

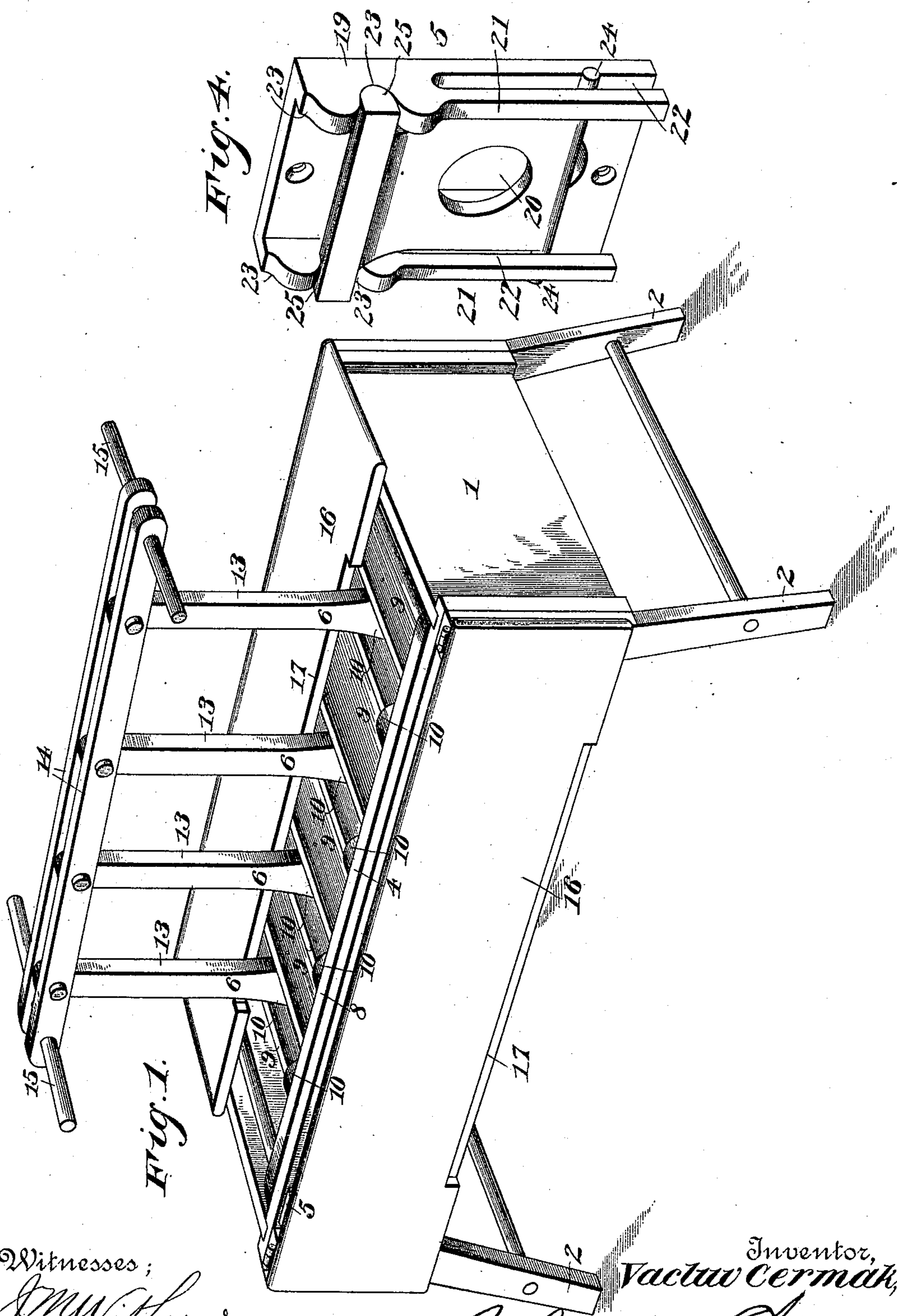
(No Model.)

2 Sheets—Sheet 1.

V. CERMAK.  
WASHING MACHINE.

No. 517,839.

Patented Apr. 10, 1894.



Witnesses;  
*J. M. Withrow*  
*E. J. Myers*

Inventor,  
*Vaclav Cermak*  
*By Joseph W. Harris*  
Attorney.



