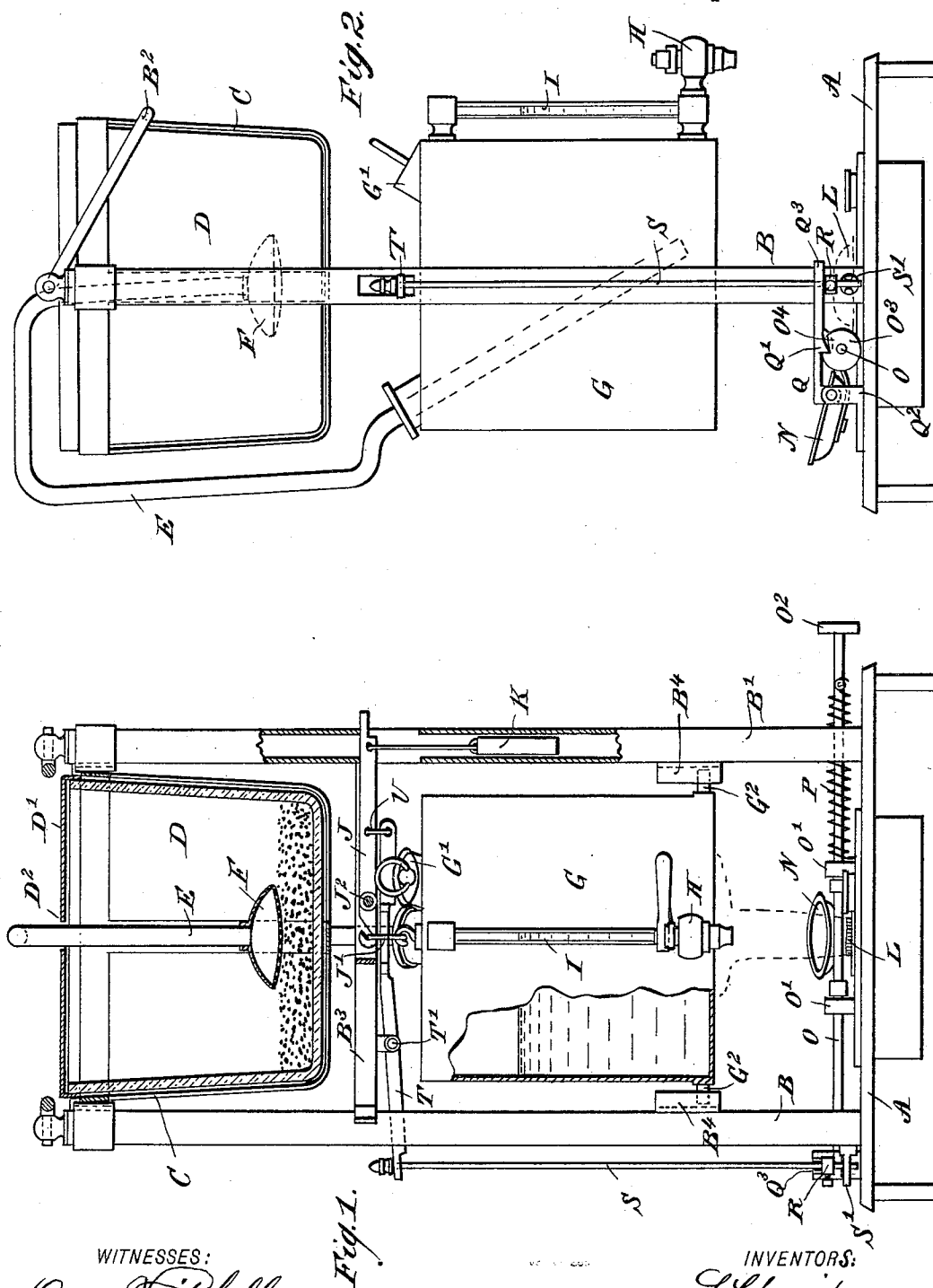


(No Model.)

L. & A. CHRONIK.
MACHINE FOR INFUSING COFFEE OR TEA.

No. 459,833.

Patented Sept. 22, 1891.



WITNESSES:

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Fig. 1.

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UNITED STATES PATENT OFFICE.

LUDWIG CHRONIK AND AUGUST CHRONIK, OF BROOKLYN, NEW YORK.

