

I. L. FRANKEM.
DISH WASHING MACHINE.
APPLICATION FILED MAR. 29, 1909.

948,046.

Patented Feb. 1, 1910.

Fig. 1.

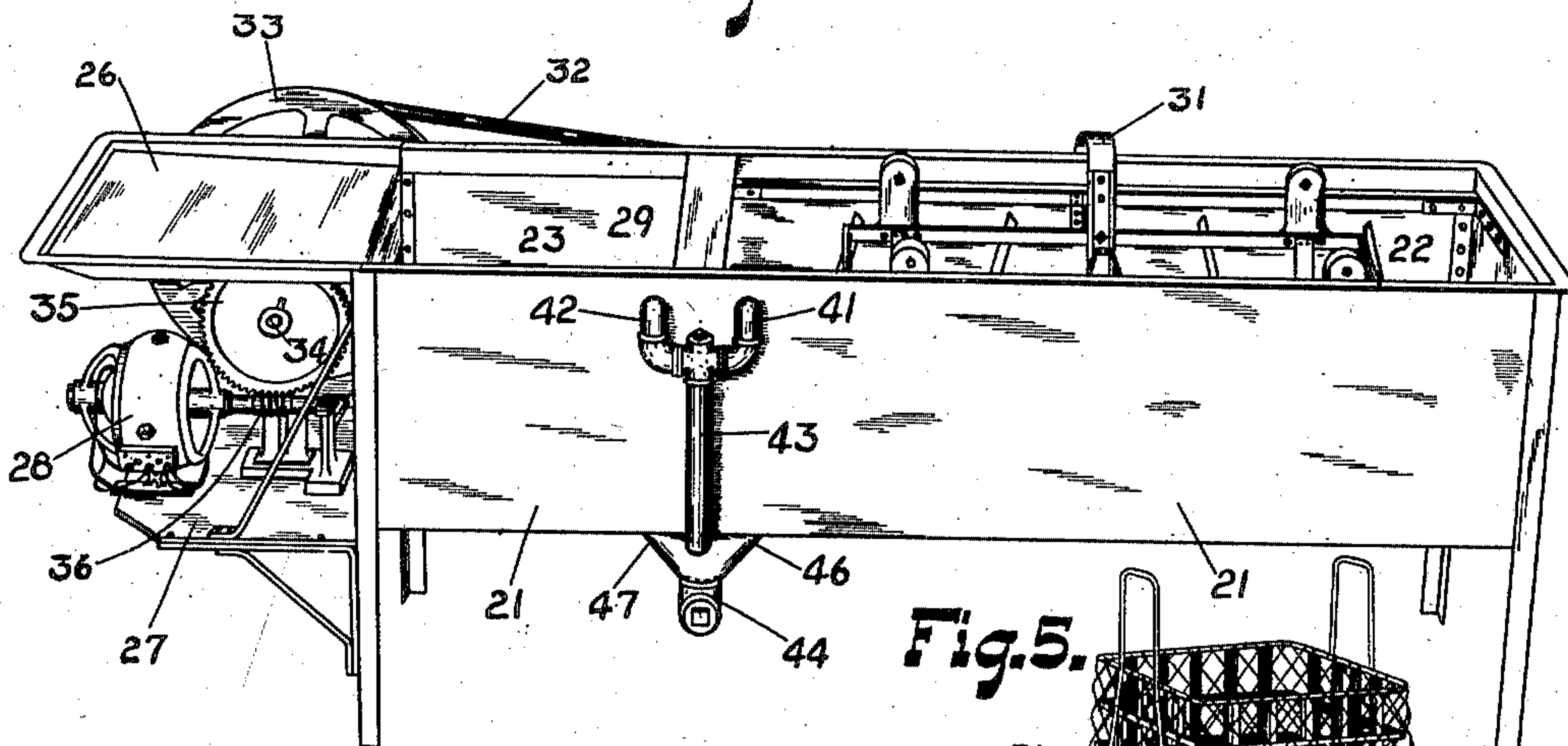


Fig. 5.

