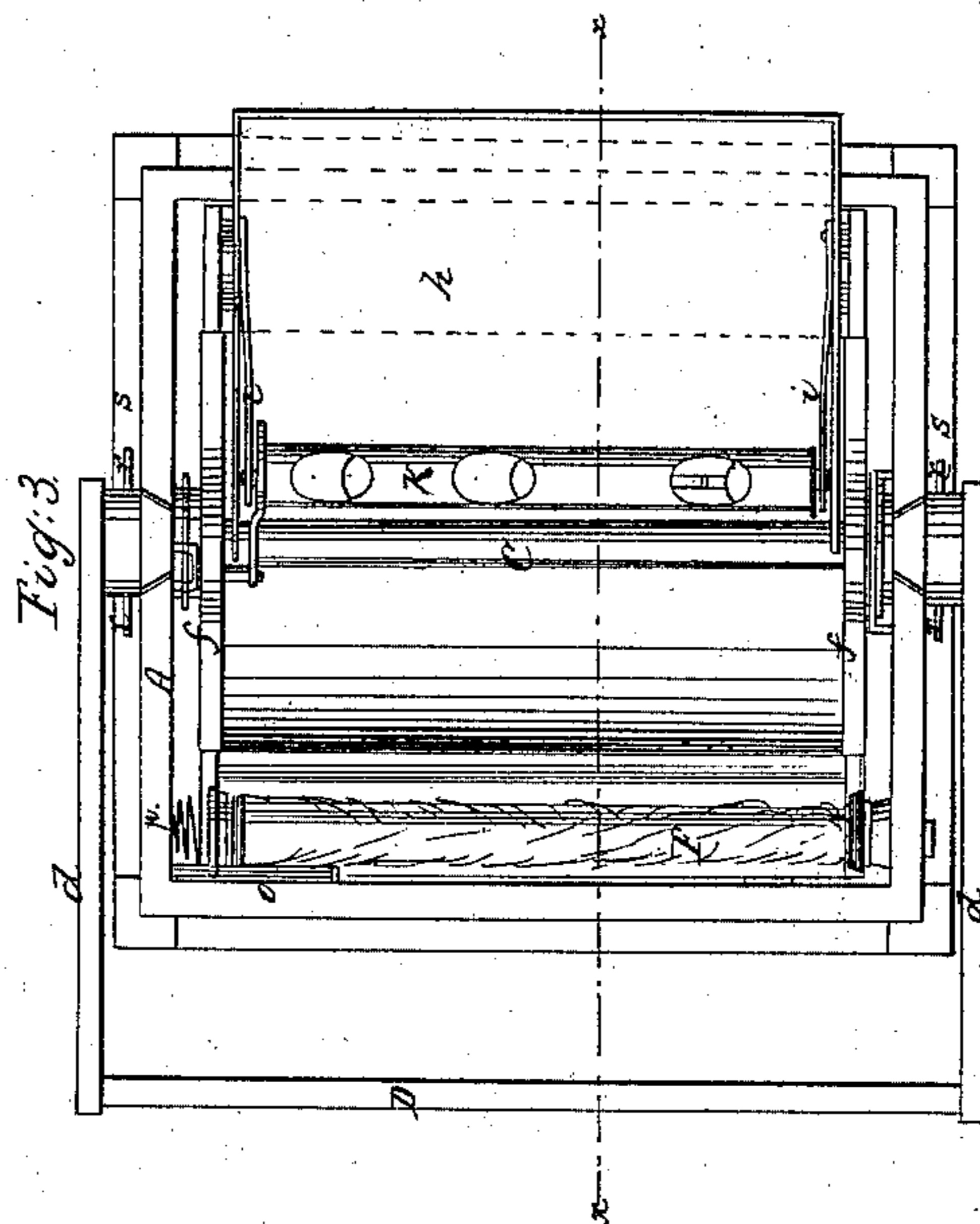
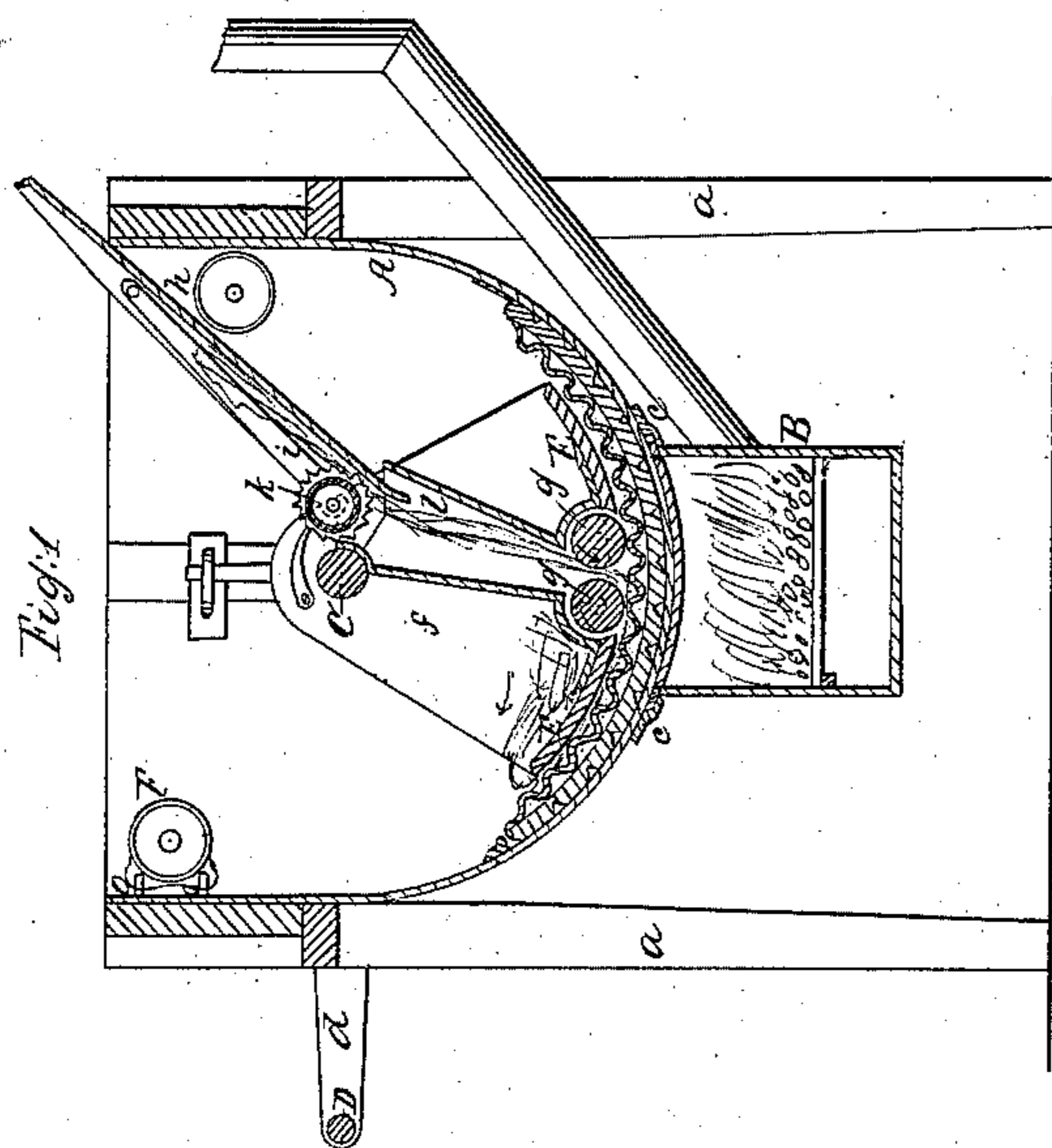
