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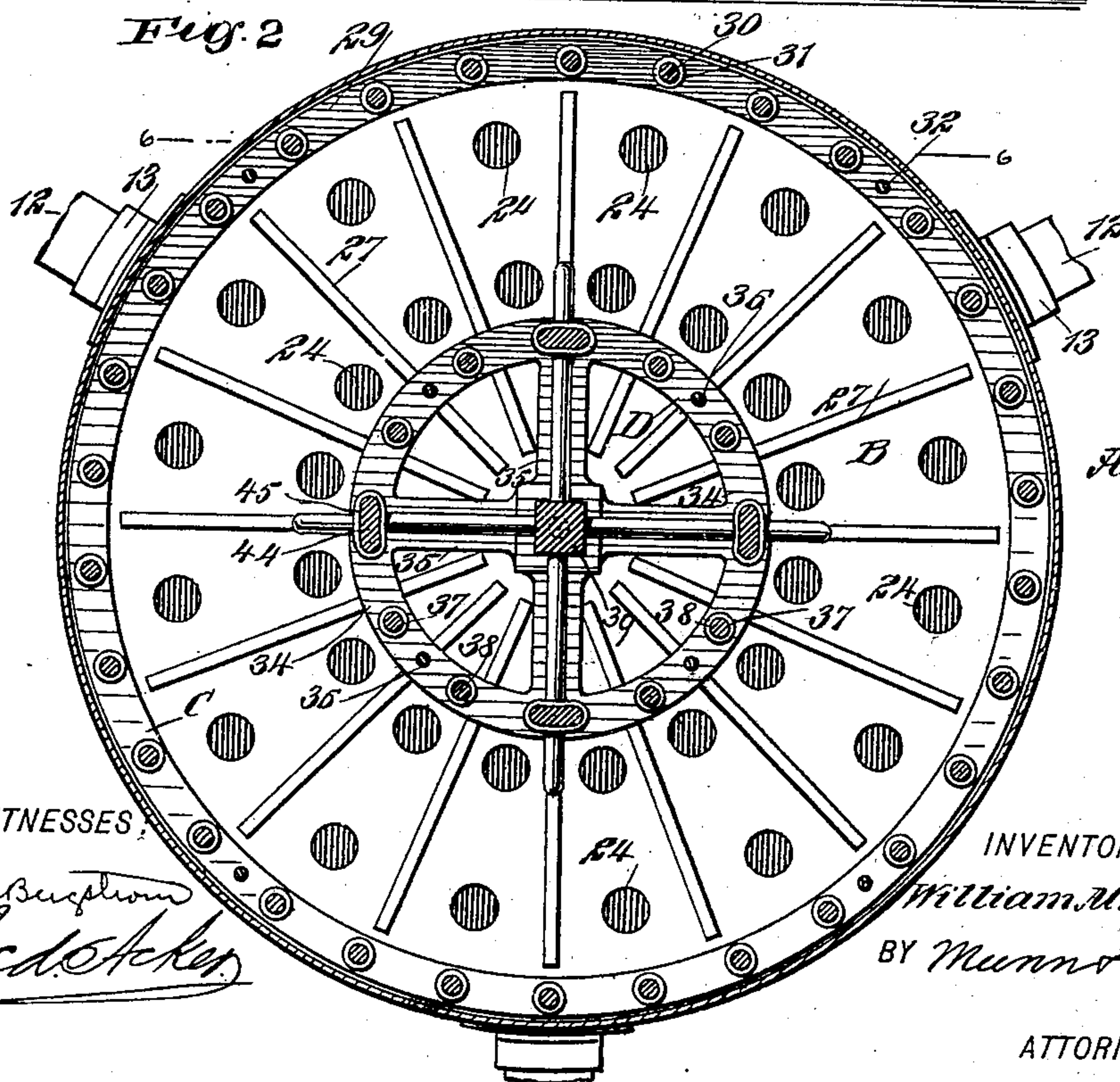
