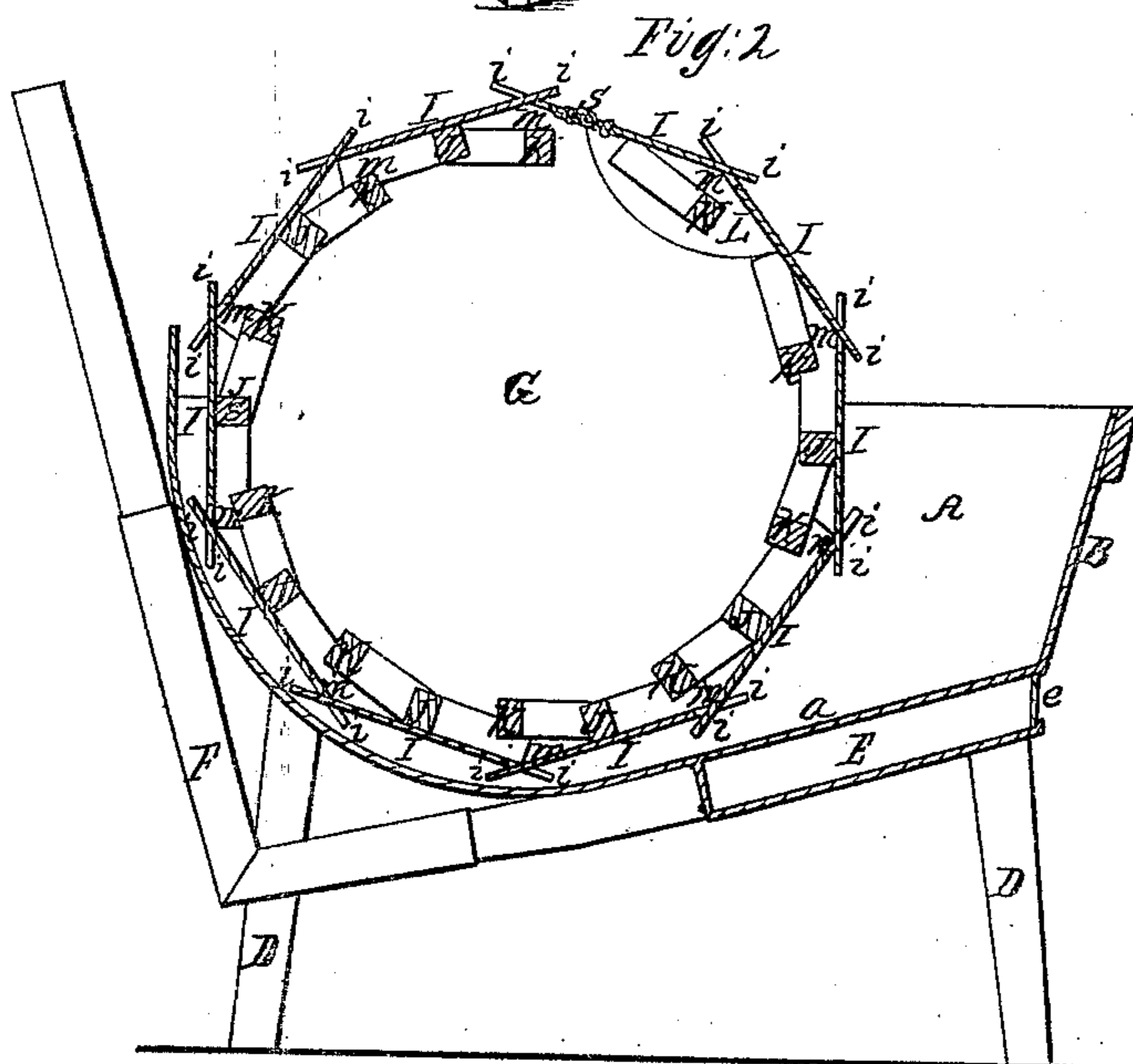
