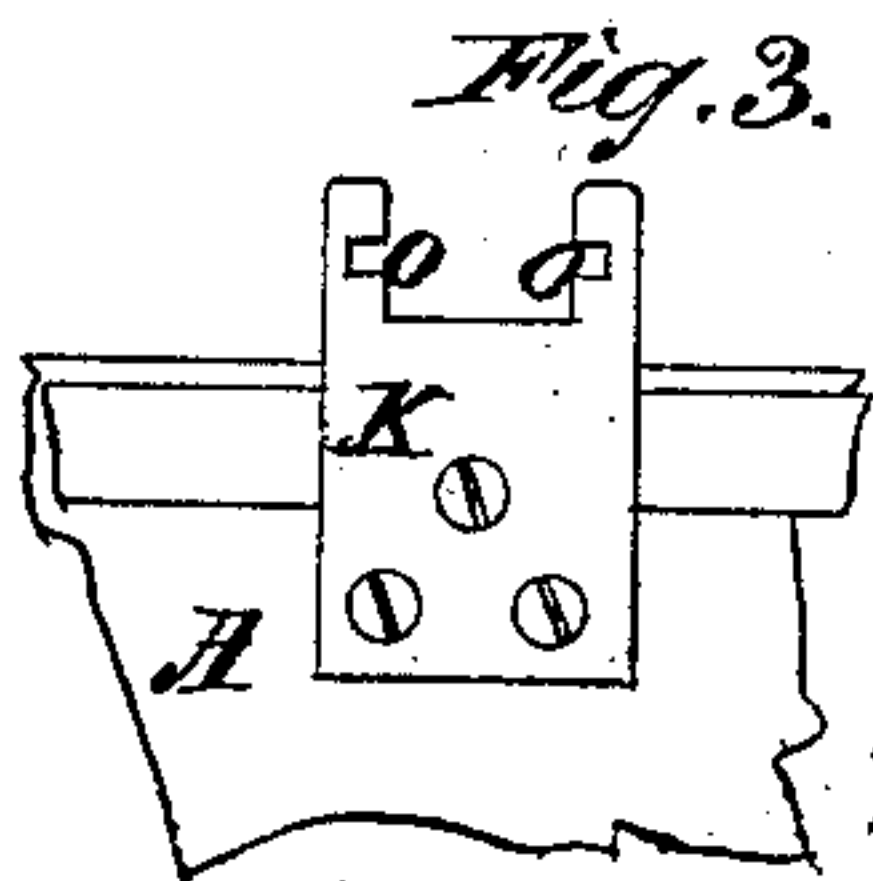
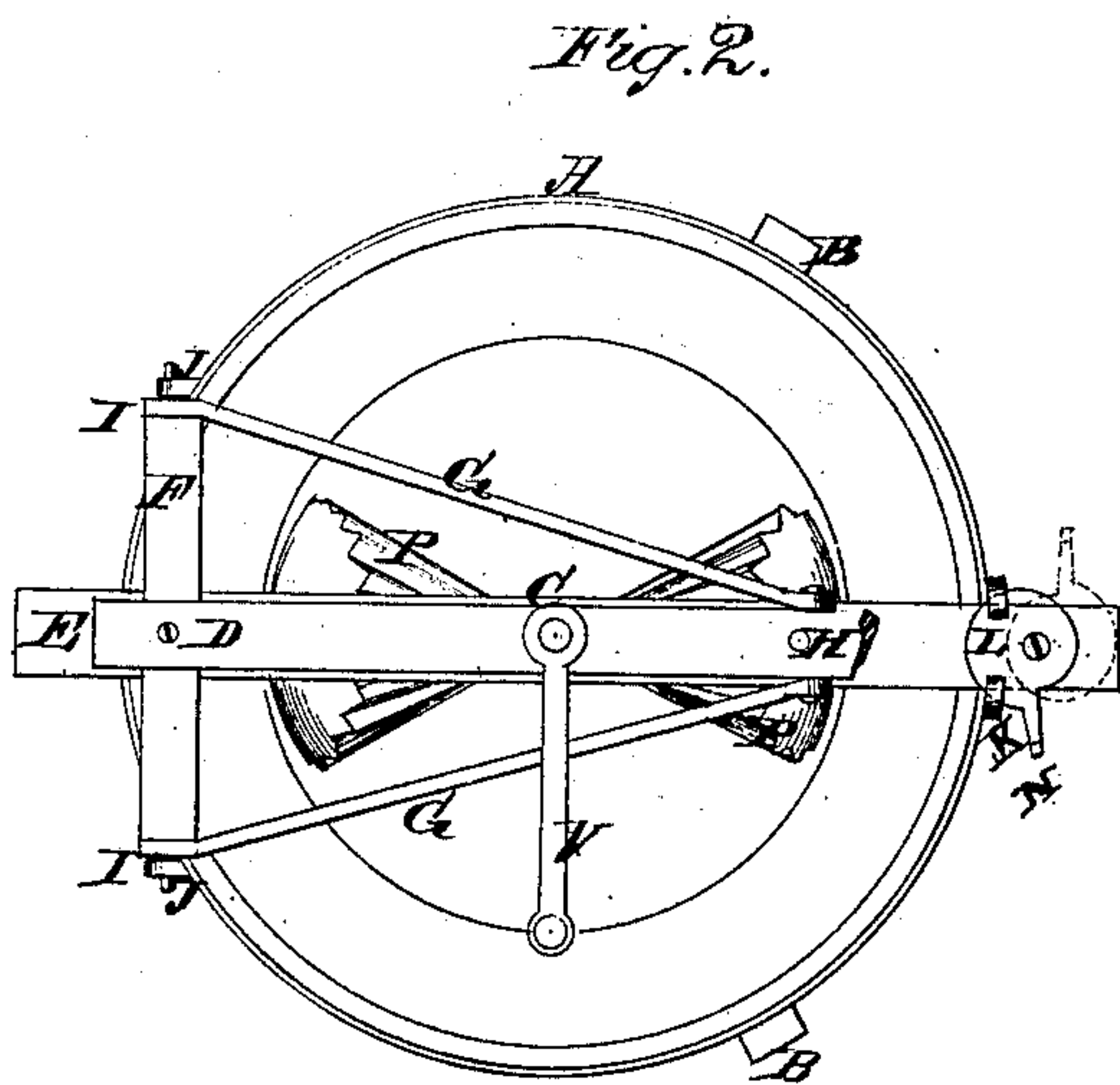
