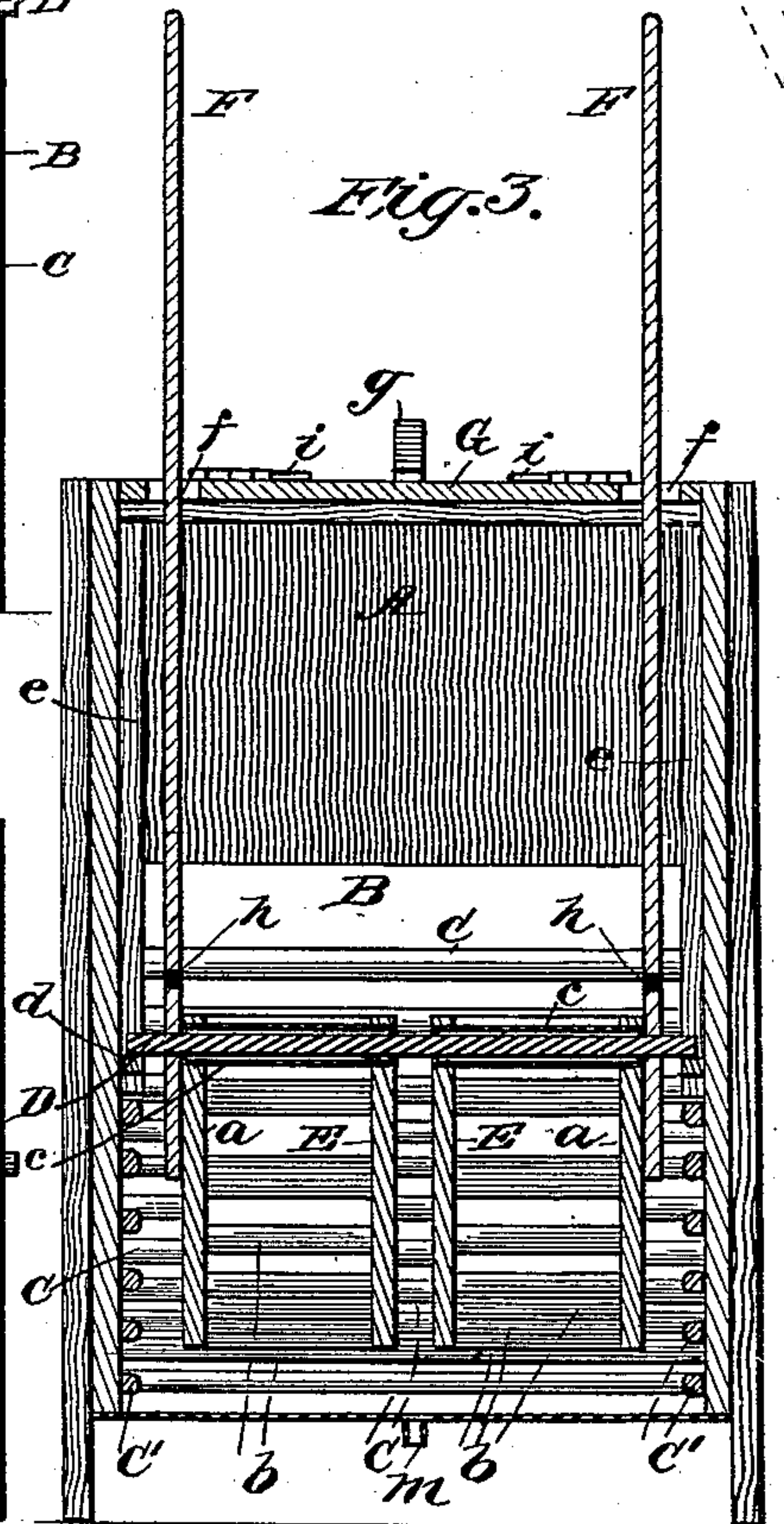
