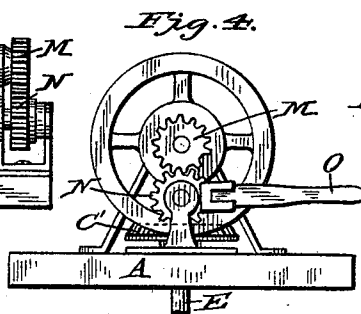
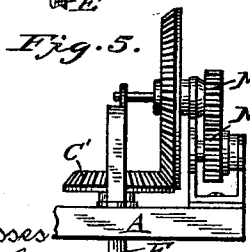
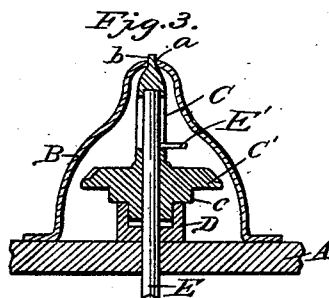
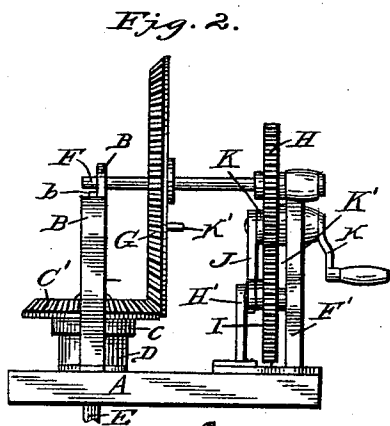
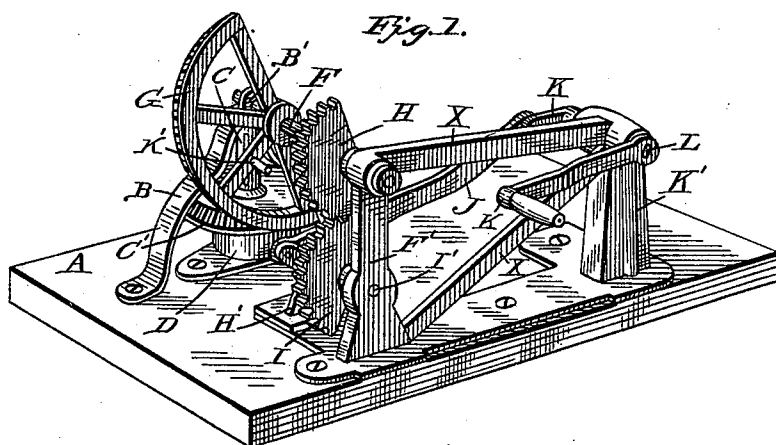


(No Model)

A. ERBOR & F. PETER.
GEARING FOR WASHING MACHINES.

No. 582,725.

Patented May 18, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW ERBOR, OF COPLAY, AND FRANCIS PETER, OF CEMENTON,
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GEARING FOR WASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 582,725, dated May 18, 1897.

Application filed October 25, 1895. Renewed November 6, 1896. Serial No. 611,304. (No model.)

To all whom it may concern:

Be it known that we, ANDREW ERBOR, residing at Coplay, and FRANCIS PETER, residing at Cementon, in the county of Lehigh and State of Pennsylvania, citizens of the United States, have invented certain new and useful Improvements in Gearing for Washing-Machines; and we 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.

This invention relates to certain new and useful improvements in washing-machines, and more particularly to the gear or means for operating the dasher thereof. It has for its objects, among others, to provide a simple and cheap gear which shall require but little power to operate it and by which the dasher may be given a rapid movement to better agitate the water, and thus more effectually and easily cleanse the clothes.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the appended claim.

The invention in this instance resides in the peculiar combination and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of our improved device. Fig. 2 is a rear view. Fig. 3 is a vertical section through the casting and dasher-stamp. Fig. 4 is a front elevation of a slightly-modified form. Fig. 5 is a view of still another modification. Fig. 6 is a perspective view of one of the gears seen in Fig. 5.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the support for the working parts. It is shown in this instance as the top of the washer, which may be of the usual form and construction except as hereinafter specified.

As seen in Fig. 1, B is a bracket, arched, as shown, and secured to the part A in any suitable manner. This casting has at its upper end a hole *a* for the reception of a pin or stud *b* on the upper end of a hollow slotted shaft C, to which is fast a pinion C', which has a depending sleeve or collar *c*, which rests upon the boss *d*, formed on the bracket D, which is secured to the part A between the legs of the bracket or casting B, as shown. The stem E of the dasher passes up through a hole in the part A and into the hollow shaft C and through the boss and collar and is held to and within the hollow shaft by the removable pin E', which passes through the slots of the said shaft and through the stem, which is by preference of wood. The pin can be easily removed and the stem detached when desired.

At the upper portion of the bracket B is a vertical lug or ear B', perforated for the reception of the horizontal shaft F, the other end of which finds a suitable bearing in the upright F', secured to the part A, as shown. This shaft carries a segmental gear G, which meshes with the pinion C', and a second segmental gear H, which latter meshes with an oppositely-disposed segmental gear I on the shaft I', mounted in the upright F' and a small standard H', rising from the part A, as shown. To the gear I is connected in any suitable manner one end of the pitman or connecting-rod J, the other end of which is connected to the crank-arm K on the shaft L, which is mounted in the upright K' and is provided with a crank-handle *k*, by which it may be rotated. The two uprights may be braced by suitable braces X, if found necessary.

The operation will be apparent. When the crank-handle is turned, the gears cause the larger segmental gear to actuate the pinion C' and give to the dasher-stem a partial rotation first in one direction and then in the other.

The intermeshing segmental gears may sometimes be dispensed with and the pitman connected directly to the larger segmental gear, which is shown as provided with a laterally-projecting pin *k'* for this purpose.

Modifications in detail may be resorted to without departing from the spirit of the in-

vention or sacrificing any of its advantages. In Fig. 5 is shown a form in which the large segmental gear is replaced by a large pinion meshing with the pinion C', and instead of
5 intermeshing segmental gears there are two gears M and N, the latter being provided with a lever O, by means of which the dasher is given a partial rotation first in one direction and then in the other. The result is practi-
10 cally the same as in the form shown in Fig. 1.

Various other modifications may be devised and still be within the scope of the present invention.

The crank or handle may be connected to
15 the main shaft by means of a socket, as shown.

What is claimed as new is—

The combination with the base and the bracket arched as shown and supported from said base, of the vertical hollow shaft mounted
20 at one end in the arch of said bracket and

provided with a longitudinal slot, a pinion fast on said shaft and having a depending sleeve, a bracket extending upward from said base and having a boss on which said sleeve rests, a dasher-stem passed through an open- 25 ing in the base through said bracket and into the hollow shaft, and a removable pin secured to said stem and passed laterally through the slot in the shaft above the upper face of the pinion, all substantially as herein shown and 30 described.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

ANDREW ERBOR.
FRANCIS PETER.

Witnesses:

H. B. YINGLING,
JNO. J. YINGLING.