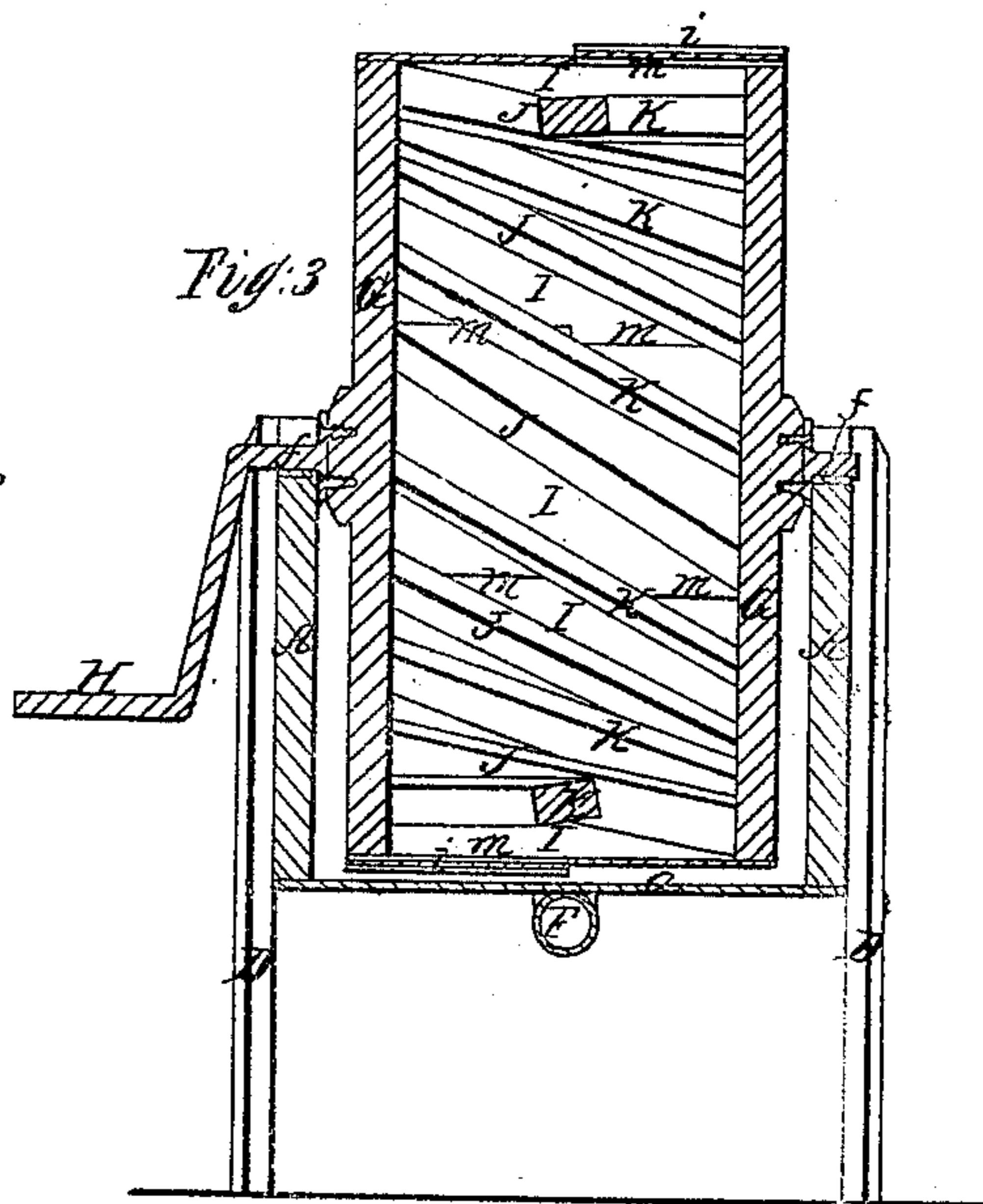
