

J. W. SPANGLER & B. F. REICH.

Washing-Machines.

No. 157,237.

Patented Nov. 24, 1874.

Fig. 1.

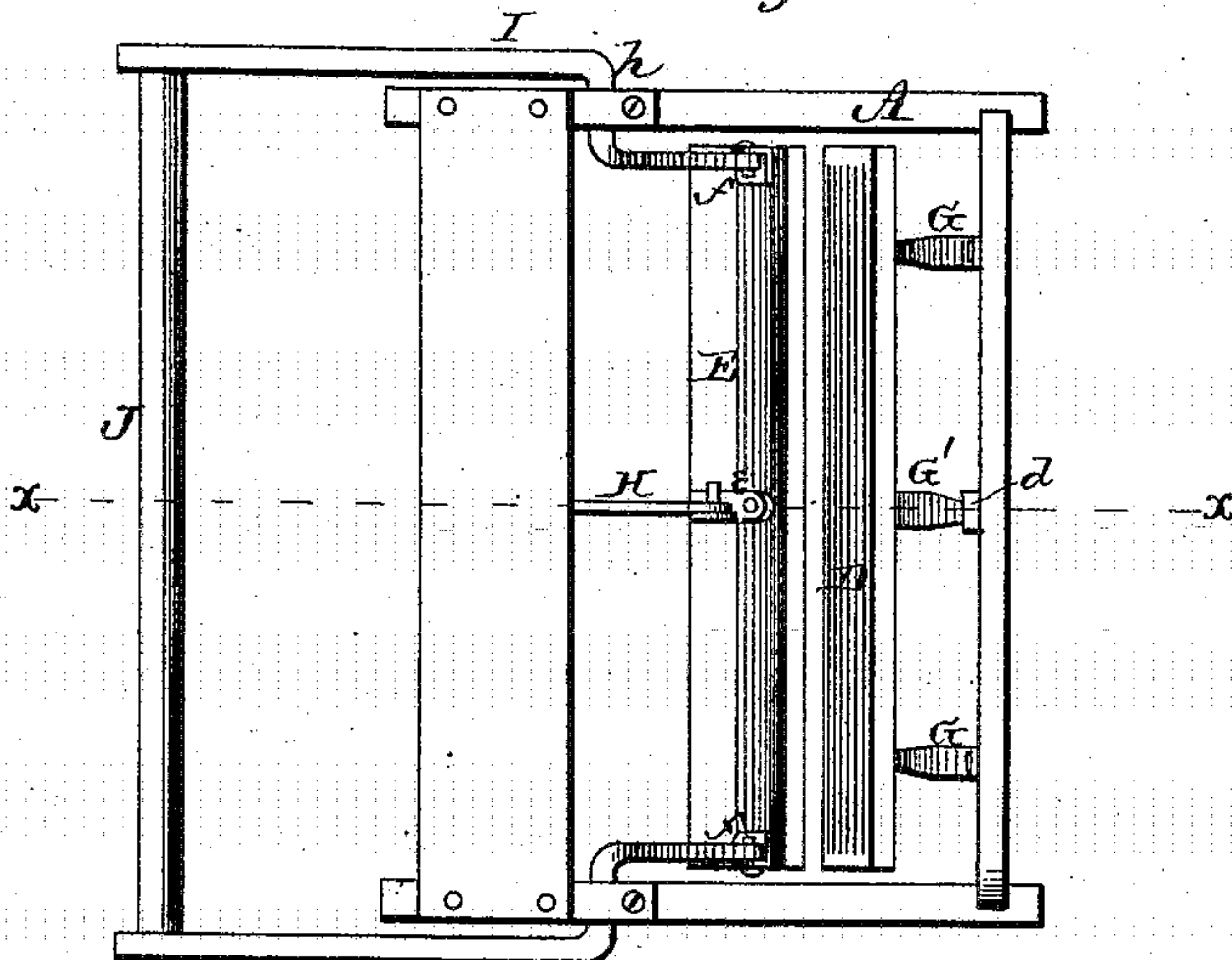


Fig. 2.

