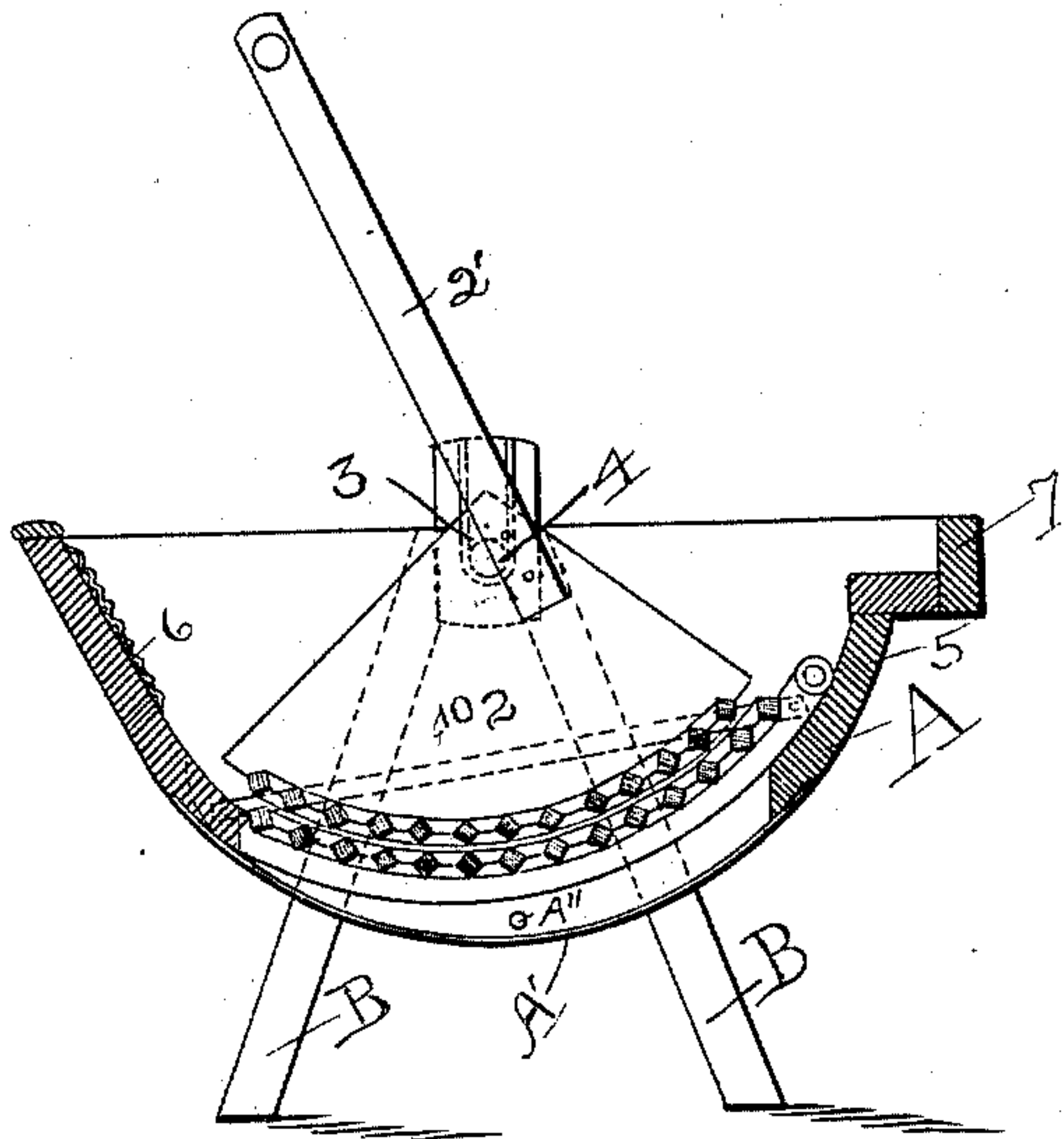


(Model.)

