

No. 755,455.

PATENTED MAR. 22, 1904.

R. C. COBURN.
LAUNDRY APPARATUS.

APPLICATION FILED DEC. 27, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

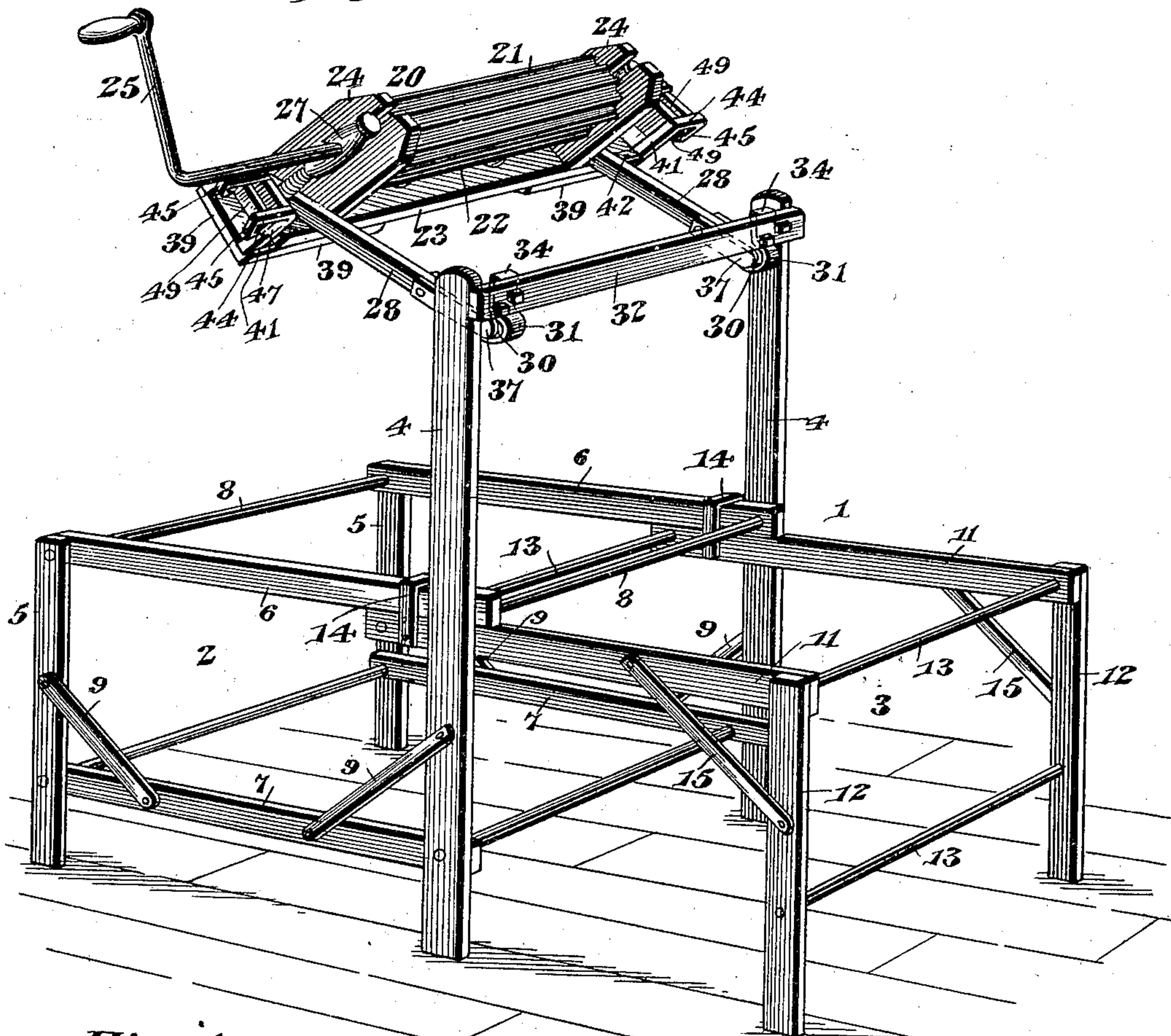


Fig. 4.

