

J. W. REAMS.

GEARING.

APPLICATION FILED SEPT. 12, 1908.

930,562.

Patented Aug. 10, 1909.

2 SHEETS—SHEET 1.

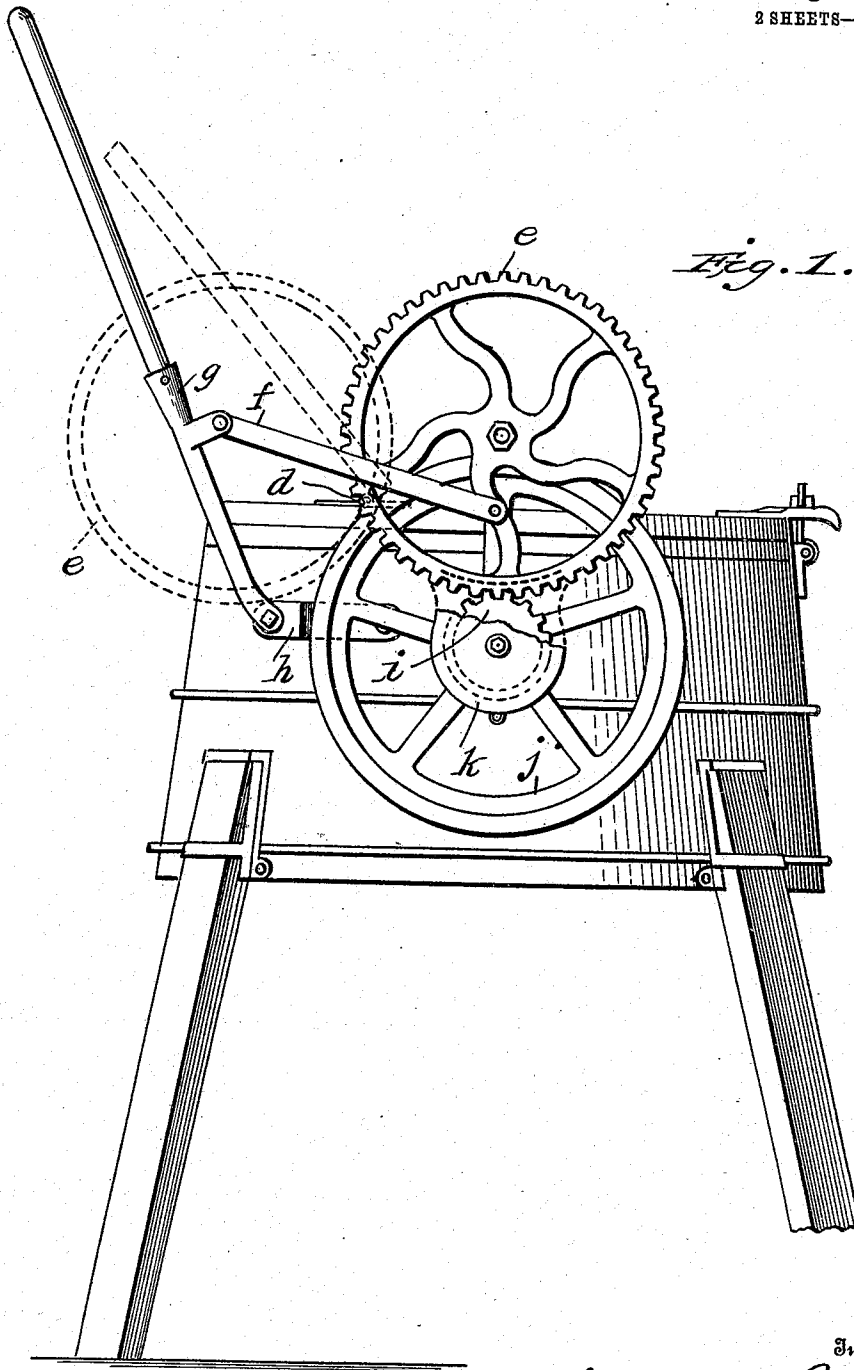


Fig. 1.

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2 SHEETS—SHEET 2.

Fig. 2.

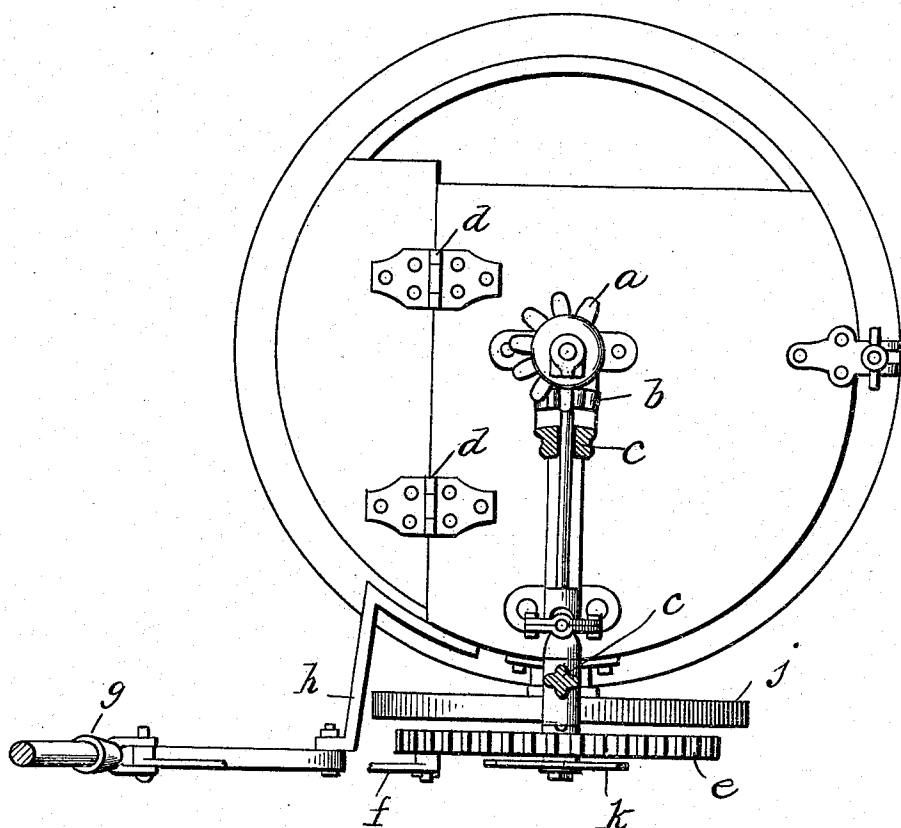
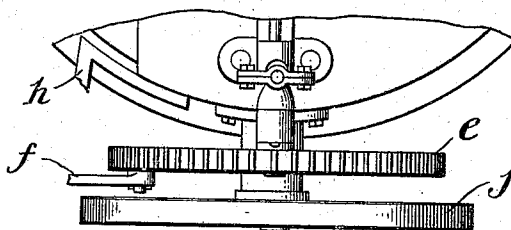


