

No. 731,356.

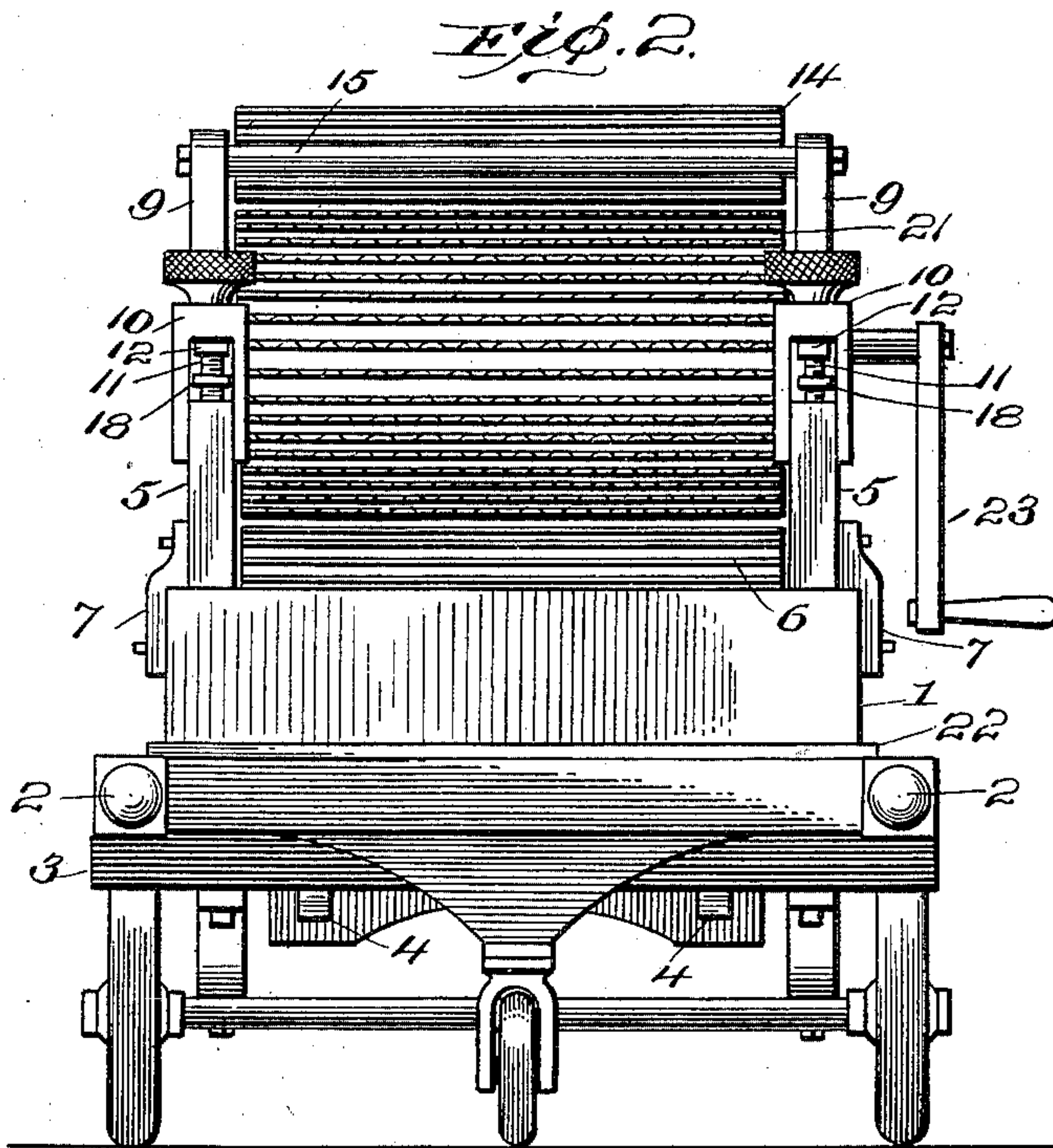
