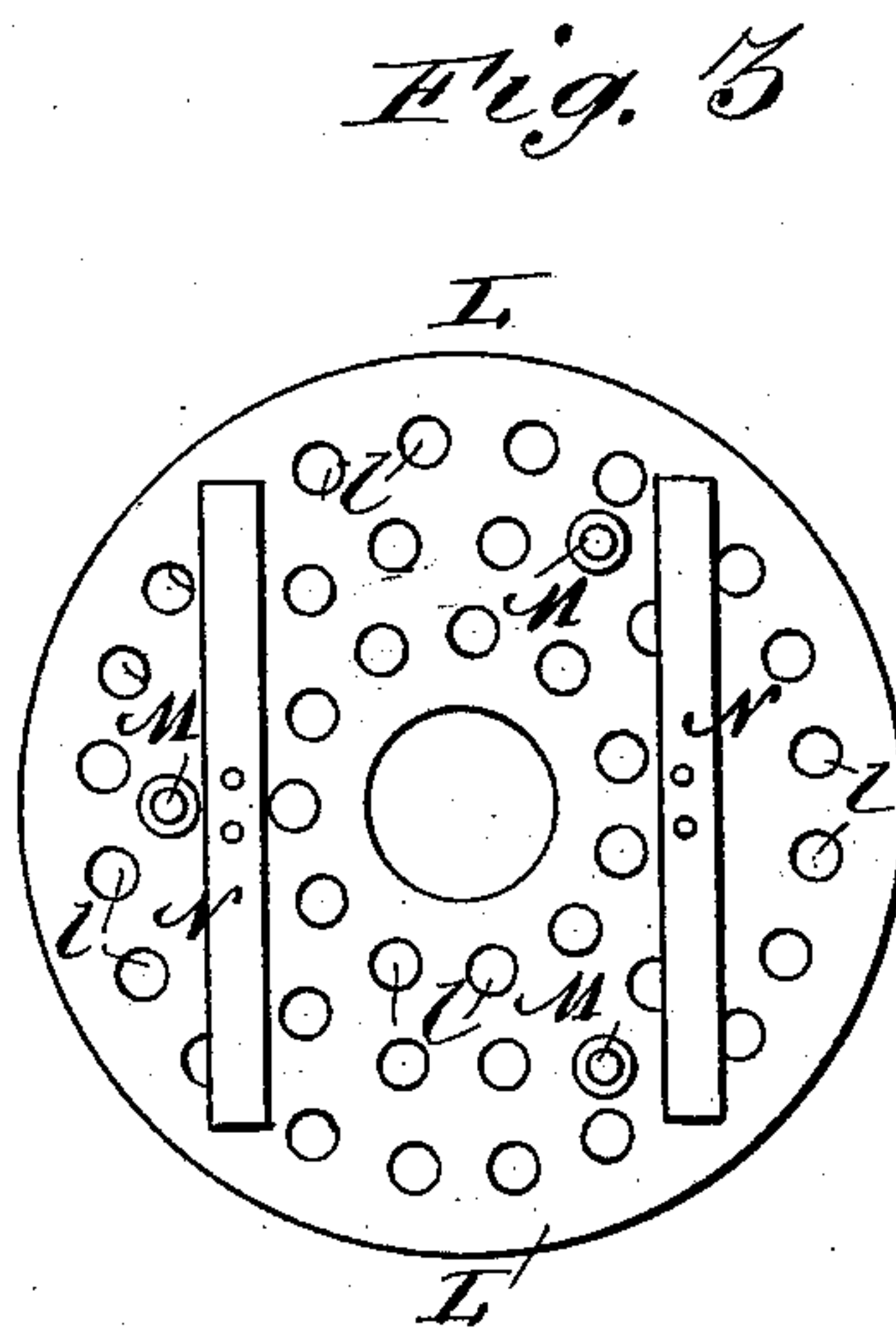
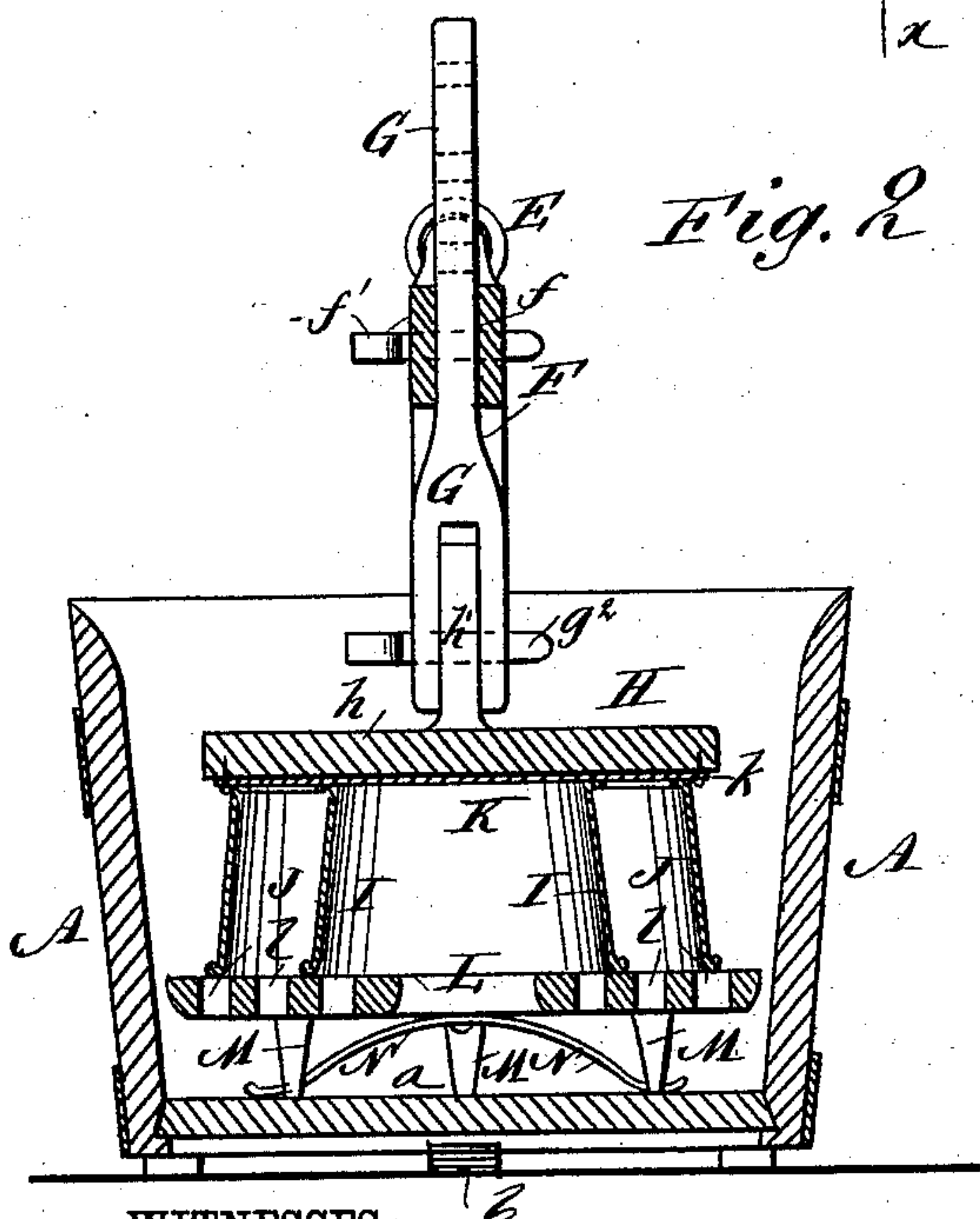
