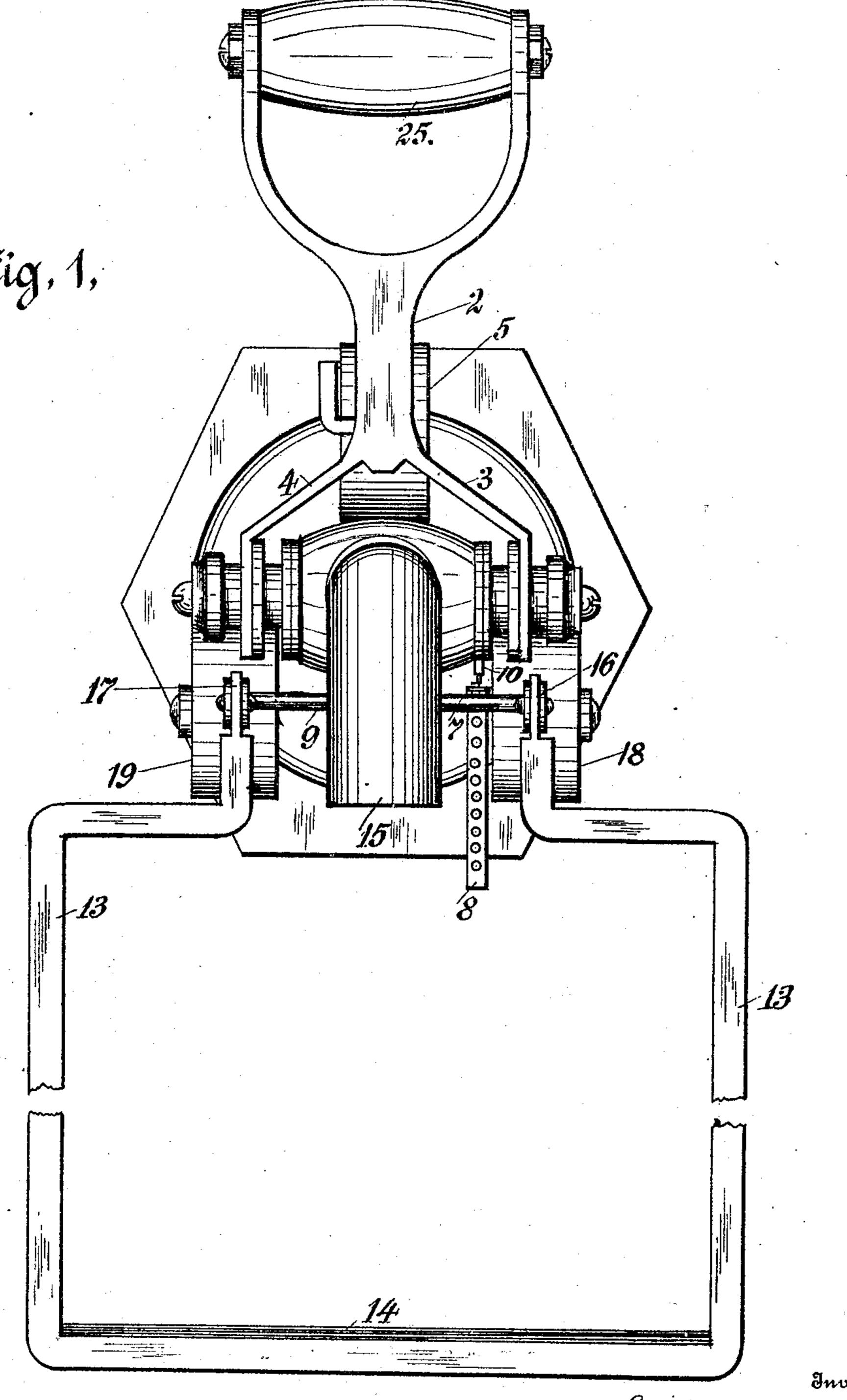
C. LEWIN. AUTOMATIC TAP.

APPLICATION FILED JULY 5, 1904.

NO MODEL.

2 SHEETS-SHEET 1.



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Witnesses Gette billige kafoissien

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AUTOMATIC TAP.

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United States Patent Office.

CARL LEWIN, OF SAN FRANCISCO, CALIFORNIA.

AUTOMATIC TAP.

SPECIFICATION forming part of Letters Patent No. 774,729, dated November 8, 1904.

Application filed July 5, 1904. Serial No. 215,429. (No model.)

To all whom it may concern:

Be it known that I, Carl Lewin, a subject of the Emperor of Germany, residing in the city and county of San Francisco, State of Cali-5 fornia, have invented a new and useful Improvement in Automatic Taps, of which the following is a specification.

The object of my invention is to provide means of automatically closing a tap and of 10 making its automatic action adjustable for dif-

ferent quantities of liquid.

I attain my object by means illustrated in the accompanying drawings, in which—

Figure 1 is a front view of my invention, 15 showing the lever 2 rigidly attached to the tap-valve through the arms 3 and 4 and having a forward-and-backward movement, as shown by dotted lines in Fig. 2, which is a side view of my invention, showing spring-case 5, 20 containing a coiled spring 20, lever 6, attached to lever 2, whereby latter may be drawn backward to the position shown by full lines in present figure, so as to close valve; Fig. 3, a detail drawing showing spring 7 of Fig. 2, a 25 dependent rod rigidly attached to the end thereof, said rod being slidable through an aperture in cross-bar 9, Fig. 1, and said spring 7 controlling latch 10. Fig. 4 shows mechanism of spring-case and its means of oper-3° ating valve-lever 2. Fig. 5 shows interior of spring-case 5 and the attachment of the contained spring by its ends to the outer case and inner rod, respectively, as at 11 and 12. Fig. 5 also shows interior mechanism of case 18 35 and 19; but whereas the outer case of 5 is secured to faucet the rim of 18 is free to move with lever 16, the other parts of case being fixed to faucet. It is the same with case 19.

