

C. H. WIGHT.
Bottle-Filling Machines.

No. 156,518.

Patented Nov. 3, 1874.

FIG. III.

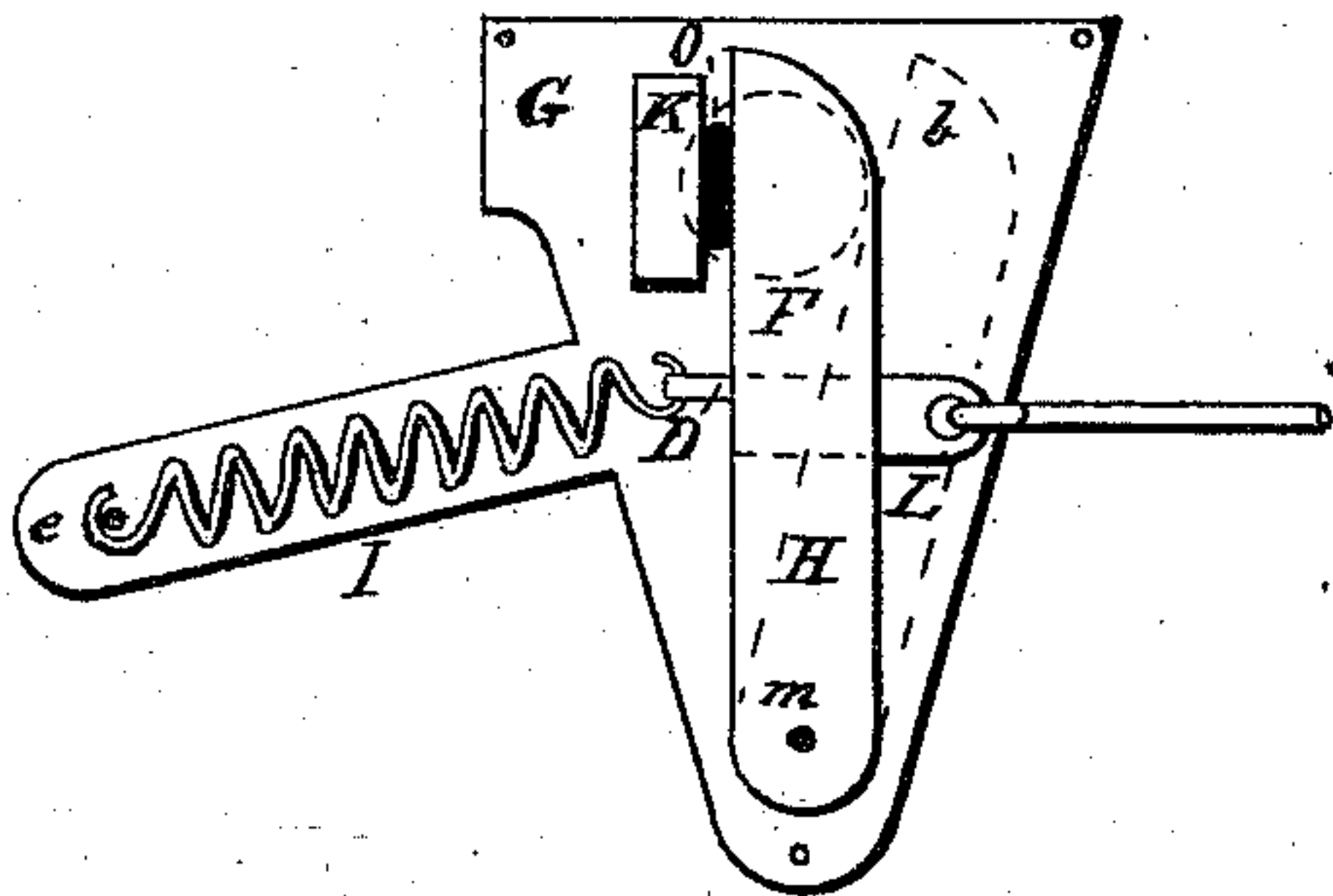


FIG. I.

