

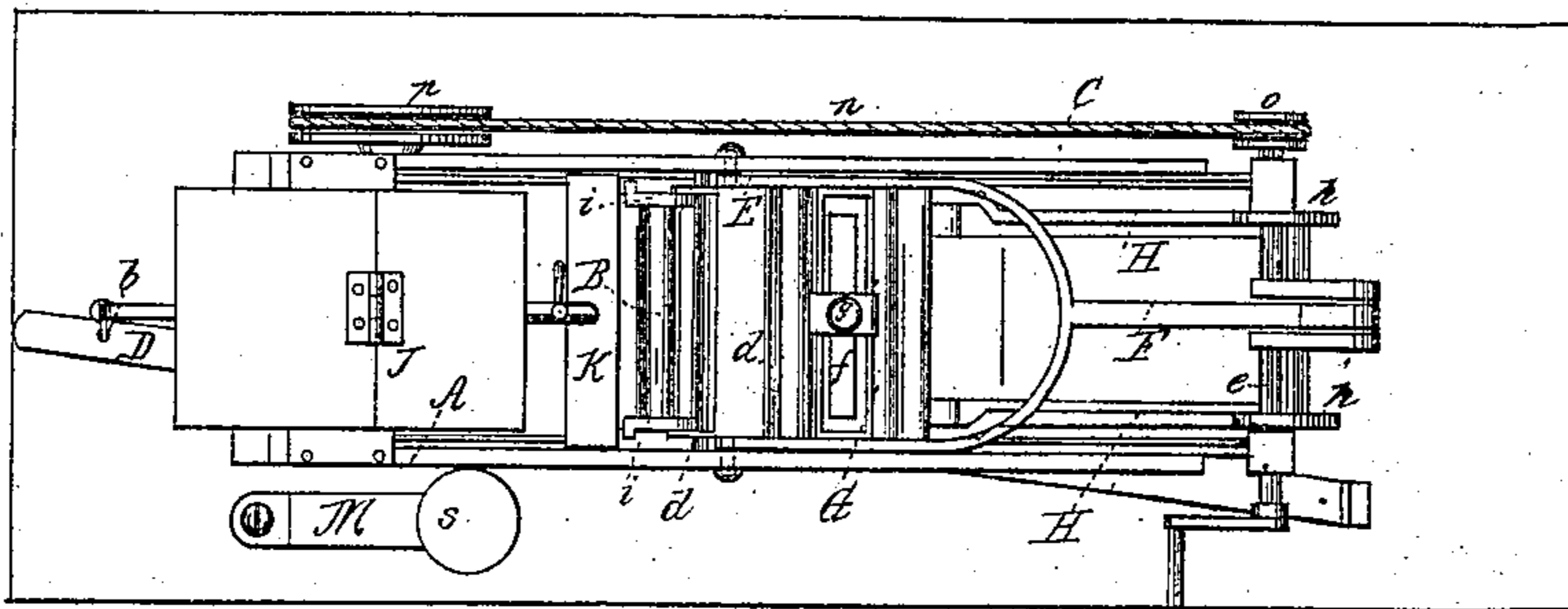
*S. M. Barnett*

*Washing Machine,*

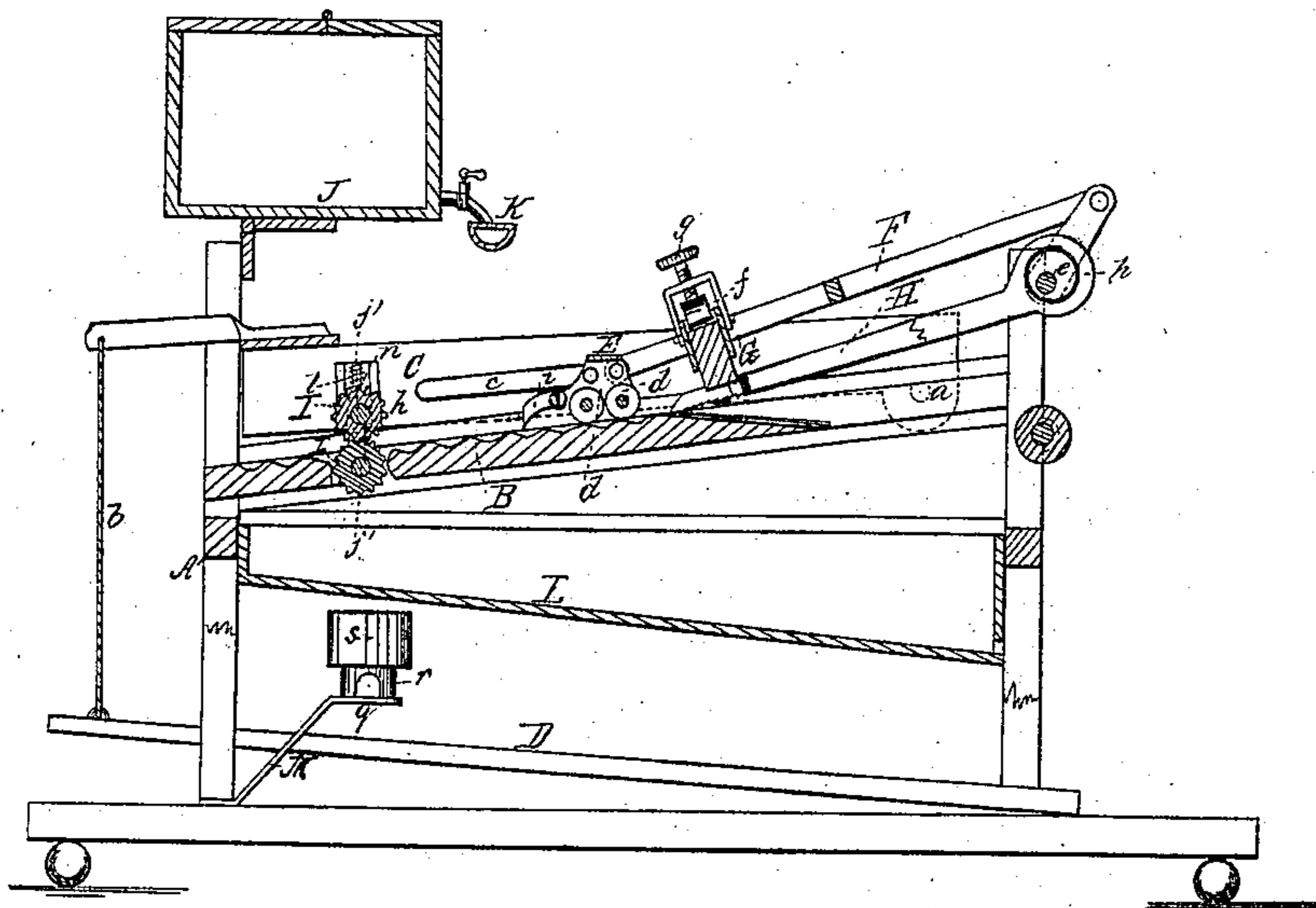
*N<sup>o</sup> 39,029.*

*Patented June 30, 1863.*

*Fig. 1*



*Fig. 2*



*Witnesses:*

*Robt H. Lawrence*  
*M. Whittington*

*Inventor*

*Samuel Barnett*

# UNITED STATES PATENT OFFICE.

SAMUEL M. BARNETT, OF NEW YORK, N. Y.

## IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 39,029, dated June 30, 1863.

*To all whom it may concern:*

Be it known that I, SAMUEL M. BARNETT, of the city, county, and State of New York, have invented a new and Improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a plan or top view of my invention. Fig. 2 is a longitudinal vertical section of the same.

Similar letters of reference in the two figures indicate corresponding parts.

The object of this invention is to imitate by machinery the action of hand washing, spreading the clothes to be washed one after the other on a corrugated or fluted wash-board on which the soap is applied and the rubbing performed, while at the same time the piece to be washed is fed along, causing the soap and rubbers to pass gradually over its entire surface.