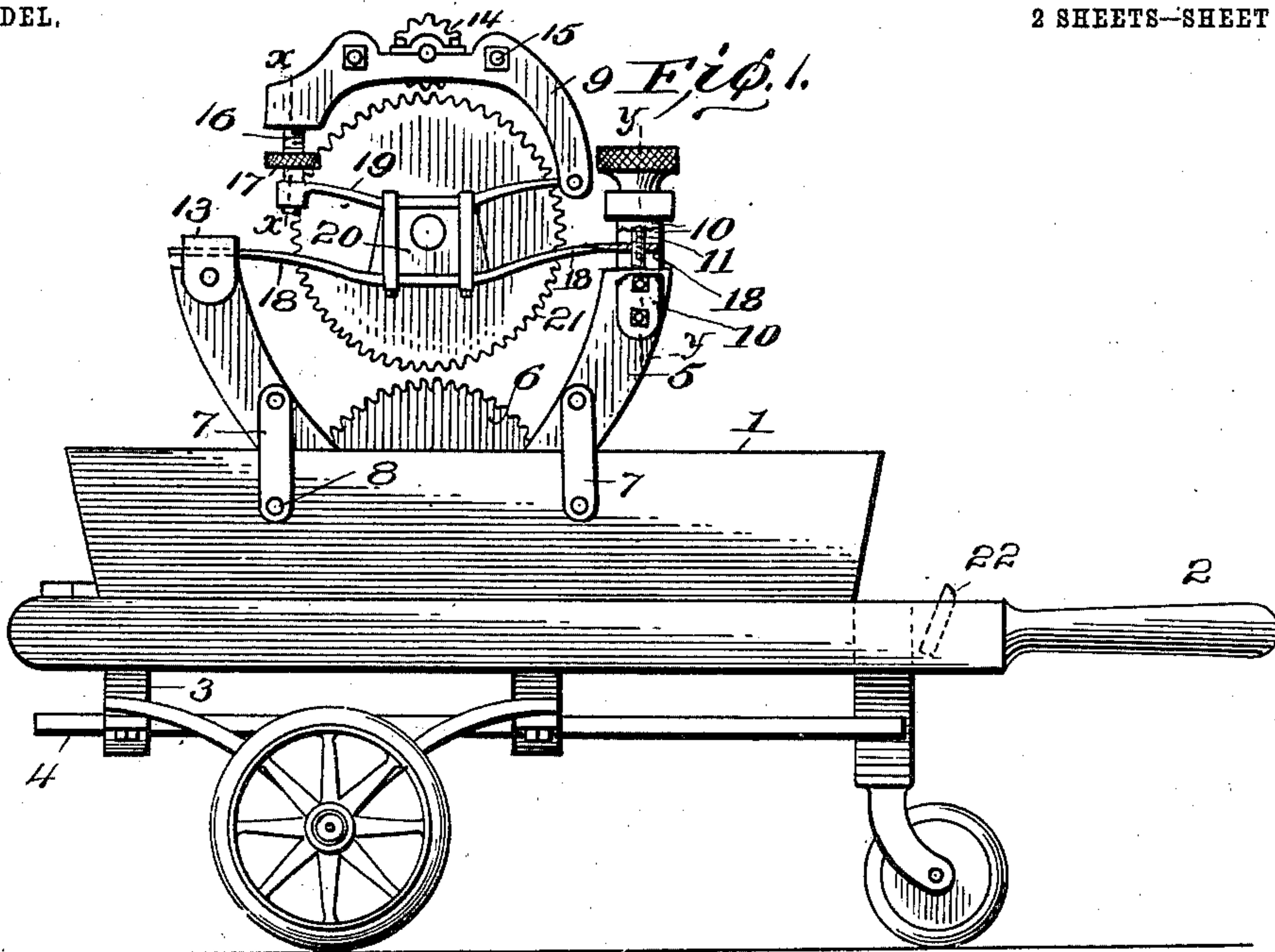
PATENTED JUNE 16, 1903.

