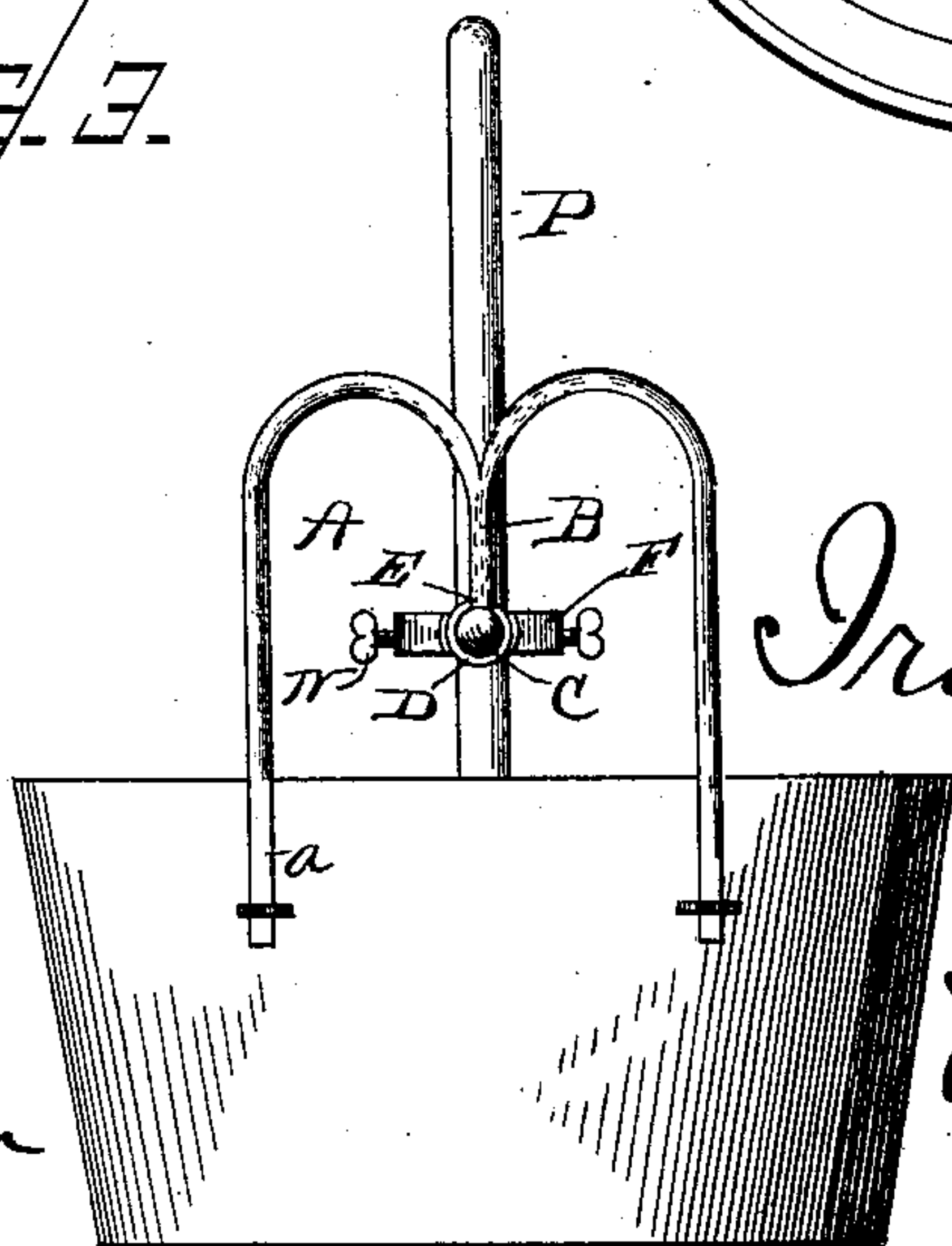
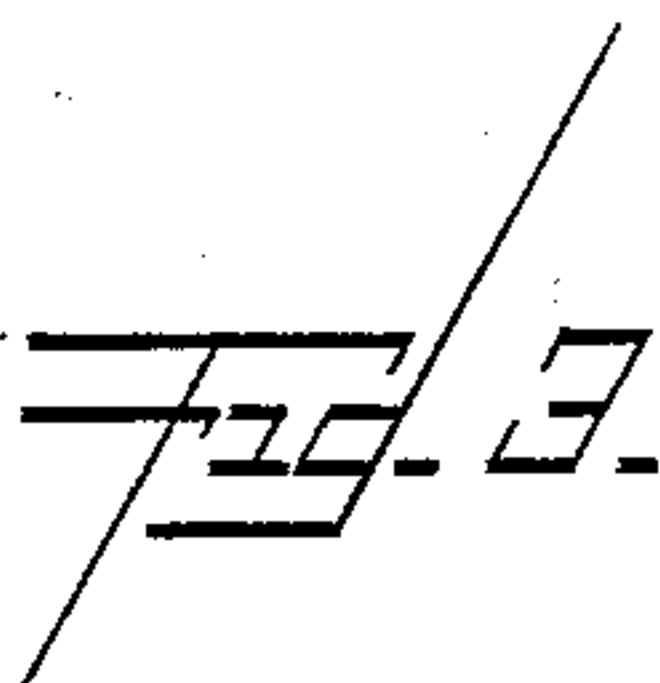
