(No Model.)

W. H. IVENS.

POTTER'S MACHINE.

No. 367,525. Patented Aug. 2, 1887.

Fig. 1.

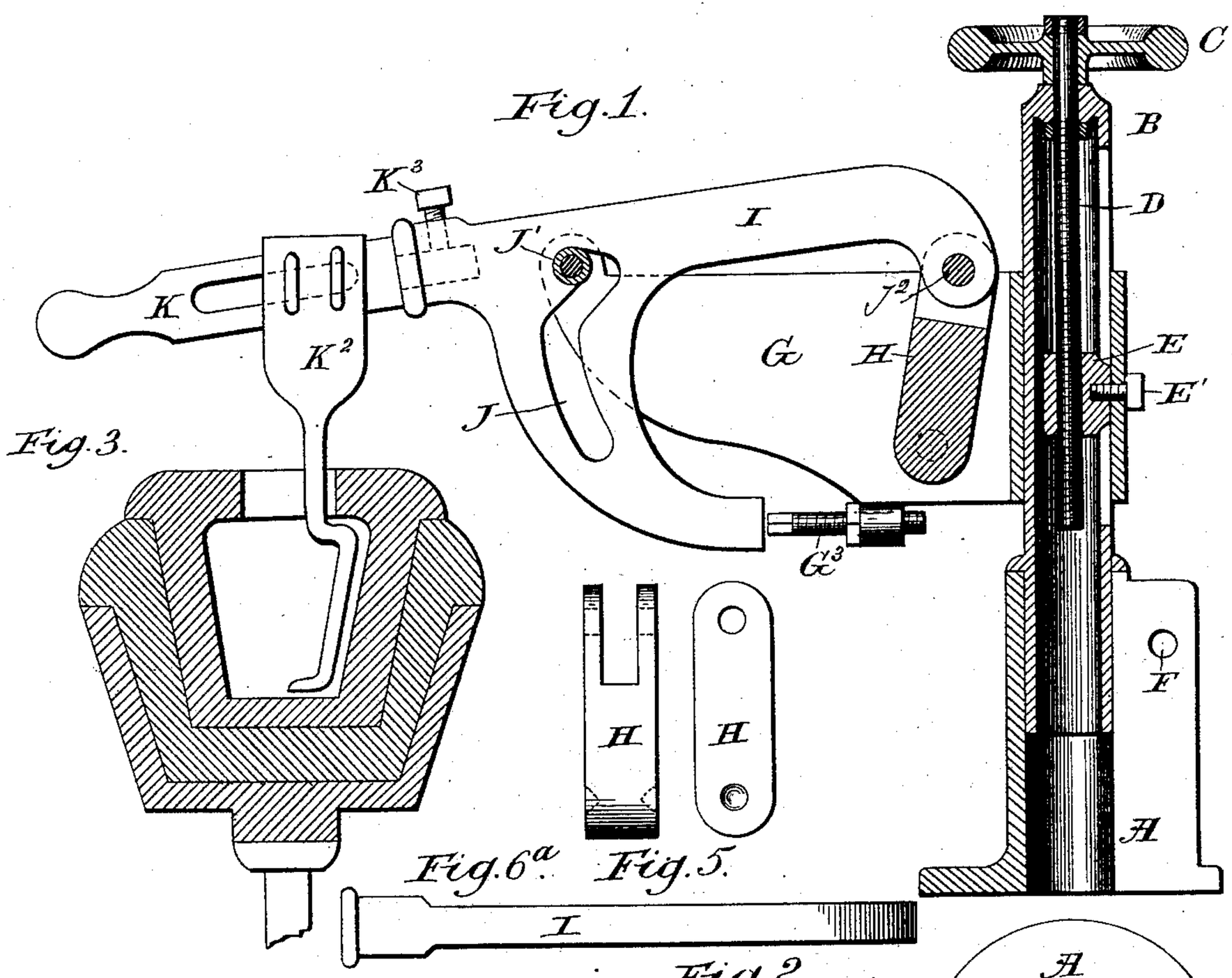


Fig. 3.

