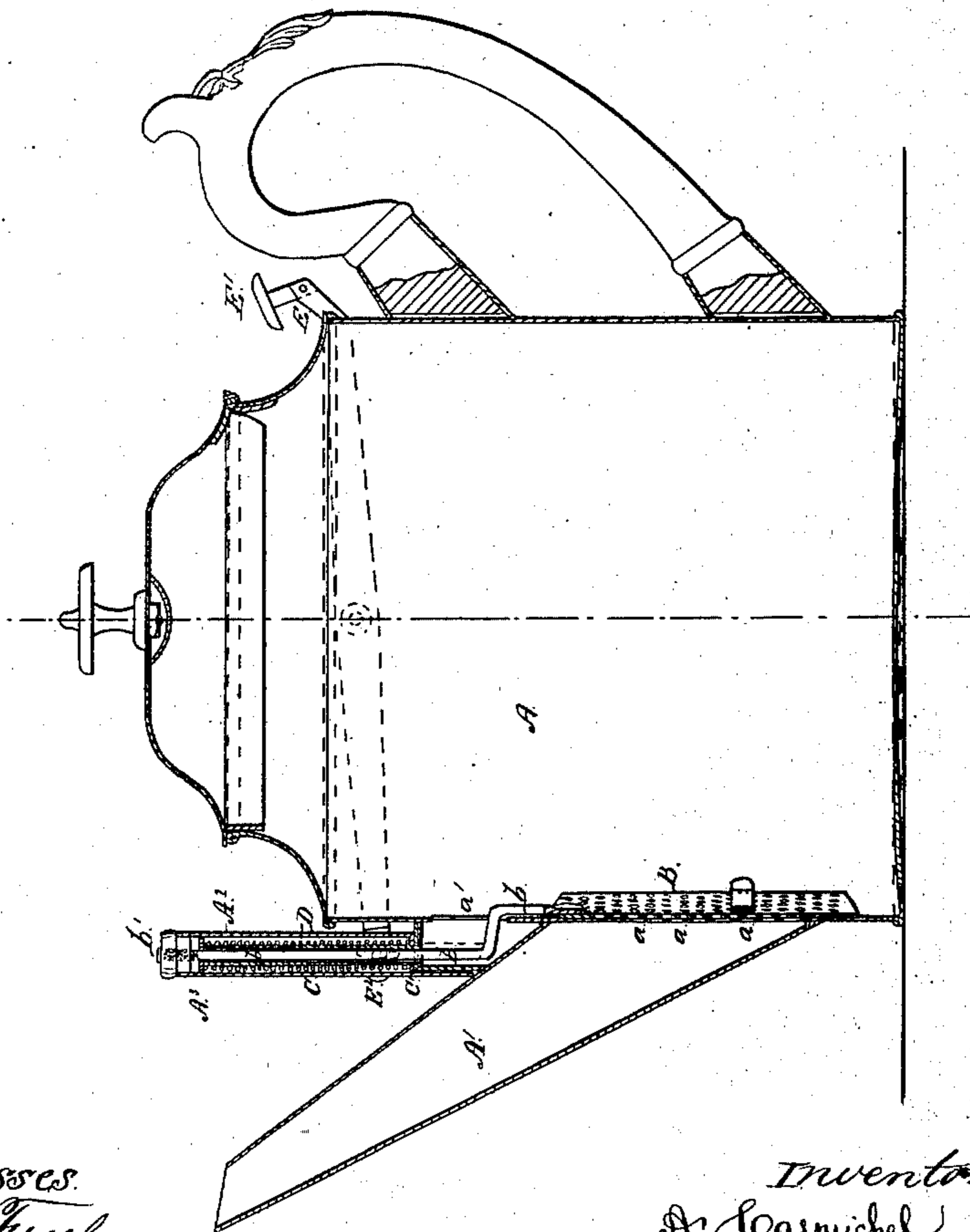