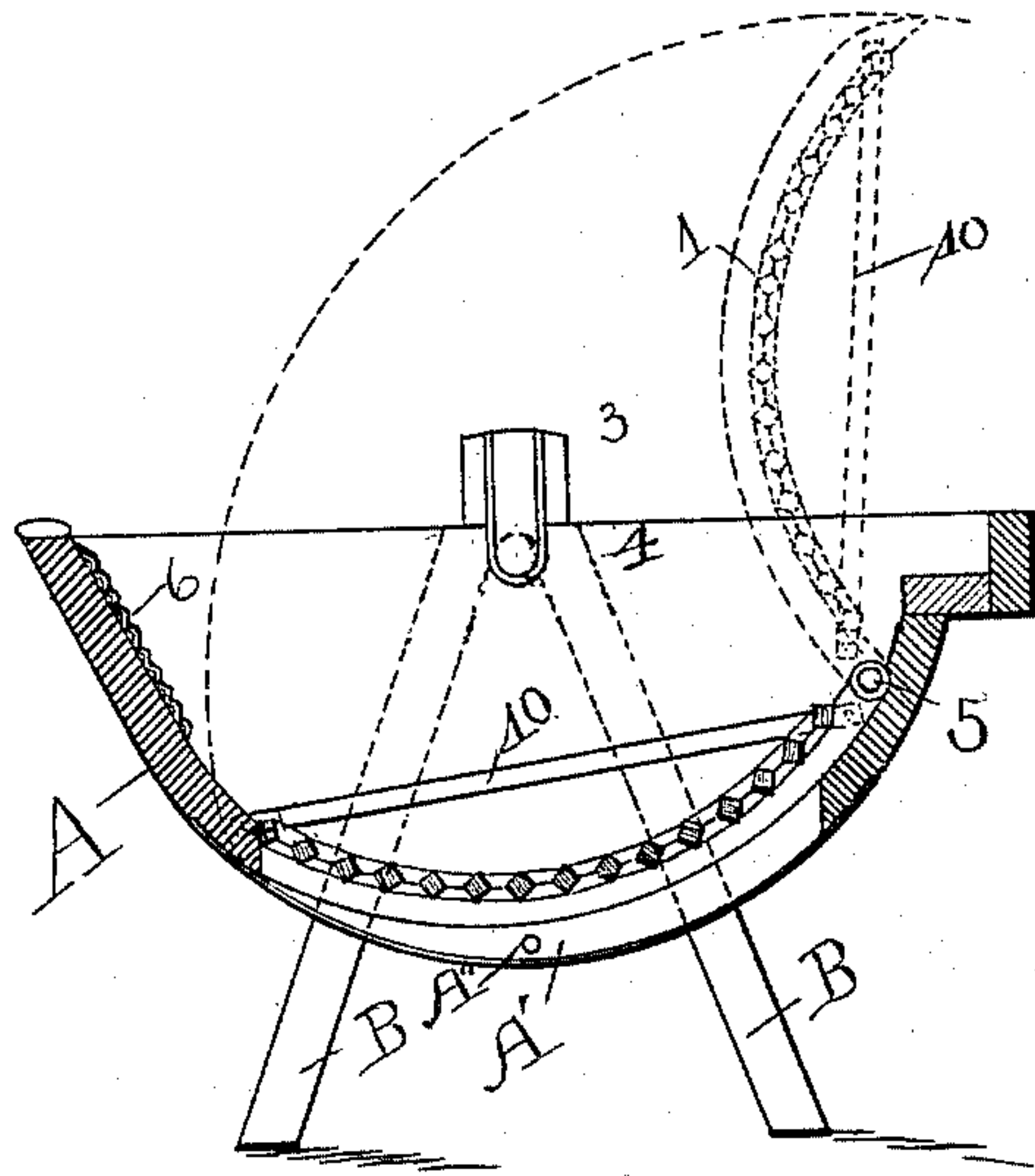
B. L. FINCH.
WASHING MACHINE.

No. 485,812.

