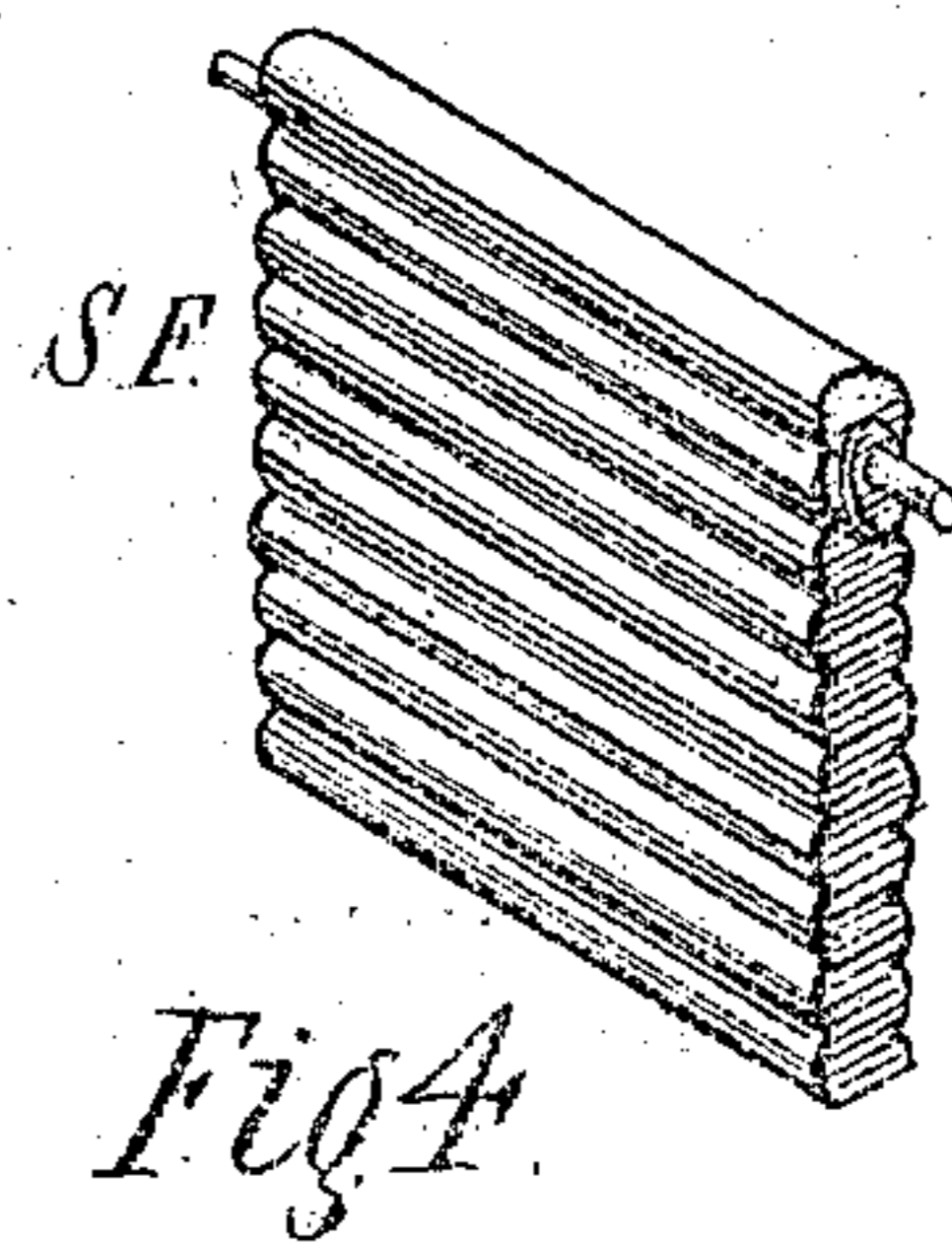
