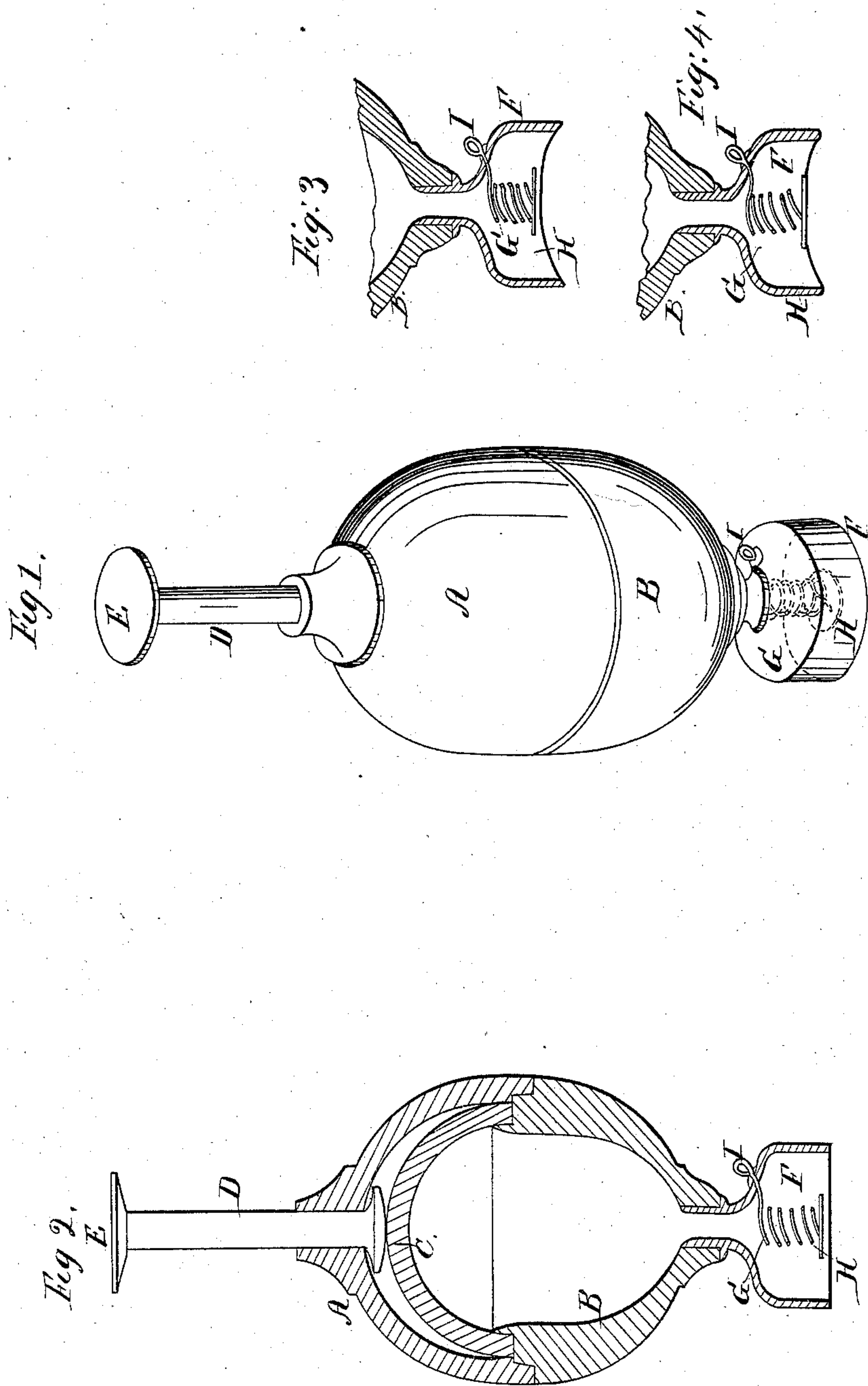


*L. Tillotson,*  
*Cupping Apparatus,*  
*No. 15,626,*  
*Patented Aug. 26, 1856.*





# UNITED STATES PATENT OFFICE.

LOYALL TILLOTSON, OF THOMPSON, OHIO.

## CUPPING.

Specification of Letters Patent No. 15,626, dated August 26, 1856.

*To all whom it may concern:*

Be it known that I, LOYALL TILLOTSON, of Thompson, in the county of Geauga and State of Ohio, have invented a new and useful apparatus for employing electricity in connection with cupping for the purpose of operating on diseased parts of the human body; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a cupping instrument with my apparatus attached thereto, showing the mode by which the electric force is conveyed, or made to operate, within the cup; Fig. 2 a vertical section through its center; and Figs. 3 and 4 exhibit the adjustment of the spiral wire when the pole or plate is required to be on or off the part to be operated on, as will be explained, the letters of reference thereon indicating similar parts in all the figures.

