No. 756,131. PATENTED MAR. 29, 1904.

O. A. MORROW.

MECHANICAL MOVEMENT.

APPLICATION FILED JUNE 2, 1903.

NO MODEL.

FIG. 1.

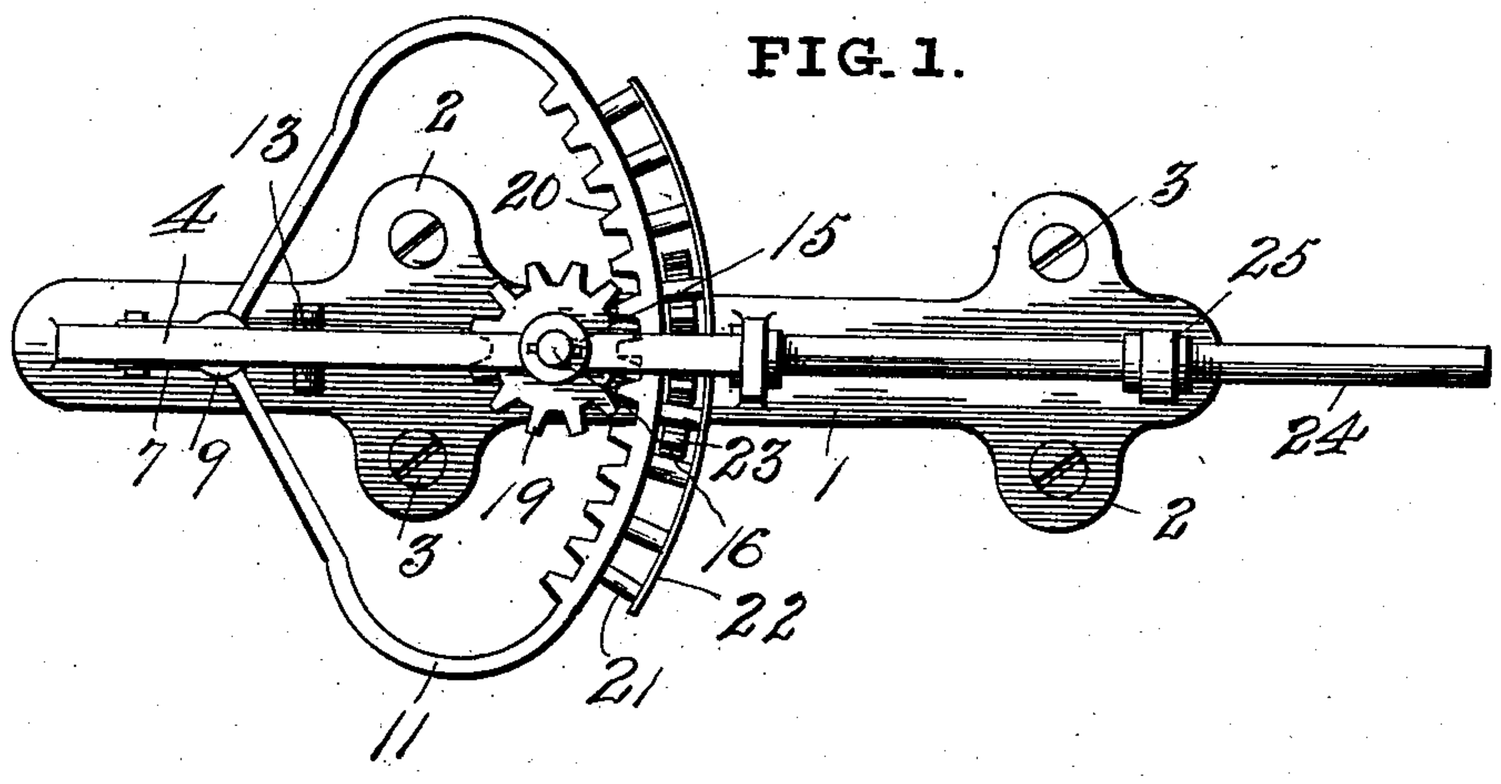


FIG. 2.