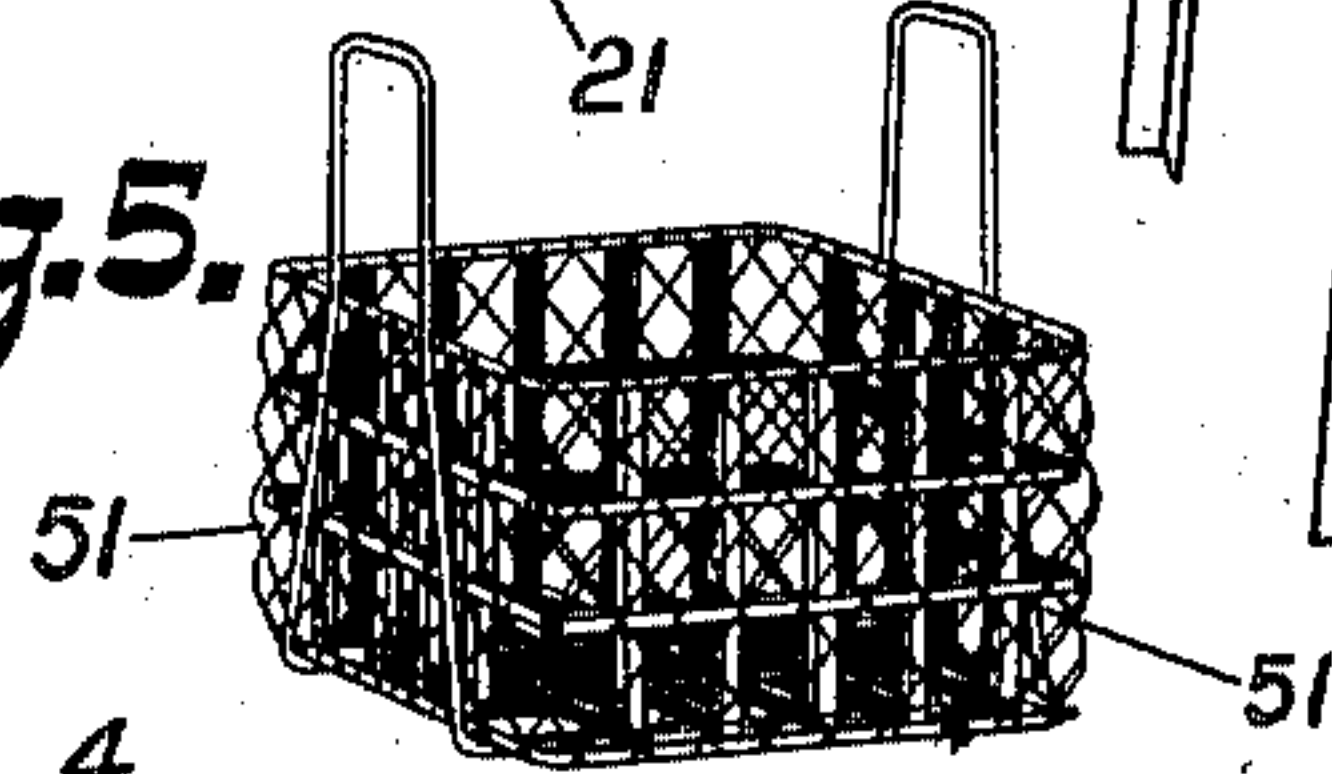


Fig. 2.