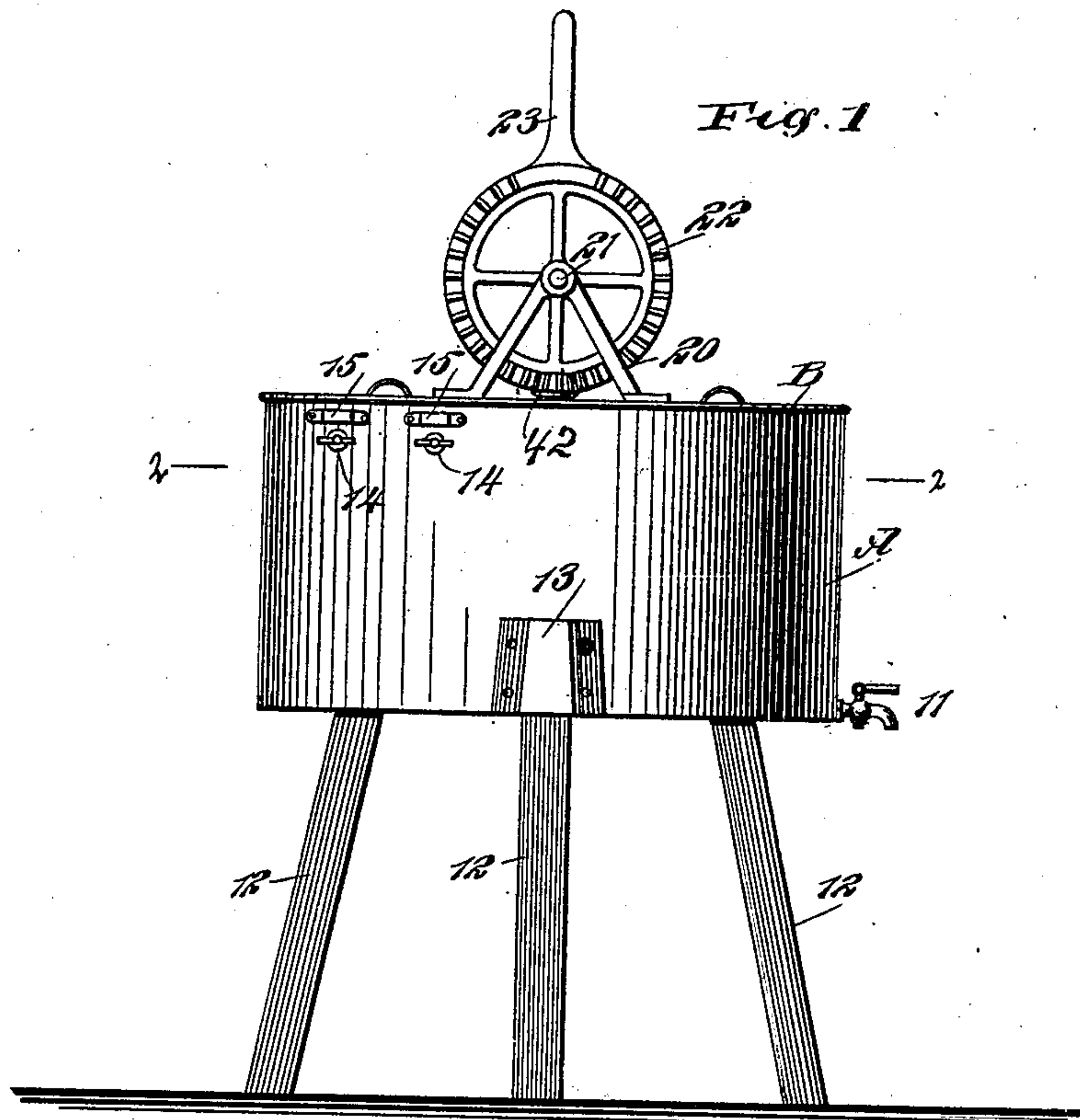
Patented Jan. 22, 1901.

