

(No Model.)

J. J. SEIWERT.

BEER PUMP.

No. 338,560.

Patented Mar. 23, 1886.

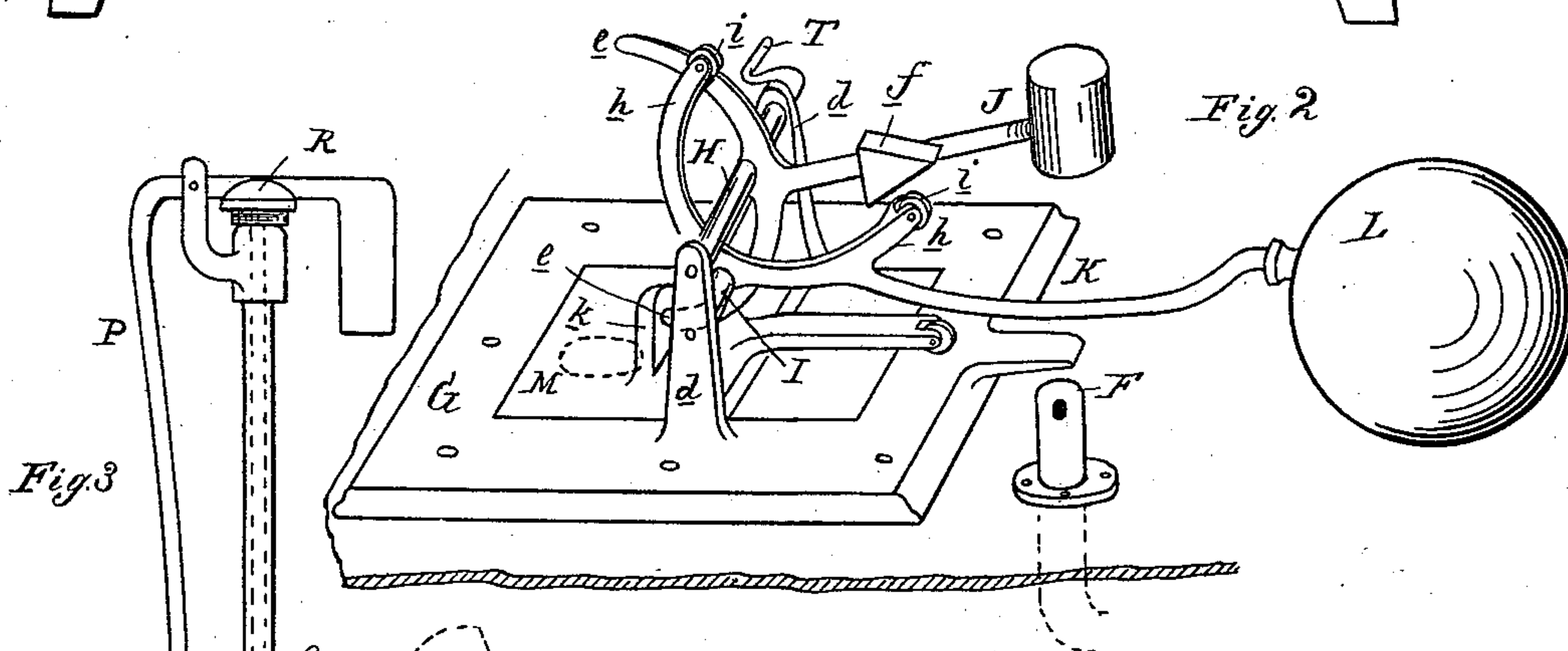