(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

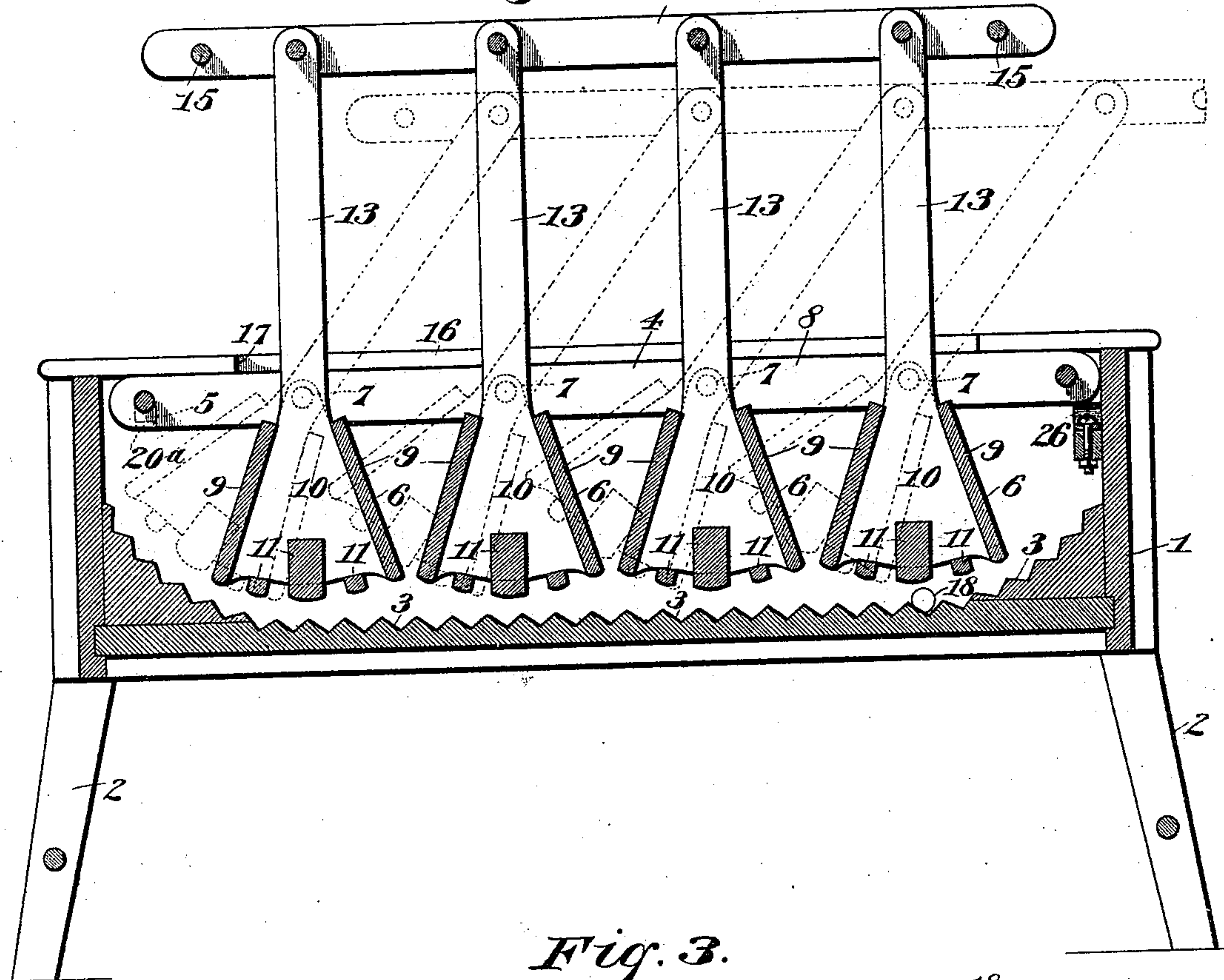
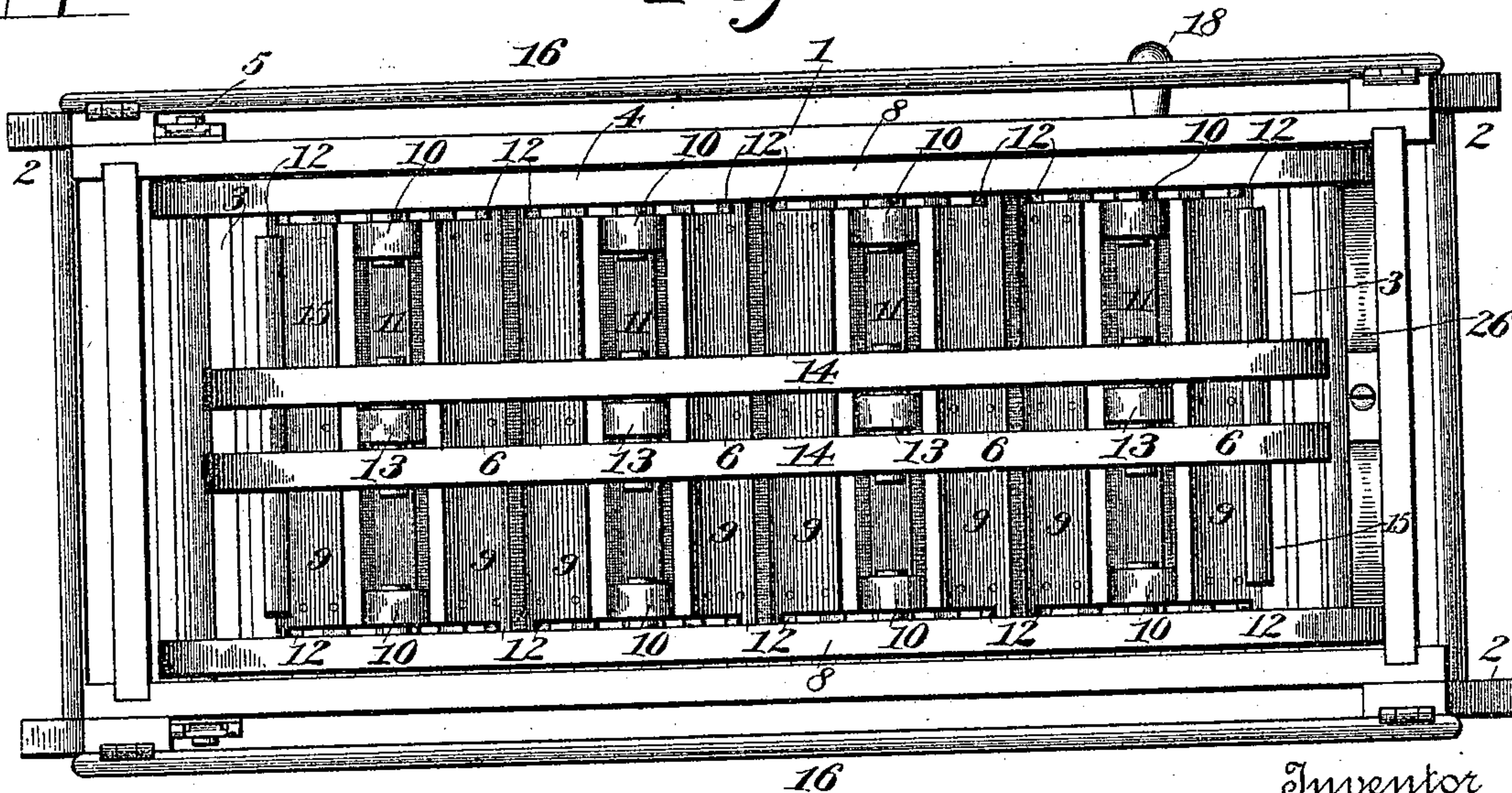