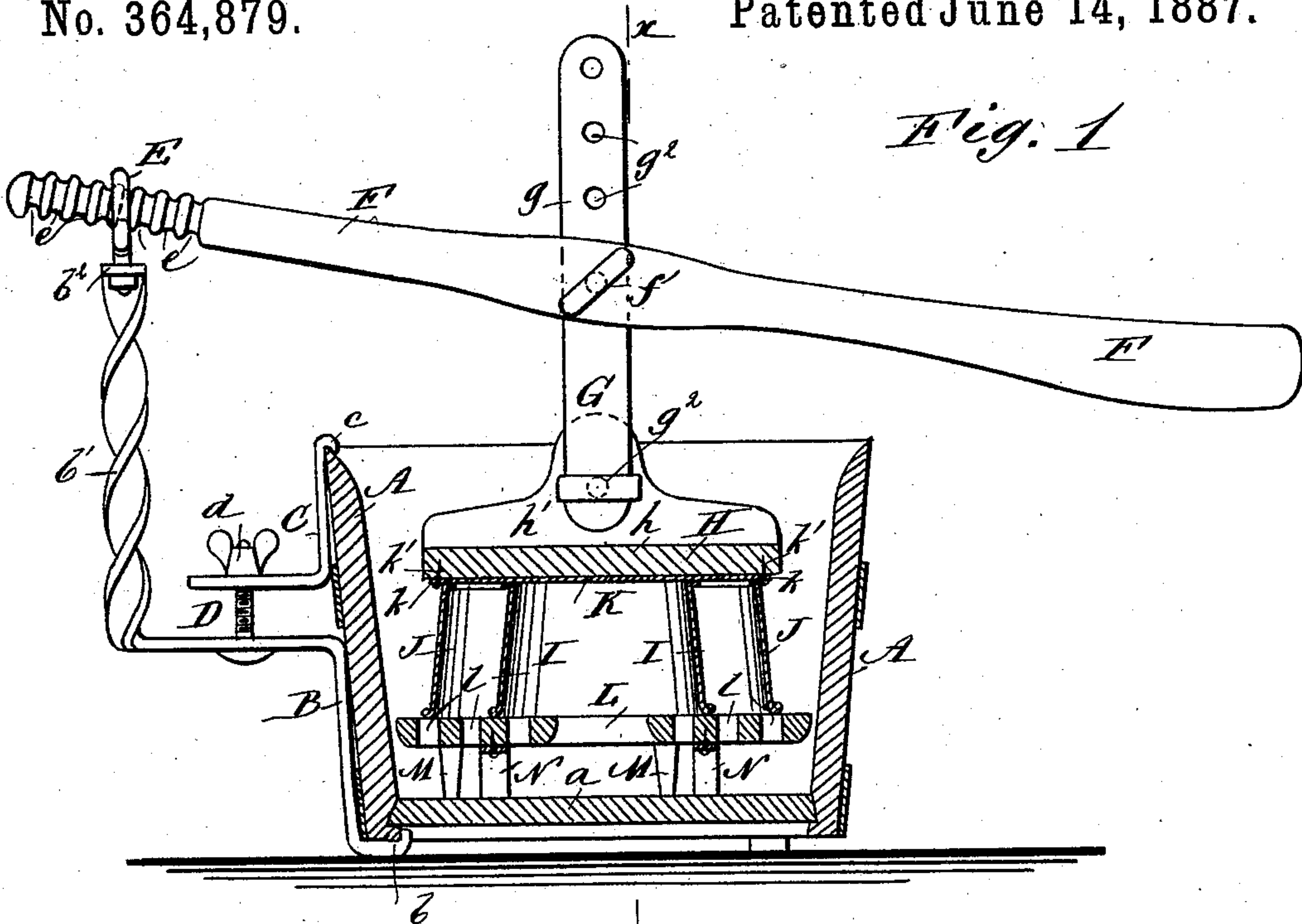