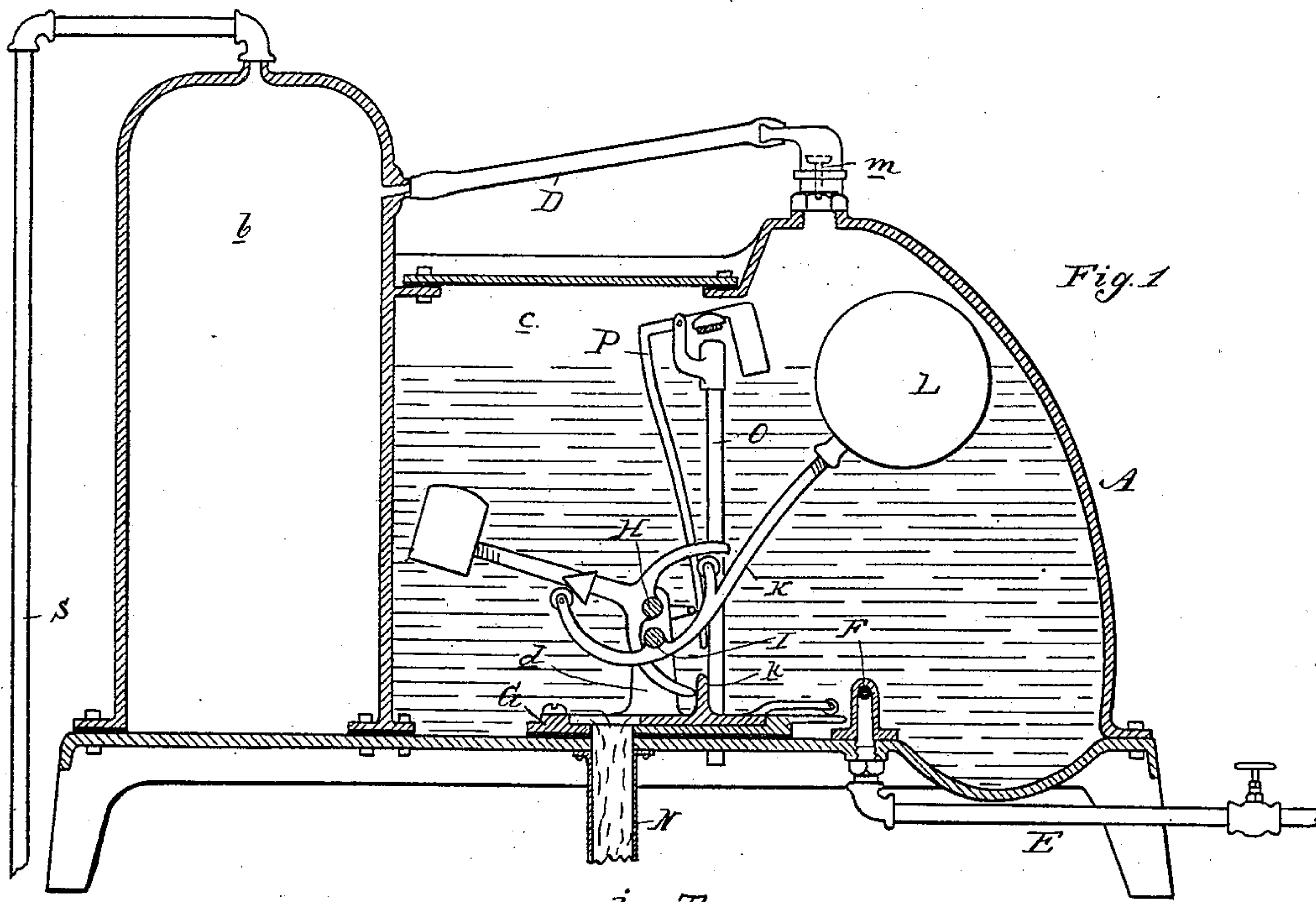
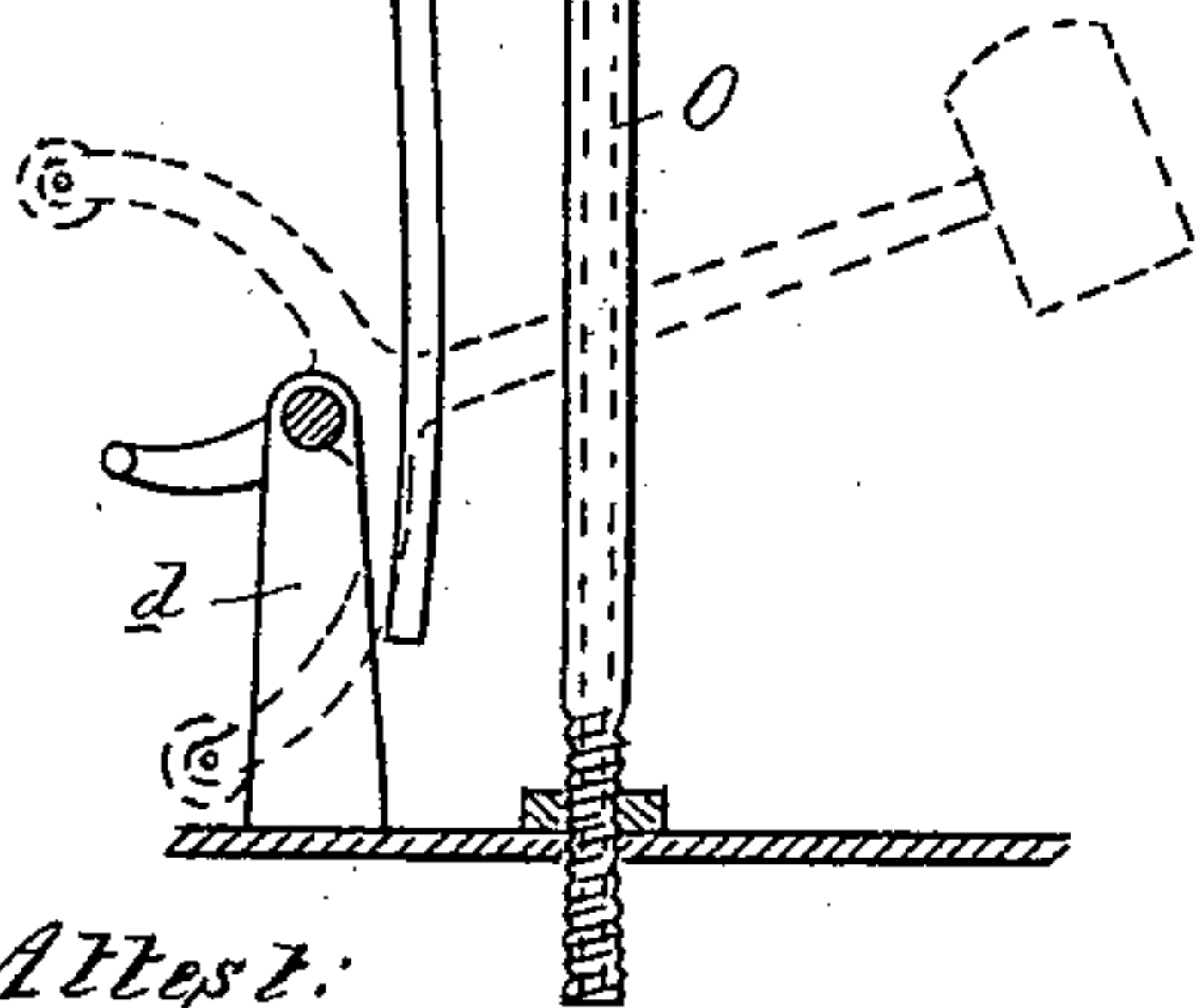