MACHINE FOR INFUSING COFFEE OR TEA.

SPECIFICATION forming part of Letters Patent No. 459,833, dated September 22, 1891.

Application filed December 18, 1890. Serial No. 375,092. (No model.)

To all whom it may concern:

Be it known that we, LUDWIG CHRONIK and AUGUST CHRONIK, both of Brooklyn, in the county of Kings and State of New York, have
5 invented a new and Improved Machine for Infusing Coffee, Tea, &c., of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved machine designed for infusing coffee, tea, and other similar substances, and which is simple and durable in construction and entirely automatic in operation.

The invention consists of a boiler hung on
15 a counterbalanced lever and a lamp-extinguisher controlled from the said lever.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

25 Figure 1 is a front elevation of the improvement, with parts in section, and Fig. 2 is a side elevation of the same.

The improved machine is mounted on a suitably-constructed base A, on which are
30 erected two posts B and B', preferably made hollow and connected with each other at their upper end by a bail B³, which serves to move the machine conveniently.

On the upper ends of the posts B and B' is
35 secured a skeleton frame C, in which is held a receptacle D, adapted to contain the ground coffee, tea, or other substances to be treated. Into this receptacle D extends the upper end of a pipe E, provided within the receptacle
40 D with a rose F to prevent the ground coffee from passing into the pipe E. The latter extends loosely through a slot D² in the removable cover D' of the receptacle D and passes at its lower end into the boiler G to within a
45 short distance of the bottom thereof.

The boiler G is provided with an inlet G', adapted to be closed by a suitable cap, which, when removed, permits of introducing the necessary amount of water into the boiler G.
50 The latter is provided near its lower end with a faucet H for drawing off the coffee, tea, &c.,

and is further provided with a gage I, indicating the level of the water in the boiler. The boiler G is connected at its top by a link J' with the inner end of a lever J, fulcrumed
55 at J² on a bracket B³, connecting the two posts B and B' with each other. The outer end of the lever J extends through a slot in the post B' and supports a weight K, preferably extending in the hollow post B'. On the
60 side of the boiler G are arranged the pins G², extending into vertically-arranged guideways B⁴, formed or secured on the insides of the posts B and B' and serving to guide the boiler G in its up-and-down motion.

In the base A, directly below the boiler G,
65 is held a lamp L, of any approved construction, serving to heat the water in the boiler G. The flame of the lamp L is automatically extinguished, as hereinafter more fully described, by an extinguisher provided with a
70 cap N, adapted to pass over the burner of the lamp L. The cap N is secured on a shaft O, extending longitudinally in the rear of the posts B and B' and mounted to turn in suitable
75 bearings O', secured on top of the lamp L. A spring P is coiled on one end of the shaft O and is secured by one end to one of the bearings O' on the lamp L and at its
80 other end to a pin of the shaft O. The spring P has a tendency to turn the shaft O in such a direction as to move the cap N over the burner of the lamp L in order to extinguish
the flame. The shaft O is provided at one
85 extreme end with a knob or handle O² for conveniently manipulating the shaft, and the other end of the said shaft is connected with a tripping device controlled from the lever J, supporting the boiler G. This tripping device
90 is provided with a disk O³, secured on the shaft O and provided in its periphery with a notch O⁴, adapted to be engaged by a
lug Q', projecting from the under side of a lever Q, fulcrumed at Q² on a bracket secured
95 to the base A. When the shaft O has been turned to move the cap N into a rear-most position, as illustrated in Figs. 1 and 2, then the spring P has been compressed and the lug Q' has dropped into the notch O⁴, so
100 that the disk O³, as well as the shaft O, with its cap N, are locked in position. The free end of the lever Q is formed with a fork Q³,

adapted to be engaged at the under side by a collar R, held adjusted by means of a set-screw or other device on a rod S, passing through the fork Q³ of the lever Q. The rod
 5 S extends vertically and has its lower end guided in a fork S', projecting from the post B. The upper end of the rod S is connected with a lever T, passing through a slot in the post B and fulcrumed at T' on the bracket
 10 B³, previously mentioned. The inner end of the lever T is pivotally connected by a short link U with the lever J at a point between the fulcrum J² and the connection of the weight K with the said lever.