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSHUA W. REAMS, OF RICHMOND, VIRGINIA, ASSIGNOR TO RICHMOND CEDAR WORKS, OF RICHMOND, VIRGINIA, A CORPORATION OF VIRGINIA.

GEARING.

No. 930,562.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed September 12, 1908. Serial No. 452,701.

To all whom it may concern:

Be it known that I, JOSHUA W. REAMS, a citizen of the United States of America, and resident of Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Gearing, of which the following is a full and clear specification, reference being had to the accompanying drawings, in which—

10 Figure 1 is a side elevation; Fig. 2 is a plan view of my improved device; and Fig. 3 is a plan view showing a modification.

The object of this invention is to provide a gearing with a simple high-speed fly-wheel attachment to store up part of the power and thus contribute to rapidity and uniformity of operation, as more fully hereinafter set forth.

25 This gearing is especially adapted for use on washing-machines of the agitator type wherein the driving gearing and the agitator shaft are mounted on the lid of the tub and must therefore be raised with the lid when the same is opened, but it is obvious that the invention is not restricted to washing-machines as it is applicable to other tubs or vessels provided with means for stirring or agitating their contents.

Referring to the drawing by reference characters, *a* designates the usual gear-wheel attached to the vertical stirrer-shaft of the machine; *b* the pinion meshing with said gear and carried on a floating driving shaft journaled in a frame *c* fastened to the lid of the machine. The lid is hinged to the top of the tub at *d* and the axis of the hinges is parallel with the drive-shaft. On the outer end of the drive-shaft is rigidly fixed a large gear-wheel *e* and for rotating this gear-wheel a pitman *f* is connected to it and to the operating lever *g* pivoted on a bracket *h* attached to the side of the tub. Any other suitable means such as a handle attached to the gear-wheel may be employed for rotating it, and any suitable well-known or improved means 45 may be employed for transmitting motion from the drive-shaft to the stirrer-shaft.

The gear-wheel *e* meshes with a pinion *i* below it, this pinion being carried by a fly-wheel *j* rotatably mounted on a horizontal stub-shaft fixed to the side of the tub and having its axis in parallelism with the axis of

the hinges of the lid. The fly-wheel lies in a vertical plane between the large gear-wheel *e* and the adjacent side of the tub. Attached to the outer end of the stub-shaft is a guard-plate *k* adapted to prevent clothing or the fingers being caught in the intermeshing teeth of the gear-wheel and the pinion.

It will be observed that by my invention I provide an extremely simple high-speed attachment for a well-known type of rotary washing-machine which does not require that the mechanism be materially altered and which will impart to the stirrer-shaft the desirable high-speed and smoothness of operation with the expenditure of a minimum of power. A feature of importance lies in the fact that the fly-wheel and its pinion are so located with reference to the hinges of the lid carrying the remaining portion of the gearing that the lid may be opened without lifting the fly-wheel and its pinion, thus avoiding the labor and strain on the hinges incident to lifting the entire gearing.

As shown in Fig. 3, the fly-wheel may be placed outside the gears and thus serve as a guard for the gears and do away with guard plate *k*.

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

1. In combination with a stationary support, a support hinged thereto and a vertical shaft to be operated carried thereby, a drive-shaft journaled on the hinged support and a gear-wheel carried thereby at its outer end, means for transmitting power from the drive-shaft to said vertical shaft, a shaft supported on the stationary support below the aforesaid gear, a fly-wheel journaled on said shaft and a pinion carried thereby meshing with said gear, and operating means mounted on the stationary support and connected to said gear-wheel.

2. In combination with a stationary support, an upwardly-swinging support, a driven shaft mounted in the swinging support, a drive-shaft and means for transmitting power therefrom to said driven shaft, a vertical gear-wheel fastened on the outer end of said drive-shaft, operating means on the stationary support and connected directly

to said gear-wheel, a stub-shaft mounted on
the stationary support below said gear-wheel,
a fly-wheel journaled on said stub-shaft and a
pinion carried thereby meshing with said
5 gear-wheel, whereby the swinging support
and its gearing elements may be raised with-
out lifting the fly-wheel and pinion.

In testimony whereof I hereunto affix my
signature in the presence of two witnesses
this 2nd day of September 1908.

JOSHUA W. REAMS.

Witnesses:

B. R. EWING,

D. V. MORTON, Jr.