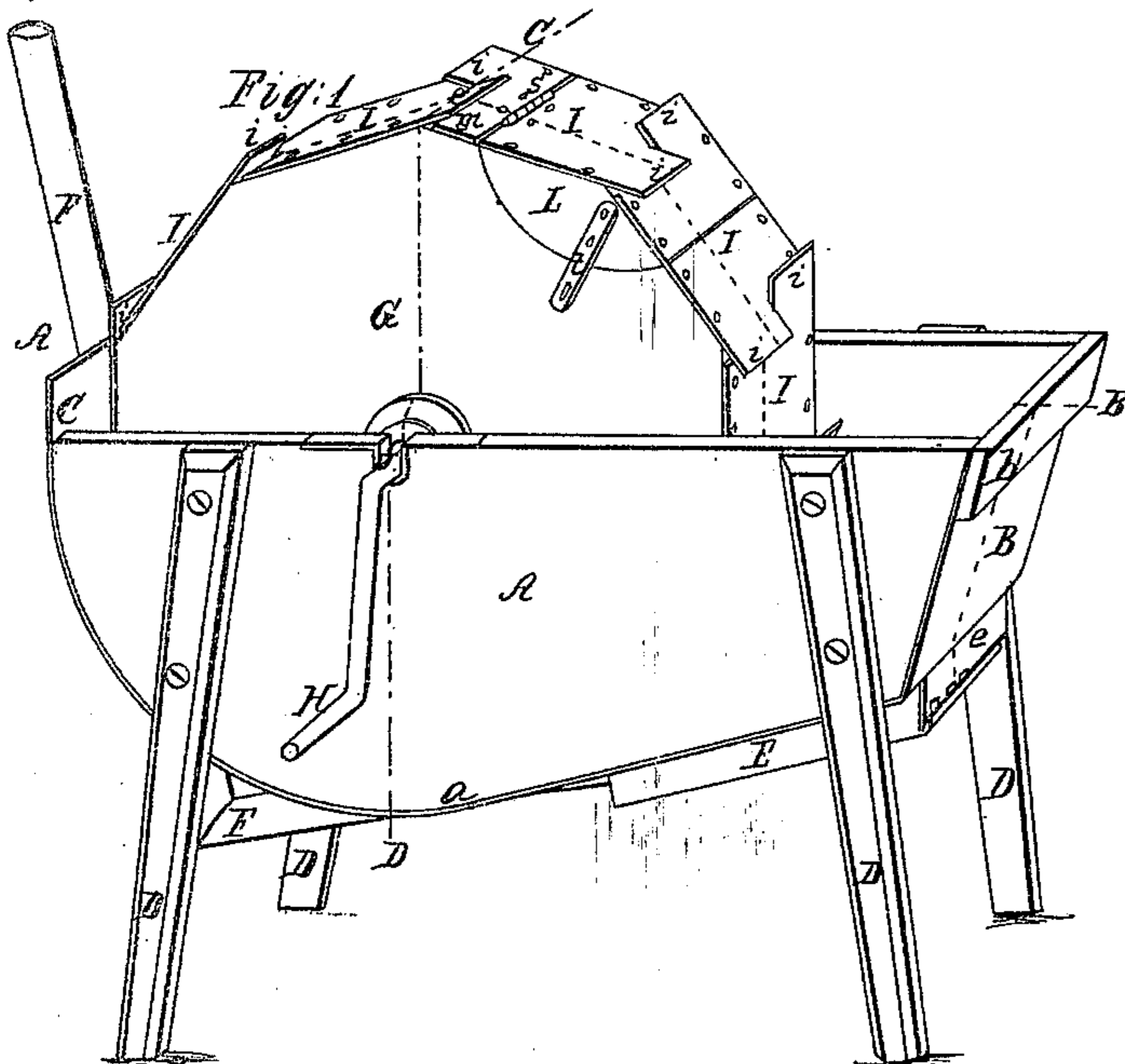


