(No Model.)

F. E. ARNOLD.
Washing-Machine.

No. 228,015. **Patented May 25, 1880.**

Fig: 1.

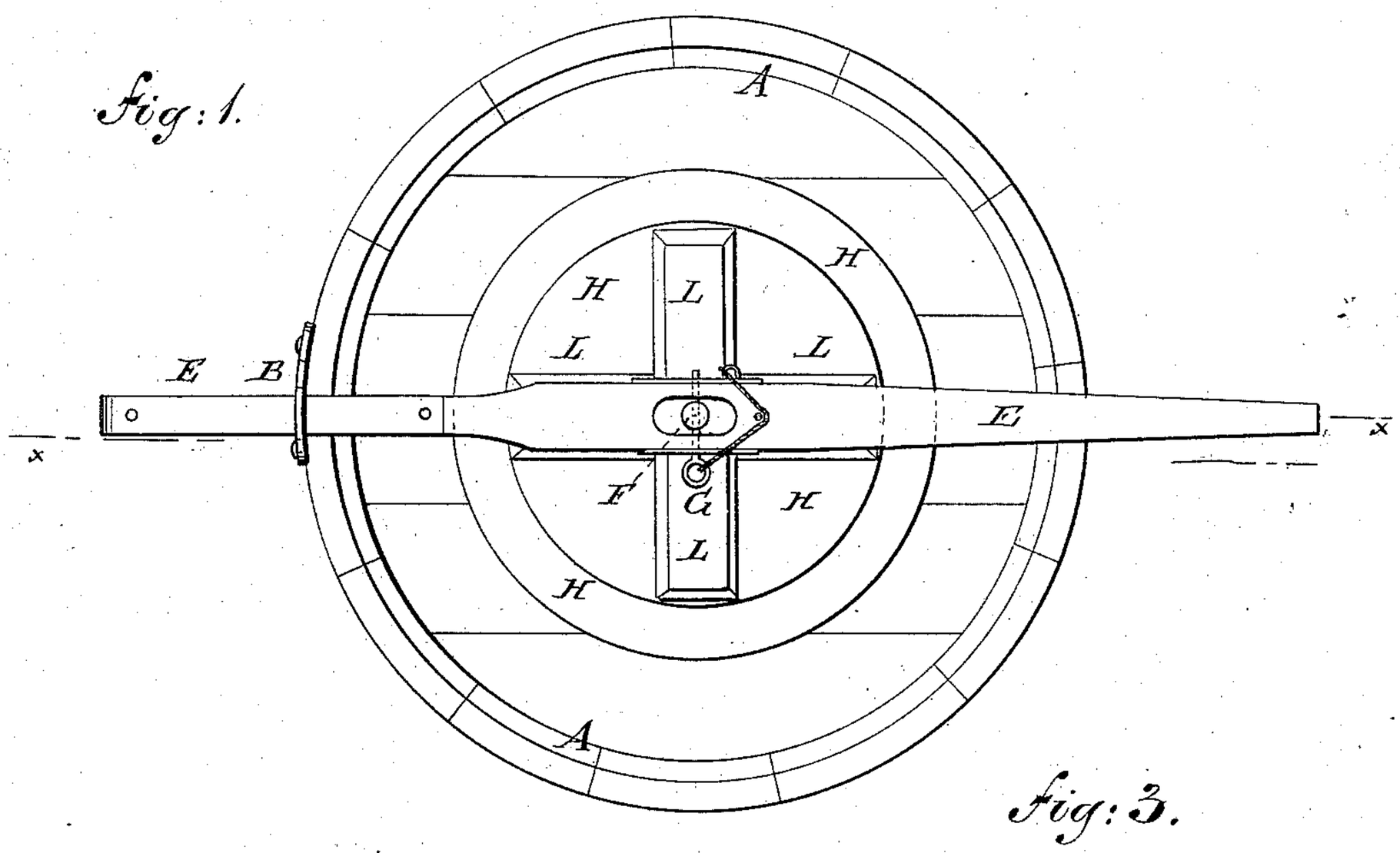
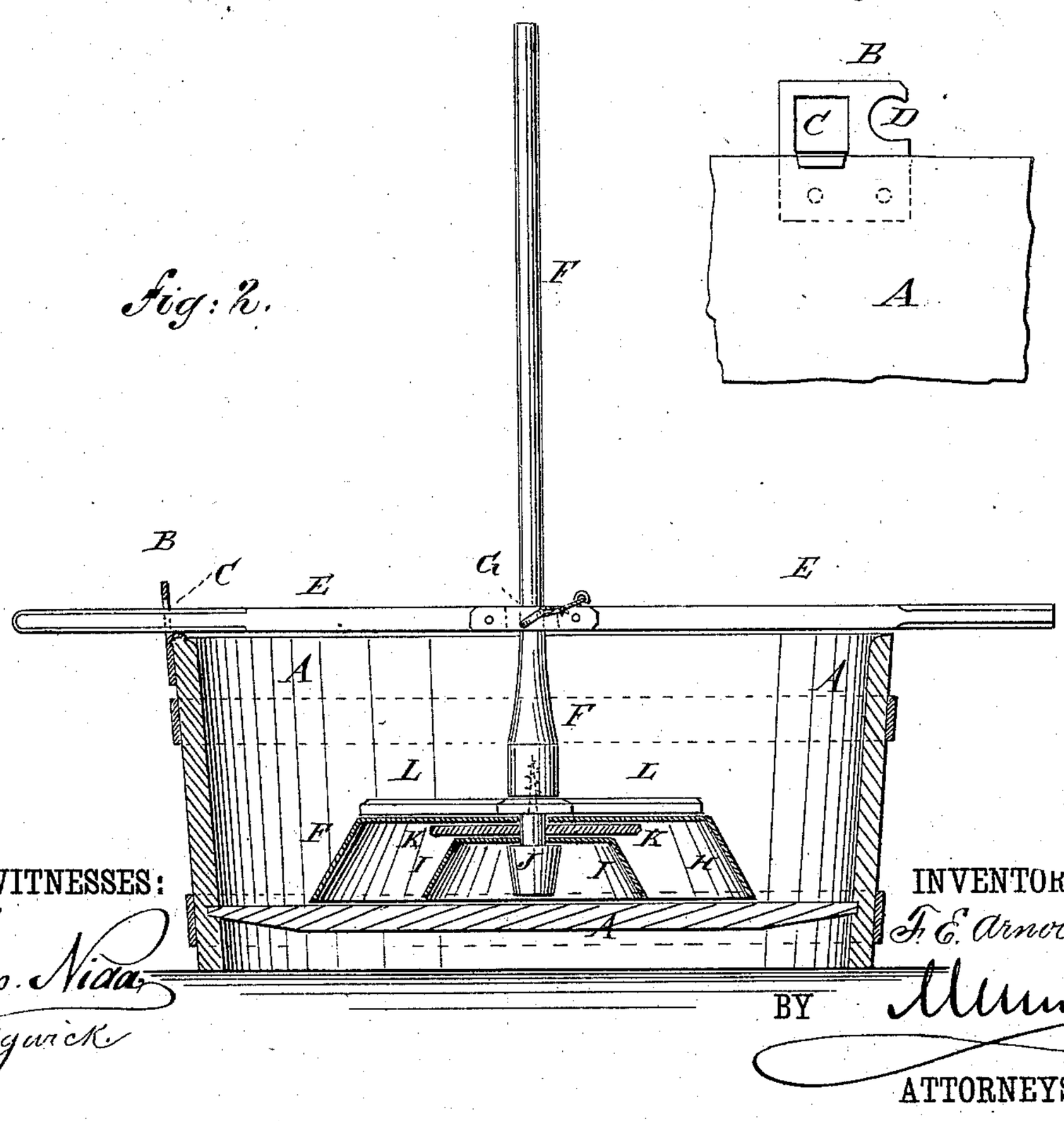