W. M. THOMAS.
MACHINE FOR WASHING CLOTHES.

(Application filed Aug. 25, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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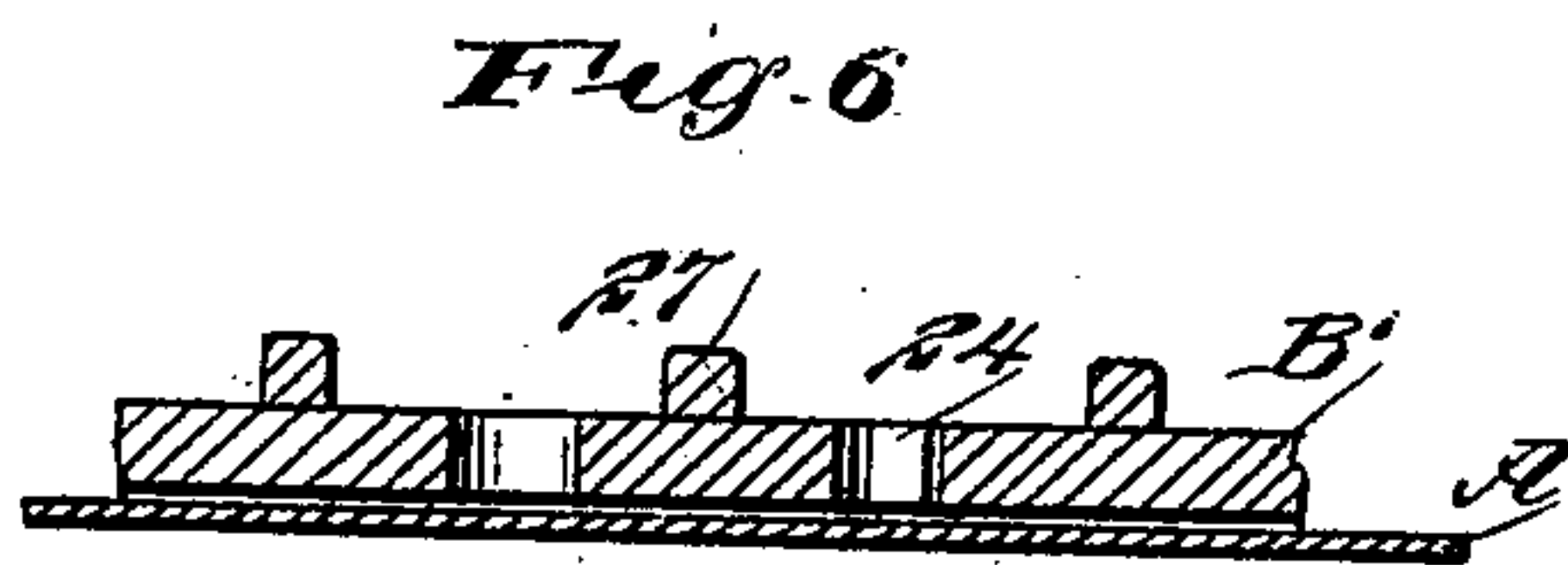
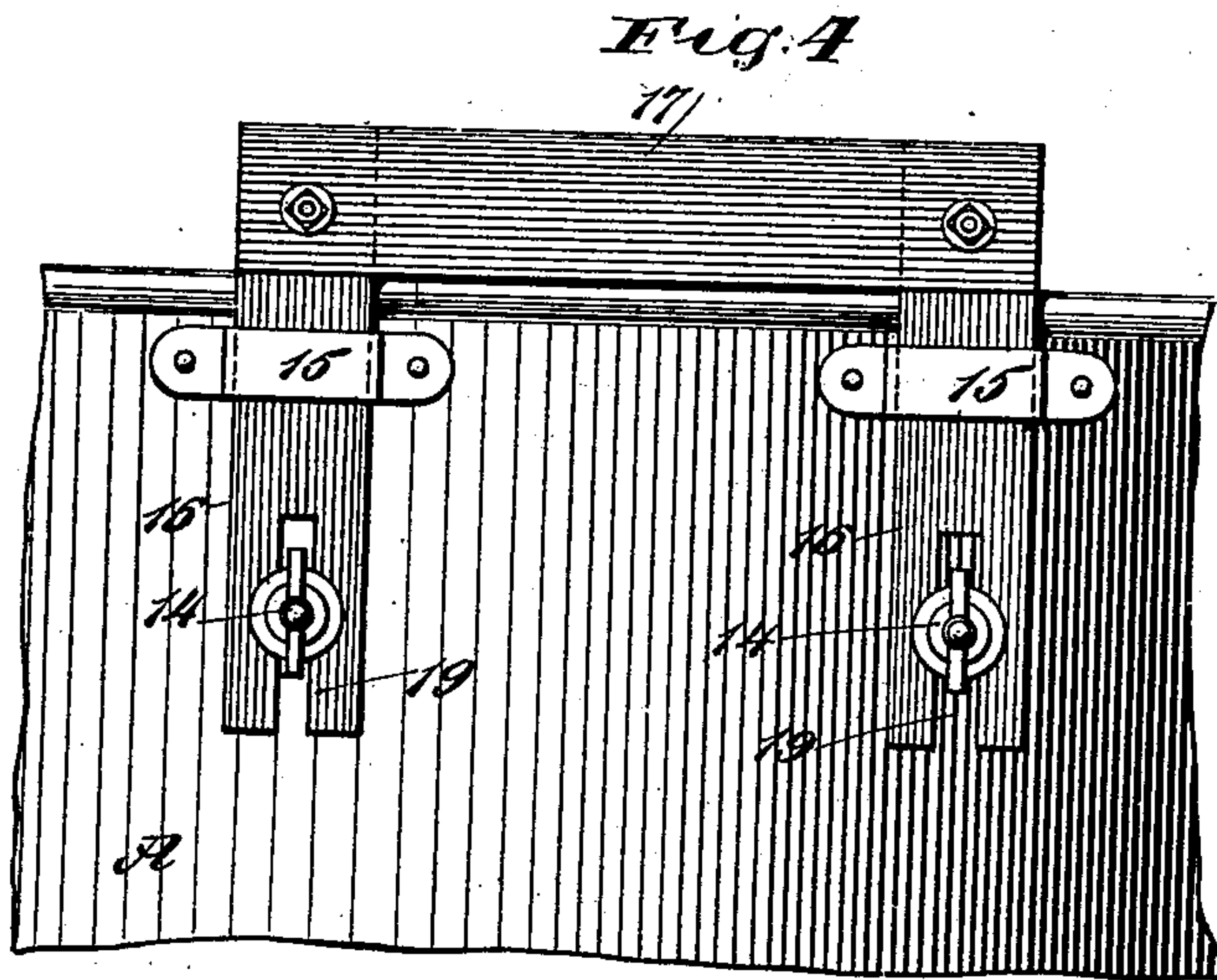
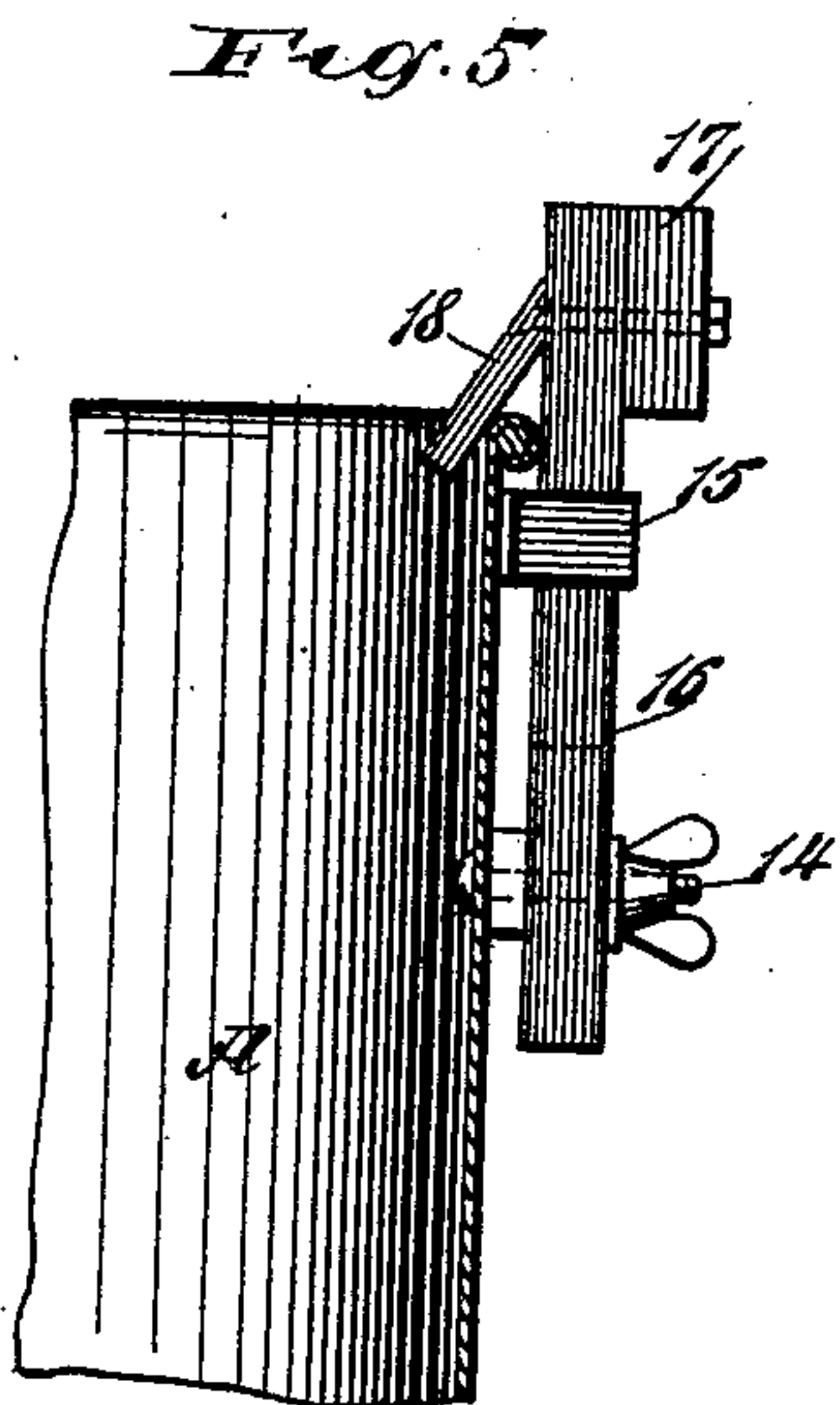
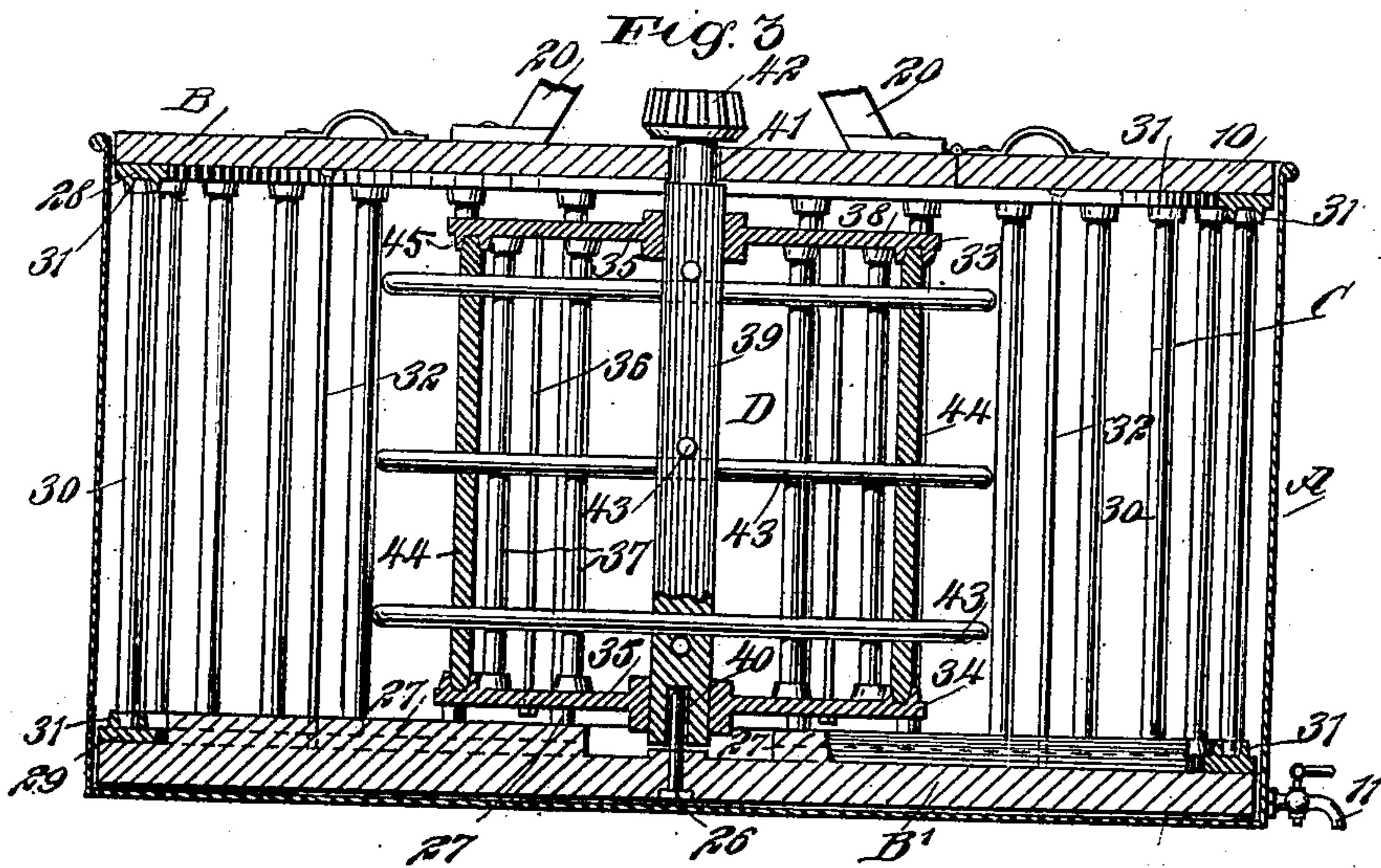
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WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM M. THOMAS, OF EAST CHICAGO, INDIANA.