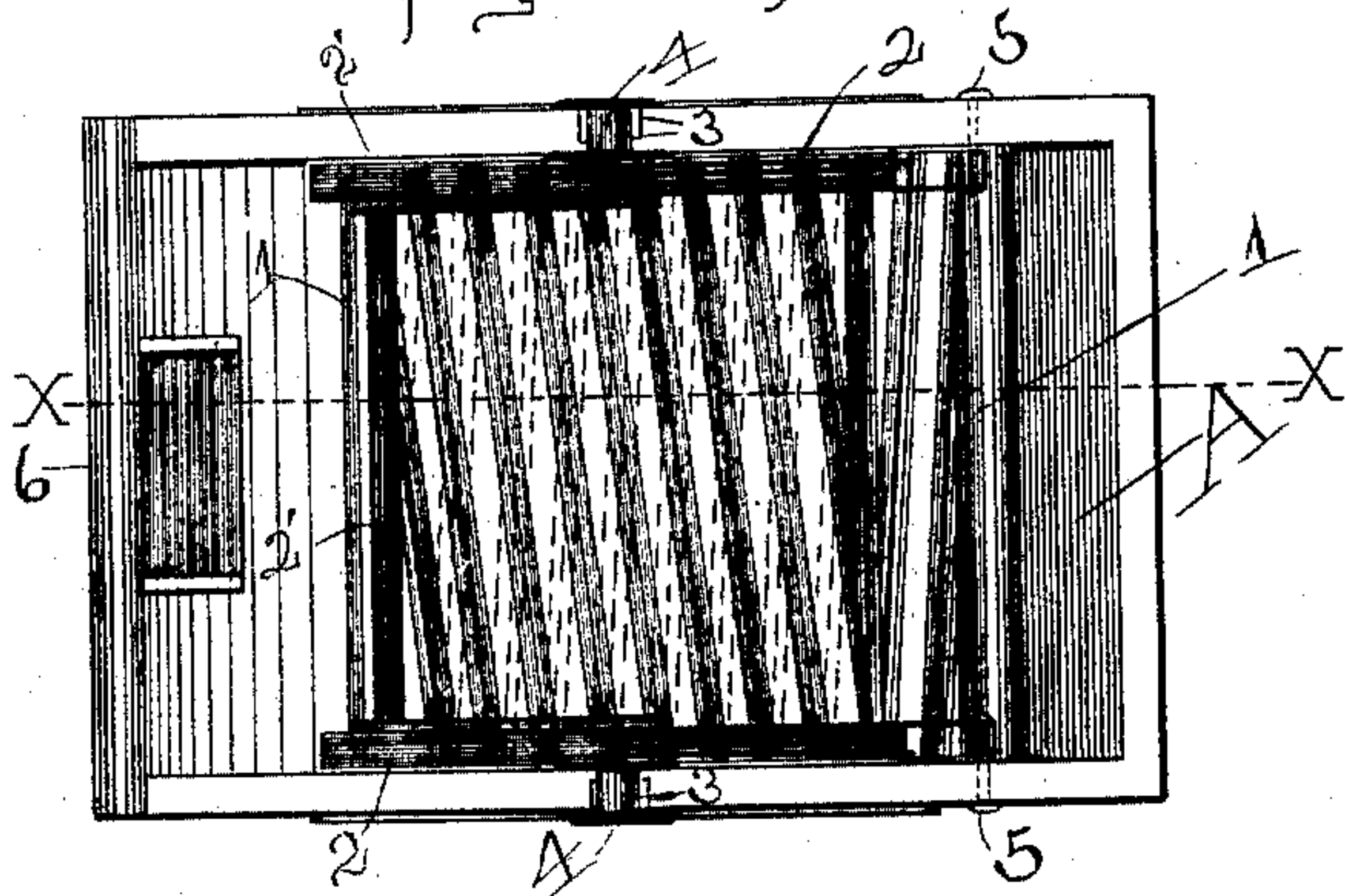
Patented Nov. 8, 1892.