(No Model.)

G. W. WILSON.
WASHING MACHINE.

No. 364,879.

Patented June 14, 1887.



WITNESSES:

C. Neveu
C. Sedgwick

INVENTOR:

G. W. Wilson

BY

Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE W. WILSON, OF LANESBOROUGH, MINNESOTA, ASSIGNOR TO HIMSELF AND B. A. MAN, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 364,879, dated June 14, 1887.

Application filed December 7, 1886. Serial No. 220,902. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WILSON, of Lanesborough, in the county of Fillmore and State of Minnesota, have invented a new and Improved Washing-Machine, of which the following is a full, clear, and exact description.

My invention relates to a machine for washing clothes, and has for its object to provide a simple, inexpensive, durable, and efficient machine of this character which will quickly and thoroughly cleanse the clothes, and with little fatigue to the operator.

The invention consists in certain novel features of construction and combinations of parts of the washing-machine, all as hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical central sectional elevation of my improved washing-machine. Fig. 2 is a transverse vertical section of the machine, taken on the line *x x*, Fig. 1; and Fig. 3 is an under side view of the false bottom of the clothes-holding tub.

The clothes-holding tub A of the machine may have any suitable form or size. At one side of the tub there are fitted a couple of angularly-bent plates, B C, having hooked extremities *b c*, respectively, which engage the lower chine and upper edge of the tub, and are held securely to the tub by a screw-bolt, D, having a nut, *d*, as clearly shown in Fig. 1 of the drawings.