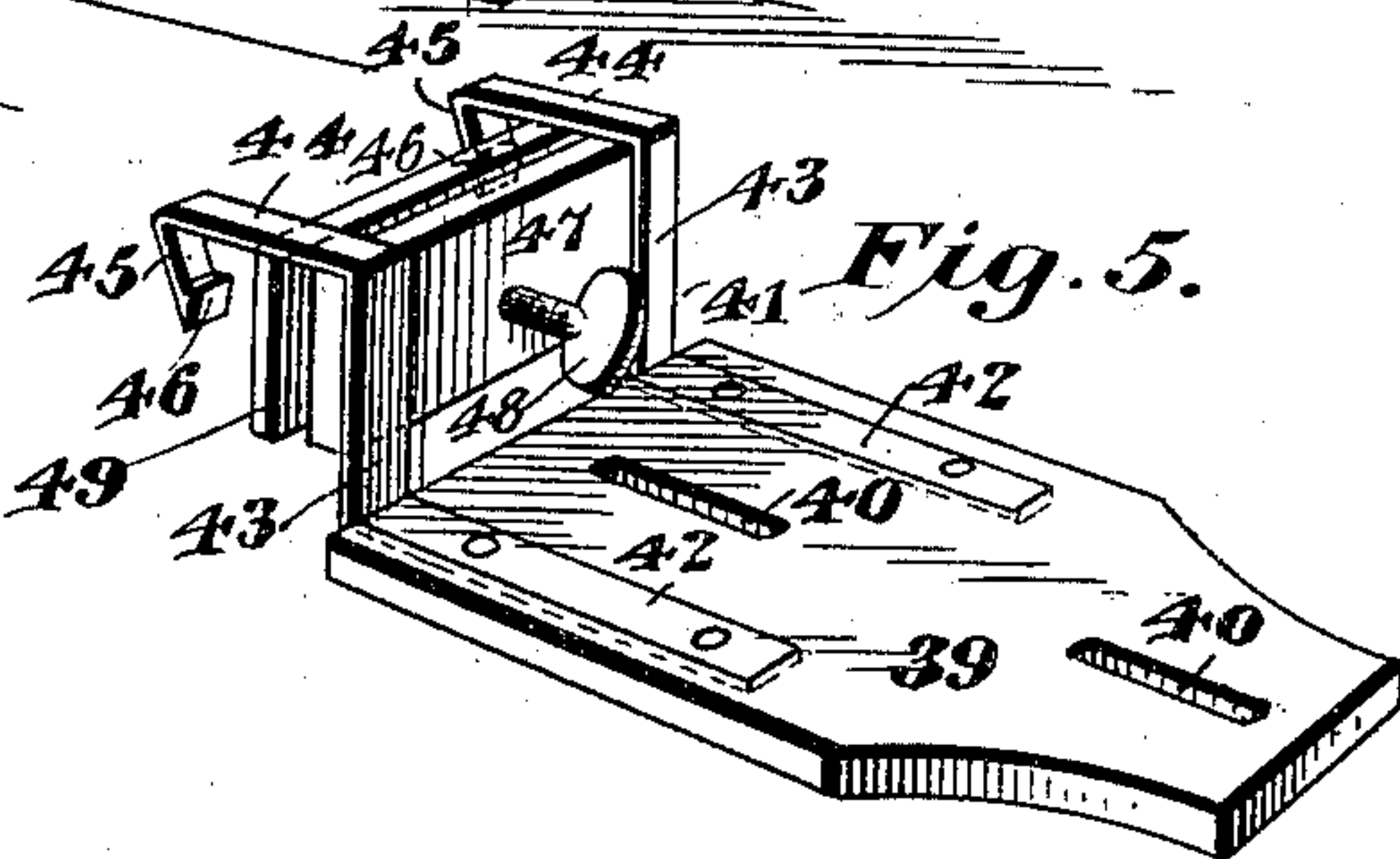
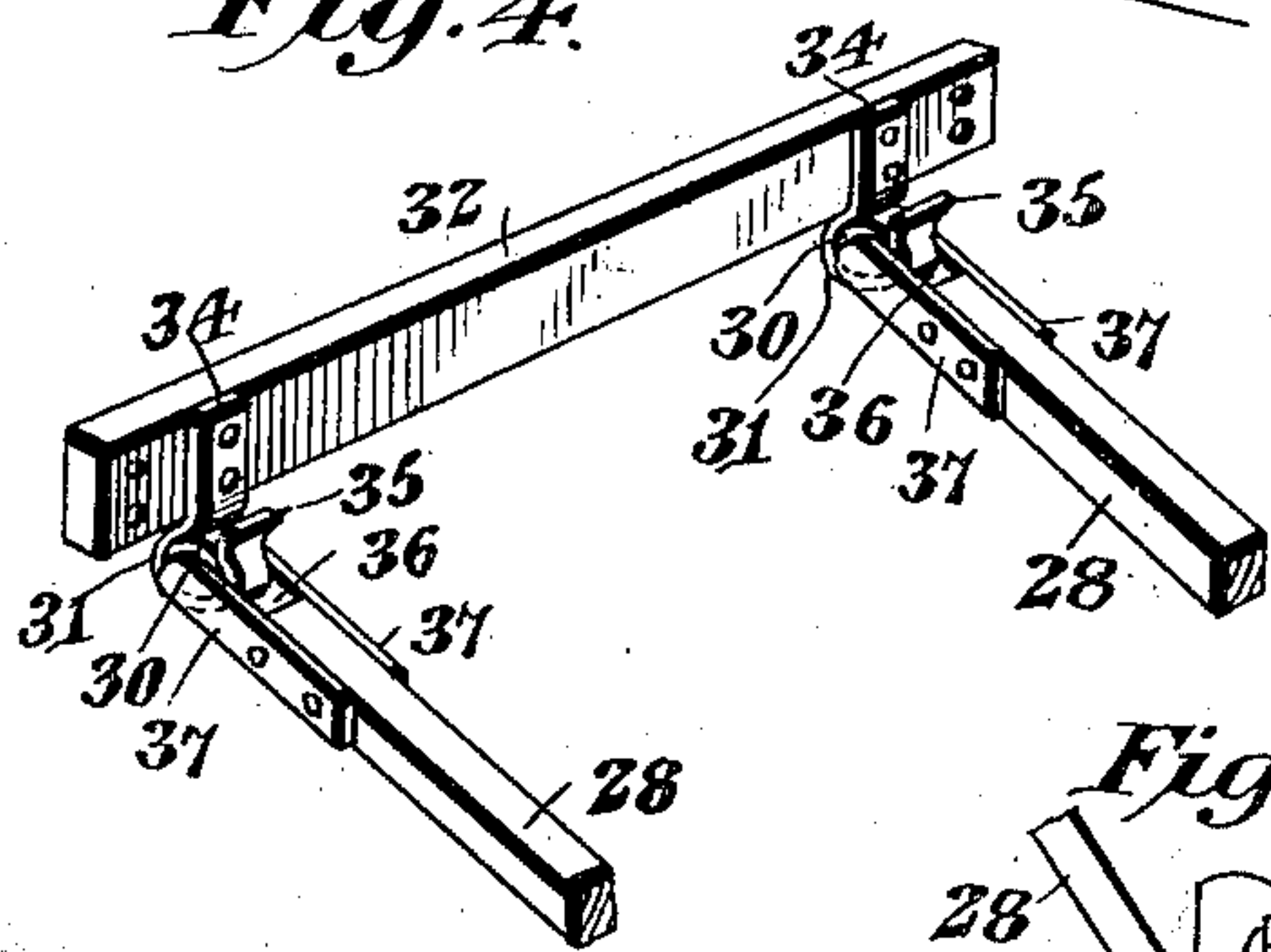
