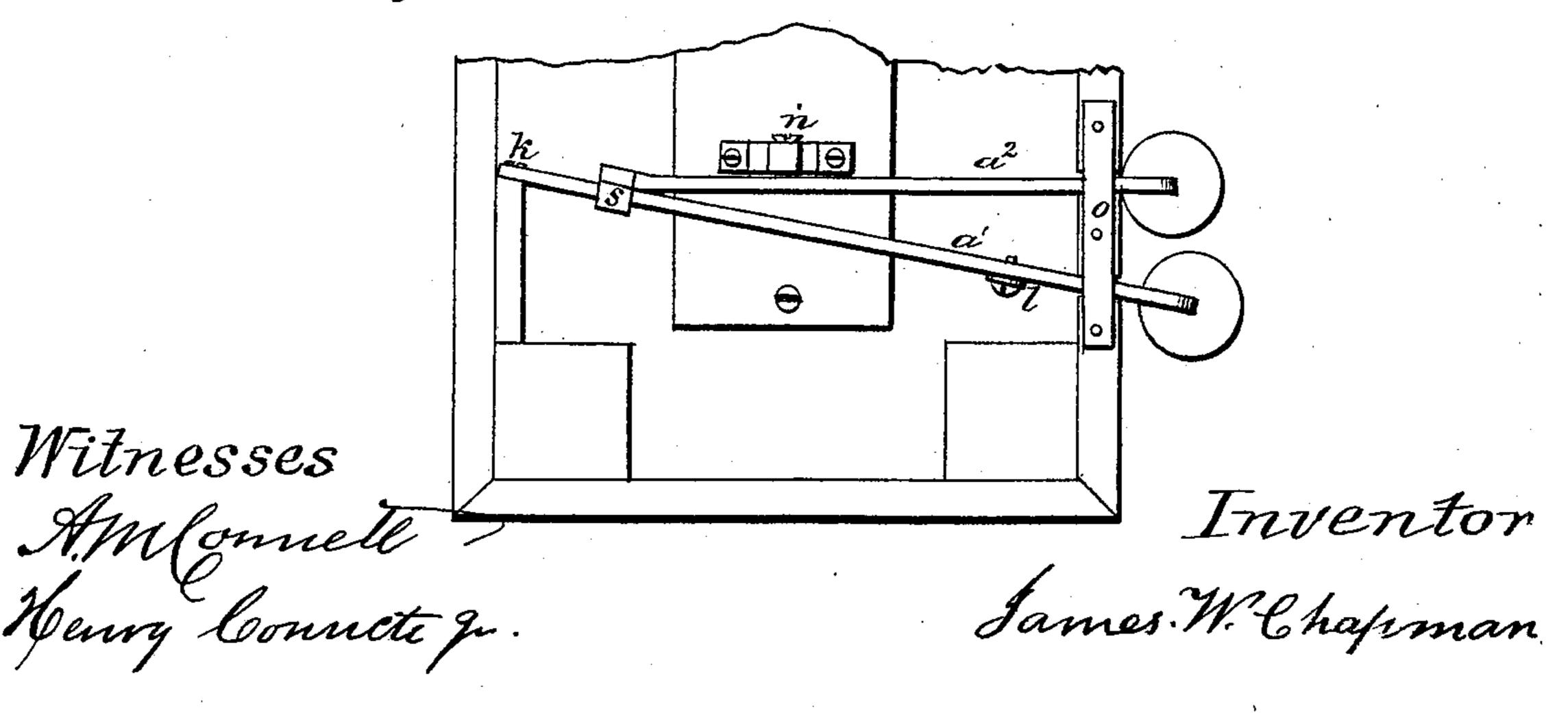


Fig. 2.



Anited States Patent Office.

JAMES W. CHAPMAN, OF MADISON, INDIANA.

Letters Patent No. 92,015, dated June 29, 1869.

IMPROVEMENT IN SODA-FOUNTAINS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, James W. Chapman, of Madison, in the county of Jefferson, and State of Indiana, have invented new and useful Improvements in Soda-Fountains; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention is an improvement on the soda-fountain patented by F. J. Chapman on the 5th day of September, 1865, and numbered 49,719, and relates to a compound-lever arrangement of the treadles by which the plunger of the pump is operated.

It also relates to the combination of the lever-treadles with the fountain; also, the manner of combining the levers, tube, and plunger with the crooked connecting-rod, by passing the said rod down between the inner and outer walls of the refrigerator.

Figure 1 is a vertical section of the fountain and frame-work.

Figure 2 is a plan view of the bottom.

Similar letters of reference indicate corresponding parts.

A is the cylindrical chamber of the fountain; and F, an outer cylinder or casing.

Between these casings is placed the non-conducting material E.

C is the pump-chamber, in which is the plunger b. To the chamber C is attached the ejection-tube d.

c is the pump-rod, connecting with the plunger at one end, and at the other with the treadle a^1 , the said rod being doubled on itself, in the manner shown, so that it may pass over the side of the chamber A.

B is the cap of the fountain, attached to the cover of the same by the screws m m, so that it may be used as a counter and receptacle for glasses while on the fountain, or may be removed, if it is desired to place the same under a counter or table.

This cap is provided with a door, D, which is fast-ened by the button or catch e.

In the hollow base of the fountain are the treadles $a^1 a^2$.

The treadle a^1 makes the down stroke of the plunger b, and is attached to the lower end of the pumprod c by the screw l, the rear end of the treadle being pivoted on the screw k, thus forming a lever of the third class.

The treadle a^2 is provided with a sleeve, s, which slips loosely on the bar of the other treadle, as shown.

This treadle is pivoted on the fulcrum-pin or screw n, thus forming a lever of the first class, and operating, when pressed down, to raise the lever or treadle a', and, through it, the plunger b of the pump.

The treadles are provided with plates for the foot, and work in slots in the base of the fountain, being "stopped" by the check-plate o, all of which is clearly shown in fig. 2.

The operation is very simple:

When the treadle a^i is pressed down by the foot, the plunger b of the pump is forced down. This pressure also raises the treadle a^2 , by reason of its operating on the rear end of the said treadle, beyond its fulcrum n.

A downward pressure on the treadle a^2 raises the plunger b of the pump, through the medium of the treadle a^1 , said treadle being lifted by the sleeve s, attached to the rear end of the bar of the lever a^2 .

Thus, a downward pressure of the foot on the levers, alternately, is all that is required to operate the plunger of the pump C, either up or down.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The combination, herein shown, of the treadles a^1 a^2 , with the bent pump-rod c, tube y, and pump C, of a soda-fountain, when the said parts are arranged to operate substantially in the manner and for the purposes as set forth.

Witnesses: JAMES W. CHAPMAN.
A. M. CONNETT,
HENRY CONNETT, Jr.