J. B. Woolsey
Washing Mach.

Nº 90,416.

Patented May 25, 1869.



Witnesses
Geo. H. Miller
D. L. Miller,

Inventor
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United States Patent Office.

J. B. WOOLSEY, OF BLOOMFIELD, IOWA.

Letters Patent No. 90,416, dated May 25, 1869.

IMPROVED WASHING-MACHINE.

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

Know all men by these presents:

That I, J. B. WOOLSEY, of Bloomfield, in the county of Davis, and State of Iowa, have invented certain new and useful Improvements in Clothes-Washers; 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, and in which—

Figure 1 represents a perspective view of my improved clothes-washer;

Figure 2 represents a longitudinal section of my improved clothes-washer at line A B, fig. 1; and

Figure 3 represents a transverse section of the same at line C D, fig. 1.

To enable those skilled in the art to which my invention belongs, to make and use the same, I will proceed to describe it more in detail.

In the drawings—

The part marked A is the tub for containing the water used in washing.

It is composed of two sides, made of boards, and a metallic bottom, *a*, which is turned upward and forms the ends of the tub, one of said ends, B, being turned up at an angle and reinforced at its upper edge by a piece of board, *b*, and the other end, C, turned on the arc of a circle, as shown in the drawings.

The tub A is supported upon four legs, D, at a convenient height for the operator, and has beneath it, attached to its metallic bottom *a*, a fire-box, E, to contain the fire for heating the water in the tub A.

The fire-box E is furnished with a sliding damper, *e*, at its front side, and at its rear a smoke-pipe, F, which extends along beneath the bottom *a*, and upward past the end C of the tub A, as fully indicated in the drawings.

In the interior of the tub A is placed the cylinder into which the clothes are placed to be washed.

It is composed in this instance of two heads, G, made of wood, in a decagonal form, with their edges joined together by plates of zinc I.

Journals, *f*, are secured to the head G, which turn in bearings on the sides of the tub A, and at one side is a crank, H, by means of which the cylinder may be operated.

The metallic plates I are formed so that when secured in position their edges lap by each other in the manner shown in the drawings, forming projections *i*, beneath which are left openings, *m*, through which the water can freely pass.

The projections *i* are so arranged that for half the distance across the face of the cylinder they extend forward, and the remaining half of the distance they extend backward, so that by turning the cylinder the water is forced in at the openings *m* at one side and allowed to pass out at the openings on the other side, thereby constantly changing the water in the cylinder while the machine is in motion.

In the interior of the cylinder, directly beneath the plates I, are bars or slats of wood, secured diagonally across between the heads G.

A part of these bars J is placed close to the plates I, and tend to throw the water toward the centre of the cylinder; the others, K, are placed at a short distance from the plates I, thereby keeping the clothes from coming in contact with the plates I, and thus preventing a free passage to the water through the openings *m*.

At one side of the cylinder is a section, L, arranged to swing outward upon a hinge, S, leaving an opening through which the clothes are deposited in and removed from the cylinder.

It is secured, when closed, by spring-clasps *t*, which loop over pins placed in the outer side of the heads G, as fully indicated in the drawings.

Operation.

A sufficient quantity of water being placed in the tub A, a fire is built in the fire-box E, which heats the water to the desired temperature, the section L is opened, and the clothes to be washed are deposited within the cylinder, also the soap or other cleansing-material, when the section L is closed and secured by the clasps *t*.

Then, by turning the cylinder by means of the crank H, the clothes are rolled around in the cylinder by the bars J and K, and rapidly cleansed by the water passing in and out at the openings *m*.

The bars being placed diagonally across between the heads G, gives to the clothes a rambling motion, so that all parts are brought in contact with the bars and the action of the water.

The fire-box E may be used for either wood or coal, as desired, and the smoke-pipe used in its present position, as shown, or turned in any convenient direction and inserted in the smoke-flue of the chimney to the house.

The tubs A may be built of any desired form, and the cylinder may be constructed with more or less plates, I, and bars, J and K, without altering the principle of my invention.

By the foregoing description it will be seen that I have constructed a clothes-washer, which is simple in construction, easy of operation, and not liable to get out of order; one wherein the water may be kept constantly heated, and that does not subject the clothes to injurious strain or wear.

They may be built of any desired size and operated by power, thereby adapting them to large laundries where there is a great deal of washing to be done.

It will be noticed that the form of the overlapping metallic plates I is such as to admit of their being struck out or cut from a continuous strip of sheet-metal one after the other, and without any waste of material, and that when once struck out in this man-

ner, they are ready, without further manipulation, to be directly applied to the cylinder-heads. And again, their overlapping parts, when so applied, form very perfect buckets for permitting either the ingress or egress of the water.

Having described my improved clothes-washer,

What I claim therein as new, and of my invention, and desire to secure by Letters Patent, is—

1. The construction and the arrangement, with relation to each other, and the heads of the washing-cylinder, of the overlapping metallic plates which constitute the body of the said cylinder, as herein shown and specified.

2. The arrangement, in connection with the cylinder-heads and metallic plates, constructed and applied to each other as specified, of the bars J K, held between the cylinder-heads, the former being placed close to, and extending across the centre of the metallic plates, or thereabouts, the latter being placed at a distance from said plates and over the apertures formed for the ingress and egress of the water, as and for the purposes herein shown and set forth.

J. B. WOOLSEY.

Witnesses:

S. S. CARRUTHERS,
M. H. JONES.