MACHINE FOR WASHING CLOTHES.

SPECIFICATION forming part of Letters Patent No. 666,575, dated January 22, 1901.

Application filed August 25, 1900. Serial No. 27,996. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. THOMAS, a citizen of the United States, and a resident of East Chicago, in the county of Lake and State of Indiana, have invented a new and Improved Machine for Washing Clothes, of which the following is a full, clear, and exact description.

One purpose of the invention is to provide a machine for washing clothes which will be simple and inexpensive in construction and rapid and efficient in operation, and; further, to so construct the machine that all parts may be duplicated or readily repaired and so that the clothes will not be torn during the process of washing, also, to provide means for drawing water from the tub while the clothes are in the machine and to supply fresh water to the clothes.

Another purpose of the invention is to construct the machine in such a manner that all parts may be conveniently and readily removed from the tub and thoroughly cleaned.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improved machine. Fig. 2 is a horizontal section drawn on a larger scale, the section being taken practically on the line 2 2 of Fig. 1. Fig. 3 is a central vertical section through the body of the machine. Fig. 4 is a partial side elevation illustrating the application of a support for a wringer to the tub of the machine. Fig. 5 is a vertical section through a portion of the tub of the machine, showing the support for the wringer in edge view; and Fig. 6 is a part of the bottom portion of the tub and the false bottom for the tub, the section being taken practically on the line 6 6 of Fig. 2.

The tub A is preferably of circular form and is made of galvanized iron or other thin, yet strong, material, and the said tub is provided with a removable top B, one section 10 whereof may be lifted, so as to permit the clothes to be introduced into the tub or taken

out therefrom while the cover is in position on the tub. A faucet 11 is located at the bottom portion of the tub A, and through the medium of this faucet the wash-water is to be drawn from the tub either while the clothes are therein or after said clothes have been removed. The tub A is usually supported by legs 12, which when employed are made to enter sockets 13, attached to the outer face of the tub A, as shown in Fig. 1. The tub A is also provided at its exterior, near its upper edge, with set-screws 14, and above the set-screws metal loops 15 are located. These loops and set-screws are adapted to hold in position on the tub a supporting device for a wringer, which device is particularly shown in Figs. 4 and 5, and consists of vertical members 16, connected at the top by a cross-bar 17, said vertical members being passed through the loops 15 to an engagement with the stem portions of the set-screws 14, and to this end the vertical members 16 are provided with slots 19, as is especially shown in Fig. 4. A wringer is secured in the usual manner upon the cross-bar 17, and this cross-bar is provided with an inclined board 18 at its back, the lower portion of which board enters the upper portion of the tub, as shown in Fig. 5.

Standards 20 are erected on the central portion of the cover B, and a short shaft 21 is journaled in the said standards, the shaft having attached thereto a gear 22, which is turned through the medium of an attached handle 23. This gear is adapted to communicate motion to a rotary dash to be hereinafter described.

A false or auxiliary bottom B' is located in the tub, and this bottom is loosely fitted therein in order that the water in the tub, when the auxiliary bottom is in place, may find its way out through the faucet 11. This auxiliary bottom B' is provided with series of apertures 24 in order that the dirt removed from the clothes may pass to the bottom of the tub A through the said apertures, and the auxiliary bottom B' is provided with radial ribs 27, forming rubbing-surfaces for the clothes. These ribs extend from a point near the periphery of the said auxiliary bottom to a point near the center of it, as is shown in Figs. 2 and 3. At the central portion of the auxiliary bottom an upwardly-extending pin 26 is lo-

cated, which is adapted to pivot the lower portion of the rotary dash heretofore referred to.