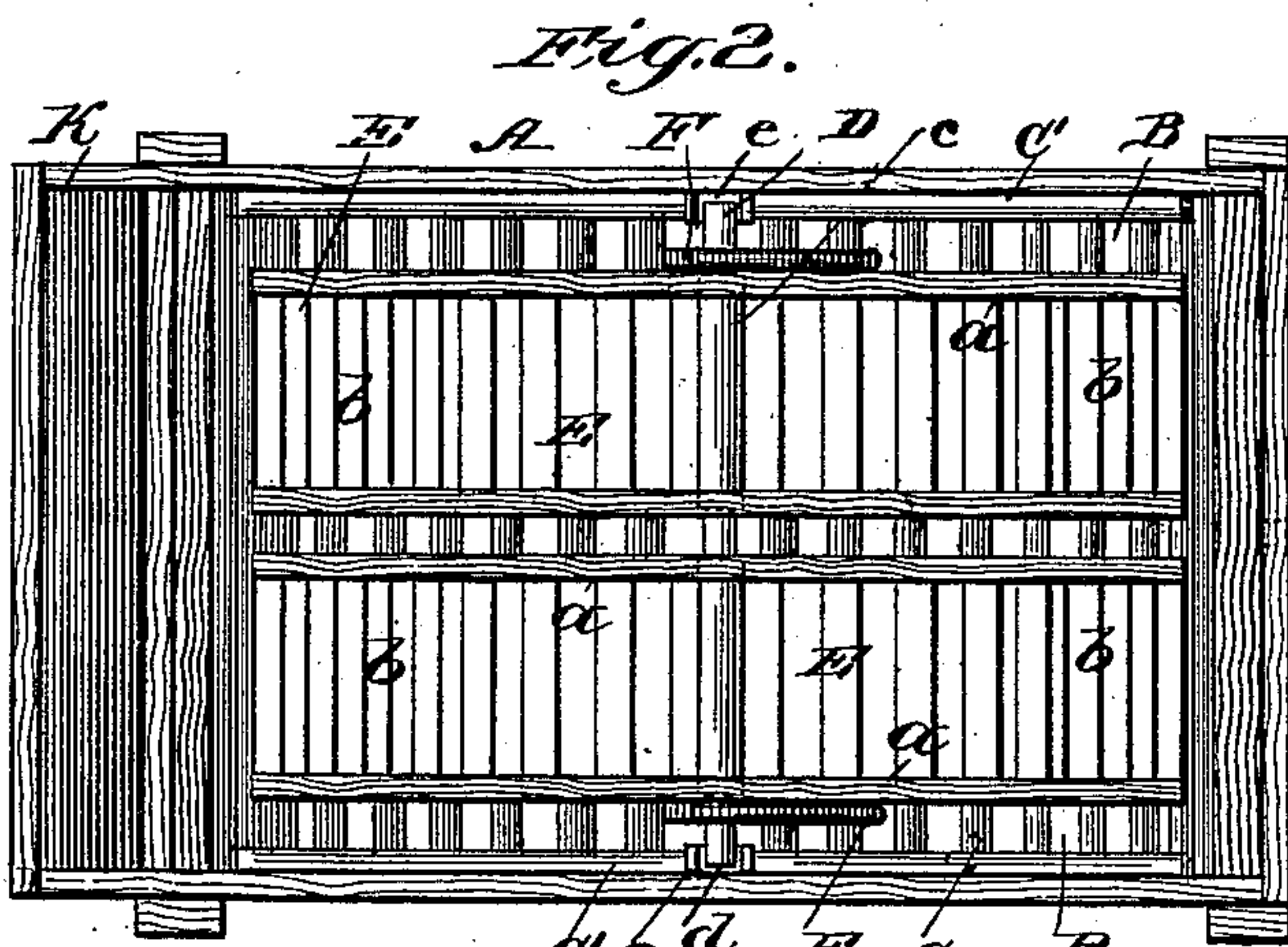