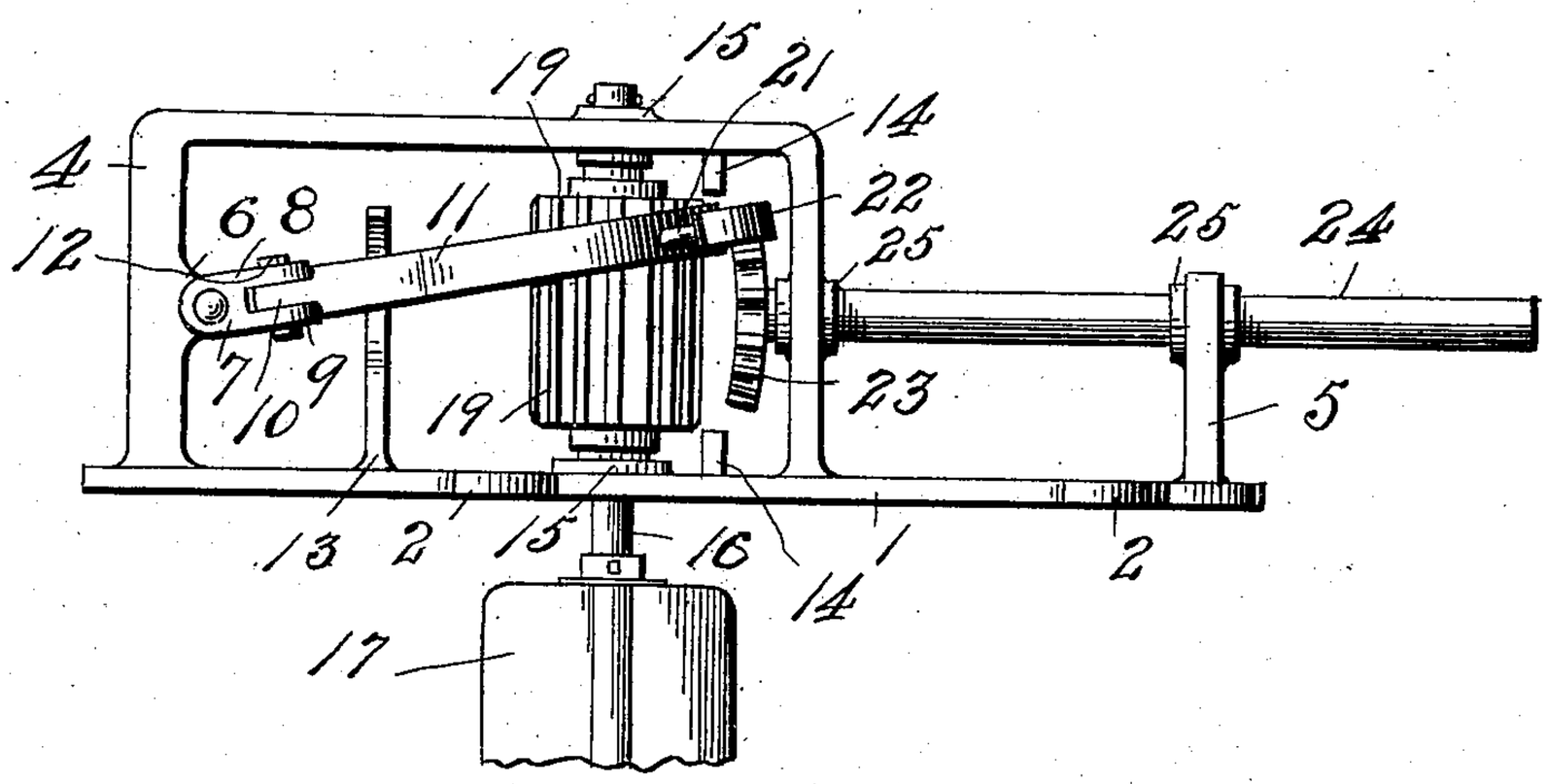