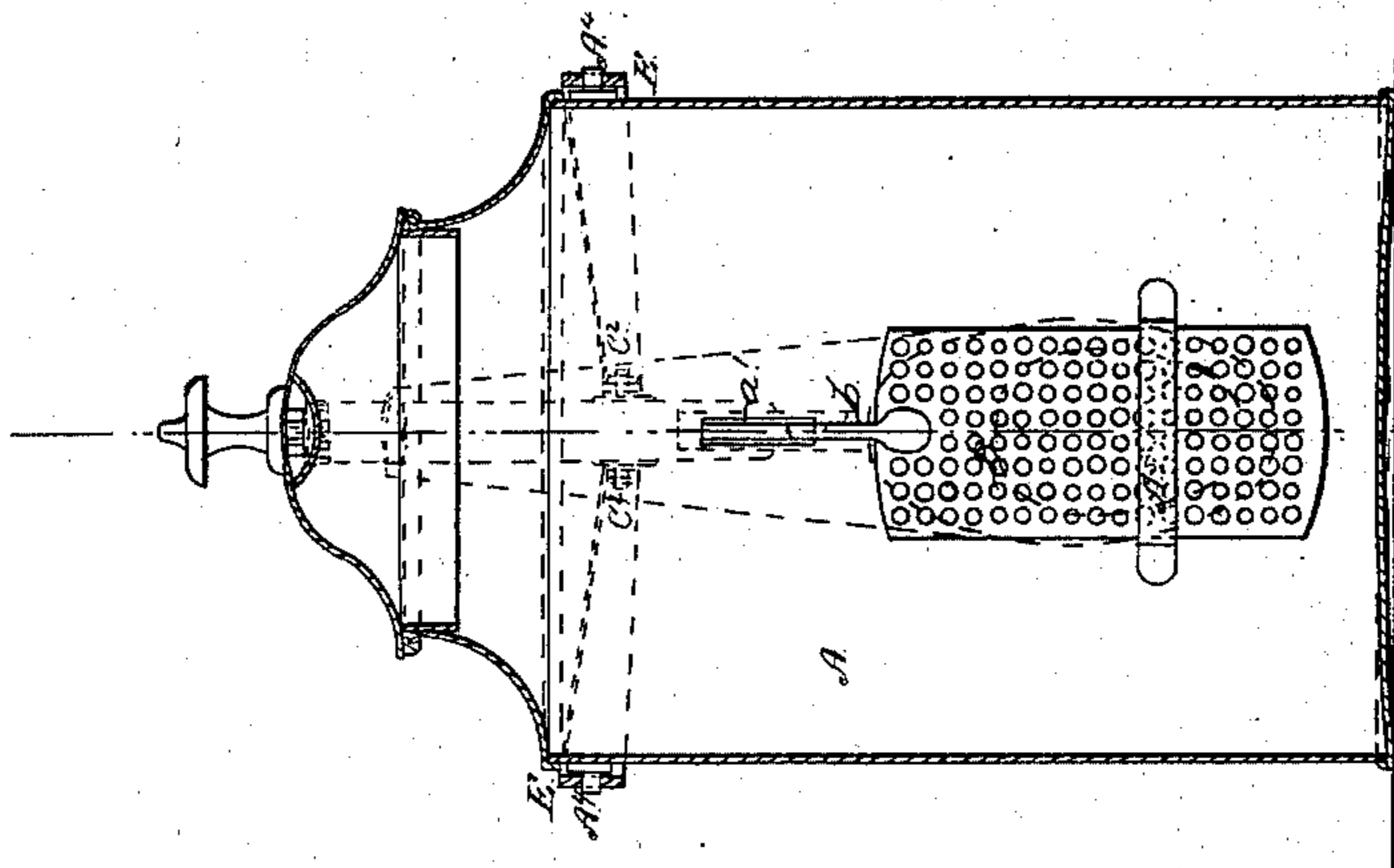


