

(No Model.)

C. BEIDLER.
WASHING MACHINE.

No. 279,691.

Patented June 19, 1883.

FIG. 1.

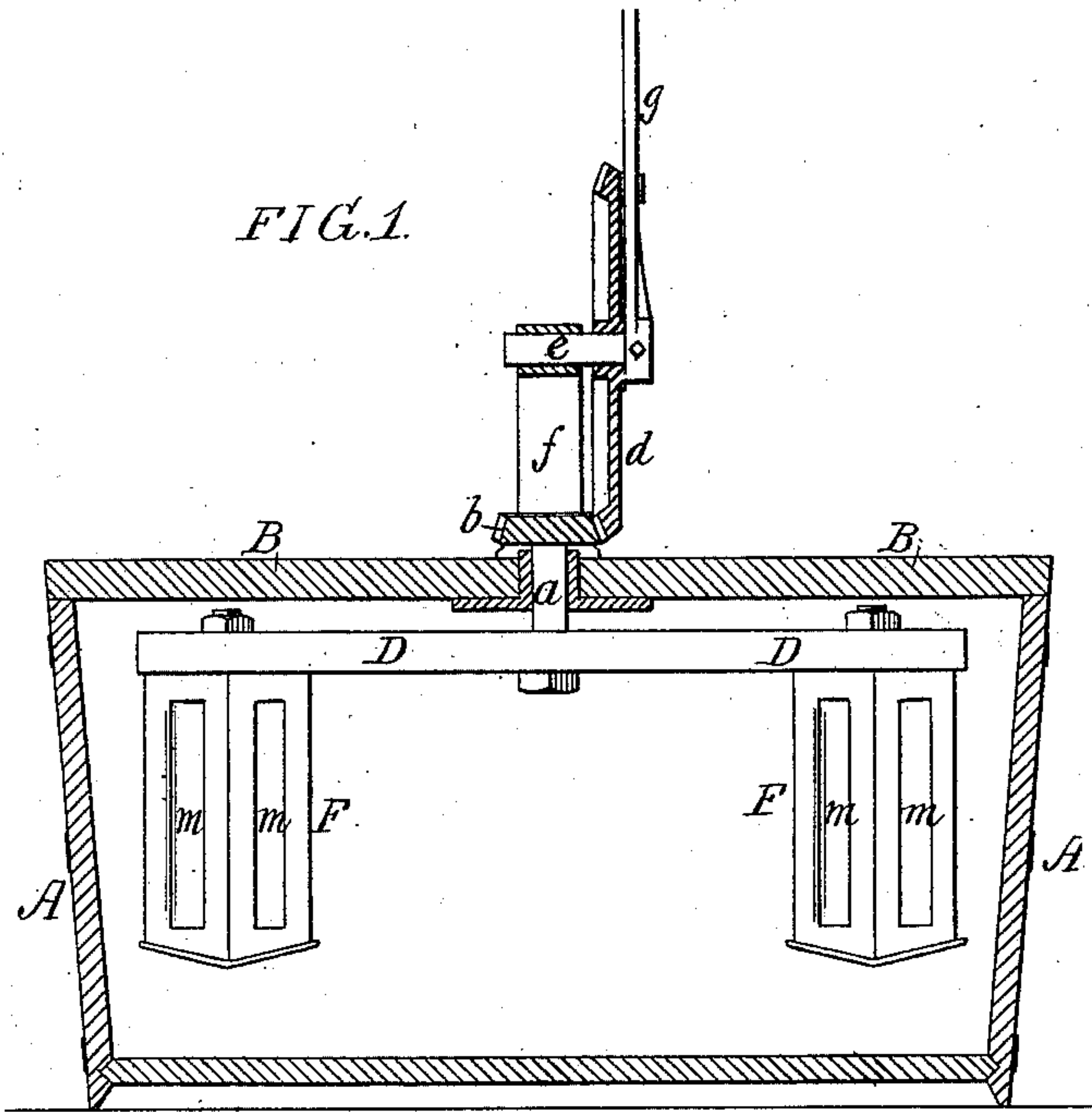


FIG. 2.