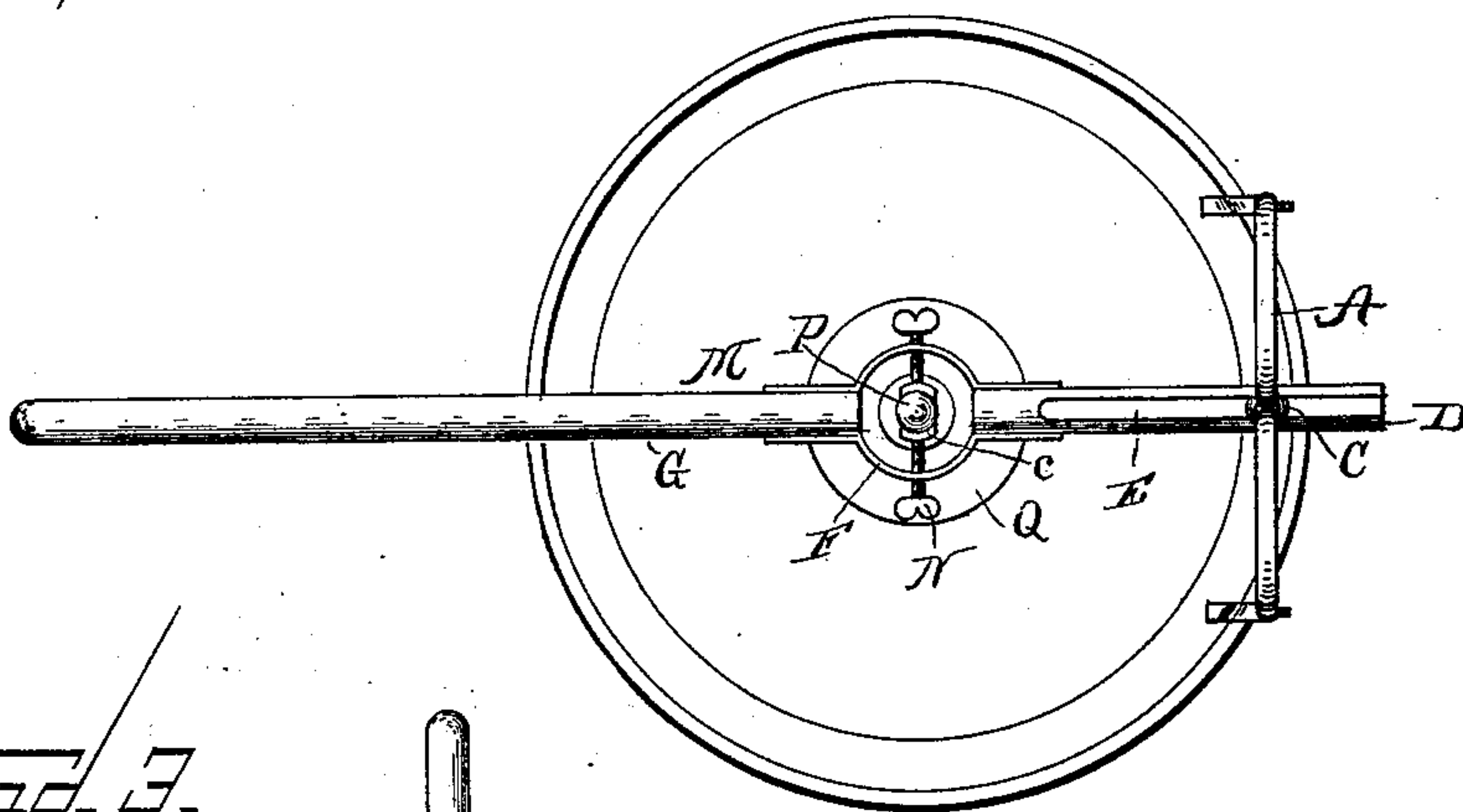