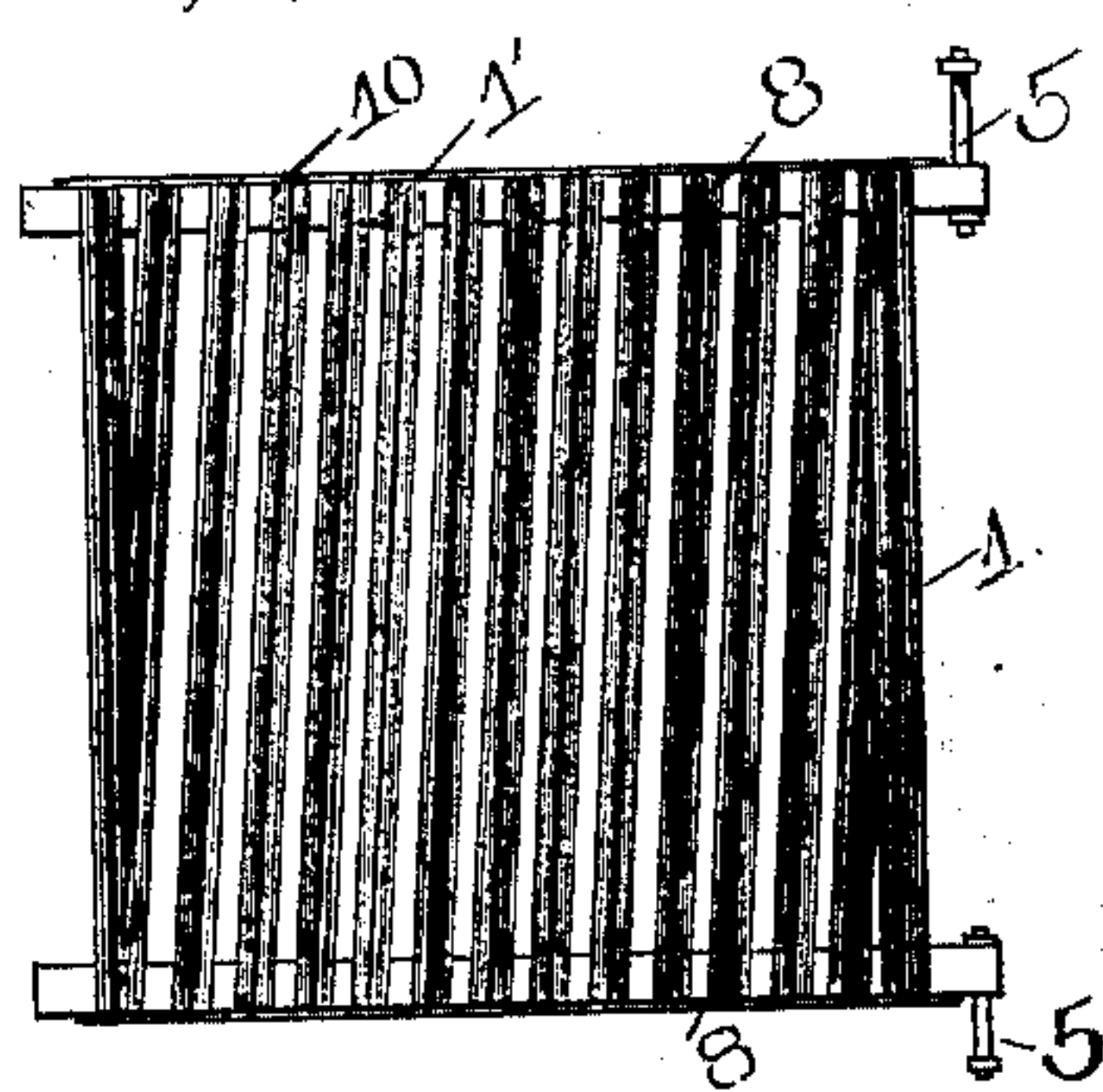
Figure, 1.



