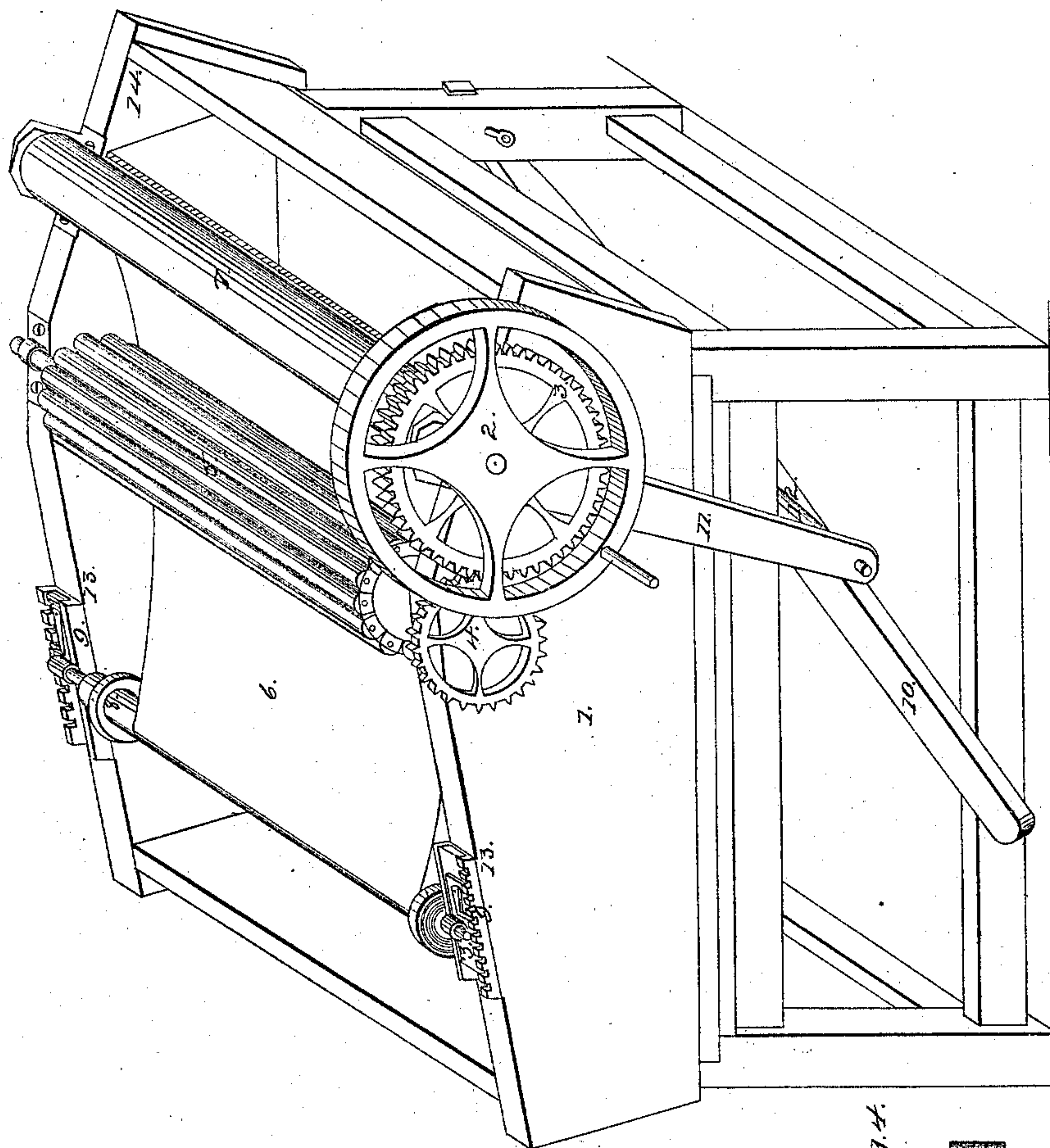