To enable those skilled in the art to fully comprehend and construct my invention, I will proceed to describe it.

A represents a frame, made of wood or any other suitable material, and provided with an inclined corrugated platform, B, which serves as the wash-board.

C is a secondary frame, which is connected at one end to the main frame A by means of pivots *a*, and its other end connects by a rope, *b*, with a treadle, D, in such a manner that the same can be forced down upon the corrugated platform or wash-board B. The frame C is provided with a cross-head, E, which slides in slots *c*, and which forms the bearings for the axles of two (more or less) rollers, *d*, of india-rubber or other elastic material. These rollers bear down upon the surface of the wash-board, and by imparting to the cross-head E a reciprocating motion said rollers sweep over the platform and rub its surface or the surface of any piece of cloth that may be spread on it. Motion is imparted to the cross-head E by a crank-shaft, *e*, which connects with the same by a forked rod, F. The forked end of this rod forms the bearings for the soap-box G, and as the crank revolves a rotary reciprocating motion is imparted to said box, causing the soap contained in it to come down upon the wash-board, sweep over

its surface, and then rise from the same and go back ready for a new start. The surface of a piece of cloth spread upon the wash-board is thus supplied with soap, and then it is exposed to the action of the rubbing-rollers. The soap in the soap-box G is exposed to the action of a spring, *f*, the tension of which can be regulated by a set-screw, *g*, in such a manner that the soap can be made to bear with more or less force upon the surface of the cloth that may be spread on the wash-board. The cloth is fed to the rubbing-rollers by means of arms H, to which a reciprocating motion is imparted by eccentric disks *h* on the crank-shaft *e*. The operation of feeding the clothes may also be assisted by fingers *i*, which are hinged to the front end of the cross-head E. After a piece of cloth has thus been soaped and rubbed on the wash-board, it passes through between the rollers I I', which may be corrugated or made of wood covered with leather or other suitable material. These rollers rotate on axles *j j'*, and one of these axles has its bearings in the sides of the main frame, while the bearings of the other axle are in boxes *k*, sliding up and down in slots *l* in the secondary frame C. Springs *m*, which act upon the boxes *k*, force the roller I' down and keep its surface in contact with the surface of the roller I. In passing through between these rollers the clothes are squeezed or pressed and the water contained in them is expelled. These rollers also act as feed-rollers to draw the clothes gradually along on the wash-board. A cord or belt, *n*, stretched over pulleys *o p*, one on the crank-shaft *e* and the other on the axle *j* of the lower roller, serves to impart to said rollers the desired rotary motion.

J is a box or tub arranged over the wash-board, and intended to contain water, which is let down upon the clothes through a sprinkler, K. The water which runs off from the wash-board is received in the trough L and conducted out at the end of the machine.

M is a swivel arm or standard provided with a platform, *q*, which is intended to receive a furnace, *r*, and on this furnace a boiler, *s*, is placed, for the purpose of boiling the clothes just before they are entered into the machine. When the machine is not used, the swivel-arm M is turned down under the frame A out of the way. Thus it will be seen that by

my machine the clothes are treated precisely in the same manner as in hand washing, and the action of the different parts of my machine combined is a close imitation of the motions generally performed by washer-women in washing by hand.

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

1. The arrangement of the reciprocating cross-head E, provided with rubbing-rollers *d* and swinging soap-box G, and moving in the slotted hinged frame C, which is adjustable by a treadle, D, in the manner and for the purpose substantially as shown and described.

2. The adjustable spring *f*, in combination

with the soap-box G, as and for the purpose set forth.

3. The feed-arms H, in combination with the reciprocating rubber-head E and soap box G, substantially as and for the purpose specified.

4. The arrangement of the swivel-arm M with furnace *r*, in combination with the frame A, which carries the wash board B, as and for the purpose described.

SAMUEL M. BARNETT.

Witnesses:

ROB. H. LOUDER,  
M. M. LIVINGSTON.