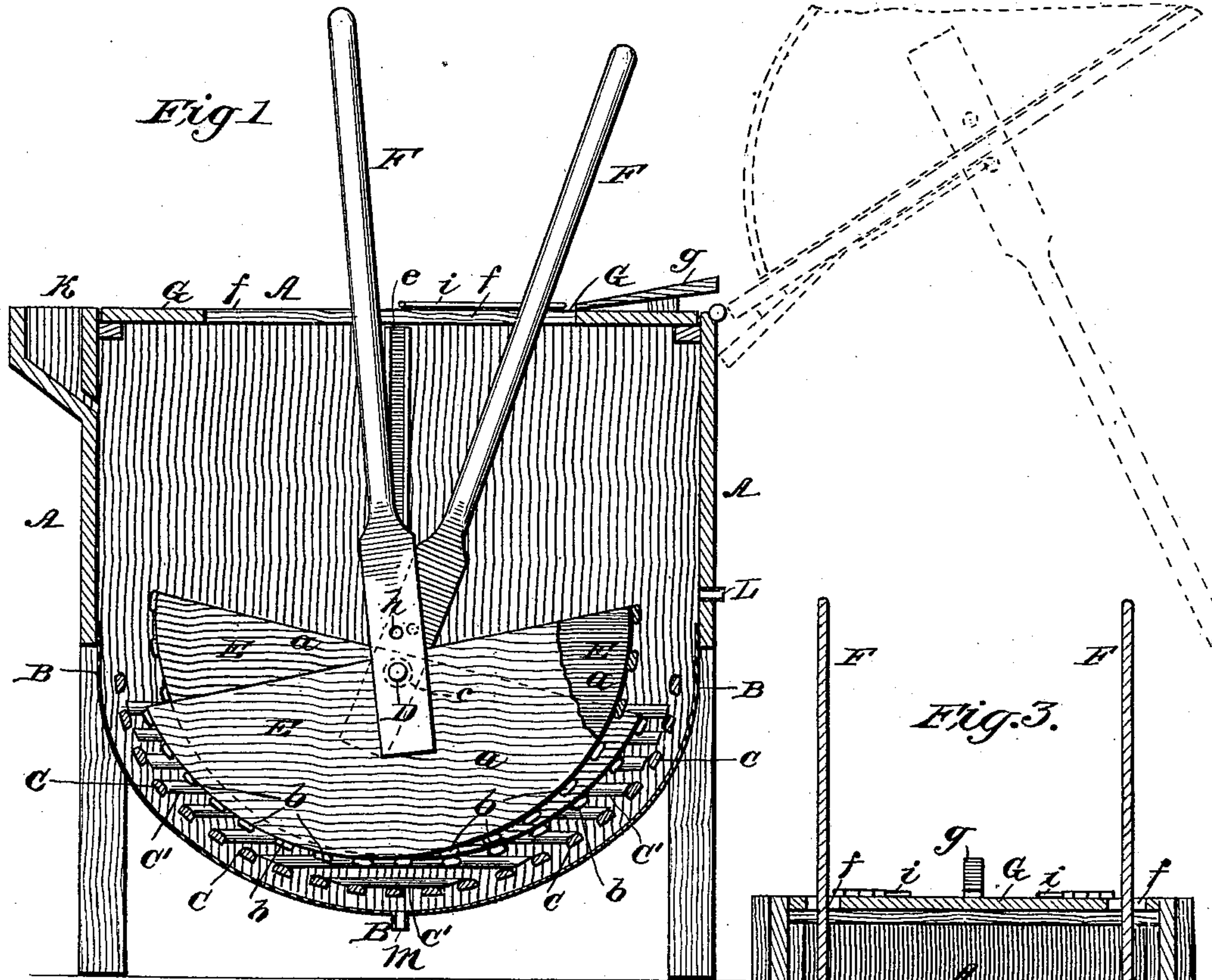