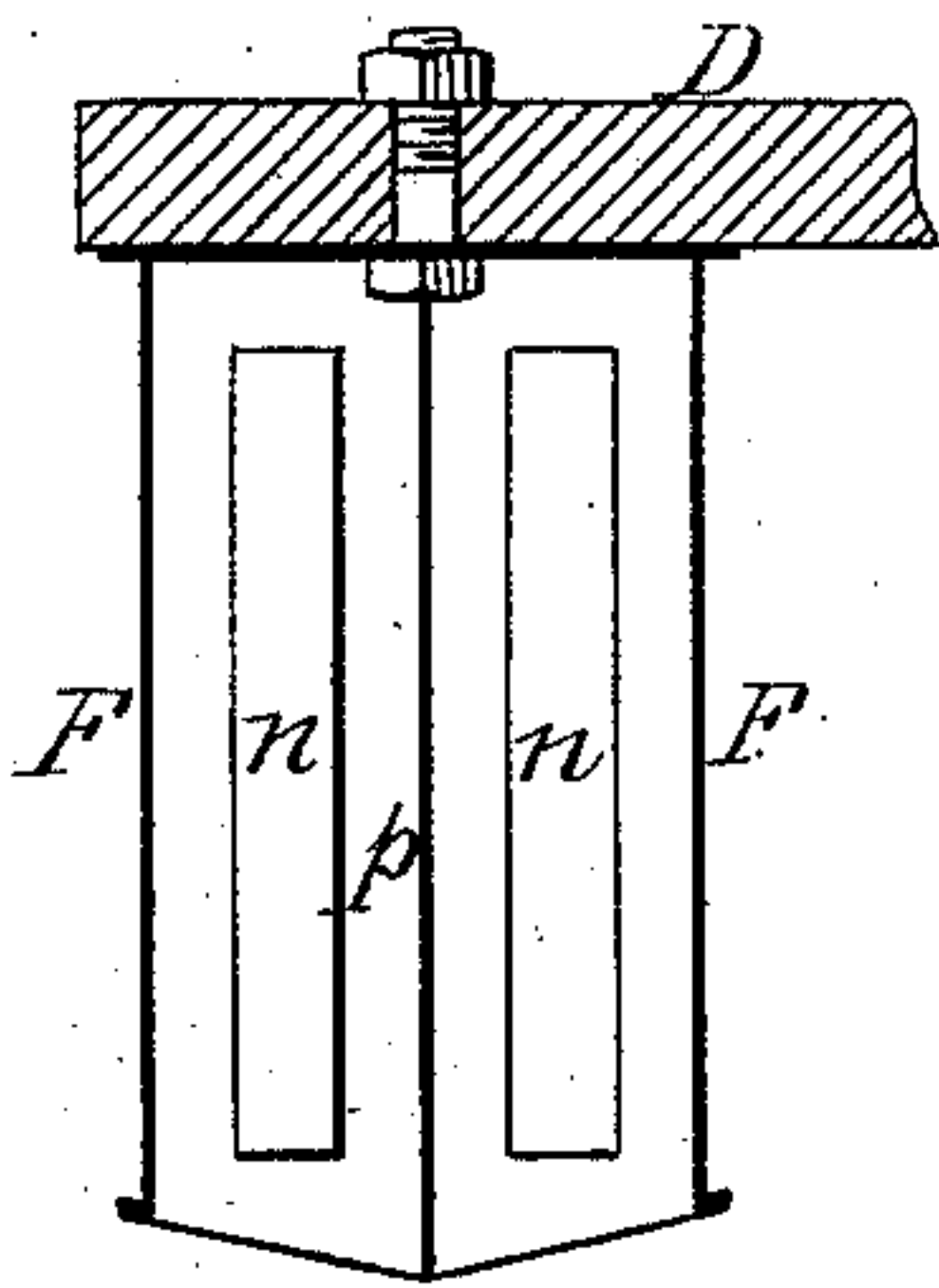
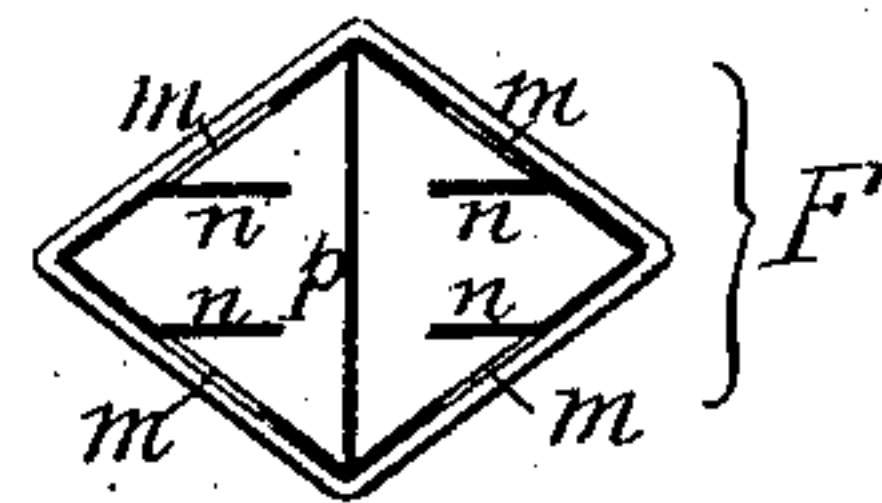