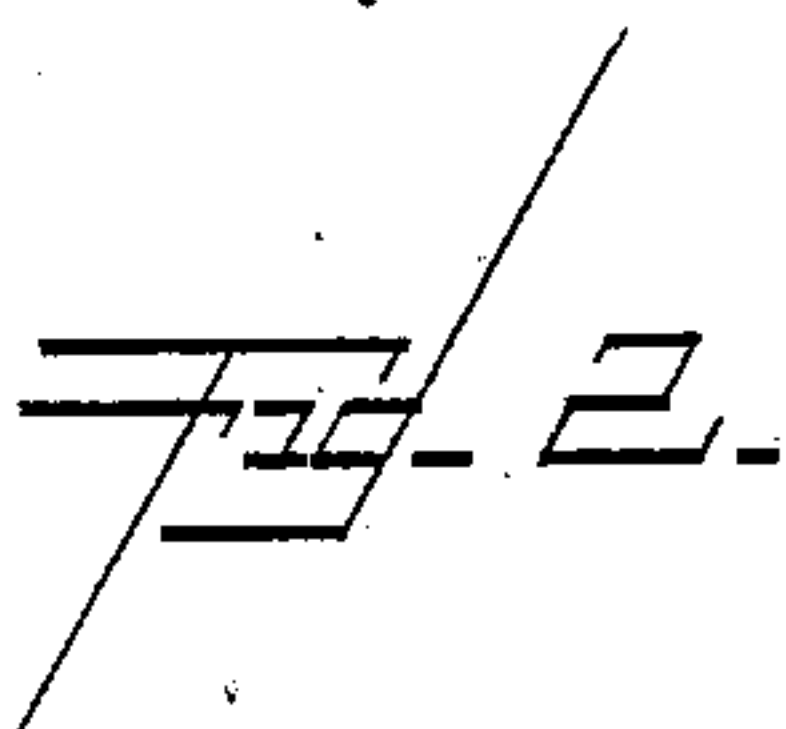
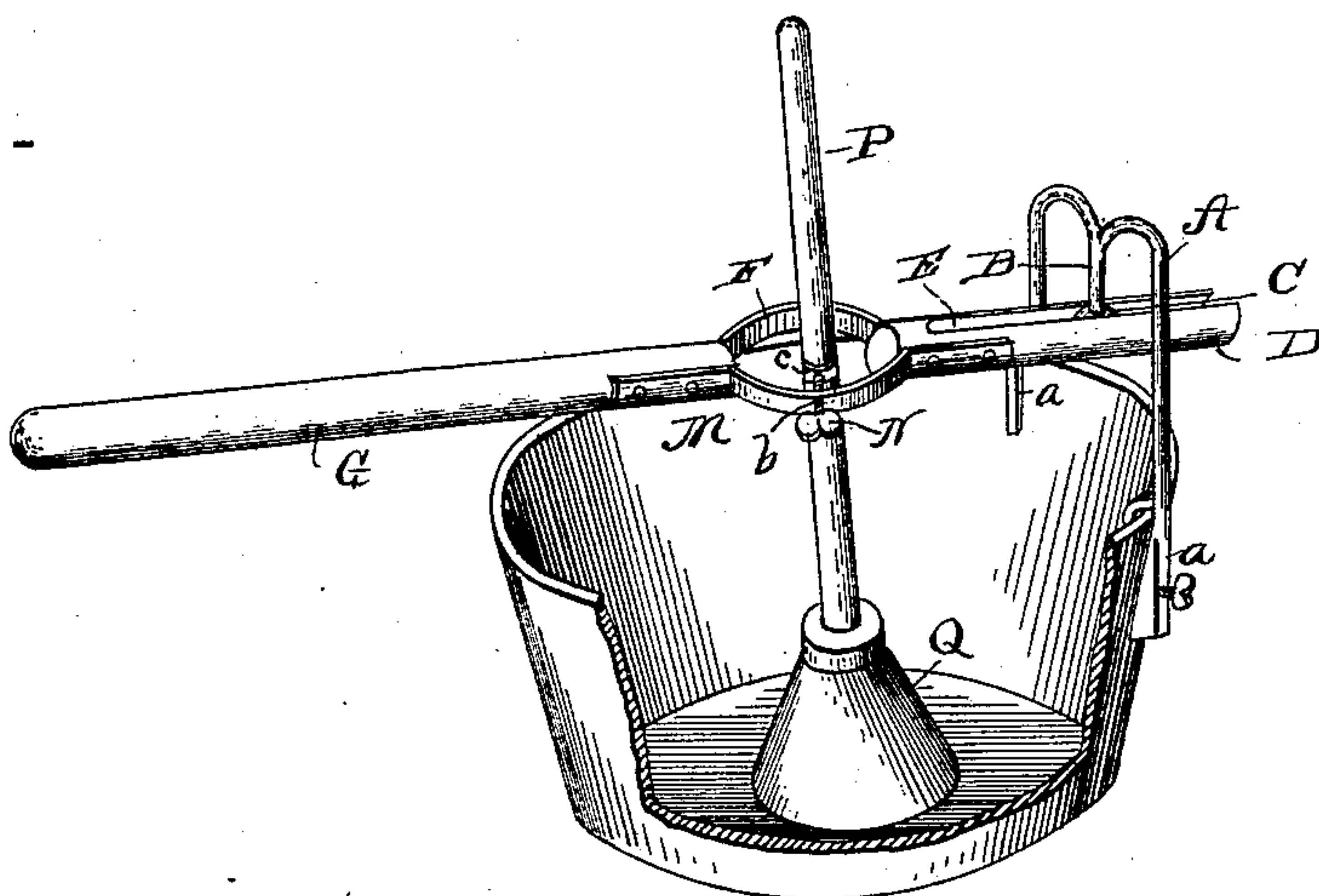