Fig. 3.



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# UNITED STATES PATENT OFFICE.

VACLUV CERMAK, OF CLEVELAND, OHIO.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 517,839, dated April 10, 1894.

Application filed September 16, 1893. Serial No. 485,676. (No model.)

*To all whom it may concern:*

Be it known that I, VACLUV CERMAK, of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce a device designed for use in laundries, &c., to quickly and thoroughly cleanse soiled fabric, or the like, and one in which all slopping and splashing is obviated.

In the accompanying drawings: Figure 1 is a perspective view of my machine. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a top plan view. Fig. 4 is a detail view of the adjustable bearing.

Referring to the figures on the drawings: 1 indicates a suitable receptacle preferably rectangular in shape and supported by legs 2.

3 indicates transverse corrugations upon the bottom and inclined ends of the receptacle adapted to increase the friction, as will be hereinafter set forth.

4 indicates a frame journaled at one end in vertically adjustable bearings 5, located at one end of the receptacle 1. This frame is designed to pivotally sustain a plurality of oscillatory rubbers 6, suitably journaled in bearings 7 in the side bars 8. These rubbers extend downwardly contiguous to the corrugated bottom and are provided with downwardly-diverging solid sides 9 secured by end and middle brackets 10, which likewise sustain a plurality of rubbing bars 11, the bottom surfaces of which are preferably curved or angular for the purpose of co-operating with the corrugated bottom to thoroughly rub the goods to be washed. These rubbing bars extend beyond the end brackets to the sides of the receptacle to prevent the clothes from working from under and to the sides of the rubbers and interrupting their motion. The sides are provided, upon their lower edges, with lugs 12 which likewise extend to the sides of the receptacle and the bottom edges of the said sides and lugs, being shaped similar to the rubbing bars, perform a like office.

13 indicates levers extending upwardly from each of the rubbers and 14 indicates parallel connecting bars pivotally connected to the upper ends of the levers. 15, 15 indicate han-

dles whereby these bars may be reciprocated and the rubbers thereby oscillated.

It will be observed that the peculiar divergence of the sides of the rubbers causes the lower edge of one side to travel contiguous to the adjacent side of the next rubber when they are synchronously oscillated. By this means I prevent the splashing of the water sufficiently to allow its escape from the machine, the agitation of the water within the receptacle being tempered, in the event of its being thrown violently upward, by the convergence of the sides. As an additional security, however, and to provide against the operator being annoyed by fumes arising from the machine, I provide hinged covers 16 cor- relatively recessed to form, when they are closed, an aperture 17 through which the le- vers 13 project.

18 indicates any suitable means for drawing off the water, when desired.

The vertically adjustable bearings 5 consist of a plate 19 secured by any suitable means to the side of the receptacle, provided with a slot 20 and with side pieces 21.

20<sup>a</sup> indicates a correlative slot in the side of the receptacle. These side pieces are provided with transverse slots 22 and notches 23, whereby the bearing proper, which is provided with lugs 24, adapted to travel in the slots 22, may be fixedly adjusted at any desired height, the adjustment being accomplished by the bearing being swung outward upon its pivot and raised or lowered until the projections 25 engage with the proper notches.

Any suitable means for yieldingly supporting the free end of the rubber supporting frame 4 may be provided, as for example, a spring 26 secured within the receptacle, as illustrated.

I do not desire to limit myself to the details of construction herein shown and described, but reserve to myself the right to change, modify, or vary them at will within the scope of my invention.

What I claim is—

1. In a washing machine, the combination with a receptacle, of a vertically adjustable frame pivoted at one end and yieldingly sustained at the other, and a plurality of oscillatory rubbers supported thereby, substantially as specified.



2. In a washing machine, the combination with a receptacle, of a frame pivoted at one end in vertically adjustable bearings, consisting of a slotted plate provided with slotted and notched side pieces, and a bearing plate adjustable thereon and provided with parts co-operating with the slots and notches of the first named plate, substantially as specified.

3. In a washing machine, the combination with a receptacle, of a frame pivoted at one end in vertically adjustable bearings and yieldingly sustained at its opposite end, a plurality of synchronously oscillatory rubbers supported by said frame, and adapted to main-

tain the same contiguous relation to each other in their various positions, levers adapted to actuate said rubbers and connected at their upper ends, and hinged correlatively-recessed covers adapted to permit the operation of the machine while preventing the escape of noxious fumes from the receptacle, substantially as specified.

In testimony of all which I have hereunto subscribed my name.

VACLUV CERMAK.

Witnesses:

NOAH S. GOOD,  
E. C. CALLYRON.