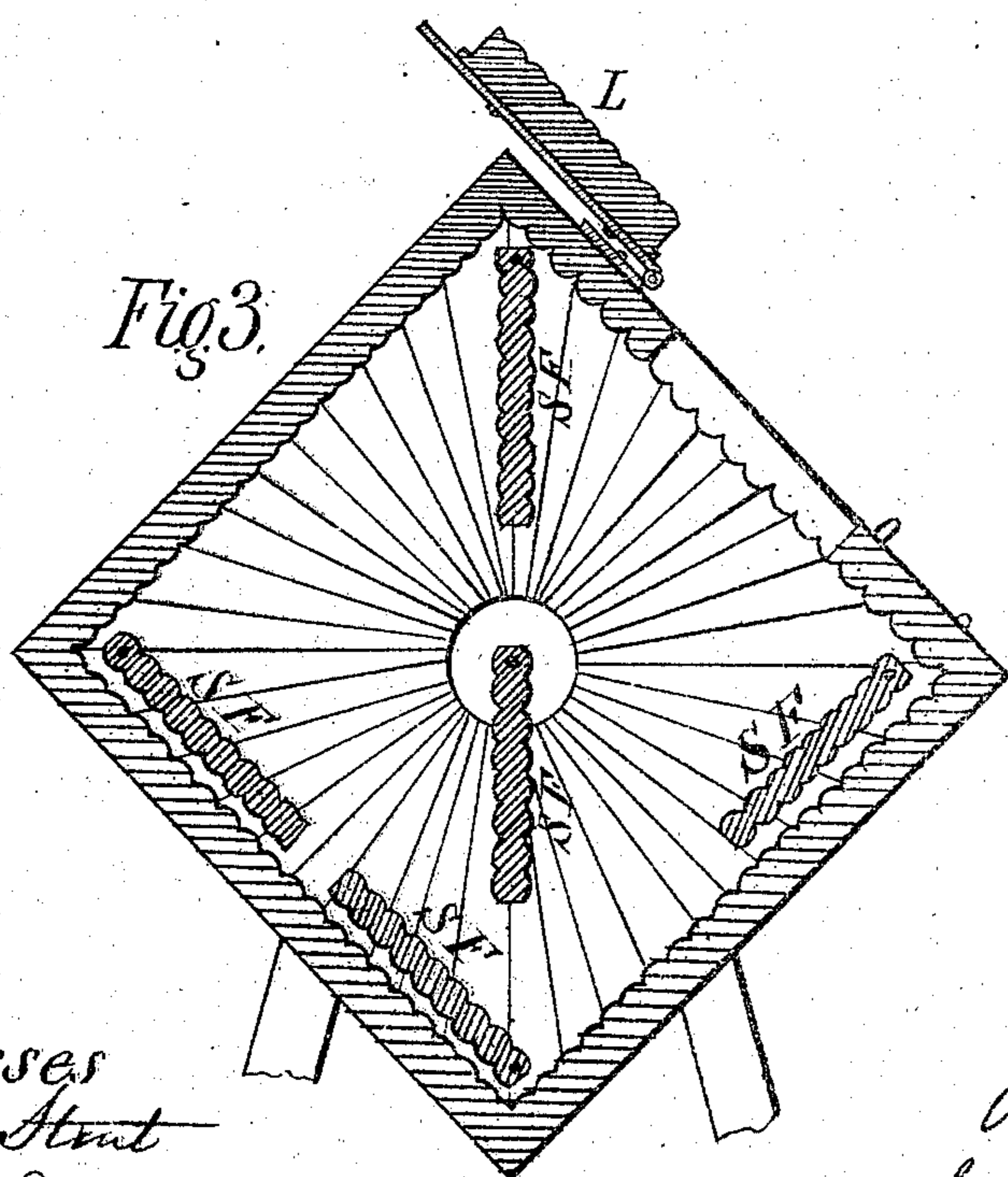
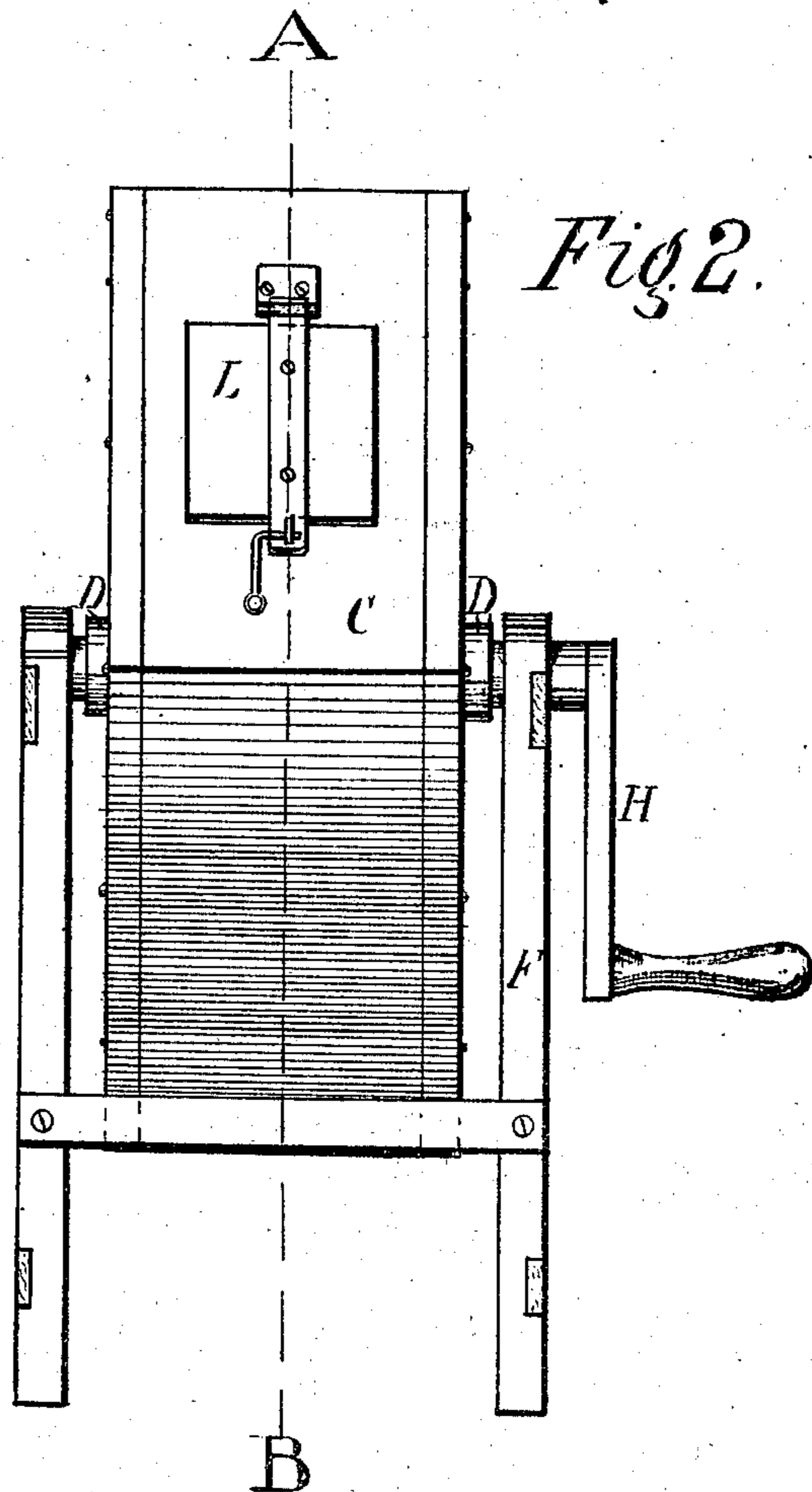