Fig: 3.

Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FRED ERNEST ARNOLD, OF CHICAGO, ILLINOIS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 228,015, dated May 25, 1880.

Application filed March 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, FRED ERNEST ARNOLD, of Chicago, in the county of Cook and State of Illinois, have invented a new Improvement in Washing-Machines, of which the following is a specification.

Figure 1 is a plan view of the improvement. Fig. 2 is a sectional elevation taken through the line *x x*, Fig. 1. Fig. 3 is a side elevation of the fulcrum-plate.

The object of this invention is to furnish machines for washing clothes so constructed as to do the work quickly and thoroughly, and which shall be simple in construction and easily operated.

A represents an ordinary wash-tub, to the upper part of one side of which is attached the lower part of a plate, B. In the projecting upper part of the plate B is formed an aperture, C, and in the side edge of the said projecting part is formed a notch, D. In the aperture C of the plate B is inserted the end of a lever, E, which is made longer than the diameter of the tub A. The part of the lever E that works in the aperture C of the plate B is faced with metal to prevent wear, and in the center of the said lever E is formed a short slot through which passes the shaft F. The shaft F is secured to the lever E detachably by a pin, G, passed through the said lever E and shaft F, as shown in Fig. 1.

H I are two inverted concentric pans made with flat bottoms and flaring sides, which have holes through the centers of their bottoms to receive the screw J. The screw J is made with a wooden head, and is screwed into the lower end of the shaft F. The screw J also passes through a wooden disk, K, interposed between the bottoms of the inverted pans H I to prevent the said bottoms from being worn by rubbing against each other.

The bottom of the larger pan H is strengthened and stiffened by two bars, L, crossing and halved to each other, interposed between the bottom of the pan H and the end of the shaft F, and through which, at their point of intersection, the screw J passes.

In using the machine, the clothes to be washed and a suitable quantity of soap and water are placed in the tub A, the end of the lever E is inserted in the aperture C in the plate B, and the free end of the lever E is worked up and down with one hand, while the other hand grasps the shaft F of the beater. The beater is made to operate upon all parts of the clothes in the tub A by moving the free end of the lever E laterally and sliding the said lever in the aperture C of the plate B. With this construction, as the beater is forced downward the air within it will force the water through the clothes, and when the beater is raised a suction will be produced, drawing the water through the clothes, so that the dirt will be washed out very quickly and thoroughly.

When clothes are to be put into or taken out of the tub A the lever E is withdrawn from the aperture C of the plate B, and the part of the shaft F between the lever E and the beater H I J K L is inserted in the notch D in the plate B, to keep the said beater in place and out of the way.

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

In a washing-machine, the combination, with the shaft F, of the inverted concentric metal pans H I, the wooden disk K, bars L, and screw J, as and for the purpose specified.

FRED ERNEST ARNOLD.

Witnesses:
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