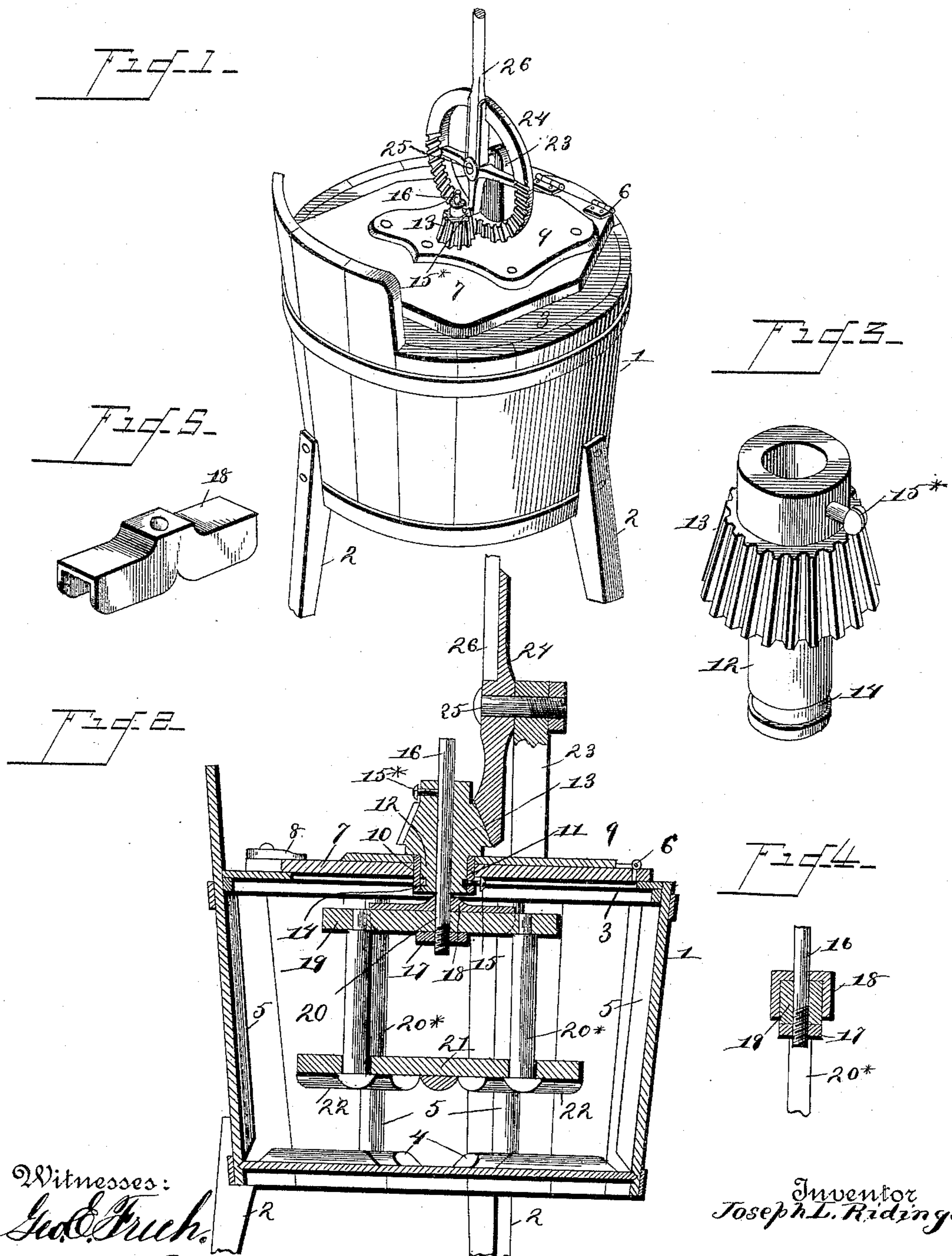


(No Model.)

J. L. RIDINGS.
WASHING MACHINE.

No. 432,082.

Patented July 15, 1890.



Witnesses:

Geo. F. Rich.

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UNITED STATES PATENT OFFICE.

JOSEPH L. RIDINGS, OF ENTERPRISE, MISSOURI.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 432,082, dated July 15, 1890.

