease and directness of action, facility and thoroughness in its work, requiring but little skill and comparatively but little labor to work it.

What I claim as my improvement, and desire to secure by Letters Patent, is—

1. The series of beaters B, as arranged in relation to the spring-board G, rib H, and springs J, in combination with the inclined bottom, and operating conjointly, substantially as and for the purpose set forth.

2. The elastic cushion Q and block P, arranged in relation to the links D, strap M, and crank, and applied as and for the purpose set forth.

L. SMITH.

Witnesses:

J. H. BURRIDGE,

J. HOLMES.