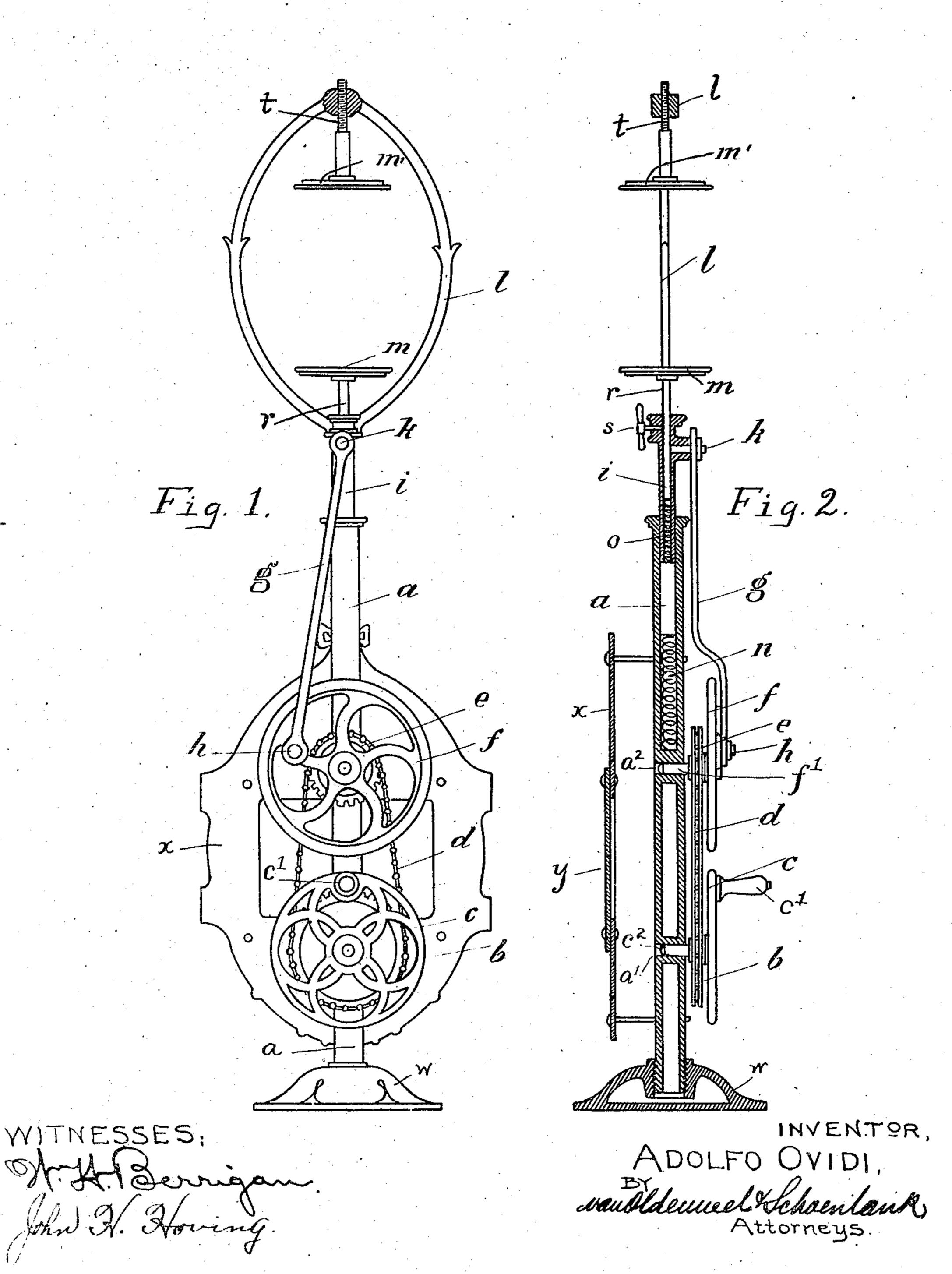
## A. OVIDI.

## MECHANICAL LIQUID BEATER. APPLICATION FILED MAR. 24, 1908.



## UNITED STATES PATENT OFFICE.

ADOLFO OVIDI, OF MILAN, ITALY.