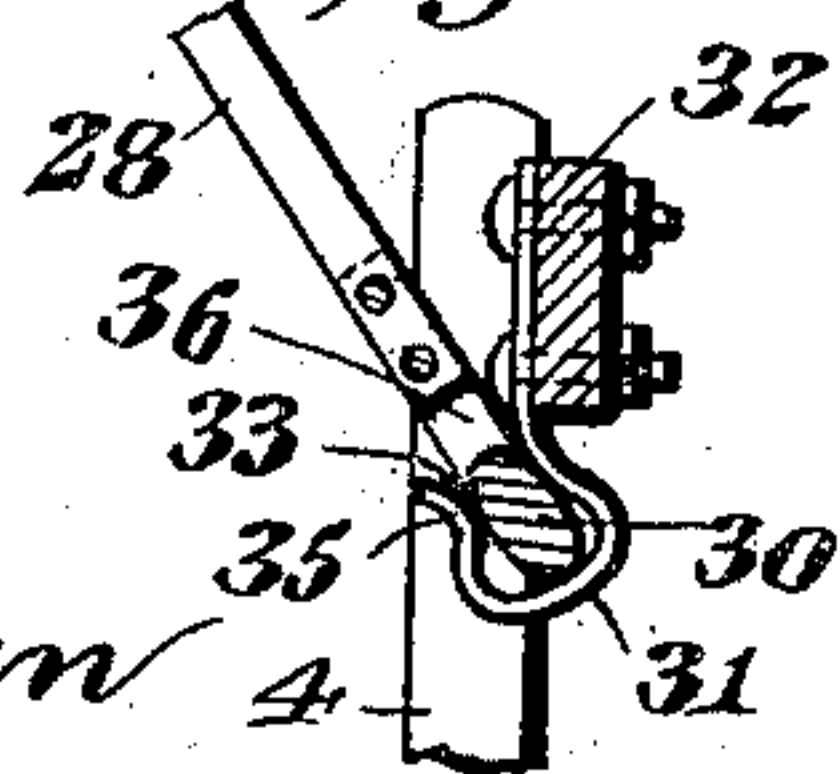