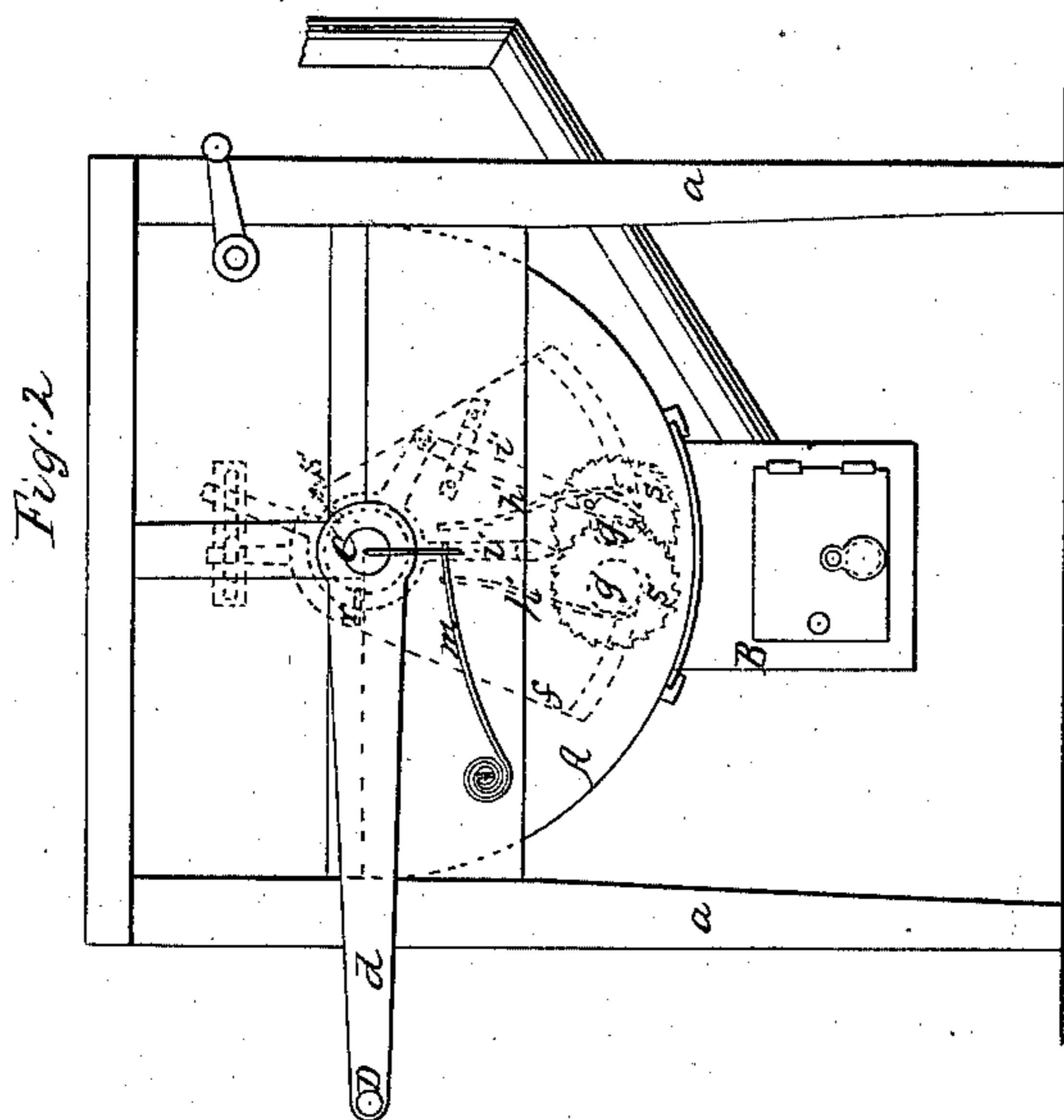