T. GRAY.
WASHING MACHINE.

APPLICATION FILED JAN. 26, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses
J. M. Fowler Jr.
C. T. Bell

Inventor
Thomas Gray

by *Robert Whitman & Co.* Attorney

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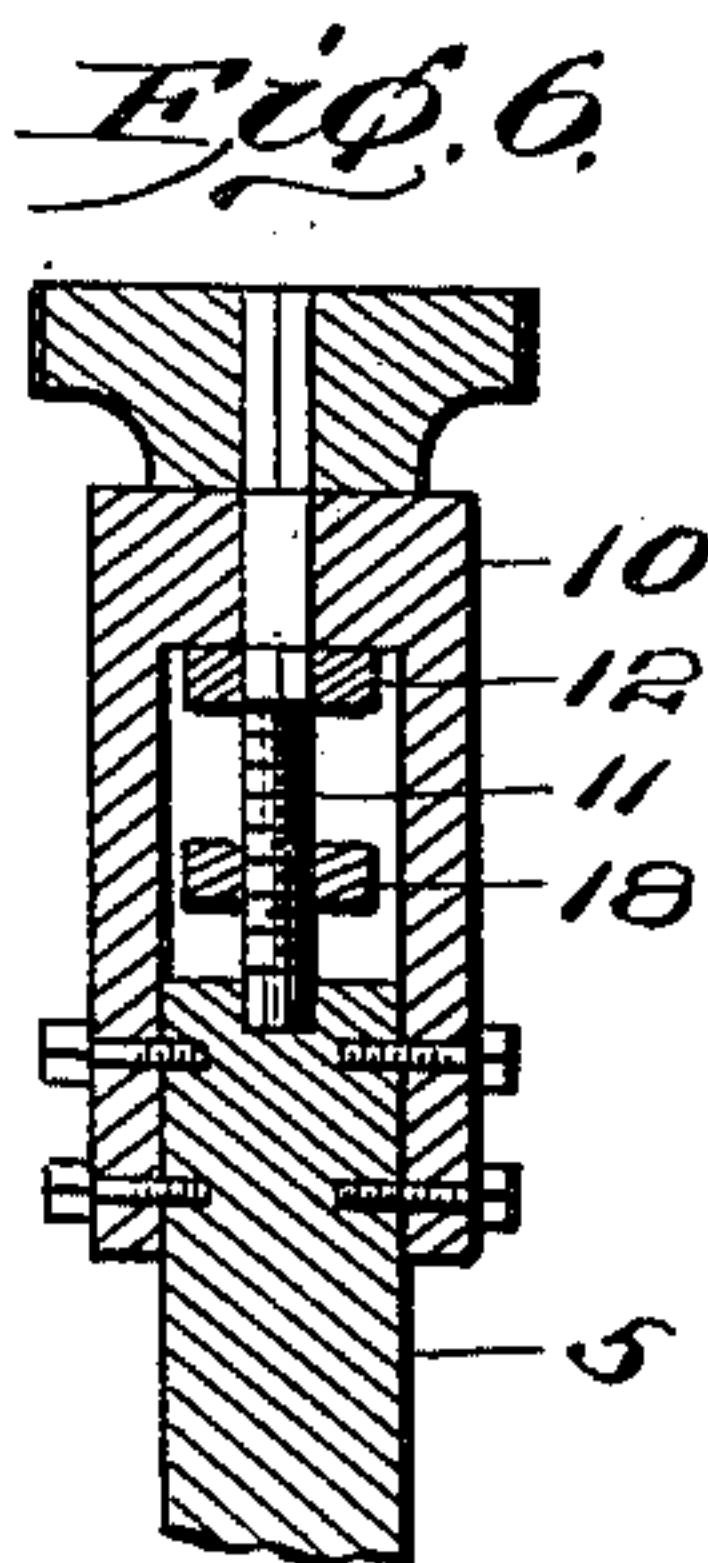
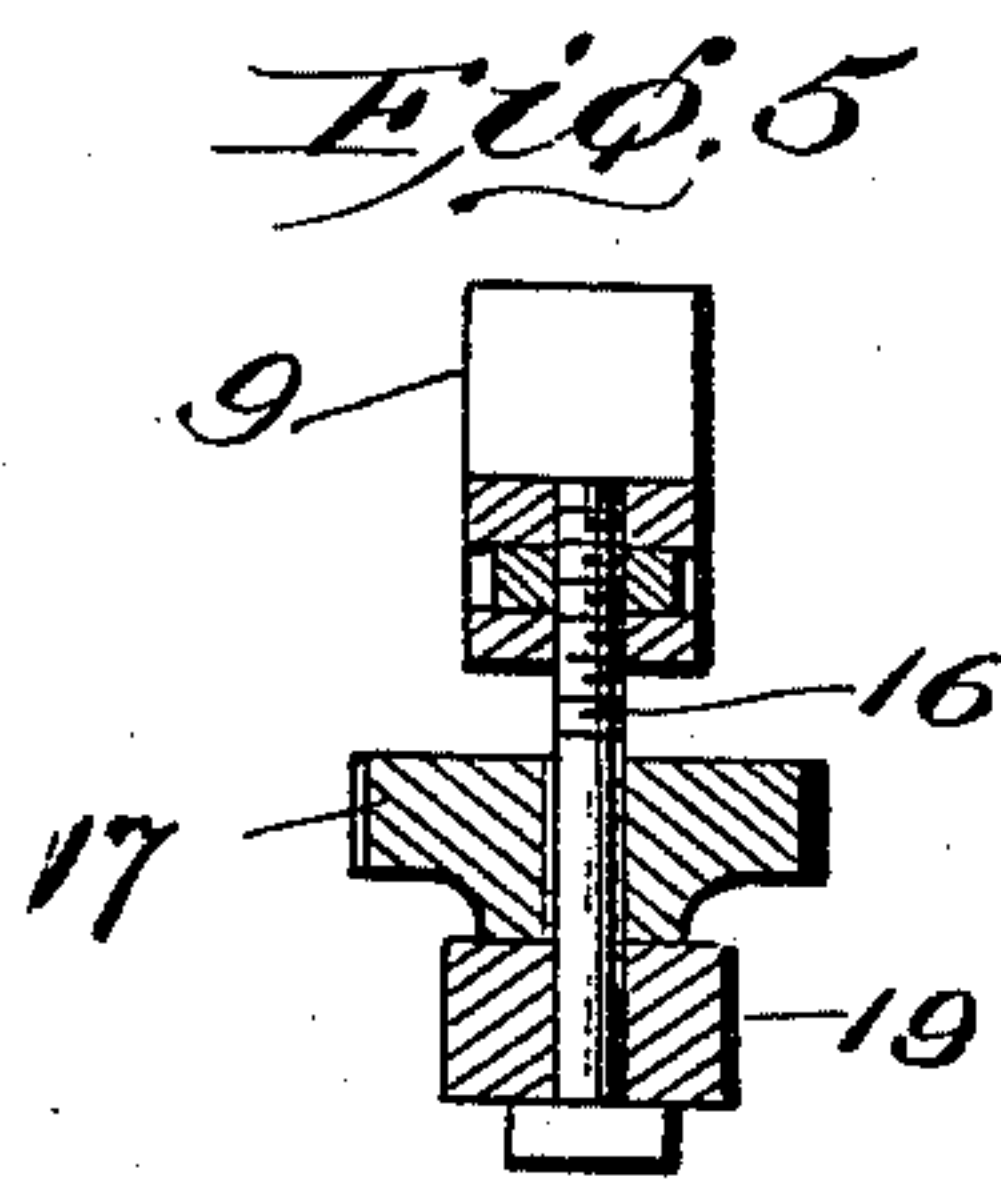
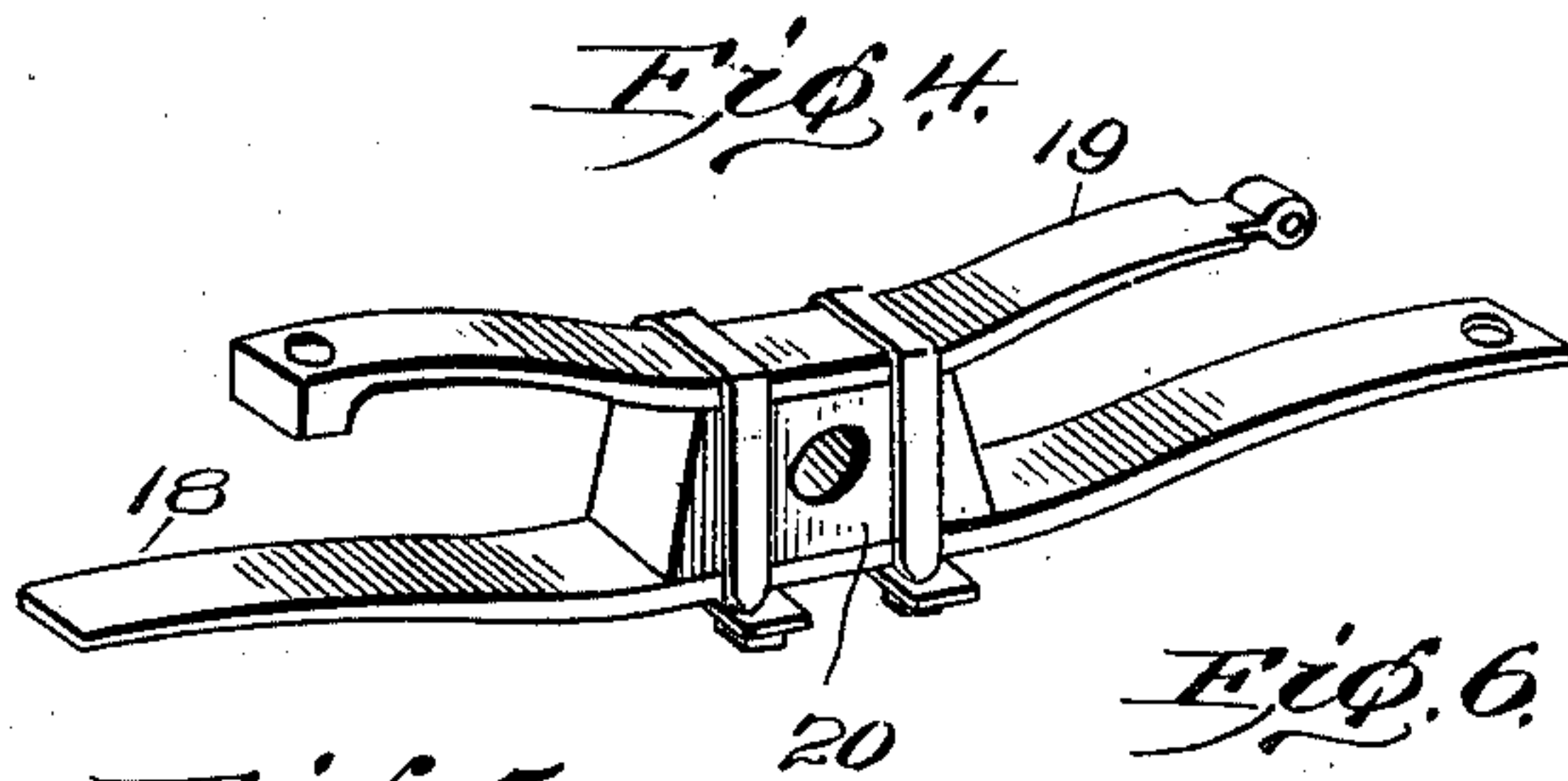