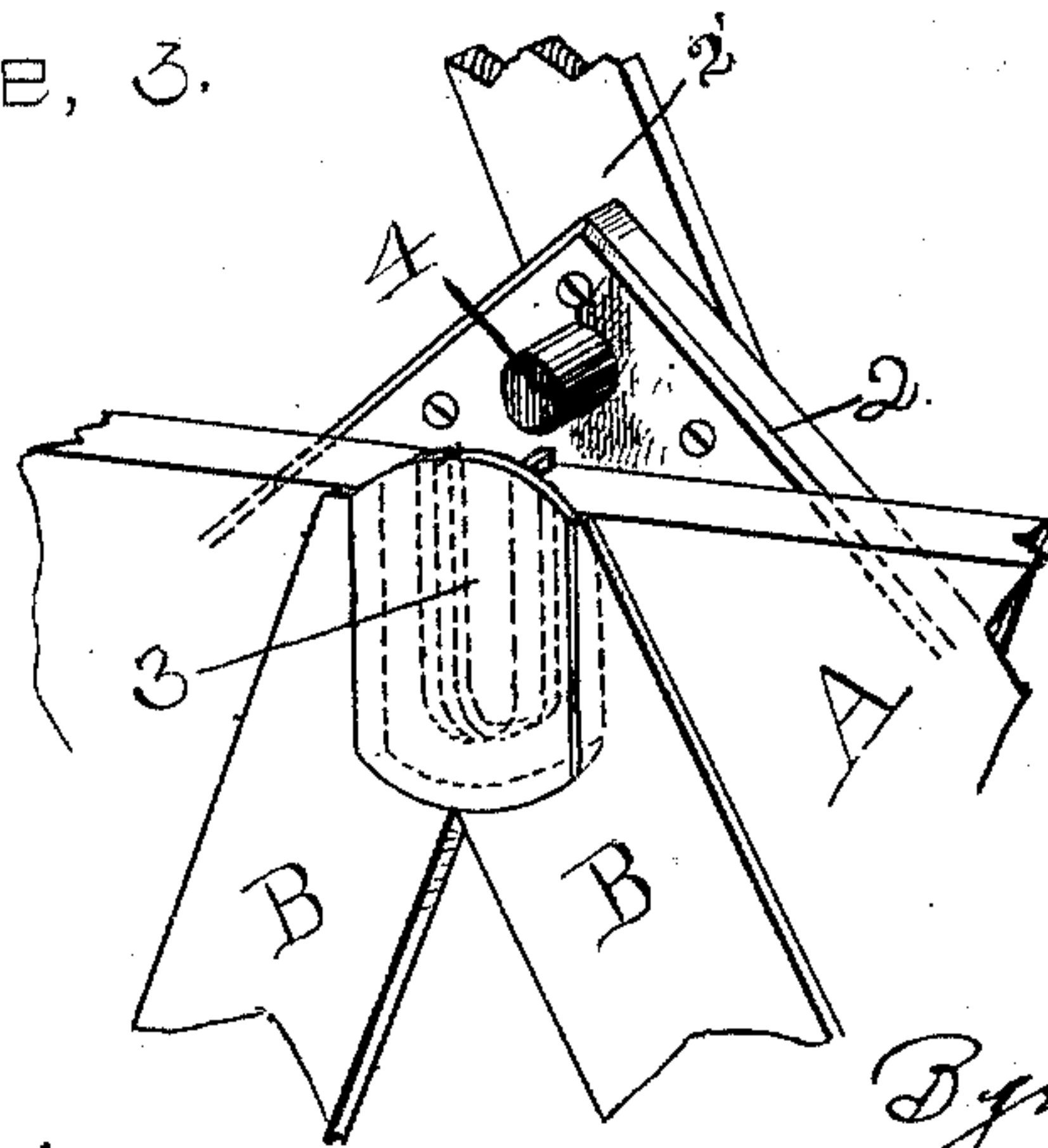
Figure, 2.



Figure, 3.



Figure, 4.



Figure, 5.

WITNESSES:

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BYRON L. FINCH, OF SAGINAW, MICHIGAN.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 485,812, dated November 8, 1892.

Application filed September 12, 1891. Serial No. 405,463. (Model.)

To all whom it may concern:

Be it known that I, BYRON L. FINCH, a citizen of the United States, residing at Saginaw, in the county of Saginaw and State of Michigan, have invented certain new and useful Improvements in Washing-Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention is a washing-machine; and it consists in the special arrangement and combination of the parts, as well as the special mechanical construction.