A. F. Kuhlmann,

Washing Machine,

N^o 56,955.

Patented Aug. 7, 1866.



Witnesses

Wm. B. Doughton
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UNITED STATES PATENT OFFICE.

ADOLPH F. KUHLMANN, OF GLENHAVEN, WISCONSIN.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 56,955, dated August 7, 1866.

To all whom it may concern:

Be it known that I, ADOLPH F. KUHLMANN, of Glenhaven, in the county of Grant and State of Wisconsin, have invented a new and Improved Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a transverse vertical section of this invention, the line *xx*, Fig. 3, indicating the plane of section. Fig. 2 is an end view of the same. Fig. 3 is a plan or top view of the same.

Similar letters of reference indicate like parts.

This invention relates to a washing-machine which is so constructed that it soaps the clothes, cooks them, washes them, and wrings them and which, after the washing has been finished, can be used as a table for cooking and ironing.

A represents a box, which is supported by four legs, *a*, and the bottom of which is semi-cylindrical and made of sheet-zinc or other suitable material. To the front end of this bottom, on its under side, is secured a piece of sheet-iron, *b*, to prevent the zinc from being burned out, and this piece of sheet-iron is provided with guide-strips *c*, to receive the stove B. This stove is made of sheet-iron or any other suitable material, and it extends to about the middle of the bottom of the box.