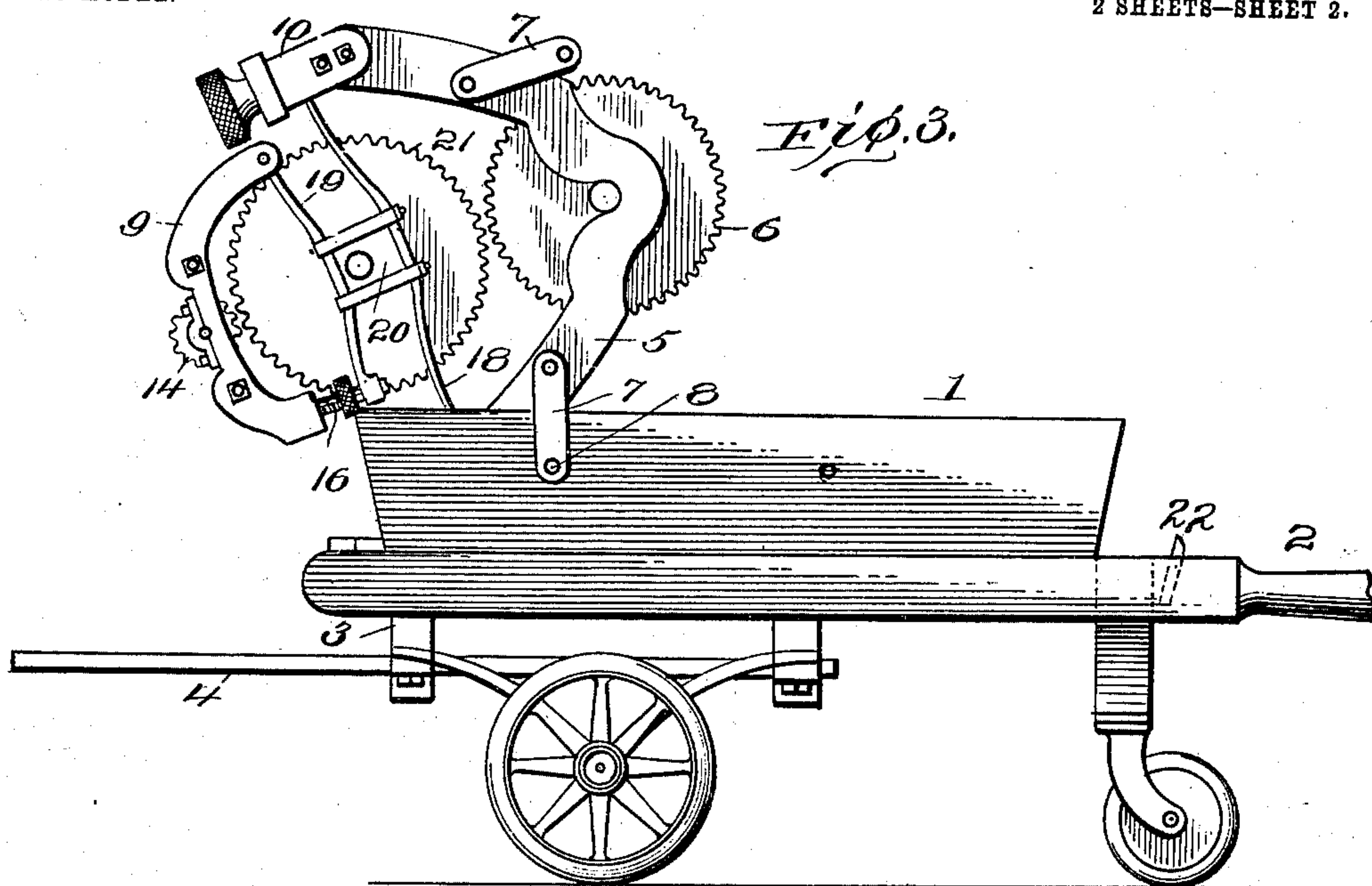
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UNITED STATES PATENT OFFICE.