Fig. 6.



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2 SHEETS—SHEET 2.

Fig. 2.

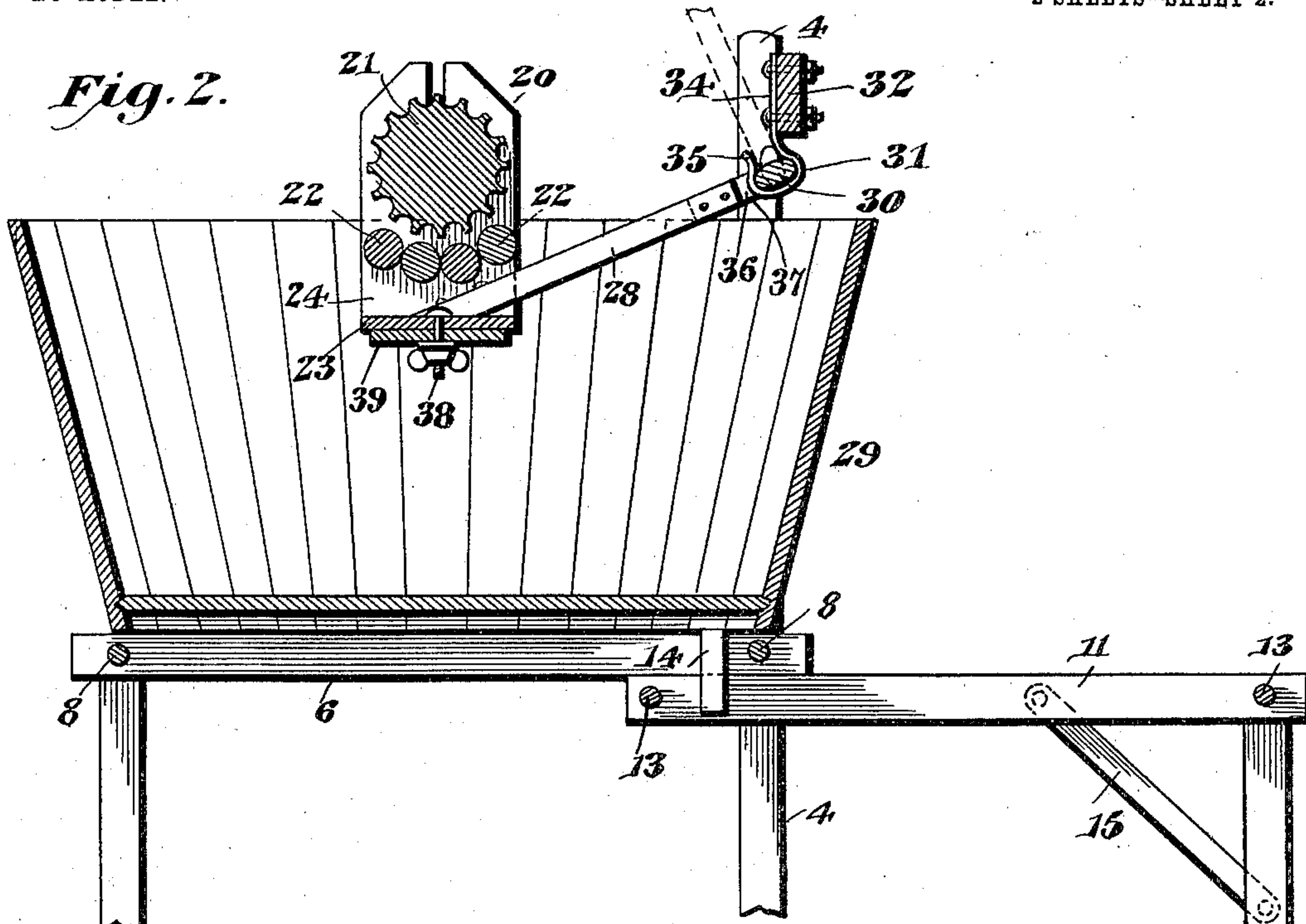
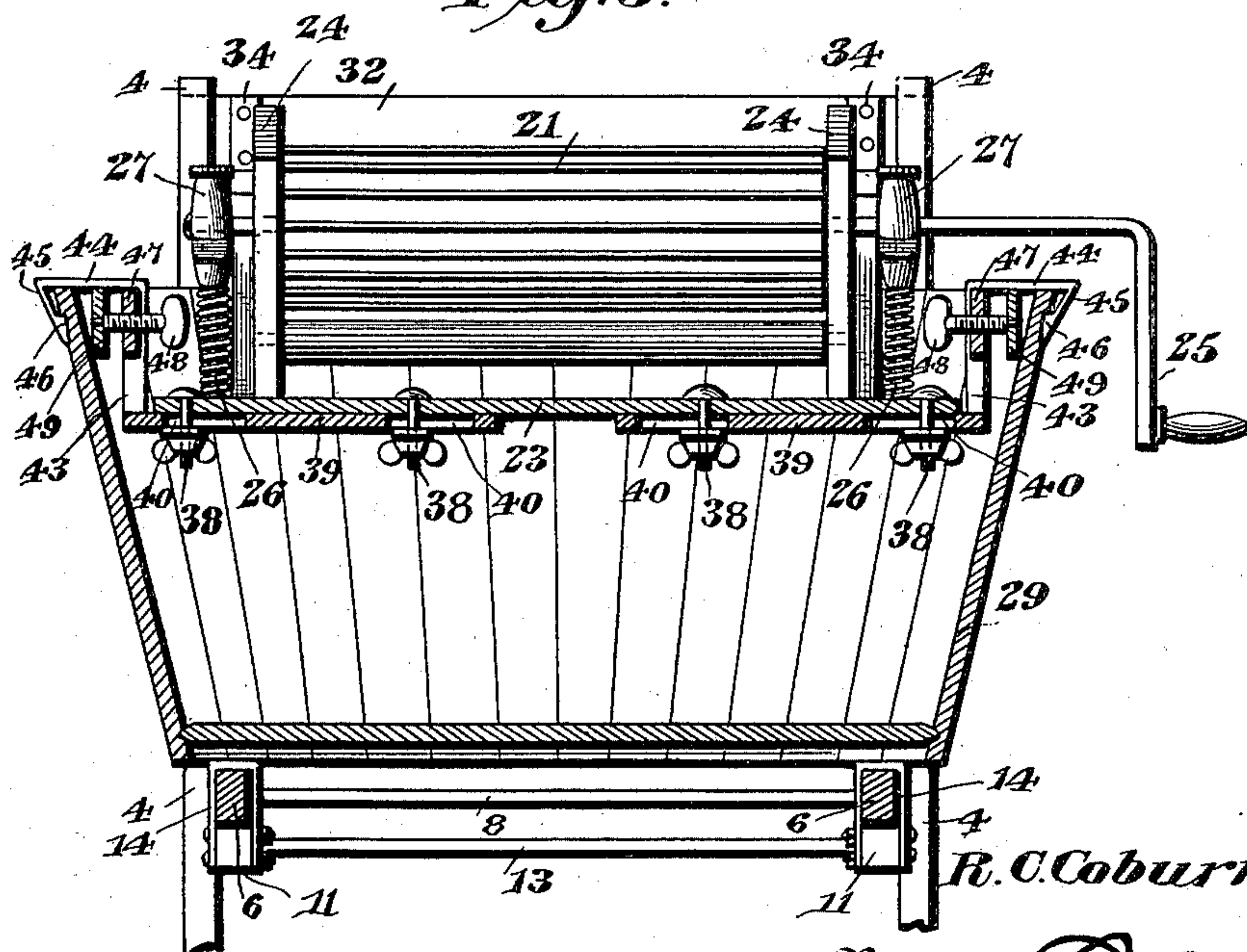


Fig. 3.