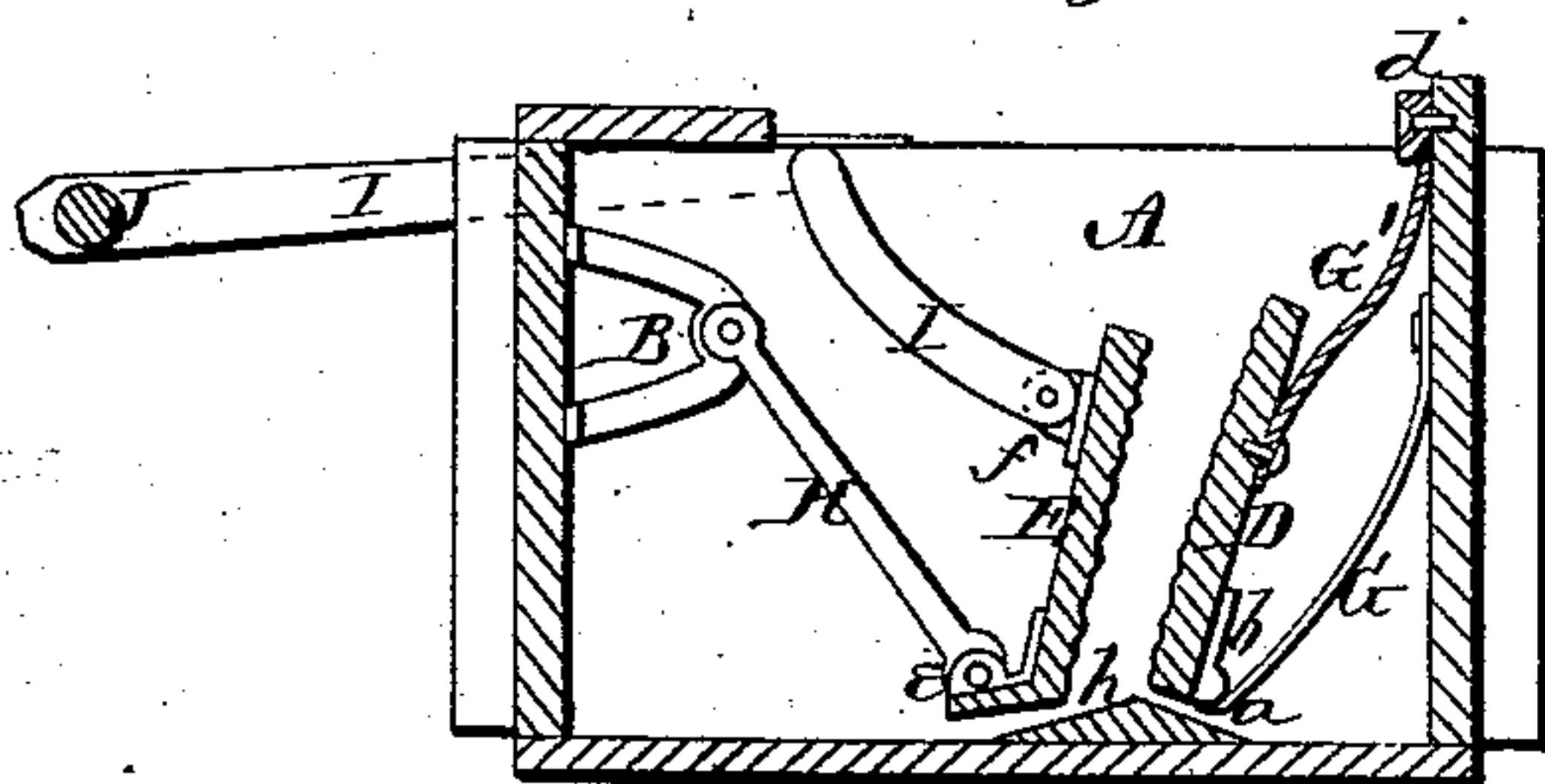


Fig. 3.

