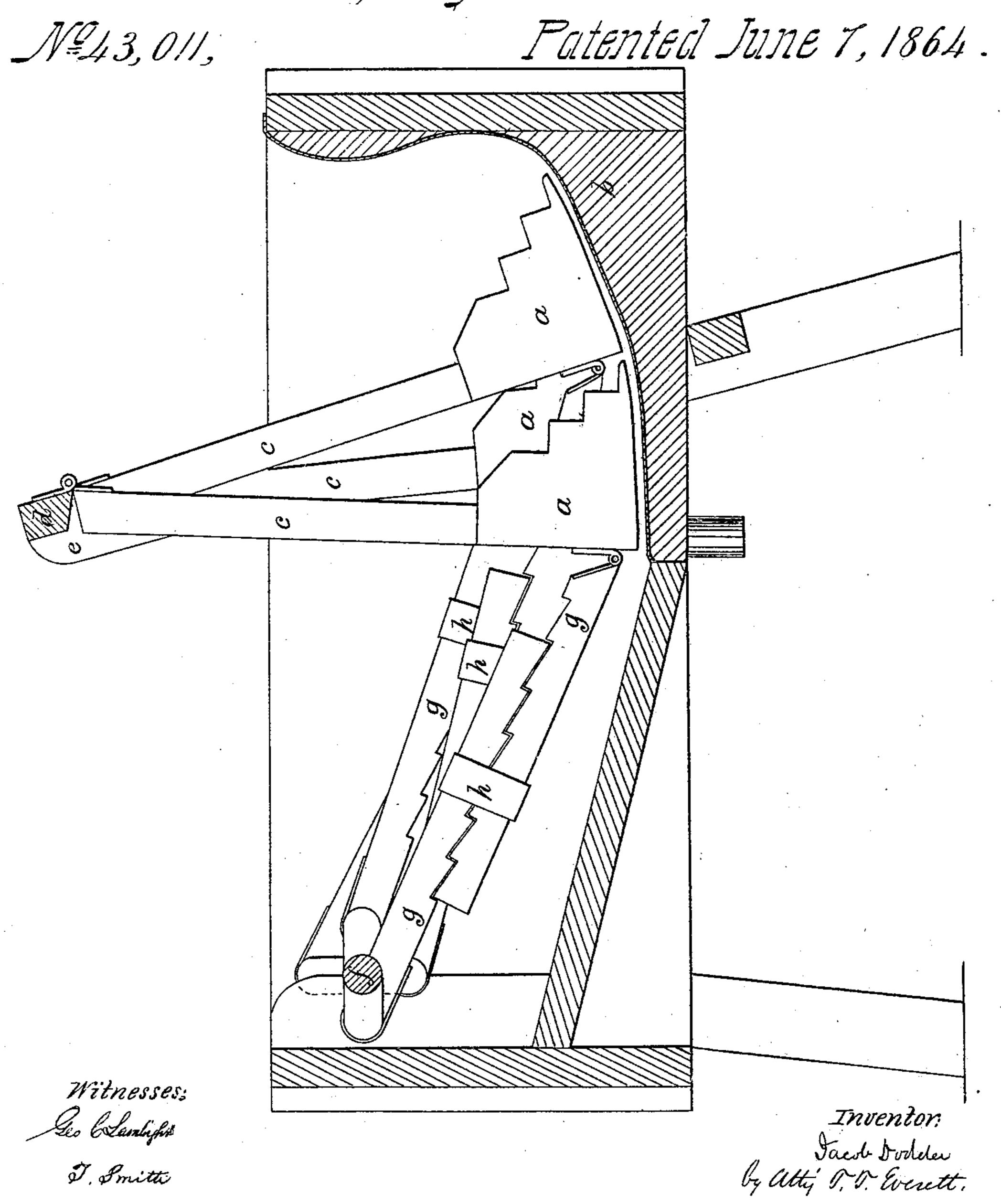
I Maller,

Mashing Machine,



United States Patent Office.

JACOB DODDER, OF WASHINGTON, IOWA.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 43,011, dated June 7, 1864.

To all whom it may concern:

Be it known that I, JACOB DODDER, of Washington, in the county of Washington and State of Iowa, have invented a certain new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters and marks thereon.

As is shown by the drawing forming part of this specification, my improvement relates to that kind of a washing-machine wherein beaters a have a reciprocating motion within a box, b, the beaters being affixed to arms c, which are hinged at their upper ends to a cross-bar, d, and the cross-bar attached to side bars, e, secured to the sides of the box.

The drawing represents the box with that side to which the crank-wheel of the crank-shaft is affixed removed.

The beaters are operated by a crank-shaft, f, moved by hand or other power, through the intervention of connecting-rods g, which are hinged to the back of the beaters. These connecting-rods are made up of two pieces, the adjoining surfaces of which are toothed or notched, as shown by the drawing, the two pieces being held together by clamping-collars h. This allows of the connecting rods being lengthened or shortened, and thus, the travel

of the beaters being diminished or increased, to adapt the machine to different quantities and qualities of articles to be washed.

It will be noticed that the beaters operate upon the clothes only on the advancing movement, and that as the clothes or other articles are pressed forward they will be crowded up into a recess formed by giving this end of the interior of the box an S-shaped line, *i*, this crowding occurring at the extreme throw of the crank, and when the greatest pressure is exerted, so that thorough and perfect washing will easily be effected.

The outlet-tube of the machine is marked j. The several parts of this machine may be made in the manner and of the materials generally used in making washing-machines.

What I claim as new in this class or kind of washing-machines, and desire to secure by Letters Patent, is—

The S-shaped line *i* on the interior surface, for subjecting the clothes to the greatest pressure at the extreme throw of the crank, in combination with beaters that are operated by the adjustable connecting rods.

This specification signed this 25th day of March, 1864.

JACOB DODDER.

Witnesses:

L. F. SHERMAN, DANIEL W. HOUGH.