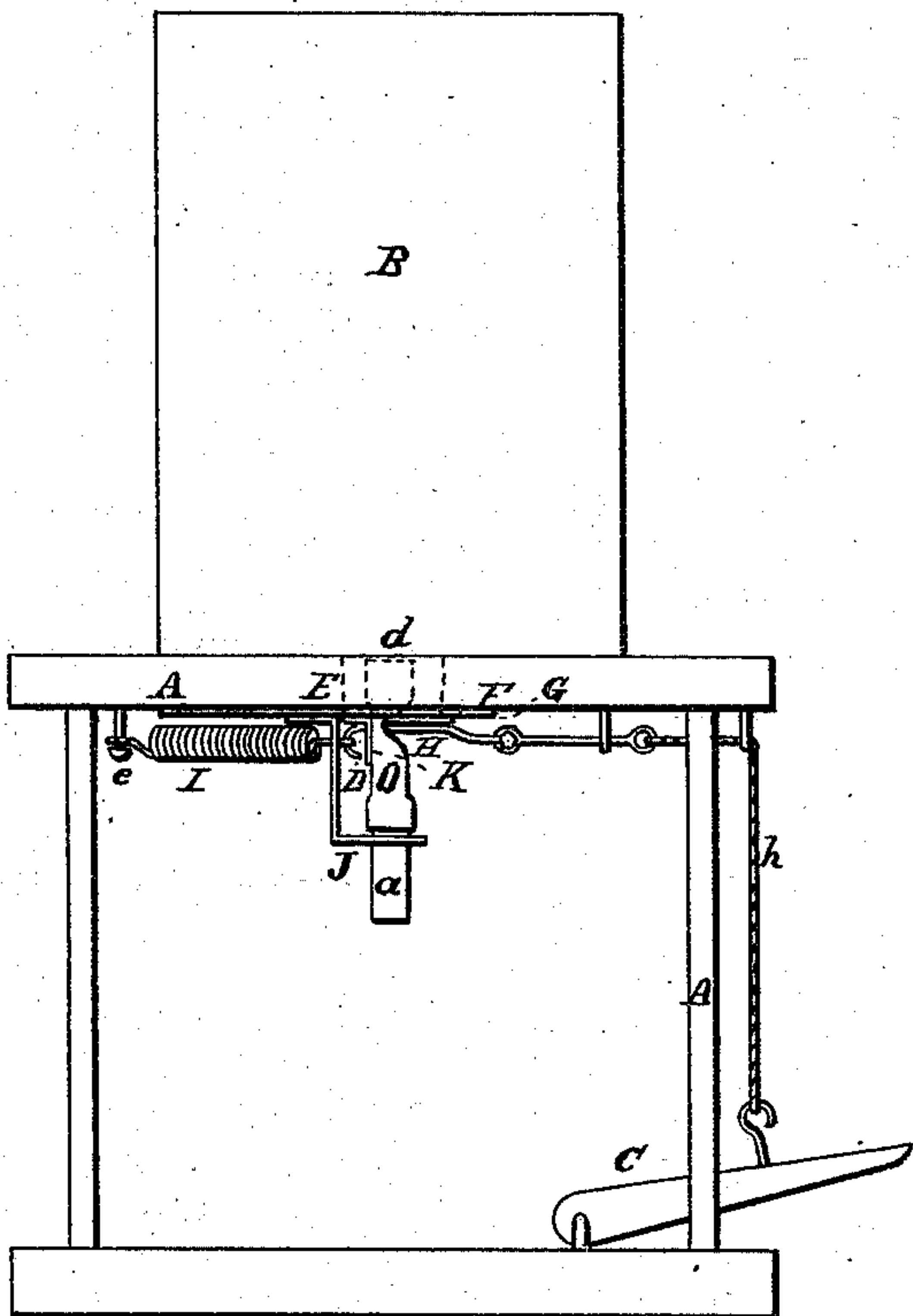
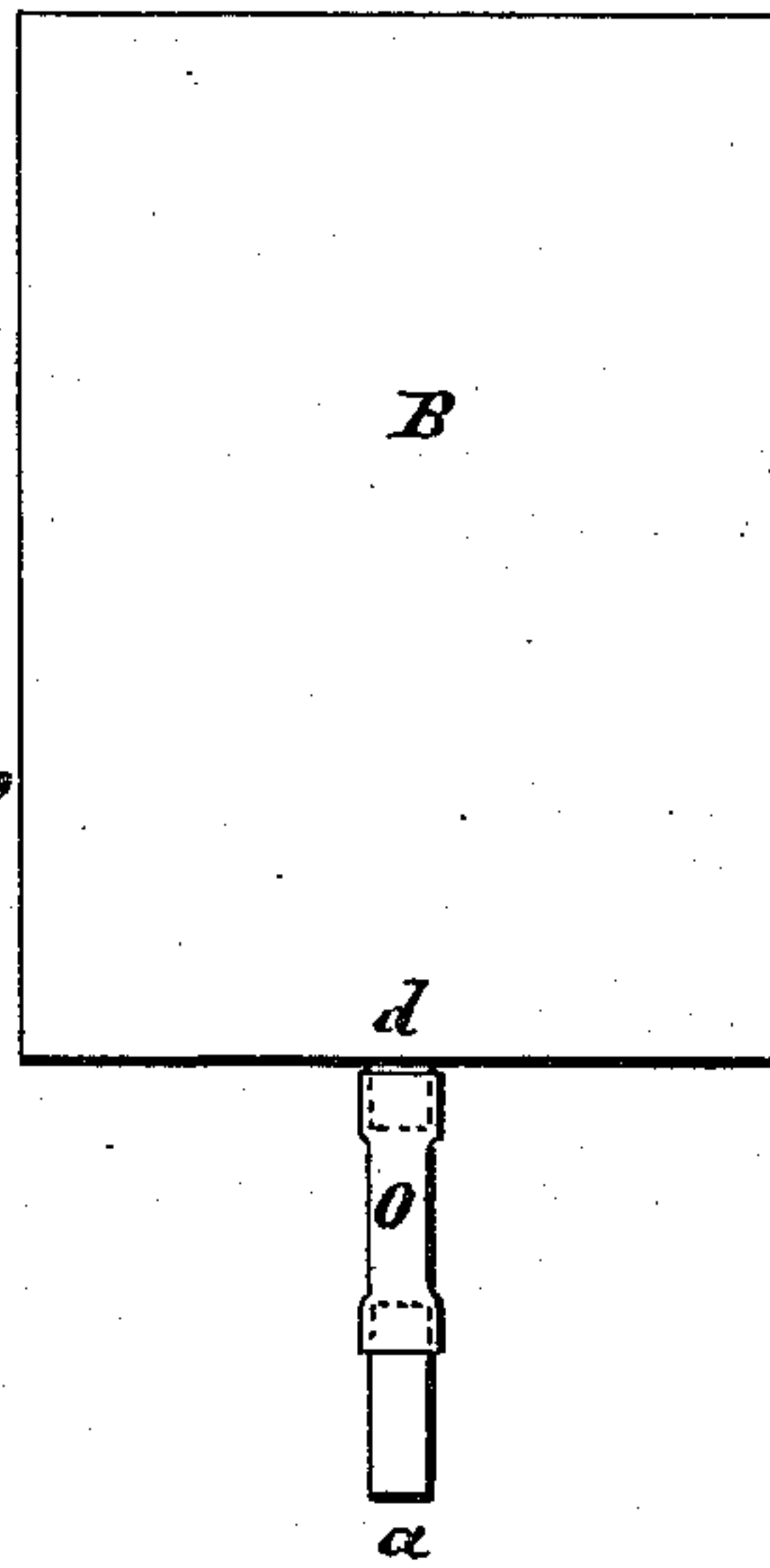