Application filed February 4, 1890. Serial No. 339,134. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. RIDINGS, a citizen of the United States, residing at Enterprise, in the county of Shelby and State of Missouri, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention has relation to rotary washers, the main objects in view being to simplify the construction and reduce to the minimum the number of parts necessary, and withal to provide an easily-operated and exceedingly effective washer, capable of thoroughly agitating the clothes and subjecting them to a proper manipulation within the suds box or tub, all as will hereinafter appear, and be particularly pointed out in the appended claim.

Referring to the drawings, Figure 1 is a perspective of a washing-machine constructed in accordance with my invention. Fig. 2 is a vertical central section of the same. Fig. 3 is a detail in perspective of the hollow stud and pinion. Fig. 4 is a detail section through the agitator-shaft. Fig. 5 is a detail view of the U-shaped socket.

Like numerals indicate like parts in all the figures of the drawings.

The suds-box 1 is of cylindrical shape in this instance, and supported upon the legs 2, and fitted within the same at its upper edge is an internal rim 3, projecting into the tub, which latter has its bottom provided with radial rubbing-ribs 4 and its side wall with similar vertical ribs 5, as is usual.

To one side of the rim 3 there is hinged, as at 6, a cover 7, designed to close over the rim and be secured thereto temporarily by means of a turn-button 8.

A metal plate 9 is bolted or otherwise secured to the hinged cover, and through the same and the center of the cover there is formed a perforation 10, provided with a bushing 11, depending below the hinged cover. Mounted for rotation in the bushing is a hollow stud 12, provided at its upper end with a small pinion 13, the stud depending through and below the bushing, and near its lower end provided with an annular groove 14, into which takes the inner end of a set-screw 15, inserted through the wall of the bushing below the hinged cover, whereby said stud is

maintained within its seat. The dasher-shaft 16 is in this instance cylindrical and made fast within the bore of the hollow stud by a set-screw 15*, and terminates in a lower threaded end adapted to receive a binding-nut 17. Above the threaded end there is formed upon the shaft a laterally-extending or transverse U-shaped socket 18, in which there is mounted and adapted to snugly fit the cross-head 19 of the dasher, which head is perforated, as at 20, for the passage of the threaded end of the shaft, and is bound in position in the transverse socket by means of the nut upon the shaft. Headed pins 20* project from the cross-head downwardly, and upon the same is loosely mounted for reciprocation the agitator 21, which, by reason of its loose mounting, is adapted to automatically adjust itself to the quantity of clothing within the suds-box and to be tilted at angles agreeing with any uneven distribution of the said clothing. The lower or under surface of the head is provided with the usual rubbing-ribs 22, to coact with those secured to the bottom and wall of the suds-box, as shown at 4 and 5, respectively.

From the rear end of the metal plate mounted upon the hinged cover there projects a vertical standard 23, in the upper end of which is mounted a toothed sector 24, provided with an axle 25 and an operating-handle 26, said sector meshing with the small pinion of the internally-bored or hollow stud and by its oscillations imparting motion to the stud and agitator.

From the above description it will be noted that the parts may be readily disassembled, and by withdrawing the set-screw which binds the agitator or dasher shaft together the agitator-head and its adjuncts, together with its shaft, may be removed, and in a similar manner may the stud that carries the pinion, these parts thus being exposed for cleaning, repair, &c.

The operation of my washer will be readily understood by those skilled in this class of invention, and in view of the above description needs no specific mention.

Having thus described my invention, what I claim is—

In a washing-machine of the class described, the combination, with the cover thereof, of a

bushing 11, mounted in the perforation of
said cover, a hollow stud 12, mounted in the
bushing and provided at its upper end with
an integrally-formed pinion 13 and at its lower
5 end with a groove 14, a set-screw 15, inserted
through the bushing and terminating in the
groove, an agitator-shaft 16, removably and
adjustably secured in the hollow stud, whereby
it is adapted to be raised or lowered accord-
10 ing to the amount of clothing, and an agitator

21, connected to the lower end of the same,
and gearing meshing with the pinion, sub-
stantially as specified.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature 15
in presence of two witnesses.

JOSEPH L. RIDINGS.

Witnesses:

J. D. HAWKINS,
G. W. VOHON.