FIG. 3.



WITNESSES:
James J. Tobin
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INVENTOR:
Charles Beidler
By his Attorneys,
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UNITED STATES PATENT OFFICE.

CHARLES BEIDLER, OF ALLENTOWN, PA., ASSIGNOR OF TWO-THIRDS TO
CHARLES S. EHRIG AND JOHN J. EGGE, BOTH OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 279,691, dated June 19, 1883.

Application filed March 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BEIDLER, a citizen of the United States, and a resident of Allentown, Lehigh county, Pennsylvania, have
5 invented certain Improvements in Washing-Machines, of which the following is a specification.

My invention relates to an improvement in that class of washing-machines in which a vibrating horizontal arm in the tub carries projecting dashers for agitating the water and clothes in the tub as the arm is vibrated, the
10 object of my invention being to so construct said dashers that a thorough agitation of the water will be effected and the passage of said
15 water into and through the mass of clothes in the tub insured.

In the accompanying drawings, Figure 1 is a sectional view of a washing-machine of the character to which my invention relates; Fig.
20 2, an enlarged view of one of the dashers, and Fig. 3 a sectional plan view of the same.

In Fig. 1, A represents the tub or vessel for holding the clothes, and B the cover of the same, in which is a bearing for the vertical
25 spindle *a* of the dasher-arm D, said arm being contained within the tub, and the upper end of the spindle having a pinion, *b*, into which gears a bevel-wheel, *d*, on a shaft, *e*, the latter
30 having its bearing in a bracket, *f*, on the lid B, and the wheel being furnished with an operating arm or handle, *g*, by the vibration of which a vibrating movement will be imparted to the arm D. Near each end of the latter,
35 and projecting downward into the tub, is a dasher, F; and it is to the peculiar construction of these dashers that my invention relates, the other parts of the machine having been heretofore used. Each dasher consists of a hollow
40 casing of sheet metal open at the bottom, and preferably of the diamond shape shown in cross-section, so that it presents an angle to the contents of the tub when moved in either direction. In each side of the dasher are
45 formed openings *m*, incisions being made in the metal around three sides of each opening,

and the metal being then bent inward, so as to form wings *n*, as shown in Fig. 3. As the dasher is moved within the tub the water enters the openings *m*, and is deflected by the wings *n* toward the center of the dasher, escaping, finally, from the bottom of the dasher in a forcible stream, one set of wings operating as the dasher is moving in one direction and the other set when the dasher is moving in the opposite direction, so that the stream of water
55 and suds discharged from the bottom of the dasher is continuous, and is projected forcibly into and through the mass of clothes in the bottom of the tub, said mass being continually
60 stirred up and turned over by the action of the dashers, so that all portions of the mass are necessarily subjected to the cleansing action of the water.

In order to prevent the stream of water deflected by one wing *n* from striking and breaking the force of the stream deflected by the opposite wing *n* on the same side of the dasher, I provide the latter with a central partition,
65 *p*, as shown in Figs. 2 and 3, this partition extending to the bottom of the dasher and serving to aid in giving the proper direction to the currents of water entering the openings *m*.
70

I claim as my invention—

1. The combination of the arm D, having hollow dashers F, open at the bottom, and provided with openings *m* and deflecting-wings *n*, with the tub A and means for supporting and vibrating the arm within said tub, as set forth.
75

2. The combination of the arm D, having hollow dashers F, open at the bottom, and each provided with openings *m*, deflectors *n*, and partition *p*, with the tub A and means for supporting and vibrating the arm within said tub, as set forth.
80

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES BEIDLER.

Witnesses:

H. B. YINGLING,
J. O. YINGLING.