A. Carmichel

Tea Kettle

N^o 62,002.

Patented Feb. 12, 1867.



Witnesses.
D. L. Freeborn
W. C. Dey

Inventor.
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By his attorney J. B. Nelson

United States Patent Office.

ALEXANDER CARMICHEL, OF WESTERLY, RHODE ISLAND.

Letters Patent No. 62,002, dated February 12, 1867.

IMPROVEMENT IN TEA-POTS.

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, ALEXANDER CARMICHEL, of Westerly, in the county of Washington, and State of Rhode Island, have invented certain new and useful improvements in Tea-Pots, applicable also to coffee-pots and analogous vessels; and I do hereby declare that the following is a full and exact description thereof.

My invention relates to means for preventing the choking or clogging of the escape passage by the tea leaves, or other solid matter in the vessel. I will first describe what I consider the best means of carrying out my invention, and will afterwards designate the points which I believe to be new. The accompanying drawings form a part of this specification.

Figure 1 is a longitudinal section; and

Figure 2 is a cross-section of a tea-pot constructed according to my invention.

Similar letters of reference indicate like parts in all figures. Tints are employed merely to aid in distinguishing parts, and do not indicate material. The material may be of various kinds, but I prefer iron or copper plated with tin or with some of the precious metals.

A is the body of the tea-pot, and A¹ the nose. The communication between the interior of the pot and the nose is permitted through small holes, as indicated by *a*. B is a perforated slide adapted to fit on the interior of the pot A, and to cover the openings *a*. An arm of stout wire *b*, extends upwards from the plate B a short distance, and then extends horizontally outward through the slot *a*¹ in the front of the tea-pot. A² is a tight casing which surrounds the slot *a*¹, and extends upward around the wire *b* to a level above the top of the coffee-pot. It will be perceived that this construction allows the plate B to be operated, and moved upward and downward by means of the wire *b*, by acting at its upper extremity with any suitable force, while the casing A² prevents the escape of any of the tea. C is a sliding case surrounding the exterior of the case A², and united firmly to the top of the wire *b* by means of the nut *b*¹. D is a spiral spring mounted in an annular space between the exterior of the casing A² and the interior of the movable casing C. It tends to increase its length. Its upper end abuts against a flange, A³, at the top of the casing A². Its lower end abuts against an internal flange, C¹, near the bottom of the casing C. The force of the spring D therefore tends to bring the plate B always to the lower extremity of its motion. E is a frame, of plated wire or other suitable material, loosely encircling the upper portion of the tea-pot, pivoted to the tea-pot at the points A⁴ A⁴. This frame serves as a lever, by turning upon the pivots A⁴. Its rear side carries a thumb-piece, E¹. Its front face carries the arms E² E², which take hold of the pivots C² C² fixed on the sides of the casing C. When the thumb-piece E¹ is depressed by the action of the thumb, the plate B is moved upward in the interior of the tea-pot, and when it is released the plate B resumes its position at the lower extremity of its motion. It is therefore easy to move the plate B up and down as many times as is necessary, either while the tea is at rest or while the tea is being poured. I find by experiment that its action is very efficient in preventing the clogging of the apertures *a*. I can pour continuously and freely from my tea-pot under all ordinary circumstances. I have described the device as a tea-pot. It will serve with or without obvious modifications, which will often be desirable for clearing the strainers of any analogous vessels. Its action is gentle, is exactly at the point where it is needed, and does not appreciably agitate the grounds or any foreign matter which may lie at the bottom of the vessel. The spring D may be adapted to operate in a reverse direction if preferred. A⁵ is a cross-bar, which may be used with good effect if necessary to prevent the holes in the plate B from becoming at all encumbered by tea-leaves. I have generally found that a smart vertical movement of the plate B will always clear it, but this bar will insure its doing so even if the motion is less rapid.

Some of the advantages due to certain features of my invention may be separately enumerated as follows: first, by reason of the fact that the clearing plate B acts in the plane of the perforated surface, and immediately adjacent thereto, I am able to clear the passages by a slight motion, and without agitating the general contents of the vessel; second, by reason of the fact that the casing A² is tight, and extends outward and upward from the slot *a*¹ to a level above the top of the tea-pot, I am able to prevent the escape of tea around the wire *b*, or its equivalent, without the necessity for any tight fitting or accurate workmanship; third, by reason of the fact that the spring D operates the plate B in one direction, I am able more conveniently and rapidly to vibrate the plate while in the act of pouring the tea; fourth, by reason of the fact that the lever E is employed in connec-

tion with the other parts as represented, I am able to operate the plate B by the same hand as holds the tea-pot, and without in anywise obstructing the removal of the cover and the cleaning and wiping of the interior.

Having now fully described my invention, what I claim as new in tea-pots and analogous vessels, and desire to secure by Letters Patent, is as follows:

1. I claim the plate B, arm *b*, and slot *a*¹, arranged relatively to the body A, and the exit holes *a*, substantially as specified.
2. I claim the case A², combined and arranged as represented, and extending upward from the slot *a*¹ to a level above the top of the tea-pot, substantially as and for the purpose herein specified.
3. I claim, in combination with the clearing-plate B, arm *b*, and casing A², or their respective equivalents, the spring D, adapted to operate substantially in the manner and for the purpose herein set forth.
4. I claim the lever E, arranged to operate in combination with the clearer B, and the several connections, substantially as and for the purpose herein specified.

Witnesses:

EDWIN A. SCHOLFIELD,
WILLIAM P. COY.

ALEXANDER CARMICHEL.