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UNITED STATES PATENT OFFICE.

RAYMOND CLINTON COBURN, OF UPPER SANDUSKY, OHIO.

LAUNDRY APPARATUS.

SPECIFICATION forming part of Letters Patent No. 755,455, dated March 22, 1904.

Application filed December 27, 1902. Serial No. 136,844. (No model.)

To all whom it may concern:

Be it known that I, RAYMOND CLINTON COBURN, a citizen of the United States, residing at Upper Sandusky, in the county of Wyandot and State of Ohio, have invented a new and useful Laundry Apparatus, of which the following is a specification.

This invention relates to improvements in laundry apparatus.

The object of the present invention is to improve the construction of laundry apparatus, more especially the means for connecting the washing mechanism with a tub, and to provide a simple, inexpensive, and efficient clamping device adapted to enable the washing mechanism to be arranged in either wood or sheet-metal tubs and capable of preventing the latter from being bulged outward at the points where the washing mechanism is connected with it.

With these and other objects in view the invention consists in the novel construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the claims hereto appended, it being understood that changes in the form, proportion, and minor details of construction within the scope of the claims may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a laundry apparatus constructed in accordance with this invention, the washing mechanism being swung upward. Fig 2 is a longitudinal sectional view, the washing mechanism being in position within a tub. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view illustrating the manner of hinging the arms or bars of the washing mechanism to the supporting-frame. Fig. 5 is a detail perspective view illustrating the construction of the tub-clamp. Fig. 6 is a detail sectional view illustrating the construction of the open elliptical bearings and the detachable elliptical pintle.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a supporting-frame, compris-

ing a main section 2 and a sliding section 3. The main section is composed of a pair of standards 4, a pair of legs 5, and upper and lower horizontal side bars 6 and 7, connecting the legs and the standards and secured to them by transverse rungs or bars 8. The main section is supported by inclined braces 9, arranged at opposite sides of the supporting-frame and secured to the lower side bars and to the legs and standards. The main section of the supporting-frame furnishes a rigid bench or support for a tub or any other suitable receptacle employed in washing, and it may also be used for a variety of purposes other than washing.

The sliding sections of the supporting-frame are composed of side bars 11, a pair of legs 12, and transverse rungs or bars 13, connecting the side bars and the legs, which are located at the outer ends of the said side bars 11. The side bars 11 of the sliding section are arranged directly beneath the upper side bars of the main section and are connected with the same by substantially U-shaped hangers or clips 14, loosely receiving the upper side bars of the main section and slidingly connecting the side bars 11 therewith. When the sliding frame is folded or arranged within the main section, it strengthens and supports the same, and when it is extended the supporting-frame is adapted to receive a pair of tubs or receptacles. The legs 12 of the sliding section are supported by inclined braces 15, secured to them and to the side bars 11.

The washing mechanism comprises a bearing-frame 20, a yielding-mounted corrugated roll 21, and a curved bed arranged beneath the corrugated roll and composed of a series of smooth rolls 22. The bearing-frame consists of a transverse base 23 and parallel sides 24, having bearing-openings (indicated by dotted lines in Fig. 3) to receive the journals of the rolls 22 of the bed, and the said sides are provided with slots receiving the journals of the corrugated roll 21, one of the journals being extended to form a crank-handle 25. During the operation of washing the clothes are passed back and forth through the rolls between the upper corrugated roll and the curved

bed and are rapidly and thoroughly washed without wearing, tearing, or otherwise injuring the fabrics. The necessary pressure on the clothes is produced by spiral springs 26, secured at their lower ends to the base of the bearing-frame and carrying at their upper ends stems 27, provided with inclined bearing-openings, forming hooks and detachably engaging the journals of the corrugated roll.

The washing mechanism is connected with the supporting-frame by a pair of arms or bars 28, arranged at an inclination, as illustrated in Fig. 2 of the drawings, when the washing mechanism is located within a tub 29 and secured at their lower ends by suitable fastening devices to the bottom or base of the bearing-frame and provided at their upper ends with substantially elliptical pintles 30, which are detachably arranged within open elliptical bearings 31 on a wringer-supporting board or bar 32. The wringer-supporting bar 32 is secured at its ends to the standards 4, at the upper terminals thereof, and the open elliptical bearings, which are provided at their tops with mouths or entrances 33, are extended at the inner or rear sides of the same to provide vertical arms 34, which are secured by suitable fastening devices to the front face of the wringer-supporting bar.