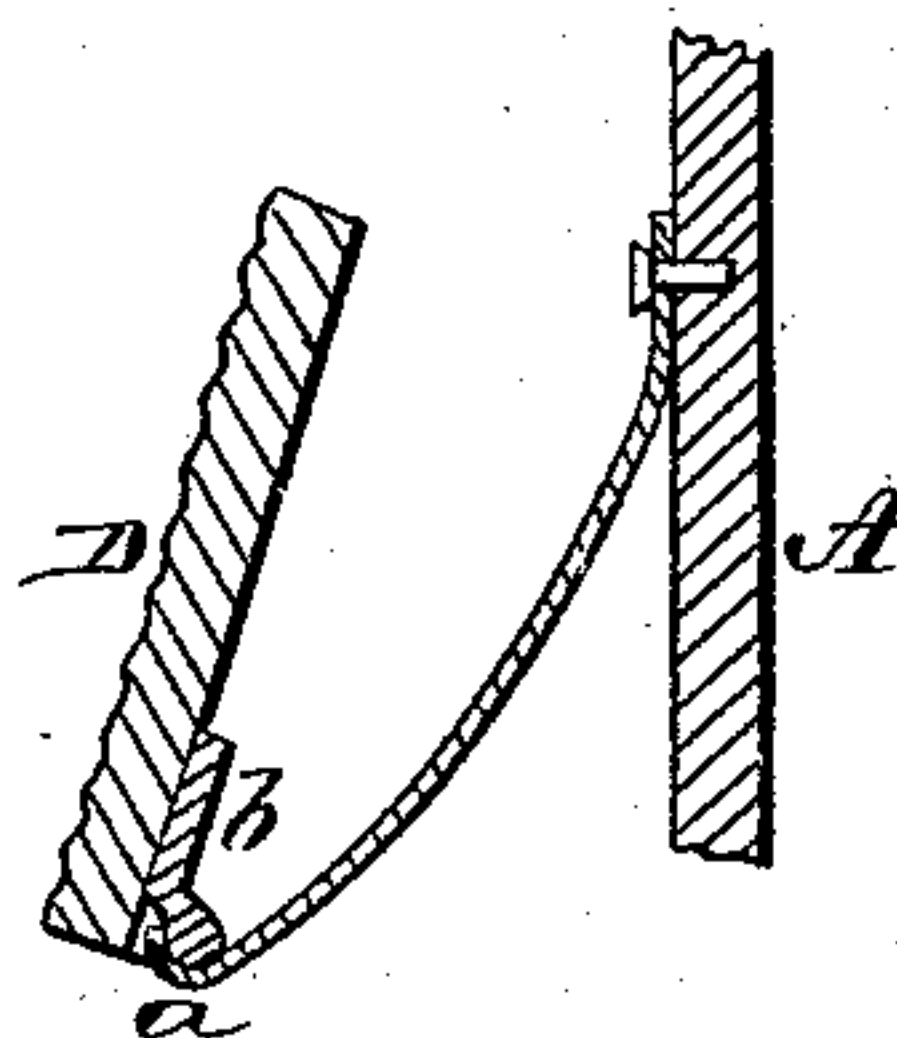
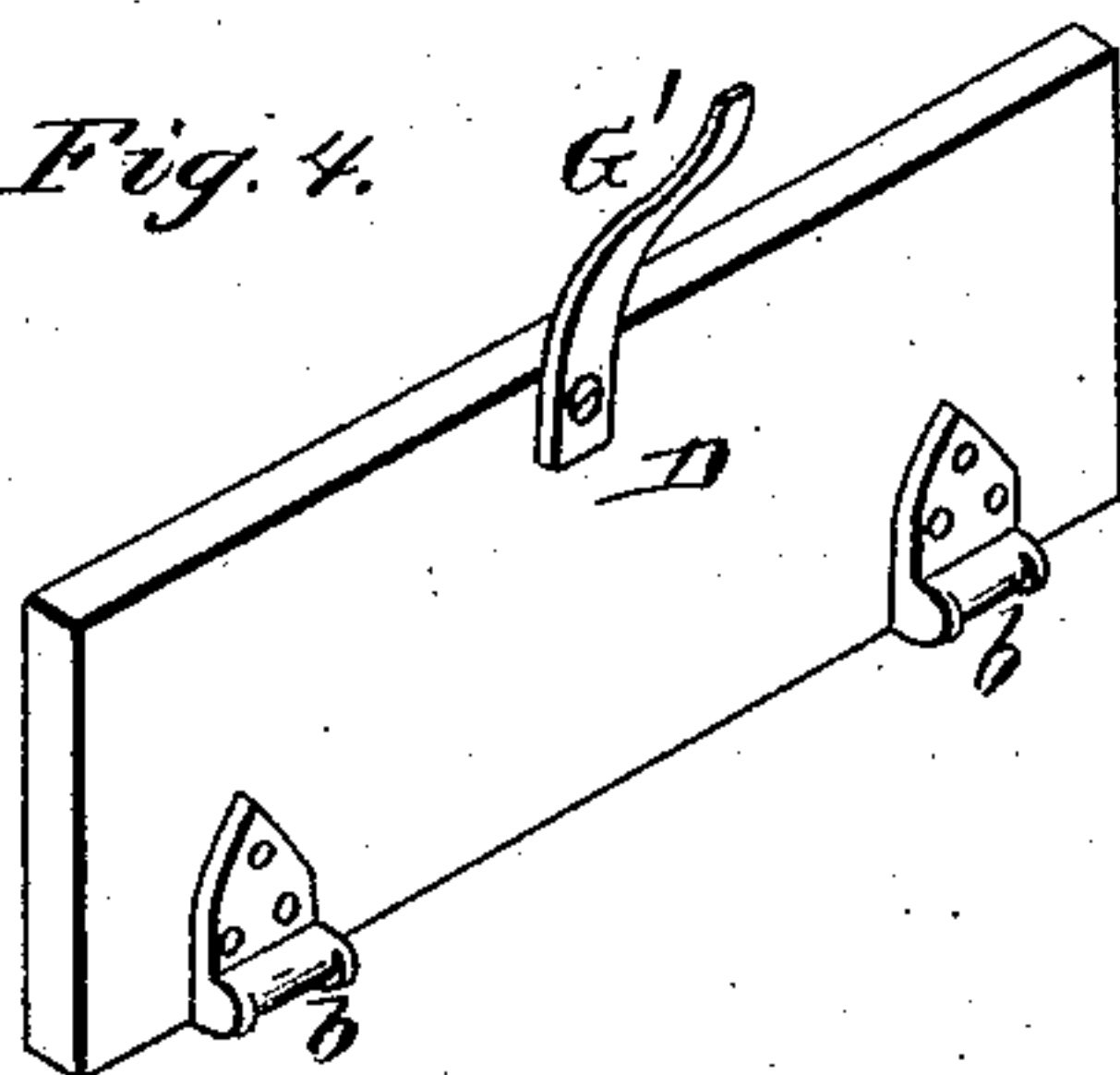