The outer part of the clamp plate or iron B is bent upward, and is preferably twisted, as at *b'*, and at its extremity the plate is bent horizontally to form a flange, *b''*, in which is swiveled an eyebolt, E, adapted to receive the outer or rear end of the lever F, by which the pneumatic washing-head or pounder is operated, as presently explained.

The lever F is preferably slotted at *f*, to receive the shank *g* of a vertically-ranging bar or shaft, G, which is provided with a series of holes, *g'*, into any one of which a headed pin, *f'*, passed through the lever, may be entered, to regulate the height of the washing-head or pounder H in the tub to accommodate the quantity of clothes placed in the tub. The

pounder H is connected pivotally to the bar G by means of a bolt or pin, *g''*, which passes through the lower forked end of the bar and through a hole in a cleat or lug-plate, *h'*, fixed to the top *h* of the pounder, and which is straddled by the forked end of the connecting-bar. (See Figs. 1 and 2 of the drawings.)

The pneumatic pounder or washing-head H comprises the head or top piece, *h*, aforesaid, which is preferably made of wood, and a couple of downwardly-projecting and flaring annular flanges, forming cups I J, which are open at the bottom, and are preferably wired around the lower edge, to strengthen them and avoid injury to the clothes on which the pounder is operated. These flange-cups I J are soldered air-tight to a sheet-metal plate, K, which really forms the top of the pounder and base of the cups, and projects beyond the larger cup-flange J, thereby forming a flange, *k*, outside of the cup J, through which a series of nails or screws, *k'*, are passed into the top board, *h*, to hold the parts I J securely thereto. With this construction a very firm attachment of the cups to the top of the pounder is secured, and the cups are air-tight at their upper parts. The cup-flange I is preferably about five inches in diameter at the lower edge, and the one J is preferably about ten inches in diameter at the lower edge, and the depth of the cups is about nine inches, and their side walls flare downward about one and one-half inches from the plate K, to which they are attached. These dimensions may be varied to suit the size of the machine and the work required of it.

Below the pounder H there is placed loosely on the bottom *a* of the tub a false bottom, L, which is made with a series of perforations, *l*, throughout its area, for passage of water and air, and the bottom L is held away from or above the tub-bottom by a number of pins, M, three being shown, or by a couple of semi-elliptical springs, N N, fixed at their centers to the false bottom and bearing by both ends on the tub-bottom; or, if preferred, both the pins M and springs N may be used, the object being to hold the false bottom L up from the tub-bottom *a*, to allow free circulation of water and air between them to promote effective action of the pounder.

The outer end of the lever F is provided with

a series of grooves, *e*, any one of which may be caused to lock into the eye of the swivel E, to allow the pounder to be adjusted to most advantageous positions to operate upon the
5 clothes over the whole area of the tub.

The operation of the machine is as follows: The clothes to be washed are placed in the tub A, on top of the false bottom L, and a suitable washing-liquid will be placed in the tub. The
10 pounder H will then be lifted over the clothes by the lever F, and by properly adjusting the lever-grooves *e* in the swivel E, and by manipulating the lever up and down, the pounder will squeeze the clothes between itself and the bot-
15 tom L, and at the same time will, by pressure and suction, induce a forcible passage of both air and water through the clothes to quickly free them from dirt, and without injuring the clothes in any way, and with very little fatigue
20 to the operator.

It will be noticed that the device B C D for clamping the lever-support to the tub is very effective for its purpose, and does not project within the tub to interfere with the operation
25 of the machine, and has little tendency to overstrain the tub or wrench it to pieces.

The false bottom L is represented as made of wood; but it may be made of metal, if preferred, and in either case will serve well its
30 intended purposes.

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

1. In a washing-machine, the herein-described lever-support, consisting of the angular
35 plate B, provided with the hooked extremity *b*, and having its outwardly-projecting portion bent upwardly and provided with the flange *b*², the eyebolt E, swiveled in the said flange, the angular plate C, having the hooked ex-
40 tremity *c*, and the bolt D, passing through the said plates, as set forth.

2. In a washing-machine, a lever-support consisting of the angular plate B, provided with the hooked end *b*, and having its out-
45 wardly-projecting portion bent upward and provided with the swiveled eye E, the angular plate C, having the hooked extremity *c*, and the clamping-bolt D, in combination with the tub A, the lever F, passed through the eye
50 E and provided with notches *e* on its under side, the pounder H, and the stem G, pivoted to the pounder and to the lever, substantially as herein shown and described.

GEORGE W. WILSON.

Witnesses:

B. A. MAN,
THOS. THORP.