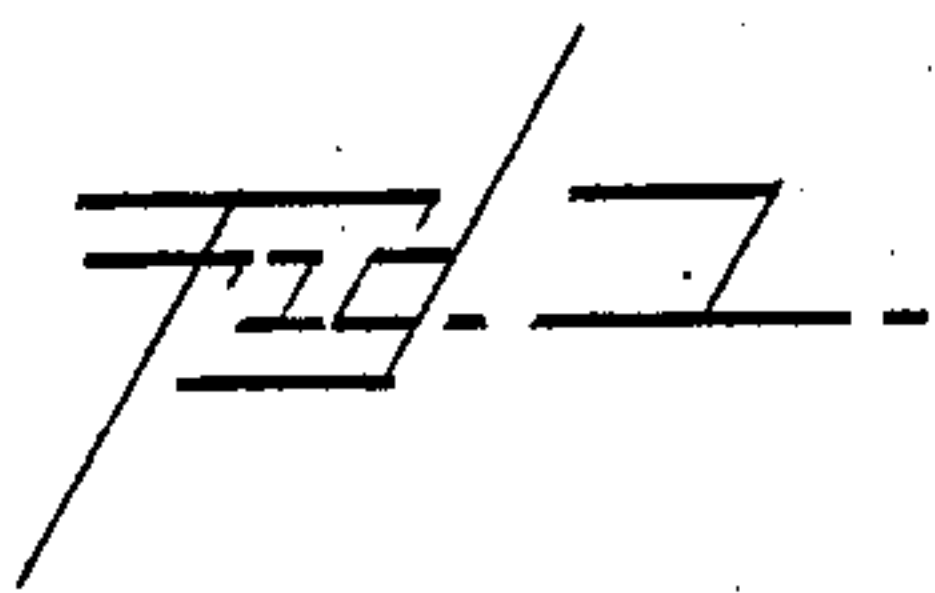