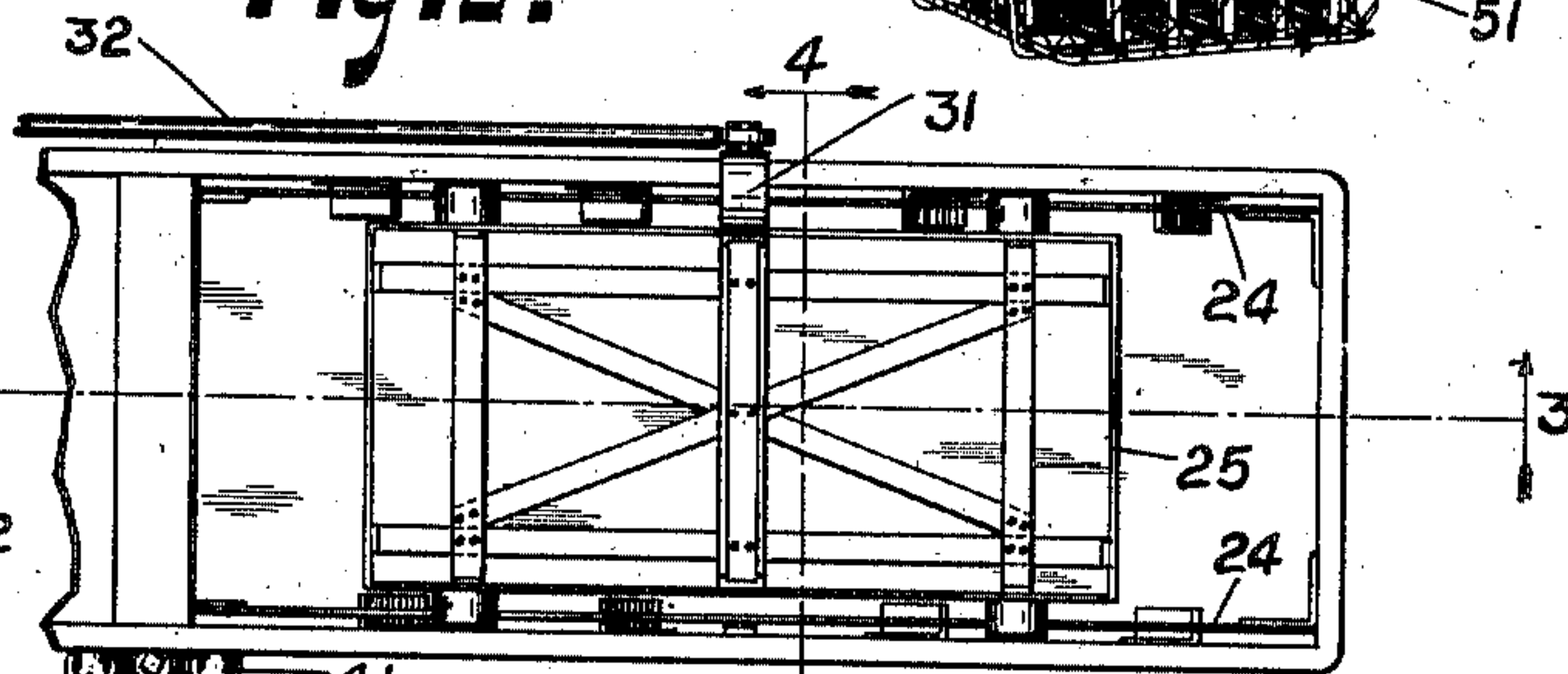


Fig. 4.