13 is a supporting-frame sustaining a table 4º 14, whereon rests under the faucet 15 the vessel into which the liquid is drawn. Said frame is jointed to arms 16 and 17, which are normally held in position shown in Fig. 2 by springs in spring-cases 18 and 19. The auto-45 matic closing means are operated by gravity,

as will be more fully shown herein.

In detail my device consists of the springcase 5, rigidly attached to the immovable frame of said tap and containing a coiled spring 50 20, one end of said spring being rigidly at-

tached to the inner surface of said case and the other end being rigidly attached to a journal 21, rotatable in bearings in the sides of said spring-case, as shown on one side at 22 in Fig. 2. To journal aforesaid is attached a 55 crank 23, Fig. 4, to which is jointed a bent rod 6, the other end of said rod being jointed to the valve-lever 2.

Valve-lever 2 is, as aforesaid, adapted to move backward and forward. It is rigidly 60 attached to the valve of said tap, which is contained in the expanded part thereof, 24, said valve being any one of the well-known forms that may be suitable. Valve-lever 2 is drawn forward by handle 25 and thereupon opens the 65 tap and is drawn backward by spring 20, through crank 23 and rod 6, thereby closing the tap.

Tap is held open by means of latch 10, rigidly attached to valve-journal, and spring 7 7° when lever 2 is in forward position, as shown by dotted lines in Fig. 2. Spring 7 is provided with an aperture 26, which engages the end of latch 10, the opposite end of said spring being fixed to the immovable frame. A de-75 pression of spring 7 releases the latch 10 and allows the spring 20 to pull lever 2 back to its normal position, thus closing the valve attached thereto.

Means of depressing spring 7 are provided, 80 consisting of the movable frame 13, jointed to arms 16 and 17. Said arms are rigidly connected to two spring-cases 18 and 19, containing springs similar to that shown in Fig. 5, having their ends similarly fixed; but whereas 85 in the device shown in Fig. 5 the journal is movable and the case fixed in the present instance the cases of 18 and 19 are movable and the rod corresponding to the journal of Fig. 5 is rigidly attached to the immovable frame. 9°

The springs of 18 and 19 serve to hold the arms 16 and 17 in their normal position upwardly against the immovable frame. A table 14 on frame 13 serves to support a vessel suitable for holding the liquid flowing from tap. 95 Where accuracy in measuring the quantity of liquid is desired, said vessel may be a measure of definite size and weight and the springs of 18 and 19 adjusted to sustain arms 16 and 17, their dependent frame-arms, table, and 100 said measure with just sufficient force so that any increased weight thereof shall depress the movable frame.

As aforesaid, the levers or arms 16 and 17 carry between them a rod 9 through an aperture in which a dependent rod 8 can freely pass, rod 8 being fixed to spring 7. Rod 8 is provided with a plurality of apertures, into any one of which a peg 27 is insertible. Therefore when rod 9 moves downwardly it engages said peg and depresses spring 7, releasing latch 10, and so closing the tap. Rod 9 being attached to arms of movable frame is lowered when said frame is lowered, and, as before described, said frame is lowered by the weight of liquid in the containing vessel on table 14

of liquid in the containing vessel on table 14. Therefore by means of mechanism described the weight of the liquid that has flown from the tap outcometically closes the tap.

the tap automatically closes the tap.

The means I employ for adjusting my device for various quantities of liquid will be understood by again referring to Fig. 5 in view of the mechanism shown by other figures. The springs 18 and 19 are coiled springs, 25 and they therefore hold their attached arms with an adjusted force. A small increase in the opposing force, such as may be produced by the weight of a gill of the liquid, would depress the frame a short distance. A heavier 3° weight would cause a further depression. In the apertures in rod 8 the peg 27 is inserted, said apertures being separated by distances corresponding to a given weight of liquid. Therefore when said peg is inserted in an 35 aperture corresponding to the desired weight

of liquid the depression of the frame will cause the closing of the tap, said closing taking place for greater or smaller quantities of liquid as peg 27 is inserted in an aperture farther from or nearer to the attached end of rod 8.

By the means described my tap is adapted

for discharging an automatically-measured quantity of liquid, as when the desired quantity has flown the tap is automatically closed.

The operation of my device is as follows: 45 The vessel to be filled is placed on the table under the faucet, and the peg 27 is inserted in the aperture of rod 8 corresponding to the quantity of liquid to be measured. The lever 2 is then pulled forward by its handle 25, 50 opening the tap and allowing the liquid to flow. When the desired quantity of liquid has flown into the vessel, its weight causes the movable frame to descend, the rod 9 engages peg 27, causing depression of spring 7, which 55 releases latch 10 and allows spring 21 to pull back the valve-lever, thus closing the tap.

My tap may be used for measuring liquids of all kind, but is especially adapted for beer.

Having described my invention, what I be claim as new, and desire to secure by Letters

Patent of the United States, is—

An automatic tap comprising a faucet having a valve operated by a lever-handle, said valve being provided with a latch; mechanism 65 for closing said valve consisting of a coiled spring in box secured to said faucet, and a connection between said spring and said leverhandle; a movable frame supported by coiled springs in boxes secured to said faucet, and having a platform to hold the vessel to be filled; trigger mechanism consisting of a spring having an aperture for engaging said latch, and having a dependent rod provided with holes and a peg; and means on said movable frame 75 of engaging said peg, whereby said spring is depressed by the weight of liquid and said latch released.

CARL LEWIN.

Witnesses:

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