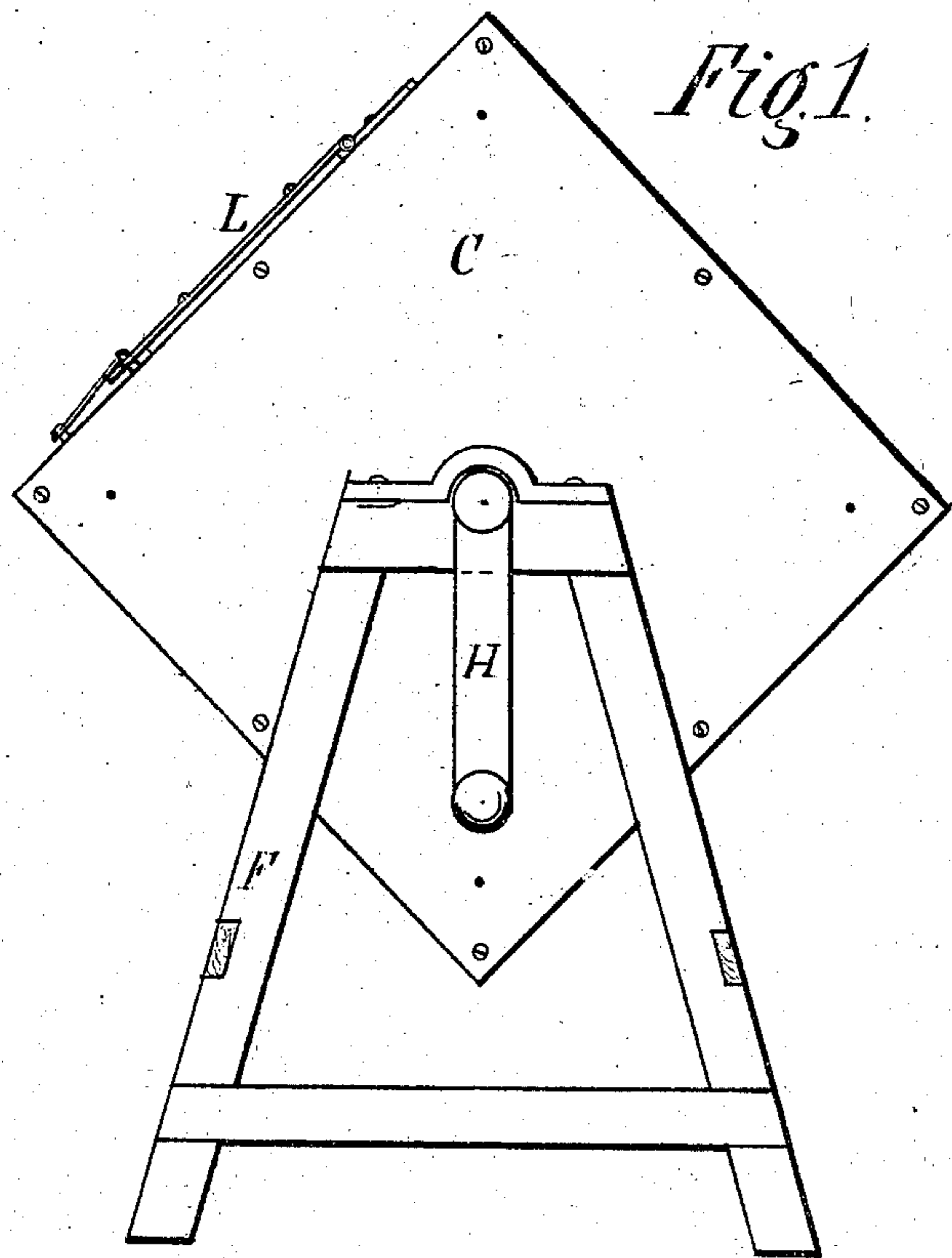