(No Model.)

I. B. OWENS.
WASHING MACHINE.

No. 481,419.

Patented Aug. 23, 1892.



Ira B. Owens

Inventor:

By
W. S. Fitzgerald,
Attorneys.

Witnesses.

C. S. Frye.

Thomas E. Turpin

UNITED STATES PATENT OFFICE.

IRA BENJAMIN OWENS, OF GLEN ELDER, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 481,419, dated August 23, 1892.

Application filed April 4, 1892. Serial No. 427,724. (No model.)

To all whom it may concern:

Be it known that I, IRA BENJAMIN OWENS, a citizen of the United States, residing at Glen Elder, in the county of Mitchell and State of Kansas, have 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 it appertains to make and use the same.

My invention has relation to improvements in washing-machines; and it consists in the peculiar construction, certain novel combinations, and the adaptation of parts hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is a perspective view of a tub with my improved machine in position, a portion of the tub being broken away so as to permit of a better illustration of the machine. Fig. 2 is a top plan view of the machine in position within the tub, and Fig. 3 is a front elevation of the same.

In the said drawings similar letters designate corresponding parts throughout the several views, referring to which—

A indicates the arch-supporting frame of my improved machine, which is preferably formed from a single piece of metal and is provided at its ends with suitable clamps, as *a*, through the medium of which it may be readily connected to the side wall of a tub.

Preferably formed integral with and depending from the apex of the arch A is a vertically-disposed shaft B, upon which is journaled the fulcrum and friction ball C, which may be formed from any suitable material, and may be supported upon the shaft B by any suitable devices.

D indicates the tubular section of the reciprocatory lever M, which section preferably has its free end open and is provided in its upper side with a longitudinal slot E for the passage of the shaft B, which slot E is preferably of a width to receive a portion of the ball C between its edges, as shown.

Connected by curvilinear or bowed straps F to the inner end of the tubular section D of the lever M is the handle-section G, which is preferably formed from wood and is of substantially the proportional length illustrated.

By the construction thus far described it will be readily perceived that the lever M may be reciprocated in the direction of its length or may be reciprocated or swung laterally, whereby it will be seen that the rubber carried thereby may be carried to any point within the tub, which is a highly important desideratum.

By the provision of the friction and fulcrum ball C for the purpose stated it will be readily perceived that the parts may be operated with the exercise of but little effort, and it will be further perceived that frictional wear of such parts will be reduced to a minimum.

An important desideratum in washing-machines has been to provide a machine of such construction that the rubber may be readily changed, when desired, to suit the texture of the different fabrics to be washed. To this end I have provided threaded apertures *b* in the curvilinear or bowed straps F for the passage of screws N, which are provided at their outer ends with wings or the like and at their inner ends with the preferably-curved shoes *c*, designed and adapted to clamp and hold the handle P of the rubber Q, which may be of the ordinary or any approved construction. By this manner of connecting the rubber to the reciprocatory lever it will be readily perceived that the same may be disconnected from the lever when desirable by simply turning the screws N outwardly, and it will be further perceived that another rubber may be as readily secured in position by turning the screws N inwardly.

Although I have specifically described the construction and relative arrangement of the several elements of my improved machine, yet I do not desire to be confined to the same, as such changes or modifications may be made as fairly fall within the scope of my invention.

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

1. In a washing-machine substantially as described, the combination, with a supporting-frame having a vertically-disposed shaft and a friction and fulcrum ball journaled on said shaft, of a reciprocatory lever embodying a tubular portion having a longitudinal slot in its upper side and adapted to receive the friction and fulcrum ball and a suitable means for

connecting a rubber to said lever, substantially as and for the purpose specified.

2. In a washing-machine substantially as described, the combination, with a supporting-
5 frame having a vertically-disposed shaft and a friction and fulcrum ball journaled on said shaft, of a reciprocatory lever comprising the tubular section having a longitudinal slot in its upper side and adapted to receive the friction and fulcrum ball, the handle-section, the

curvilinear or bowed straps, and the set-screws taking through the bowed straps and adapted to engage the handle of a rubber, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in 15
presence of two witnesses.

IRA BENJAMIN OWENS.

Witnesses:

D. C. BALL,
DANIEL S. BALL.