FIG. II.



WITNESSES

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IMPROVEMENT IN BOTTLE-FILLING MACHINES.

Specification forming part of Letters Patent No. **156,518**, dated November 3, 1874; application filed October 12, 1874.

To all whom it may concern:

Be it known that I, CHARLES H. WIGHT, of Baltimore, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Bottle-Filling 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 of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the arrangement and construction of a machine for filling bottles with liquid matter of every description, except those that are charged with gas or of an effervescent nature, whereby bottles are filled with greater rapidity than by the usual process, without waste of material or breakage of bottles.

To enable those skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a view of the machine complete. Fig. 2 is a view of the tank or reservoir; and Fig. 3 is a view of the compression cut-off detached.

A A, Fig. 1, represent the stand or frame of the machine upon which the tank B rests, which frame may be constructed of wood or metal. Through the top of frame A A, at any suitable point, an aperture or hole, E, is made, through which aperture the india-rubber tube O, attached to tank B, passes. B, Fig. 2, represents the tank or reservoir for holding the liquid matter to be bottled, and may be constructed of sheet metal or wood, of any desired form. In the bottom of the tank a nozzle or tube, *d*, is soldered or fastened therein, or the same may be arranged to screw thereon. Attached to nozzle *d* is a tube, O, of india-rubber or any equivalent material, which tube is firmly held upon the nozzle by the pressure of the india-rubber. In the end of tube O a tube or mouth-piece, *a*, is inserted for the purpose of entering the mouth or neck of the bottle to be filled. On the under side of the top of frame A A, Fig. 1, and over the aperture E is attached the mechanical device, as shown in Fig. 3, and termed a compression cut-off, of which G is the plate or frame thereof, having a blade, H, pivoted thereon at *m*, so that the blade will move freely over the face of plate G in the direction

shown by dotted lines *b*. The blade H is connected with the spiral spring I by the hook D, and the spring I is secured to plate G by the pin or rivet *e*. The object of blade H is to compress the india-rubber tube O, as shown in Fig. 3. K is a stop attached to plate G, projecting a short distance over aperture F in plate G, so that the tube O, when in proper position, will rest or bear against stop K, and is compressed against the stop by blade H. F is an aperture through plate G, through which the tube O passes. L is an eye or hook attached to blade H, and connects the same with treadle C by pulley *h*, Fig. 1. J is a bracket for holding tube *a* in a vertical position, and may be attached either to the frame A A, Fig. 1, or the plate G, Fig. 3.

By reference to Fig. 1 the operation of the machine is explained thus: The tank or reservoir B is adjusted to frame A A by withdrawing the blade H from the stop K by the treadle C, or by the hand, and then passing the tube O through the apertures in frame A A and plate G, so that the tube *a* will pass into the aperture in bracket J. By releasing the blade H it is acted upon by spring I and is drawn upon tube O, compressing same against stop K, and thus closing the aperture through tube O and preventing the flow of liquid matter contained in tank B through tube O, so that the operator may, by the treadle or any other arrangement of a similar character, discharge the liquid from the tank B into the bottles with great rapidity, with but little waste of the material or breakage of bottles.

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

1. The combination of tank B, having tube *d* O *a*, with frame A A and compression cut-off H K, substantially as and for the purpose set forth.

2. The compression cut-off, having a blade, H, stop K, and spring I, operating in the manner described, and specifically for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

CHARLES H. WIGHT.

Witnesses:

ANDREW J. MILLER,
GEORGE E. MILLER.