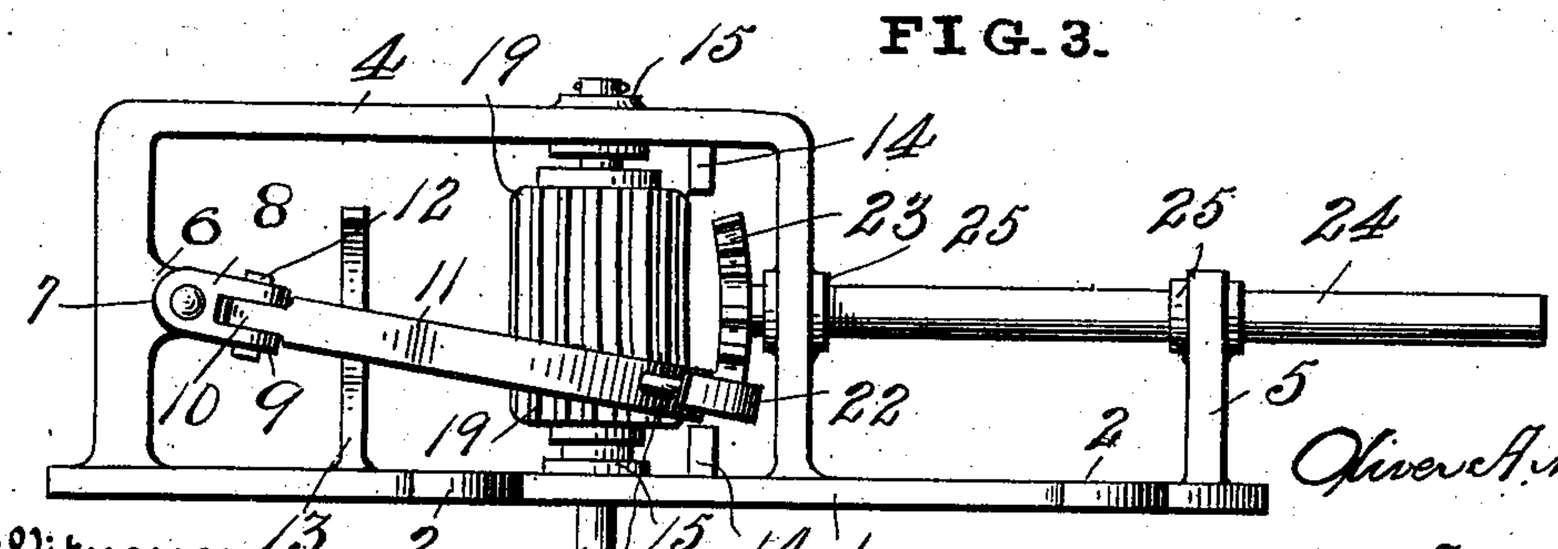