John E Carroll and John Lord's Improvement in Washing Machines

PATENTED APR 11 1871

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Witnesses
Frank Stout
J. W. Dwyer & Co.

Inventor,
John E. Carroll &
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by their attorney
Joseph Egan

United States Patent Office.

JOHN E. CARROLL AND JOHN LORD, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 113,493, dated April 11, 1871.

IMPROVEMENT IN WASHING-MACHINES.

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

We, JOHN E. CARROLL and JOHN LORD, of Philadelphia, county of Philadelphia and State of Pennsylvania, have invented certain new and useful "Improvements in Washing-Machines," of which the following is a specification.

The object of our invention is to provide a simple and effectual machine in which can be washed the finest or coarsest clothes without injury to the fabric.

To accomplish this we employ a square or any suitable-shaped casing. On the interior of same are formed rubbers similar to the face of an ordinary wash-board. Pivoted at different points are swinging frames with corrugations. The casing is mounted on a suitable frame, and rotated by means of a crank in order to squeeze and rub the clothes without unnecessary pressure, which is injurious to the fabric.

Figure 1 is a side view of our machine.

Figure 2 is an end view of the same.

Figure 3 is a sectional view on the line A B, fig. 2, with lid thrown back.

Figure 4 is a detached view of one of the swinging frames.

To enable those skilled in the art to make and use our invention, we will now proceed to describe its construction and operation.

C is the casing of the machine, which is made square, triangular, diamond, or any suitable shape. On the interior of same, at the sides, ends, top, and bottom are corrugated surfaces, as shown in fig. 3.

On the interior, and pivoted to the sides of the casing, are corrugated swinging frames S F, as shown in figs. 3 and 4.

On the outside, and in the center of the casing C,

and secured to the same by means of screws, bolts, or otherwise, are plates D, provided with a shoulder.

The casing is mounted on a suitable frame or upright, F, the shoulders of the plates D working or revolving in suitable bearings centered in the upright F in order to allow the casing C to turn freely by means of the crank H.

On top of the casing C is formed a suitable opening in which is secured, by means of metallic straps or otherwise, a tight-fitting lid, L.

The operation of the machine is as follows:

The clothes to be washed are placed in the casing through the opening covered by the lid L; sufficient water is introduced into the casing to cover the clothes. The crank H is now turned, which revolves the casing C. As the casing rotates the clothes are thrown against the corrugated surfaces, and on top and under the swinging frames S F, which squeeze and beat the clothes without injury to the fabric.

Having thus described our invention,

What we claim, and desire to secure by Letters Patent, is—

The arrangement of the casing C, provided on the interior with the corrugated surfaces and frames S F, as shown and described.

In testimony whereof we have hereunto signed our names in the presence of two subscribing witnesses.

JOHN E. CARROLL.
JOHN LORD.

Witnesses:

JOSEPH EVANS,
FRANK STOUT.