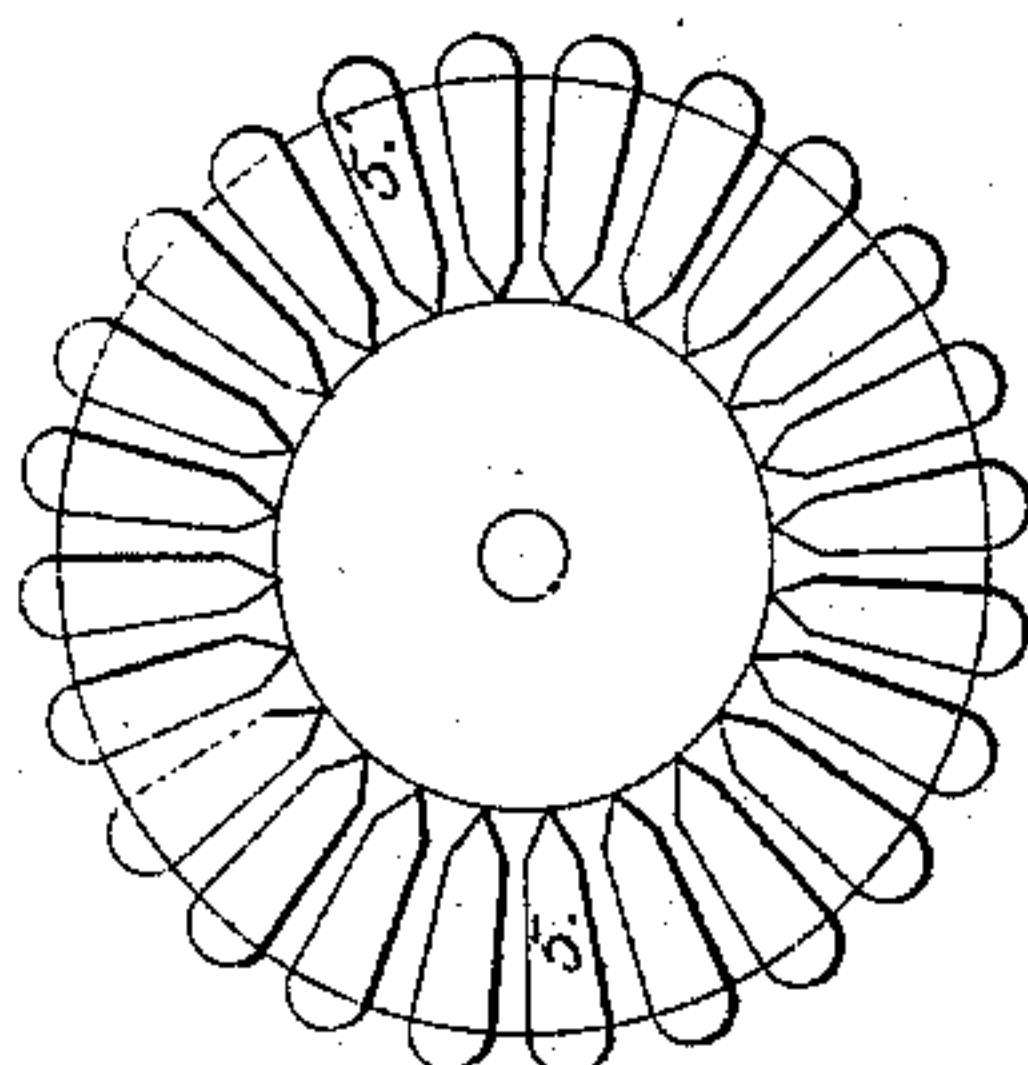