Figure 1 is a longitudinal vertical section on line X X of Fig. 3. Fig. 2 is a similar view with the parts in a changed position and the rubber removed. Fig. 3 is a top view, and Fig. 4 is a top view of the bottom 1, showing the transverse diagonal slots 1'. Fig. 5 is an enlarged perspective of the reciprocating rubber bearings.

A is the tub or the body of the machine, the bottom semicircular in form and of the desired width, and resting upon legs B B and having at one end and within the tub as a part of its end the rubbing-board 6. The other end 7 has a vertical end board adapted to receive a wringer. The bottom of the tub is made of zinc or other non-corroding material or may be lined with zinc, &c., and at the lowest part of the bottom an orifice A'' is shown, for drawing off the water from the tub.

1 is a removable slatted bottom pivoted at one end of the tub by pivots 5 5 and capable of being swung up out of the way when it is desired to clean the bottom. This is an essential feature of my invention. It will be observed that this removable slatted bottom 1 does not conform to the circle of the bottom of the tub, but a space A' is left between the slat and the zinc. This is of material importance in using the machine, as it allows free circulation of the water through and around the clothes, thus aiding in the cleansing. This bottom 1 consists of the side pieces 8 8 and the square slats 1', mitered into the sides 8 8, so that the edges of the slat will be presented

on top. These slats are laid diagonally across from side to side, except the front one at each end, and present a series of diagonal edges to the clothes as they pass over them.

10 10 are braces extending from one end of the sides 8 8 to the other.

2 is the reciprocating rubber and its general construction is similar to those in machines of this character, except in the following particulars, viz: The slats are square and are mitered in, so as to present an edge to the surface and are placed diagonally and opposite to the diagonal slats below on removable bottom 1. The reciprocating rubber 2 is suspended or hung in the sockets 3 3, formed at the middle of the edges of the sides of the tub, on the pivots 4 4, attached to the rubber 2. The pivots 4 4 are located on the rubber 2 at a point below the center of the circle described by the surface of the rubber 2 and at the proper distance from the bottom 1. It is obvious that as the rubber is reciprocated the side that turns down will approach nearer the bottom 1, while the other side will be farther removed from it. The object of this is to prevent the clothes from working out of the rubbing-surface, for as one side turns down the clothes will be grasped more firmly on that side and loosened on the other. This bearing is below the center of the circle of the lower surface of the reciprocating rubber, but sufficiently high to keep the rubber-slats from coming in contact with the bottom slats.

2' is the handle secured to the sides of the reciprocating rubber at or near the center of the aforesaid lower circle and extending toward the end, so as to be within easy reach of the operator. The arrangement of the slats in rubber 2 and bottom 1 is such that when the clothes are placed between them the slats do not rub upon the clothes, but rather hold the clothes and rub them upon themselves. (Illustrated by the old familiar way of grasping a cloth with each hand and rubbing it upon itself with closed hands.) This is different from the method of other machines, which is that of rubbing the clothes as does a person upon a wash-board.

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

In a washing-machine, the combination, with

a tub having a circular bottom and upright sides, of the suspended hinged transverse diagonally-slatted concave bottom 1, consisting of the side pieces 8 8, the diagonal slats 1',
5 mitered into the side 8 8, so that the edge of the slat will be presented, and the braces 10 10, connecting the ends of the sides 8, the hinges or pivots 5 5, the reciprocating rubber 2, having a convex diagonally-slatted rubbing-surface,
10 the diagonal of the slats being opposite to the diagonal of the bottom 1, the slats set so as to present an edge, the pivots 4 4, secured to

the rubber 2 at a point below the center of the circle described by the convex surface of the rubber, the sockets 3 3 on the sides of the tub for receiving the pivots 4 4, and the handle 2', substantially as described, and as and for the purpose set forth. 15

In testimony whereof I affix my signature in presence of two witnesses.

BYRON L. FINCH.

Witnesses:

A. H. SWARTHOUT,
GEORGE A. McLAUDRESS.