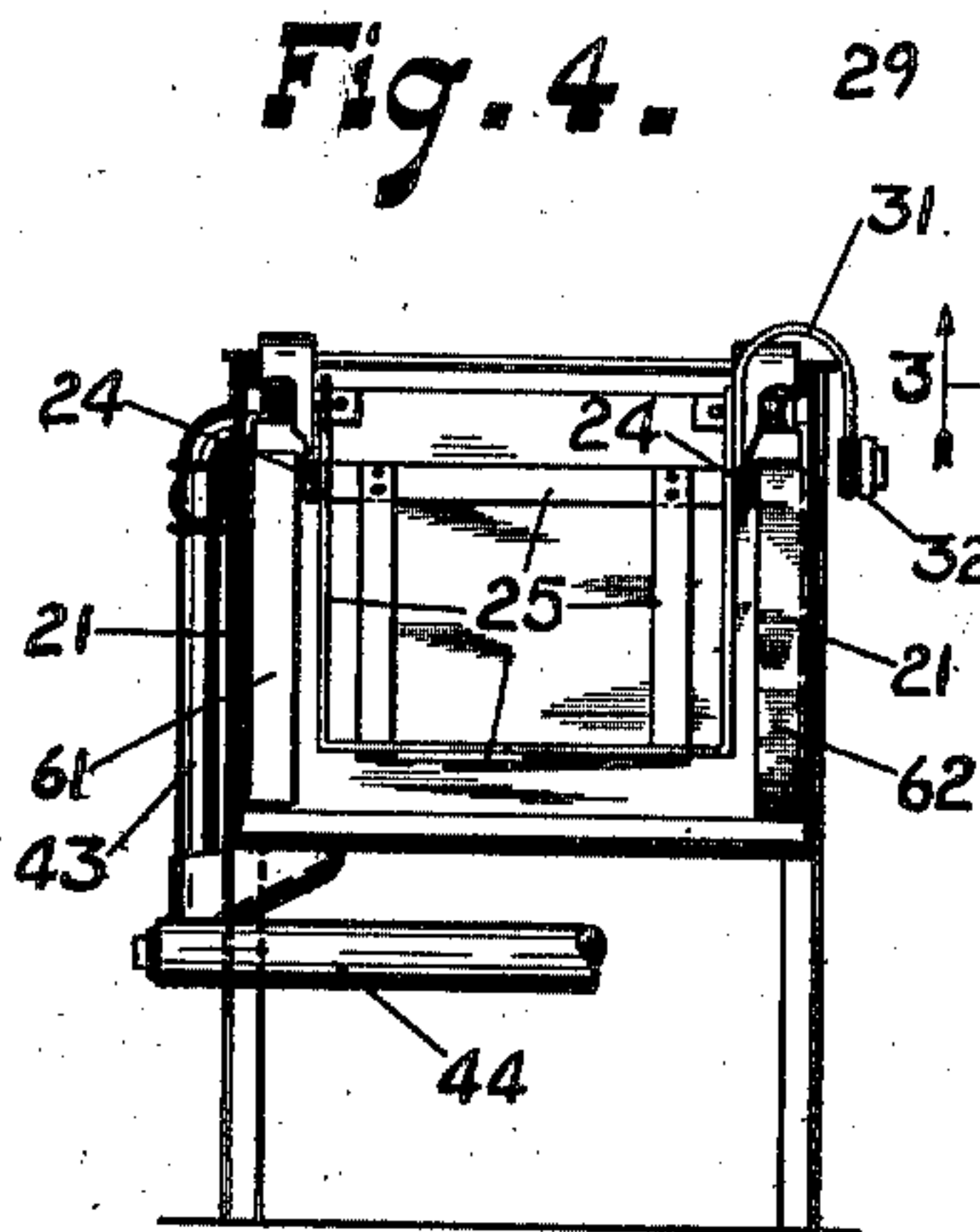