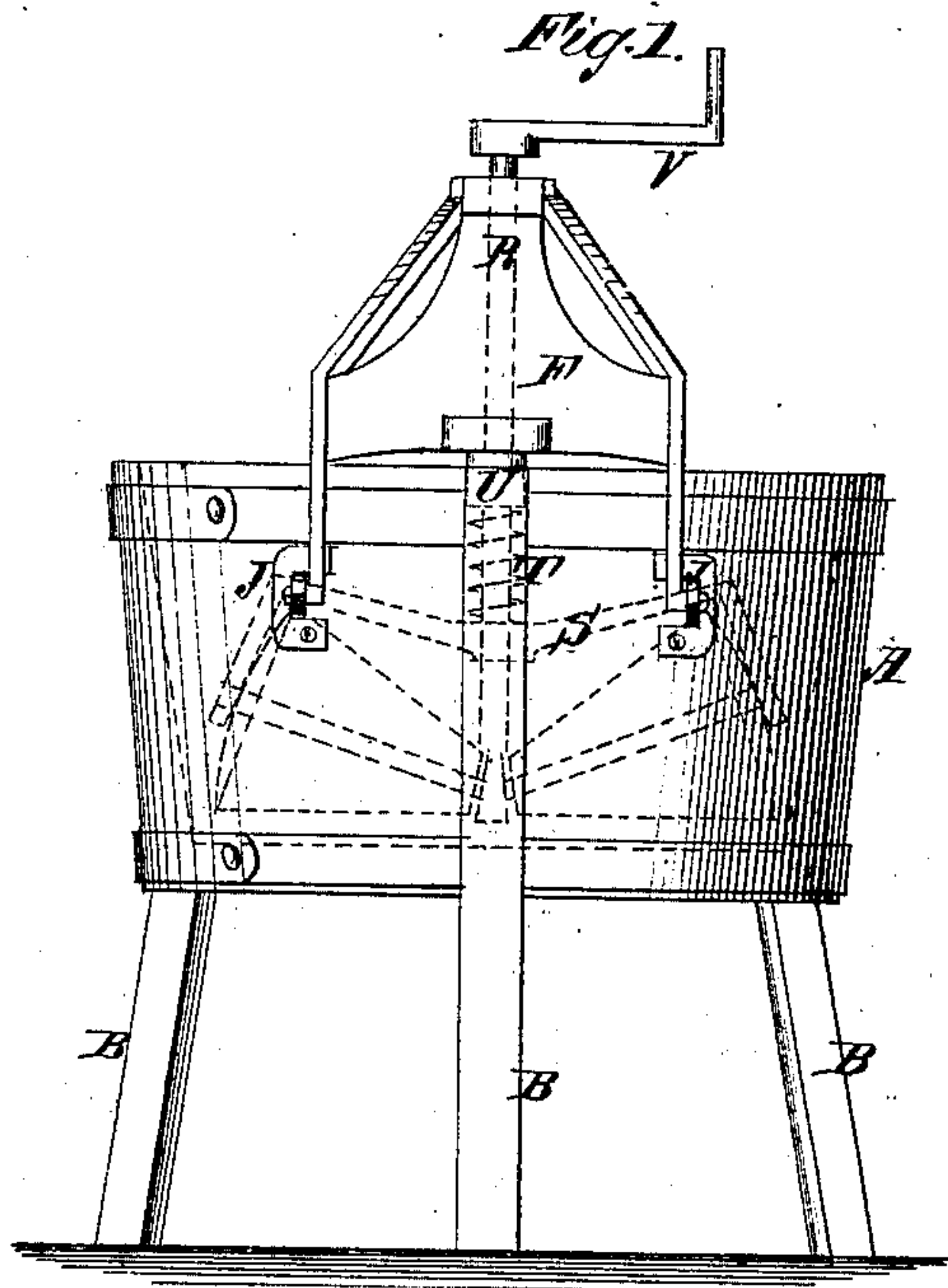