In addition to the auxiliary bottom B' a cylindrical skeleton drum C is located within the tub, upon which drum the top B of the tub has a bearing, as is shown in Fig. 3. This drum C consists of an upper ring 28, preferably made of galvanized metal, and a lower ring 29, made of the same material. Spindles 30, preferably constructed of wood, extend at suitable distances apart from one ring to the other, the ends of the spindle being made to enter pockets 31, preferably formed integral with opposing faces of the rings 28 and 29, and these pockets are made tapering, so that the ends of the spindles entering the pockets when swelled will hold the spindles firmly in place. The two rings 28 and 29 of the drum C are further connected and are locked together by bolts 32 or their equivalents passed from one ring to the other.

The rotary dash heretofore referred to is held to revolve within the drum C between the top and bottom portions of the tub A, and it may be here remarked that the bottom ring of the drum C rests upon the upper peripheral portion of the auxiliary bottom B'. This rotary dash D consists of an upper ring 33 and a lower ring 34, both of the said rings being provided with a spider-center 35, and these rings are connected by bolts 36 or their equivalents. Spindles 37, suitably spaced, also extend from one ring of the rotary dash to the other, and these spindles enter tapering pockets 38 in like manner as the spindles of the drum C. A shaft 39 is passed through the spider-centers 35 of the head portions of the said dash, being secured thereto in any desired manner, and this shaft where it passes through the dash is preferably rectangular in cross-section. The lower end of the shaft 39 is provided with an opening or recess 40, which receives the pivot-pin 26 in the false or auxiliary bottom B'. The upper end of the shaft 39 is round in cross-section and passes loosely through an opening 41, made in the cover B, and at the upper outer end of the shaft 39 a pinion 42 is secured, adapted to engage with the teeth of the wheel 22, mounted on the cover, and through which wheel, as stated, motion is communicated to the said dash. The construction of the dash is completed by passing bars 43 horizontally through the shaft 39, one bar crossing the other and two bars constituting a set. Any number of sets of said bars may be employed. These bars pass out through openings in guide-strips 44, preferably made of wood, which are secured to the rings 33 and 34 of the dash by means of tapering sockets or pockets 45, as shown in Figs. 2 and 3. These bars 43 extend beyond the outer faces of the rotary dash and constitute agitating-fingers, since they carry the clothes

around and cause said clothes to be brought into rubbing engagement with the spindles of the drum C and the ribs on the upper face of the auxiliary or false bottom B'.

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

1. In a washing-machine, a tub, an auxiliary bottom loosely mounted in the said tub and having a roughened upper surface, a drum supported by the said auxiliary bottom and provided with a rubbing-surface, and a rotary dash mounted to revolve within the said drum, which dash is provided with upper and lower annular sections, a central support, peripheral spindles extending between the upper and lower annular sections, and horizontal agitating-fingers passing through the central support and extending beyond the peripheral surface of the dash, and means for revolving the said dash, as set forth.

2. In a washing-machine, the combination with a tub, provided with a cover, an auxiliary bottom loosely mounted in the tub and having a rubbing-surface, and a drum supported by the said auxiliary bottom and having a rubbing-surface, of a dash mounted to revolve in the said drum, the said dash comprising a central shaft mounted to turn at its lower end on the said auxiliary bottom, and having its upper end extending loosely through an opening in the cover of the tub, heads secured to the shaft, spindles extending from one head to the other at the peripheries thereof, bars passed through the central shaft of the dash and extending beyond the peripheral surface of the dash, and means for revolving the said dash, substantially as specified.

3. In a washing-machine, the combination, with a tub, an auxiliary bottom loosely mounted in the said tub, having a roughened upper surface and a series of apertures extending from one face to the other, and a drum supported by the said auxiliary bottom, and provided with a rubbing-surface, of a rotary dash comprising a central shaft, heads secured to said shaft, spindles extending from one head to the other at the peripheries thereof, horizontal bars crossing each other and passed through the central support for the dash, which bars extend beyond the peripheral surface of said dash, and guides for the outer ends of the said bars and secured to the heads of the dash, and means for operating the said dash, for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM M. THOMAS.

Witnesses:

LESTER F. LADD,
LESLIE B. GRAHAM.