*H. D. Youry,*  
*Washing Machine,*  
*N<sup>o</sup> 17,180, Patented Apr. 28, 1857.*

*Fig. 1.*



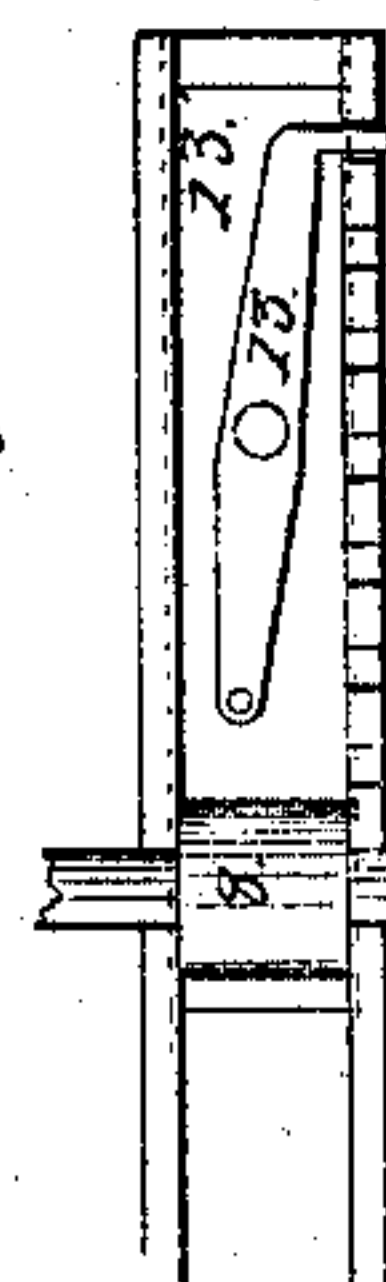
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*





# UNITED STATES PATENT OFFICE.

H. D. YOUNG, OF JUNIUS, NEW YORK.

## WASHING-MACHINE.

Specification of Letters Patent No. 17,180, dated April 28, 1857.

*To all whom it may concern:*

Be it known that I, HENRY D. YOUNG, of Junius, in the county of Seneca and State of New York, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

The nature of my invention relates to the peculiar method of constructing my washing rubber, and to the manner of tightening the apron, on which the clothes are placed to be washed, and also of the manner of driving the washing rubber and apron.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I make a box with a frame.

Figure 1 is a perspective view of my improved washing machine. Fig. 2 is a cross section of the rubber. Figs. 3 and 4 is a section of the fastener for tightening the apron to the rubber.

2, Fig. 1, is the driving wheel or crank to which the wheel 3 is attached. Both of these wheels are attached to a shaft, around which the apron 6 passes, and gives motion to it, and also to shaft 8. The rubber receives its motion from wheel 3, and pinion 4.

The clothes to be washed are first put into the box to soak, and when ready for washing they are laid on the apron 6, in front of the rubber 5, and the apron having but a slow motion, while the rubber 5, has a quick motion, the pieces of clothes in passing on under the rubber are sufficiently washed. Thence they pass on to the box 14, formed by the movable lid 15. This lid is hung by hinges to the end of the box, and while the washing process is performed it is turned back against the end of the box 1, leaving a space between it and the rollers sufficient for the clothes to drop into the water and be wet, and then again passed on to the apron 6 and under the rubber until sufficiently clean. The lid is then dropped forward, which forms a box for the reception of the clothes after being washed.

The rubber 5 is made of slats or bars

and confined together by a ring or plate perforated with holes as 5, 5', Fig. 2. The great advantage of this construction of rubber is that it is more easily made and repaired and is less liable to get out of order from cracking and rot and is less cumbersome than the ordinary lattice roller, and works much more speedily, giving more motion to the water as it works on the clothes. The great advantage of the method of tightening the apron to the rubber is that while the apron is passing around the roller 8 the slides and catch 13 may be at once relieved from the box, the rollers taken out of the way and adjusted at pleasure, and the apron wrung dry and replaced again to be set aside.

13, 13' is the plate and hook to which the eye or box for the journal to shaft 8 works in, said eye being attached to the plate 13' which works in the grooves *o*, *o'*, Fig. 4.

The particular advantage of this arrangement over any other apron machine is that while the apron is moved slowly by the small roller the rubber is driven at a much quicker rate, does its work more rapidly and better than it can where the moving of the apron depends on the motion of the washing roller to carry it, in which case the washing or work is operated by rolling the clothes, instead of rubbing them, as in my method, when the rubber has 20 or more revolutions to the apron's one, while in all the other apron machines the apron is moved along with the same motion as the washing roller, which passes the clothes too quickly through to be washed.

Having thus fully described my improved washing machine, what I claim as new and desire to secure by Letters Patent is—

I claim the mode of operating the apron 6, to give its surface a slower motion, than the surface of the rubber 5, in combination with the shaft 8, and apron 6, the slide plate and hook 13, constructed and operated in the manner and for the purposes set forth.

H. D. YOUNG.

Witnesses:

J. H. MERRILL,

JOHN S. HOLLINGSHEAD.