The ends of the box form the bearings for the main shaft C, which extends on both ends beyond the box, and is provided with arms *d*, the outer ends of which are connected by the handle D, which runs parallel with the main shaft and serves to impart to the same a rocking motion.

In the interior of the box A, and close down to its bottom, is a concave corrugated sheet, *e*, which forms the wash-board. This wash-board is put in loosely, so that it can be readily taken out and put in for the purpose of cleaning and repairing.

On the shaft C, and in the interior of the box, are mounted two segments, *f*, to which are secured two smooth rubbers, E, and be-

tween these rubbers are situated two feed-rollers, *g*, as clearly shown in the drawings.

In the upper part of the box A is placed the inclined feed-board *h*, which is provided with two arms, *i*, that form the bearings for the soap-roller *k*. This soap-roller is situated close to the shaft C, and it is composed of a hollow cylinder provided with a door or slide in one side, through which it can be filled with liquid soap. A number of holes in the cylinder permit the soap to run out gradually on the clothes to be washed.

Under the edge of the feed-board, and secured to the main shaft C, is a funnel, *l*, which extends down close upon the two feed-rollers *g*.

The feed-board, soap-roller, and funnel *l* are narrower than the box A.

The feed-rollers *g* are pressed together by springs *h'*, and an intermittent rotary motion is imparted to them by the action of pawls *i'* on ratchet-wheels *j'*, which are mounted on the ends of the axles of said rollers. If desired, said rollers may be geared together, so that they revolve with a uniform velocity. The soap-roller *k* is also provided at one end with a ratchet-wheel, and motion is imparted to it by a click secured to one of the segments *f*, on the main shaft C.

Suitable springs *m* depress the main shaft and impart to the rubber the requisite power for washing.

The wringer is composed of a sack, F, which extends across the box A, and is secured at both ends to disks *n*, one of which can be revolved by a winch, while the other is prevented from turning by two guide-rods, *o*, on which it slides as the sack shortens on being rotated. A spring, *p*, pulls the sack back to its full length when the same is unwound. On one side said sack is provided with a slot extending from one disk to the other, for the purpose of introducing the wet clothes. This slot closes up as soon as the bag is turned.

The operation is as follows: The clothes are placed on the feed-board, and by moving the handle D up and down the washing mechanism is set in motion. When the handle D moves up the rubbers E swing in the direction of the arrow marked thereon in Fig. 1, and the disks *i'* *i'* turn the feed-rollers in the direction of the arrows marked on them. On the downward

stroke of the handle motion is imparted to the soap-roller, and the clothes are made to pass through between the feed-board and said soap-roller, and supplied with the requisite amount of soap. They then pass down through the funnel *l* to the feed-rollers, and by the action of the feed-rollers they are carried between the rubbers *E* and the corrugated wash-board *e*. After having been cleansed by the action of the rubbers and wash-boards, said clothes discharge over the ends of the rubbers and accumulate on the back thereof, as indicated in red outlines in Fig. 1, and they are then taken and brought in the wringer *F*.

The products of combustion from the stove *B* pass off through a pipe, which is so arranged that it can be inserted in a stove-pipe of any desirable size, and is provided with a suitable damper to regulate the draft.

In order to relieve the clothes while the same pass through between the rubbers and wash-board, I have secured in the ends of the shaft *C* suitable cross-arms *r*, and as the han-

dle is turned clear up or down the ends of these cross-arms strike cleats *s*, secured to the outer ends of box *A*, and the shaft *C*, with the wash-board, is slightly raised at the end of each stroke of the handle.

When the washing is completed the box *A* is covered up with a flat top, which serves as a table for ironing or other purposes.

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

1. The soap-roller *k*, in combination with the feed-board *h* and oscillating shaft *C*, constructed and operating substantially as and for the purposes described.

2. The feed-rollers *g g*, in combination with the oscillating rubbers *E*, wash-board *e*, soap-roller *k*, and feed-board *h*, constructed and operating substantially as and for the purposes set forth.

ADOLPH F. KUHLMANN.

Witnesses:

B. H. BEAMANN,
J. M. SCOTT.