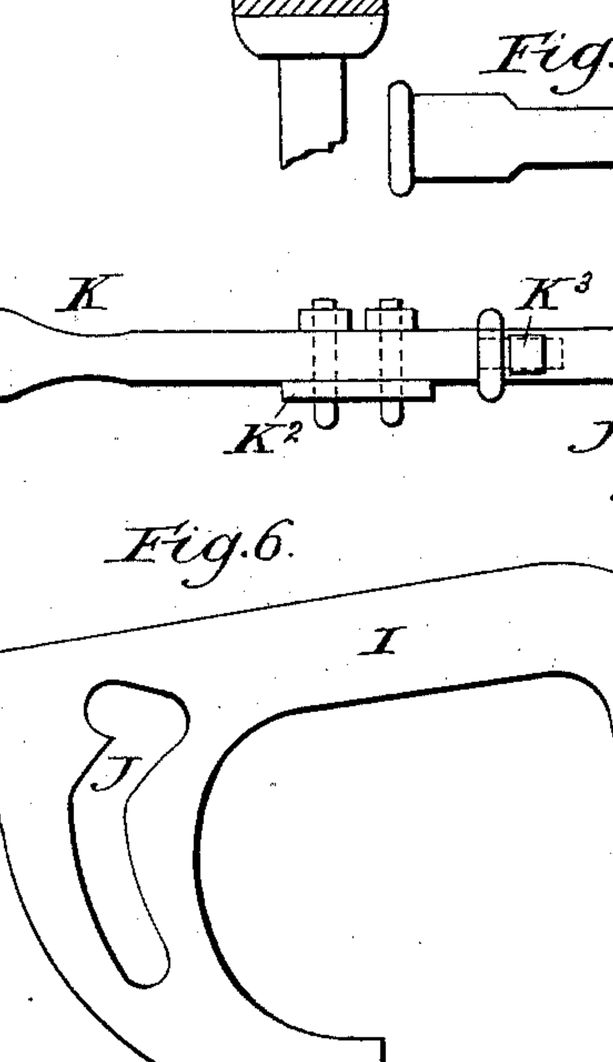


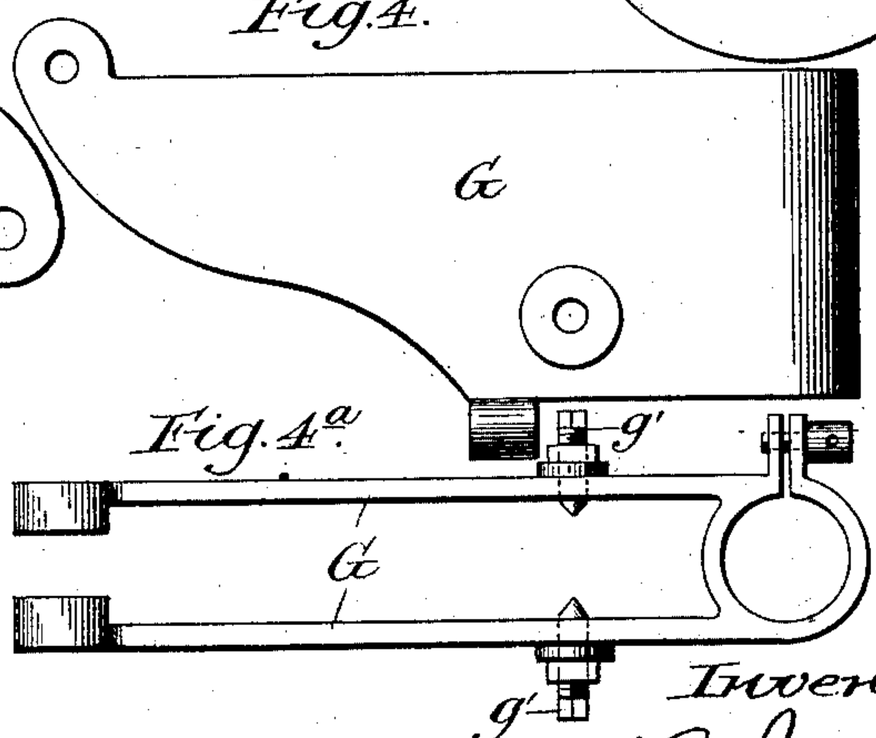
Fig. 6a.

Fig. 5.

Fig. 2.

Fig. 4.

Fig. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

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POTTER'S MACHINE.

SPECIFICATION forming part of Letters Patent No. 367,525, dated August 2, 1887.