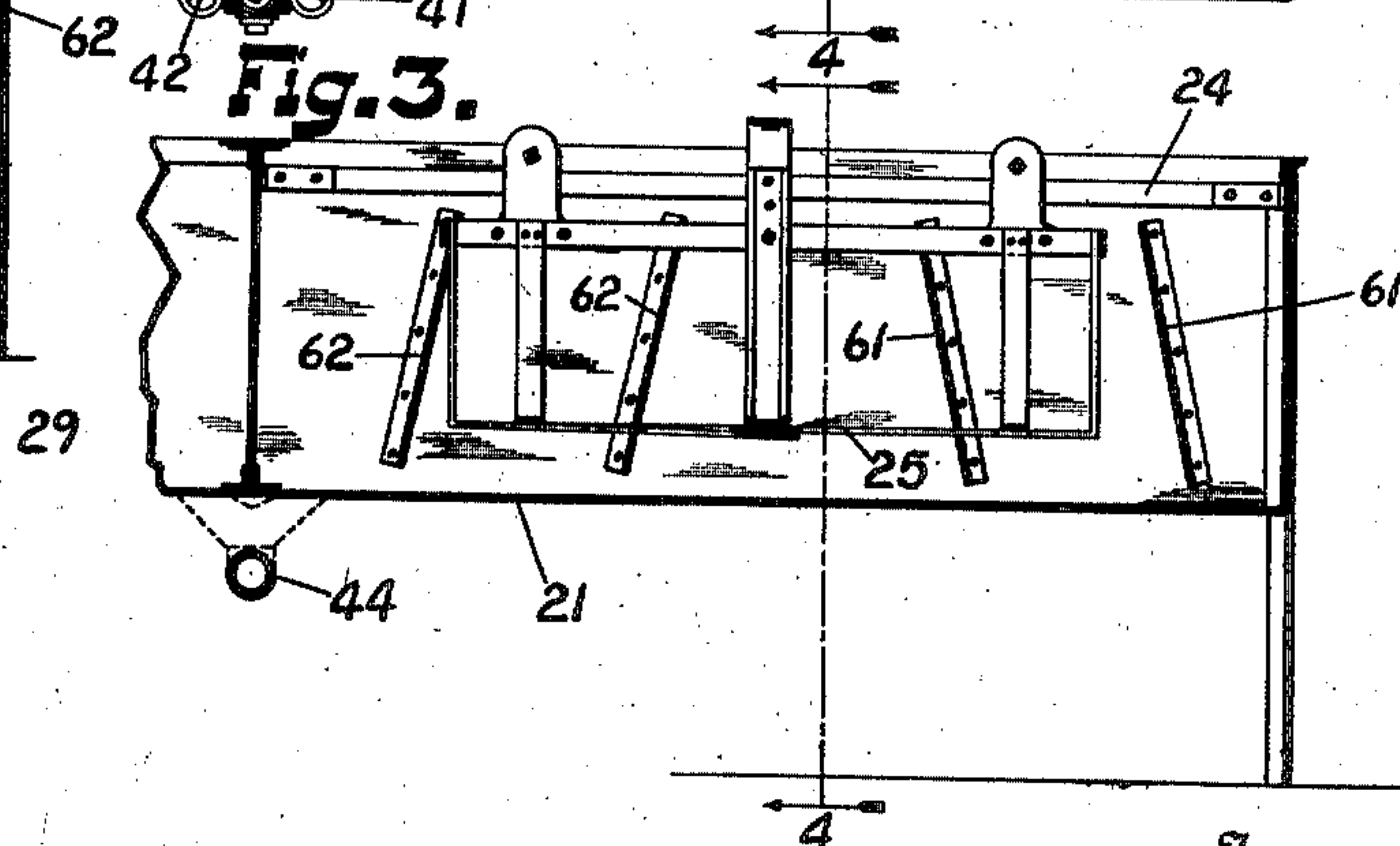