15 The operation is as follows: When the several parts are in the position shown in Figs. 1 and 2 and the ground coffee, tea, or other substance has been placed in the receptacle D and the boiler has been filled with the necessary amount of water, then the weight of the
 20 boiler G, in acting on the lever J, causes the free end of the latter to spring upward until the free end reaches the end of the slot in the post B', as illustrated in Fig. 1. When the operator now ignites the lamp L, heat emanating from the latter heats the water in the boiler G, so that steam is generated, which when it reaches a sufficient pressure acts on the remaining water and forces the latter
 30 through the pipe E of the rose F in and through the coffee-grounds, tea, &c., in the receptacle D. As soon as the water is thus discharged from the boiler G the weight K counterbalances the boiler G to its direct connections, so that the weight K sinks, while the boiler
 35 G rises. This movement of the lever causes a swinging of the lever J, which, by its connection with the lever T, swings the latter, so that the outer end of the said lever T rises, thereby moving the rod S in the same direction. The upward movement of the rod S causes the collar R to lift the lever Q, so that the projection Q' is disengaged from the notch
 40 O⁴ of the disk O³, and the shaft O is thus released. The action of the spring P now causes the turning of the shaft O, so that the cap N passes suddenly over the burner of the lamp L, thus extinguishing the flame of the latter. The steam remaining in the boiler G now condenses, so that a vacuum is formed therein,
 50 which causes the infused liquid in the receptacle D to pass through the rose F and the pipe E back into the boiler G. The coffee, tea, or other liquid is then ready for use and is drained off from the boiler G through the faucet H. Thus it will be seen that when the lamp is once lighted, as previously described, no further attention is required by the operator until the liquid is finished, as
 60 above described.

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

1. The combination, with the boiler and a
 65 counterbalanced lever supporting the boiler, of an extinguisher under the boiler and op-

erating connections extending upward from the extinguisher beyond the boiler to the said counterbalanced lever, substantially as described.

2. The combination, with the boiler and a counterbalanced lever supporting the boiler, of an extinguisher under the boiler provided with means for throwing it, a second lever under the first lever and depressed at its inner end by the downward movement of the
 75 longer end of the first-named lever, and connections between the second lever and the extinguisher for releasing it, substantially as set forth.

3. In a machine of the class described, a boiler, a counterbalancing-lever supporting the said boiler, and a lamp for heating the said boiler, in combination with a spring-actuated cap adapted to close over the burner
 85 of the said lamp, a locking device connected with the said cap, and a tripping device for the said locking device and connected with and actuated from the said counterbalancing-lever, substantially as shown and described.

4. In a machine of the class described, the combination, with a boiler and a weighted lever supporting the said boiler, of a lamp for heating the said boiler, a cap for extinguishing the said lamp, a spring-actuated
 95 shaft carrying the said cap, a locking device for holding the said shaft and cap in locked position, and a tripping device for unlocking the said shaft and connected with and actuated from the said weighted lever, substantially as shown and described.

5. In a machine of the class described, a lamp-extinguisher comprising a cap, a spring-actuated shaft carrying the said cap, a locking device for holding the said shaft in a
 105 locked position, a tripping device for unlocking the said shaft, and a lever for actuating the said tripping device, substantially as shown and described.

6. In a machine of the class described, a
 110 lamp-extinguisher comprising a cap, a spring-actuated shaft carrying the said cap, a notched disk secured on the said shaft, a lever having a lug adapted to engage the notch in the said disk, a rod provided with a collar adapted
 115 to lift the said lever, and a second lever connected with the said rod to raise the latter, substantially as shown and described.

7. In a machine of the class described, the combination, with a base and connected posts
 120 secured thereon, of a skeleton frame held on the said post, a receptacle supported in the said frame, a weighted lever fulcrumed on the said connected posts, a boiler hung on the said weighted lever and guided in the
 125 said posts, a pipe connecting the said boiler with the said receptacle, and a lamp held in the said base below the said boiler, substantially as shown and described.

8. In a machine of the class described, the
 130 combination, with a base and connected posts secured thereon, of a skeleton frame held on

the said post, a receptacle supported in the
said frame, a weighted lever fulcrumed on
the said connected posts, a boiler hung on
the said weighted lever and guided in the
5 said posts, a pipe connecting the said boiler
with the said receptacle, a lamp held in the
said base below the said boiler, and a lamp-
extinguisher adapted to extinguish the said

lamp and connected with and controlled from
the said weighted lever, substantially as is
shown and described.

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Witnesses:

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