(No Model.)

K. E. STOKER.  
WASHING MACHINE.

No. 538,134.

Patented Apr. 23, 1895.



WITNESSES:

*Fred G. Dietrich*  
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INVENTOR

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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

KING E. STOKER, OF LOGAN, ASSIGNOR OF ONE-HALF TO THOMAS ADAMS,  
OF SALT LAKE CITY, UTAH TERRITORY.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 538,134, dated April 23, 1895.

Application filed May 18, 1894. Serial No. 511,694. (No model.)

*To all whom it may concern:*

Be it known that I, KING E. STOKER, of Logan, in the county of Cache, Utah Territory, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

The object of my invention is to provide an improved washing machine designed to wash clothes more quickly and thoroughly, and with the expenditure of but little power and without tiring the back of the operator.

It consists in the peculiar construction and arrangement of the parts of said machine which I will now proceed to fully describe, reference being had to the accompanying drawings, in which—

Figure 1 is a side view showing the two rubbers, the near one being partly broken away, the outer case being in section, and the raised position of the cover indicated by dotted lines. Fig. 2 is a plan view with the cover removed, and Fig. 3 is a vertical transverse section.

A represents the tub or casing which is supported upon legs at the four corners, and has vertical sides and a semi-elliptical or half round bottom B made of sheet metal. Just above this sheet metal bottom there is arranged a false bottom of slats C whose ends are secured to the sides of the casing, and which slats form the bed upon which the clothes are deposited while being rubbed and cleansed. There are also slats C' fixed to the sides of the tub and extending up about one third the distance from the bottom to the top. Within the tub upon an axial shaft D are hung two oscillating rubbers E E arranged side by side and both constructed exactly alike. Each has two vertical side boards a a arranged parallel and having their lower edges cut to the curve of the half of an ellipse or oval so that the distance from the axial shaft to either end of the rubber is greater than the distance from said shaft to the bottom of the rubber. The two lower curved surfaces of these side boards are bridged across by parallel slats b to form rubbing surfaces of a half oval shape. The two side boards of each rubber are also connected by an axial tube c which forms a bearing for the axial shaft D upon which it is hung, which shaft passes entirely through both these tubes and forms a center of oscilla-

tion, the tubes c permitting a free and easy movement and distributing the wear.

The axial shaft D is sustained detachably upon bearings d on the inner faces of the sides of the casing, which bearings are formed at the bottom of parallel vertical guide strips e e on each side which prevent it from being accidentally displaced, but nevertheless allow it to be lifted out with the rubbers when necessary.

Attached rigidly to the side of each rubber E is a lever handle F which projects above the top of the casing in position to be conveniently grasped by the two hands and worked separately back and forth to oscillate the rubbers in reverse direction.

G is a lid hinged to one side of the casing and having two slats f f through which the lever handle F protrudes and in which they work back and forth. This lid has a stop bar g attached to it at its hinged edge which, when the lid is lifted, strikes against the end of the case and sustains the lid in its raised position. This lid is arranged to turn back and carry with it the two rubbers, and for this purpose the lever handles are provided with holes h which, when the lever handles are lifted upwardly through the slots, are adapted to receive hooks i on the top of the lid which thus connect the rubbers to the lid and allow both to be turned back out of the way, as shown in dotted lines, when putting clothes in or taking them out.

In operating this washing machine the lever handles are grasped in the two hands and are worked separately in opposite directions, one being moved backward while the other is moved forward. This has a peculiarly effective washing effect on the clothes beneath it, as the rubbing action of one is in reverse direction to the other, which prevents the clothes from being rolled up and makes a much more thorough washing effect. Furthermore as the rubbers are not of a true circular form, but oval or semi-elliptical, it will be seen that when the rubbers move in opposite directions their peripheries or lower surfaces pass out of coincidence, the rubber on one side pressing down closer to the clothes on one side of the axial shaft, while the other rubber lifts slightly away from the clothes on the same



side of the axial shaft as shown in dotted lines in Fig. 1. This prevents tearing the clothes by preventing them from being tightly strained by the oppositely moving rubbers, and at the same time gives the clothes a chance to be loosened up and become saturated with the water under one rubber while being compressed and rubbed by the other rubber on the corresponding or same side of the axial shaft. This is an important feature as it makes a very thorough washing of the clothes and yet does not tear or injure the fabric.

Among other advantages of the reversely acting rubbers I may mention the fact that as the levers are operated one with a push and the other a pull alternately, there is no strain on the back of the operator, as the work is all done by the arms.

K is an off-setting inclosure at one end of the casing to receive a wringer and allow the water from the same to run back into the tub or casing, and L and M are inlet and outlet connections for cleaning out and draining away the suds left in the tub after washing.

I am aware that it is not broadly new to construct a washing machine with two reversely acting rubbers hung upon an axial shaft, and I make no claim to this general construction.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A washing machine having a curved slatted bed or false bottom and two independently swinging rubbers arranged side by side above it and having semi-elliptical or half oval rubbing faces on their lower sides, and means for operating these rubbers independently in opposite directions, whereby the portions of the rubbers on the same side of the axis are made to alternately approach and recede from the bottom in their reversed rubbing movements substantially as shown and described.

KING E. STOKER.

Witnesses:

J. Z. STEWART,  
ALFRED PICOT.