The open elliptical bearings are provided at their outer or front sides with inclined forwardly-extending arms or portions 35, forming flaring entrances for guiding the elliptical pintles in the bearings. The elliptical pintles 30 are connected by side pieces with the ends of the arms or bars 28 and are spaced therefrom to provide openings 36 to receive the outer or front portions of the elliptical bearings. The side pieces 37 are preferably formed integral with the elliptical pintles, which have their shorter diameter of approximately the same size as the mouths or entrances of the elliptical bearings, so that the said pintles may be readily removed from the open bearings when the arms or bars 28 are swung upward to an inclined position, as illustrated in Fig. 2 of the drawings. When the washing mechanism is arranged within the tub and the arms or bars 28 extend downward and forward, the major diameter of the elliptical pintles extends transversely of and projects beyond the mouths or entrances of the elliptical bearings, whereby the pintles are securely retained therein while the washing mechanism is within the tub. The washing mechanism is adapted to be readily detached to enable it to be compactly stored and also to permit the supporting-frame to be used for other purposes than washing.

The base of the bearing-frame of the washing mechanism has secured to it by bolts 38 or other suitable fastening devices adjustable sections or members 39, which carry tub-engaging clamps and which are provided with slots 40 to receive the fastening devices 38

of the bearing-frame of the washing mechanism. The tub-clamps, which are located at opposite sides of the tub, are each provided with a pair of angularly-bent bars 41, having lower inwardly-extending portions 42, which are let into the upper face of the adjustable section or member 39 and suitably secured to the same, the upper faces of the inner portions of the bars 41 being arranged flush with the upper faces of the adjustable sections or members. The bars 41 are provided with intermediate upright portions 43, extending from the lower or inner horizontal portions to upper outwardly-extending horizontal portions 44, which terminate in depending inwardly-inclined jaws 45, arranged to engage the exterior of a tub and provided with spurs or projections 46. The spurs or projections 46, which are arranged to be embedded in the sides of a wooden tub, are adapted to lie under the strengthening wire or rod of a galvanized-iron tub, whereby they are prevented from perforating or otherwise injuring a sheet-metal tub. The upright intermediate portions 43 of the angularly-bent bars are connected by an inner transverse bar or piece 47, preferably provided with recesses to receive the intermediate portions of the bars 41 and having a central threaded aperture for the reception of an adjusting-screw 48. The connecting piece or bar 47 may be constructed of any desired material and the screw-threads of the central opening may be provided in any suitable manner. The connecting bar or piece 47, which is constructed of metal, is provided with a threaded opening to receive the adjusting-screw 48, but any other suitable means may be employed for mounting the adjusting-screw on the connecting-piece. The clamping-screw 48 is connected with an adjustable jaw 49, having its upper edge arranged adjacent to the lower faces of the upper outwardly-extending horizontal portions of the bars 41, and its outer face is arranged to engage the inner face of the side of the tub, whereby the jaws 45 will be securely held in engagement with the same. The sections or members 39 are adapted to be readily adjusted to arrange them to suit the size of the tub or other receptacle, and when the clamping devices are in engagement with the same the sides of the tub, while being firmly gripped, are supported against inward and outward movement, so that the washing mechanism may be applied to a sheet-metal tub without bulging or otherwise injuring the sides of the same.

What I claim is—

In an apparatus of the class described, the combination with washing mechanism, of a horizontally-adjustable section extending beyond the washing mechanism, and a clamp comprising opposite parallel bars consisting of inner horizontal portions secured to the adjustable section, upright intermediate portions rising from the horizontal portions and the

outer horizontal upper portions projecting
from the upper ends of the intermediate ver-
tical portions and provided with depending
jaws having projections or spurs at their inner
5 faces adapted to be embedded in the sides of a
wooden tub and forming shoulders arranged to
lie under the strengthening wire or rod of a
sheet-metal tub, a transverse piece connecting
the intermediate upright portions of the par-
10 allel bars and forming a support, an adjust-
able jaw interposed between the transverse
connecting-piece and the said jaws, and an ad-

justing device mounted on the transverse con-
necting-piece and connected with and adapted
to actuate the adjustable jaw for engaging the 15
same with the inner face of a tub, substan-
tially as described.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

RAYMOND CLINTON COBURN

Witnesses:

L. R. SEAMAN,
AUSTIN M. BROWN.