*H. Warner,*

*Washing Machine.*

*No. 109,279.*

*Patented Nov. 15. 1870.*



Witnesses:

*John Decker.*  
*L. S. Mabee*

Inventor:

*H. Warner*  
PER *Munn & Co*  
Attorneys.

# United States Patent Office.

HORACE WARNER, OF RIDGWAY, PENNSYLVANIA.

Letters Patent No. 109,279, dated November 15, 1870.

## IMPROVEMENT IN WASHING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, HORACE WARNER, of Ridgway, in the county of Elk and State of Pennsylvania, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

This invention relates to a new and useful improvement in machines for washing clothes, having special reference to a washing-machine for which Letters Patent were granted me, dated November 19, 1867.

The present invention consists in the mode of raising the vertical shaft and cones from the tub, and in the mode of fastening them down and keeping them in place when in the tub, as will be hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a side elevation of the machine, showing the rollers or the operating portion of the machine in dotted lines.

Figure 2 is a top or plan view, partly in section.

Figure 3 is a section, showing the fastening stand on the side of the tub.

Similar letters of reference indicate corresponding parts.

A is the tub, which is elevated to a convenient height on the legs B.

C is a frame, consisting of two parallel pieces, D and E, connected together by the rear end piece F, and by a round bar near the opposite end.

G G are hinge pieces, the upper ends of which are attached to the horizontal piece D, as seen at H.

From this point they extend back and are firmly attached to the sides of the end pieces F, as seen at I I.

From the points I I they are bent downward forming nearly right angles.

The upper portions, from H to I I, are braces for supporting the frame C.

The lower portions are provided with hooks on their

ends, confined in eyes J J on the side of the tub, thus forming hinges which allow the frame C, with the operating parts of the machine, to be raised and thrown back, so as to give free access to the tub for putting in or taking out the clothes. The mode of fastening down the frame C to the tub is seen in figs. 2 and 3.

K is the fastening stand, which is attached to the side of the tub.

L is an eccentric plate, which works on a pin on the top of the frame piece E.

N is a short lever on the eccentric, by which the plate is operated.

O O are slots in the stand K, which receive the plate when the latter is turned round, as seen in fig. 2.

When the plate is turned round, as seen in dotted lines, same figure, the eccentric is clear of the stand, and the frame is readily raised up on its hinges, as before stated.

P P are the working rollers, which are cone-shaped and fluted, connected with the vertical shaft R by pivots and by the yoke S.

T is a spiral spring above the yoke, which bears against the collar U on the underside of the frame C, and serves to press the rollers down onto the clothes.

The rollers are revolved on the bottom of the tub by turning the crank V on the upper end of the shaft R, while they revolve, while thus being turned, on their own axial centers.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

1. Hinging the frame C to the tub so that the rollers P P can be raised from the tub, substantially as and for the purposes herein shown and described.

2. The eccentric L and stand J, in combination with the frame C and rollers P P, substantially as and for the purposes herein shown and described.

HORACE WARNER.

Witnesses:

GEO. W. MABEE,  
T. B. MOSHER.