## MECHANICAL LIQUID-BEATER.

No. 894,459.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed March 24, 1908. Serial No. 423,062.

To all whom it may concern:

Be it known that I, Adolfo Ovidi, a subject of the King of Italy, residing at No. 16 Via Colonna, Milan, Italy, have invented a new and useful Improvement in Mechanical Liquid-Beaters, a Mechanism Having the Purpose of Beating and Mashing Liquids Mechanically; and I do hereby declare the following to be a full, clear, and exact description of the same.

The present invention relates to machines for beating and mixing beverages, and the object is to provide a device which operates smoothly, economically and efficiently.

Referring to the accompanying drawings, Figure 1 is a front view of the new apparatus, and Fig. 2 illustrates a vertical section through the base, standard and frame of the same.

The device is provided with a base w, whereby it may be secured to a table or other body, and with a vertical standard having horizontal sockets,  $a^1$  and  $a^2$ , therein. The upper end of the standard is tubular to permit reciprocation of a plunger i therein. Said plunger is in the form of a tube having a closed bottom, and a coiled spring n, housed within the tubular part of the standard below the plunger, tends to keep the latter in its highest position.

The plunger forms part of and extends downwardly from a loop-like frame l which, at its top, supports a depending plate  $m^l$  adapted to engage the top or bottom of a glass or other hollow body containing the beverage to be mixed or assisting in the mixing thereof, and the vertical position of which may be adjusted by turning the same so as to have the screw t advanced or re-tracted in the upper part of the loop l.

A separate plate m is adapted to engage the bottom of the glass or pair of hollow bodies wherein the beverage is mixed, and said plate is secured above the upper end of a vertical rod r which extends downwardly into the hollow of plunger i. A coiled spring o below the rod r and housed within said hollow part of the plunger, tends to lift the same at all times. By this arrangement, the glass or glasses will be held, by the spring o, between the upper and lower plates  $m^1$  and m,

until the rod o is clamped within the plunger

i by tightening a screw s.

In order to reciprocate the plunger i, and thereby to give violent to and fro motion to 55 the glass or glasses held between plates m and  $m^1$ , I provide suitable mechanical connections. The drawings show a large sprocket wheel b (mounted upon an axial pin  $c^2$  fitting within the socket  $a^1$ ), a chain b 60 driven thereby and passing over a smaller sprocket e (mounted upon an axial pin  $f^1$  fitting within the socket  $a^2$ ) and a link g connecting, at one end, with a pin k (carried by the upper end of the plunger i) and at the 65 lower end with a pin k eccentrically mounted upon a fly-wheel f driven by the smaller sprocket e.

It will be obvious that the frame will be reciprocated once for each rotation of the fly-70 wheel f, which runs at a speed greater than that of the sprocket b driven by means of a fly-wheel c and by a handle  $c^1$  thereon; it will also be obvious that the spring n will be compressed at each downward movement of the 75 plunger, and will assist in the raising of the parts when the link g starts to move upwardly.

A metallic plate x may be secured to the standard at the side facing the purchaser of 80 the beverage, and an exchangeable advertising sign y or other plate may be secured to plate x.

What I claim is:

1. In means for beating and mixing bever- 85 ages, a standard, a frame mounted for movement therein and having a device for engaging a beverage holder and a spring tending to move said device independently of the movements of the frame, and connections for rap- 90 idly reciprocating said frame.

2. In means for beating and mixing beverages, a standard, a frame mounted for reciprocation therein, and a spring tending to reciprocate said frame in one direction, a description of the frame for engaging a beverage holder and a spring tending to move said device independently of the movements of the frame, and connections for rapidly reciprocating said frame.

3. In means for beating and mixing beverages, a standard, a frame mounted for recip-

rocation therein and having a device for engaging a beverage holder, and connections for rapidly reciprocating said frame and comprising a wheel supported by said standard and a link connected with said wheel and with said frame.

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In testimony whereof, I have signed my

name to this specification in the presence of two subscribing witnesses.

ADOLFO OVIDI.

Witnesses:

OSCAR PUMPEL, M. SICKDORFER.