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

ISAAC L. FRANKEM, OF INDIANAPOLIS, INDIANA.

DISH-WASHING MACHINE.

948,046.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed March 29, 1909. Serial No. 486,540.

To all whom it may concern:

Be it known that I, ISAAC L. FRANKEM, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Dish-Washing Machines, of which the following is a specification.

My present invention consists in certain improvements upon the machine shown and described in my Letters Patent No. 818,427 dated April 24, 1906. Said invention will be first fully described, and the novel features thereof then pointed out in the claims.

Referring to the accompanying drawings, which are made a part hereof, and on which similar reference characters indicate similar parts, Figure 1 is a perspective view of a machine embodying my said invention; Fig. 2 a top or plan view of that portion within which the washing of the dishes is done; Fig. 3 a longitudinal vertical sectional view as seen when looking in the direction indicated by the arrows from the broken line 3 3 in Fig. 2; Fig. 4 a transverse vertical sectional view as seen when looking in the direction indicated by the arrows from the broken lines 4 4 in Figs. 2 and 3, and Fig. 5 a perspective view of a basket such as is used to contain the soiled dishes when they are placed in this machine for purposes of cleansing.

The interior mechanism and arrangement is very similar to that shown and described in my said Patent No. 818,427, but is of a somewhat improved form.

The machine consists, generally speaking, of an oblong rectangular tank 21 containing (as in said former patent) two compartments, one, 22, for the primary washing operation, and the other, 23, for the rinsing. Within the compartment 22 are the tracks 24 upon which the cage 25 is mounted and reciprocates. Upon that end of the structure which contains the rinsing tank 23, I have now added a drain-board 26, and I have provided, preferably below said drain-board, a shelf 27 upon which a motor 28 for driving the machine may be placed.

In my improved machine I attach to the frame 25 a curved arm 31 which extends over to outside the wall of tank 21. To the end of this arm 31 I connect a pitman 32, which, in turn, connects to a crank wheel 33 mounted on shaft 34. Also on said shaft 34

is a gear wheel 35 which is driven from the motor, preferably through a worm 36 engaging therewith, all as is shown in Fig. 1 of the drawing.

The drain connections, for the purpose of drawing off the scum and grease from the top of the water, are, in my improved machine removed from inside the tanks to the outside. Branch pipes 41 and 42 extend in through the wall of tank 21 near the top, one on either side of the partition 29 which separates the two chambers 22 and 23. These unite in a central pipe 43 which leads down and connects with the main pipe 44. The pipes 46 and 47 leading through the bottoms of the two compartments also connect with said main pipe 44.

In performing the washing or cleansing operation, as formerly, I place the soiled dishes within one or more baskets 51, and place said baskets within the cage 25. The cage is then driven back and forth through the water, and the cleansing operation is thus performed.

In my former machine, especially when driven at considerable speed, one result was a considerable splashing and slopping of the water. I have discovered that by securing within the compartment a series of inclined wings, this is almost wholly overcome. I therefore place on each of the two sides wings 61 and 62, inclined in opposite directions, as most plainly shown in Fig. 3 of the drawing. These wings, as above stated, have the effect to very largely control the splashing and slopping, and render the operation very much more neat and cleanly, and aid materially in forcing the water through the basket and over the dishes. The application of a motor and connecting mechanism also renders the operation of the machine much more steady and uniform, with a consequent improvement of result.

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

1. The combination, in a dish washing machine, of a tank, tracks therein, a reciprocating cage mounted on said tracks, and means for imparting motion thereto, the said compartment of the tank wherein the cage is positioned having inclined wings secured to its inner surface whereby the tendency to splash is overcome.

2. The combination, in a dish washing machine, of a tank, tracks therein, a reciprocating

cating cage mounted on said tracks, and means for imparting motion thereto, the said compartment of the tank wherein the cage is positioned having inclined wings secured to its inner surface whereby the tendency to splash is overcome, some of said wings being inclined in one direction and some in the other.

3. The combination, in a dish washing machine, of a tank, tracks therein, a reciprocating cage mounted on said tracks, and means for imparting motion thereto, the said compartment of the tank wherein the cage is positioned having inclined wings secured to its inner surface whereby the tendency to splash is overcome, the wings at each end of the tank being inclined upwardly toward the wings at the other end of the tank.

4. The combination, in a dish washing ma-

chine, of a tank, tracks therein, a reciprocating cage arranged on the tracks within the tank and wholly below the top thereof, a curved arm extending from said cage over the upper edge of the wall of the tank to a point outside horizontally opposite the cage, a pitman connected to said curved arm at its outer end at a point below the level of the top of the cage, and a motor connected to said pitman whereby the cage is actuated.

In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana, this twenty-fifth day of March, A. D. one thousand nine hundred and nine.

ISAAC L. FRANKEM. [L. s.]

Witnesses:

CHESTER BRADFORD,
THOMAS W. McMEANS.