FIG. 3.



Witnesses
Chas. K. Davies
M. E. Moore,

Oliver A. Morrow.
Inventor
by Jno. A. Moore.
Attorney.

No. 756,131. Patented March 29, 1904.

UNITED STATES PATENT OFFICE.

OLIVER A. MORROW, OF WHITEHALL, ILLINOIS.

MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 756,131, dated March 29, 1904.

Application filed June 2, 1903. Serial No. 159,757. (No model.)

To all whom it may concern:

Be it known that I, OLIVER A. MORROW, a citizen of the United States, residing at Whitehall, in the county of Greene and State of Illinois, have invented certain new and useful Improvements in Mechanical Movements, of which the following is a specification.

My invention relates to an improvement in mechanical movements particularly designed for use in connection with washing-machines, churns, and machines of like character, although it may be used in any situation where it would perform its functions in a proper manner.

The object of my invention is the provision of a mechanical movement comprising few parts, insuring simplicity, durability, and inexpensiveness of construction and which will be thoroughly efficient and practical.

To attain the desired objects, my invention consists of a mechanical movement embodying novel features of construction and combination of parts, substantially as disclosed herein.

Figure 1 represents a top plan view of a mechanical movement constructed in accordance with and embodying my invention. Fig. 2 represents a side elevation with the parts of the invention in one position, and Fig. 3 represents a similar view with the parts in another position.

In the drawings, the numeral 1 designates the base-plate provided with lateral securing-ears 2, which receive fastening-screws 3, and from the base-plate rises the rectangular open frame 4 and the parallel short post or standard 5. The outer standard of said frame is provided with an inwardly-extending lug 6, to which is pivoted the vertical forked or bifurcated end 7 of the hinge or connection 8, which is also provided with the horizontal bifurcated end 9, which receives the end 10 on the yoke 11, a pivot 12 connecting the yoke with said hinge. From this construction it will be seen that the yoke has a vertical and a transverse movement with reference to the frame, and I provide the post or bar 13, which, engaging said yoke, limits the transverse and vertical movement of the same, holding the end pins of the rack 21 in mesh with the pinion 23 while oscillating, and said frame 4 is also provided with the upper and lower lugs 14, which limit the vertical or up-and-down movement of said yoke, holding the rack 21 in mesh with the pinion 23 during the transverse movement of said yoke.

In the frame within the yoke is mounted in bearings 15 the vertical shaft 16, to which is connected the dasher or agitator 17, and also upon said shaft is mounted the elongated pinion 19, and the inner face of the yoke is provided with a rack 20, adapted to engage said pinion 19, and upon the outer face the yoke is provided with a series of peripheral pins 21, inclosed by a band or rim 22, and said pins are engaged by the driving-pinion 23, mounted on the inner end of the horizontal driving-shaft 24, which is driven by a crank or other suitable means and revolves in bearings 25 of the frame and post.

From the foregoing description, taken in connection with the drawings, the operation of my mechanical movement will be readily understood, and I would simply state that the horizontal driving-shaft is revolved by a crank or other suitable power, the pinion thereon engaging the pins 21 on the yoke and moving the yoke in one direction, which movement of the yoke causes the rack 20 thereon to engage the upper part of the elongated pinion 19 on the vertical shaft 16, oscillating said pinion and the shaft with agitator thereon. The yoke will then fall and engage the lower part of the elongated pinion 18 on the said shaft 16, oscillating the agitator in the opposite direction, thus imparting an oscillating movement to the shaft, which movement or action is particularly desirable in a washing-machine or machine of like character. It will be observed that the yoke has a horizontal and vertical movement through the medium of its connection with the frame and that it is limited in its horizontal and vertical movement by means of the vertical post or bar 13 in the frame 4 and in its vertical movement by means of the upper and lower lugs 14 within the frame 4.

It is evident that I provide a simple, durable, inexpensive, and thoroughly practical mechanical movement.

I claim—

1. In a mechanical movement, the combina-

tion of a frame, a shaft, an elongated pinion, a yoke having a horizontal and vertical movement with reference to the frame, the connection between the yoke and the frame consisting of a hinge having a vertical bifurcated portion connected to the frame and a horizontal bifurcated portion connected to said yoke, a rack carried by the yoke on its outer face, for engaging the said elongated pinion, a series of pins carried by the yoke on its inner face, a driving-pinion engaging said pins, a shaft carrying said pinion, and means in the frame for limiting the horizontal and vertical movement of said yoke.

2. In a mechanical movement, the combination of a frame, a shaft mounted in said frame, an elongated pinion on said shaft, a yoke having a vertical and horizontal movement with reference to the frame, the connection between the yoke and the frame consisting of a hinge having a vertical bifurcated portion connected to the frame and a horizontal bifurcated portion connected to said yoke, a post in the frame for limiting the movement of the yoke, an upper and lower lug in the frame for limiting the vertical movement of the yoke, a rack carried by the yoke to engage the pinion, a series of pins carried by said yoke, a driving-pinion and a driving-shaft carrying said driving-pinion, meshing with the pins on said yoke.

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

OLIVER A. MORROW.

Witnesses:

ALBERT E. VOSSELE,

R. B. WINN.