Fig. 4.



WITNESSES

Henry W. Miller
C. L. Evers.

INVENTOR

J. W. Spangler,
B. F. Reich,
per Charles Mason
Attorneys

UNITED STATES PATENT OFFICE.

JACOB W. SPANGLER AND BENJAMIN F. REICH, OF YORK, PENNSYLVANIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **157,237**, dated November 24, 1874; application filed August 12, 1874.

To all whom it may concern:

Be it known that we, JACOB W. SPANGLER and BENJAMIN F. REICH, of York, in the county of York, and in the State of Pennsylvania, have invented certain new and useful Improvements in Washing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in certain improvements upon the washing-machine for which Letters Patent No. 151,447 were granted to us May 26, 1874, as will be herein-after more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of our improved washing-machine. Fig. 2 is a transverse vertical section of the same through the line *xx* of Fig. 1. Figs. 3 and 4 are detached views of certain parts thereof.

A represents the washing-machine box, with convex part *h* on its bottom. D and E are the two wash-boards, constructed substantially the same as in our former patent above referred to. The wash-board D is supported by means of two end springs, G G, and one center spring, G'. The end springs G G are fastened to the interior of the side of the box, and their lower ends bent in hook form, as shown in Fig. 3 at *a*. The hooks *a* catch or hook upon castings *b b*, secured on the back

of the wash-board at the lower edge, as seen in Fig. 4. The middle spring G' is fastened to the back of the wash-board D at or near the upper edge, and the upper end of said spring is sprung under a button or casting, *d*, attached to the side of the box, said button or casting being recessed on the under side at the lower edge for that purpose, as shown in Fig. 2.

By this construction and arrangement of the springs, the wash-board can be easily attached and detached at pleasure, and while the machine is in operation it is held in better position to the advancing clothes.

The wash-board E is operated, substantially as described in our former patent above referred to, by means of the pivoted arms H and I, connected to brackets B, E, and *f*, as shown in Fig. 2.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination, with the box A and wash-board D, of the end springs G G, forming hooks *a a* at their lower ends, the castings *b b*, middle spring G', and notched or recessed casting *d*, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 1st day of August, 1874.

JACOB W. SPANGLER.
BENJAMIN F. REICH.

Witnesses:

GEORGE M. SHETTER,
A. W. SHETTER.