Application filed December 9, 1886. Serial No. 221,135. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. IVENS, a citizen of the United States, residing at Chambersburg, in the county of Mercer and State of New Jersey, have invented a new and useful Potter's Machine, of which the following is a specification.

My invention relates to improvements in that class of pottery-machines ordinarily used in conjunction with a potter's wheel or jigger, wherein the forming-blade is attached to and operated by a hinged lever.

This device, universally adopted by potters for jiggering purposes on account of its simplicity and rapidity of working, is in its present form restricted to the manufacture of wide-mouthed vessels.

The object of my improvement is to adapt an apparatus of this class to the manufacture of narrow-necked vessels also.

It consists in converting the circular motion of the sweep into rectilinear, angular, or a combination of all three motions, as may be desired, by means of a former-slot operated in conjunction with a laterally-movable lever guiding the forming-blade in its traverse in and out of the mold. The former-slot shown in the drawings is of proper form for making bottles, where the traverse is approximately in a perpendicular line, with a sudden thrust forward at the bottom point to work under the shoulder of the bottle. Its principal feature is the forming-slot, which, by the suspension of the lever, so as to provide a lateral motion, causes the forming-blade to follow the line of traverse laid out for it in operating. This forming-slot can be infinitely varied in shape, so as to adapt it to the manufacture of any particular class of ware. I preferably hinge the lever to a link suspended in the arm to obtain the necessary lateral motion, although it can be suspended in journals fitted to slots in arm, having sufficient end-play to furnish the necessary lateral motion and yet be within the scope of my invention.

I accomplish the object of my invention by means of the mechanism shown in the accompanying drawings, wherein—

Figure 1 represents a vertical longitudinal section of my machine. Fig. 2 is a plan of the same. Fig. 3 is a vertical section of a jigger with incased bottle-mold. Fig. 4 is an elevation of the adjustable arm G, carrying lever. Fig. 4^a is a plan of the same. Fig. 5 is a front and side elevation of the link. Fig. 6 is a side elevation of lever, showing former-slot. Fig. 6^a is a plan of the same.

Similar letters refer to similar parts throughout the several views.

A, Fig. 1, is the base, in which column B is snugly fitted and clamped by stud F.

B is a hollow column of cylindrical form, its lower part fitted snugly to base A. Its upper part is fitted to arm G and contains a journal for screw D. It is also provided with a vertical slot, in which the nut E is fitted to adjust and key arm G.

C is a hand-wheel keyed to screw D to rotate it and adjust the arm G.

D is a screw fitted to column B and nut E.

E is a nut secured in the bore of arm G by bolt E′ and fitted to screw D.

F is a stud for clamping column B to base A.

G is the arm fitted to column B, and clamped, after adjusting, by stud G^2. It is fitted with two center-screws, g', between which link H is suspended, fitted with journals for bolt j^2.

G^3 is a stop-screw for lever I.

H is a link suspended between centers g' in arm G. Its upper part is jointed to lever I, giving the oscillation required for operating the former-slot J.

I is a lever jointed to link H, fitted with the former or regulating slot J and recess K′ to receive handle K.

J is the regulation or former slot. It is fitted freely to friction-wheel J′, which rotates freely on bolt J^2, fitted to arm G.

K is a detachable handle fitted in recess K′ in lever I and secured by set-screw K^3. The forming-blade K^2 is secured to and operated by it.

Having now described my invention, its operation is as follows: A batch of clay is worked into the form of a hollow cylinder with bottom end closed, and then thrust into the mold and rudely shaped to it by hand. The jigger is now put in motion. The operator presses han-

dle K hard down until lever G is stopped by the screw G^3 at the low point. The sweep K^2, previously set back from mold to allow the thickness for vessel, will now have rough-shaped the vessel. The blade is now worked out clear of the mold and the surplus clay wiped from it, when it is again pressed down upon stop. This operation is repeated until the desired finish of the vessel is attained, when the lever is drawn back from under the shoulder of the vessel and the counter-balance is allowed to take it up to the top stop. The mold is now taken out and to the hot room, another one is inserted, and the operation repeated, and so on *ad infinitum*.

What I desire to claim and secure by Letters Patent of the United States is—

The former or regulating slot J, in combination with link H, lever I, arm G, and column B, substantially as and for the purpose specified.

WM. H. IVENS.

Witnesses:
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