Fig. 3



Attest:

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# UNITED STATES PATENT OFFICE.

JOHANN JOSEPH SEIWERT, OF DETROIT, MICHIGAN.

## BEER-PUMP.

SPECIFICATION forming part of Letters Patent No. 338,560, dated March 23, 1886.

Application filed November 16, 1885. Serial No. 182,994. (No model.)

*To all whom it may concern:*

Be it known that I, JOHANN JOSEPH SEIWERT, of Detroit, in the county of Wayne and State of Michigan, having invented new and  
5 useful Improvements in Beer-Pumps; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to certain new and novel improvements in devices for automatically sustaining pressure in a beer-keg, for the purpose of forcing the contents of the keg to the discharge-faucet.

15 The invention consists in the peculiar construction of mechanism arranged to be operated by water-pressure, and in the peculiar construction, arrangement, and combinations of the various parts, all as more fully herein-  
20 after set forth.

Figure 1 is a central vertical section of my device. Fig. 2 is a perspective of the mechanism employed for opening and closing the water-discharge pipe. Fig. 3 is a detail in  
25 elevation.

In the accompanying drawings, which form a part of this specification, A represents a suitable water-tight vessel divided into two compartments—an air-compression chamber, *b*,  
30 and a water-chamber, *c*, a pipe, D, in which is placed a check-valve, *m*, connecting these two chambers, as shown.

E is a water-supply pipe, which discharges water under pressure into the compartment *c*  
35 through a nipple, F, the discharge-opening of which is somewhat smaller than the bore of the supply-pipe.

G is a base-plate, secured in the bottom of the chamber *c*, and is provided with the standards *d*, in which are properly journaled the rock-shafts H and I. To the shaft H is rigidly secured the weighted lever J, which is provided with the arms *e* and the triangular stud *f*. To the shaft I is secured the lever K,  
40 which carries a ball-float, L, and is provided with tappets *h*, in the ends of which are secured friction-rollers *i*.

In the bed-plate G is arranged a slide-valve plate, M, provided with a stud, *k*, upon its  
50 upper face, the office of such valve-plate being to close or disclose the water-discharge pipe N, as hereinafter described.

O is a vent-pipe, which projects through the bottom of the compartment *c*, its upper end carrying an arm or bracket, in which is  
55 pivoted a weighted lever, P, provided with a valve, R, for closing the end of the pipe O.

S is a pipe connecting the chamber *b* with the keg.

In practice, the parts being constructed and  
60 arranged substantially as described, and the pipe S connected with the keg, the normal positions of the levers are as shown in Figs. 2 and 3, both the valves M and R being closed. Water now being turned on, it rushes into the  
65 chamber *c* from the supply-pipe. The float L gradually rises until one of the tappets *h* comes in contact with the stud *f* on the lever J, forcing such lever to a vertical position and past the center of its pivotal point, when by  
70 gravity it quickly falls to the position shown in Fig. 1. One of its arms *e* striking against the stud *k* forces the slide-valve M in advance of it, disclosing the discharge-pipe N, while at the same time a crank-arm, T, on the shaft  
75 H strikes against the longer arm of the lever P, thus raising the valve R from its seat upon the pipe O. This allows the water to escape while air is drawn in through the vent-pipe, the check-valve *m* in the pipe D preventing  
80 the escape of the air from the chamber *b*. As the water is entering the chamber *c*, it forces the air through the pipe D into the compression-chamber *b*, and thence into the keg, until the pressure of the confined air is sufficient to  
85 overcome the water-pressure, thereby stopping a further inflow of water. As beer is drawn from the keg, water will again enter the chamber *c*, compelling the air to again enter the keg, and so on until the float has raised  
90 far enough to compel the parts to assume the positions above described. The float L, being somewhat heavier than the weight on the lever J, falls as the water discharges through the pipe N, causing the parts to assume the  
95 positions shown in Fig. 2, and closing the valves M and R, when the operating of the parts is repeated, thus keeping the keg charged with air under a sufficient pressure to compel a discharge of the entire contents of  
100 the keg.

What I claim as my invention is—

1. In a beer-pump, the combination, with the chambers *b c*, pipe D, connecting the same,

supply-pipe E, discharge-pipe N, base-plate G, having aperture, as shown, and the slide-valve M, provided with projection *k*, and working in said base-plate, of the shafts H  
5 I, journaled in bearings on said base-plate, weighted lever J on the shaft H, and provided with triangular stud *f*, and the lever K, having arms *h h*, provided with rollers *i i*, and carrying the float L, all substantially as and  
10 for the purpose specified.

2. In a beer-pump, the combination of the chambers *b* and *c*, pipes D, E, and N, base-plate G, standards *d*, arising therefrom, rock-shafts H

I, journaled in said standards, crank-arm T on the shaft H, levers J and K, secured to shafts H 15 I, respectively, slide-valve M, working in said base-plate, with the pipe O, lever P, actuated by the crank-arm T, and valve R, carried by said lever P, when constructed, arranged, and operating substantially in the manner and for 20 the purposes specified.

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Witnesses:

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