THOMAS GRAY, OF KATIE, INDIAN TERRITORY.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 731,356, dated June 16, 1903.

Application filed January 26, 1903. Serial No. 140,579. (No model.)

To all whom it may concern:

Be it known that I, THOMAS GRAY, a citizen of the United States, residing at Katie, in the Chickasaw Nation, Indian Territory, have
5 invented certain new and useful Improvements in Washing-Machines; and I do hereby 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
10 it appertains to make and use the same.

This invention relates to washing-machines, and particularly to the class of roller-machines wherein is employed a series of rollers between which articles of clothing are
15 passed for washing.

The object of the invention is to provide a peculiar frame having a roller, pivoted hangers carrying a roller, and a spring device having a roller journaled therein, so that in
20 swinging the hangers all the rollers are swung, together with the frame, the purpose of which swinging to be hereinafter fully disclosed.

A further object of the invention is to provide a peculiar roller-frame and roller-hangers in combination with novel spring devices
25 for elastically connecting the rollers.

A still further object of the invention is to provide in a wheel or cart washing-machine certain new and useful improvements in its
30 general construction whereby improved results and advantages are attained.

In the accompanying drawings, forming part of this application, Figure 1 is a side elevation of the machine ready for use. Fig.
35 2 is a front view. Fig. 3 is a side elevation showing the parts in moved position. Fig. 4 is a perspective view of the spring device. Fig. 5 is a detail section on the line *xx*, Fig. 1. Fig. 6 is a detail section on the line *Y Y*,
40 Fig. 1.

The same numeral references denote the same parts throughout the several views of the drawings.

The cart-body 1 has handles 2 and an under-frame 3, in which is slidably secured a table
45 or support 4, adapted to be projected to hold a tub of clothes or other desirable articles, and when not used may be retracted under the cart-body, as shown in Fig. 1. The hangers
50 5 are U-shaped and have a central bearing in which the bottom ribbed roller 6 is journaled, the hangers, of which there are two,

being secured to each side of the cart-body by shouldered brackets 7, pivoted at 8, and the shoulders engage the top edge of the cart-body for supporting the hangers and the
55 roller 6 in the cart and above the floor or bed of the cart. A post 10 is secured to or formed on one prong of the hangers 5, and a set-bolt 11, having a collar 12 and anchored in said
60 prong, works through the post. The other prong of the hangers has a strap 13. The roller-frame 9 is arch-shaped and has the top ribbed roller 14 journaled centrally therein and has brace-rods 15. Screwing through one
65 end of the top frame portion is a set-bolt 16, having a thumb-nut 17 keyed thereto. Each of the spring devices consists of a lower spring-plate 18, pivoted or anchored at one end by the strap 13, and the other end is provided
70 with a screw-aperture for the bolt 11. An upper spring-plate 19 has one end pivoted in one end of the frame 9, and the other end of said plate is carried by the bolt 16. A block
75 20 has the spring-plates 18 and 19 strapped to it, and a central roller 21 is journaled in the blocks. This roller 21 has ribs which are serrated or notched throughout, and a suitable crank-handle 23 is secured to this
80 roller, and the latter meshing with the top and bottom rollers turns all the rollers, whereby the clothes are fed between them. A bar 22 is set on an incline between the inner ends of the handles 2, so as to leave a
85 space between the bar and the cart-body, through which the clothes may be passed for wringing. It will be seen that the lower spring-plates allow a yielding between the center and the bottom rollers and that the top spring-plates allow a like action be-
90 tween the top and the center roller to adapt the machine to action on different kinds of clothing. It is obvious that the tension of the spring-plates may be varied as desired by
95 operating the set-bolts and that the rollers may be thrown or tilted out of the cart by simply swinging the hangers on their pivots, thereby permitting access under the rollers and to the bottom of the cart for cleaning the
100 latter and for adjusting the clothes.

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

1. In a washing-machine the combination,

with the hangers, a roller journaled therein, a roller-frame, and a roller journaled thereon; of the spring connection between the hangers and the frame, and a roller journaled in said connection.

2. In a washing-machine, the combination, with the pivoted hangers, a roller journaled therein, an adjustable roller-frame, and a roller journaled thereon, of the spring device connecting the hangers and frame, and a roller journaled in said device.

3. In a washing-machine, the combination, with the pivoted hangers, a roller journaled therein, a roller-frame, and a roller carried thereby, of a spring device connecting the hangers and frame, a roller journaled in said device, and the adjustable connections between the hangers and frame and the spring device.

4. The combination, with the rollers, the roller-frame, and the hangers, of a spring device comprising a plate pivoted at one end

to the frame, a plate having one end anchored to the hangers, a connection between the plates forming a journal-bearing for one of the rollers, and means carried by the hangers and by the frame to vary the relative relation of the said frame and hangers and said spring devices.

5. The combination, with the washing-machine body, the rollers, the roller-frame, the spring device, and the hangers, of the shouldered brackets pivotally connecting the hangers with the body, the adjusting means between the spring device and the hangers, and the adjusting means between the spring device and the roller-frame.

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

THOMAS GRAY.

Witnesses:

R. McMILLAN,
P. C. HAMILTON.