The nature of my invention consists in employing the electric, electro-magnetic, voltaic, magneto, and thermo-electric forces, in connection with cupping for the purpose of operating on diseased parts of the human body, the cup being used for the purpose of increasing or reducing the atmospheric pressure on the affected parts. The action of the cup and that of the force is simultaneous, and is intended to mutually aid each other, as hereinafter explained. This I accomplish by attaching to the cup of a cupping instrument the apparatus presently described, consisting of a metal wire placed within it, to the end of which is fastened a metallic plate or disk (to be used as the positive or negative pole as the case requires) the other end passing through a hermetically sealed aperture and terminating in a loop on the outside thereof, the said loop being for the purpose of attaching the connecting wire of the battery. The said wire is coiled, for the purpose of allowing it to be extended or contracted, so that the pole or plate can be placed on, or over, the diseased part, consistent with the kind of force employed, as will be explained.

To enable the medical faculty and others to use my said invention it will be necessary to describe, first, the construction of a cupping instrument suitable for applying it, and secondly the parts constituting my ap-

paratus by which the electric force is conveyed within the cup.

*First, the cupping instrument.*—A, B, Fig. 1, is the body of the cupping instrument, which is made hollow and consists of two parts. The lower part B is closed with a flexible or elastic covering C, Fig. 2, which is securely fastened over its upper portion, so as to be air tight. This covering may be made in any convenient form, either by stretching it across the diameter, similar to a drum-head, or hemispherically as shown.

D is a plunger with its broad end in contact with the covering C. The said plunger passes through a guide hole at the top of the upper part of the body A, and has a button, E, secured in its top.

F is the cup which is made removable, so as to admit other cups of different sizes or shapes to be used.

*Secondly, the parts constituting my apparatus.*—G is a metallic wire to which is soldered a disk of metal H. The said wire is coiled and the end passed through a hole in the body of the cup of the cupping instrument and terminating in a small loop I on the outside, the said hole is to be closed hermetically.

In putting the above described apparatus and cupping instrument into operation two things are to be considered—First, whether the nature of the disease requires the plate or pole to be in contact with the part, or not; second, if the atmospheric pressure within the cup must be reduced, or increased (as hereinafter explained.) In the former case the extension of the spiral wire will allow the plate to rest on the part. Contracting it will have the contrary effect. In the latter case the depression of the plunger before the cup is applied will reduce the atmospheric pressure on the part; depressing it after will increase it. After these preliminaries are determined on the wire from the battery is to be attached to the loop outside the cup, which of course conveys the electricity to or from the part operated on.

I will now explain the mode of procedure in a few cases in which I contemplate using the above described invention, in doing which it will be necessary to describe the influence of dry cupping, also the properties and influence of the electrical forces, and also in what cases the positive or the negative force of the battery is required.



1st. The effect of dry cupping, as it is usually termed, is to remove the atmospheric pressure which causes an expansion of the muscular fibers when shrinking and  
 5 are pressing on the sensor nerves, often causing the most acute pain. It also expands the vascular and capillary vessels, causing them to fill with their appropriate fluids, which restores vitality and motion.  
 10 2nd. When either of the electric or magnetic forces, or currents, traverses the fluids of living beings, it effects the decomposition of the salts within them, acids being evolved at the positive pole, and alkalis at the negative pole. Albumen coagulates at the positive pole, where oxygen and acid are set  
 15 free; hydrogen appears at the negative pole with an alkaline liquid. Consequently one force must and does exert an expansive influence, while the other exerts a contracting influence. 3rd. As there are certain limits to these forces beyond which they cannot go, and consequently will fail of the desired effects, and as an adjuvant to these  
 20 forces in removing, for instance, the atrophy of a muscle, I place the cup over the atrophied part and remove the atmospheric pressure, which has the effect to expand the muscles and vascular vessels, as above described, while at the same time is conveyed,  
 25 by means of the disk in the cup, one of the expansive forces of electricity as evolved by the battery, which when combined with the cup produces the most satisfactory results, which could not be produced by either  
 30 when used separately. In a case of hypertrophy or tuberculation the cup, of a proper size and form, is placed over the part affected, and by forcing the plunger into the  
 35 cup the atmospheric pressure is increased, the effect of which is similar to that of a compress, at the same time is conveyed by means of the spiral wire and disk the positive or contracting force, which force and  
 40 the cup being used together, as above stated, produce instantaneous and happy effects on crooked limbs, spinal curvatures, and similar diseases.

In using statical electricity on excoriated  
 50 surfaces, attended with extreme sensibility and pain, the patient is to be placed on an isolated stool or bed, the patient being connected with the prime conductor of an electric battery, the disk in the cup is depressed  
 55 so as not to touch the surface of the part and the cup placed over it, after a wire has been attached to the loop on the outside of the cup and extending to the floor. A small portion of the atmospheric pressure is then  
 60 to be removed by the cup, and the patient being charged with electricity it flows off the diseased surface in jets or sparks on the disk or plate in the cup, and is con-

veyed to the earth by means of the wire attached to the outside of the cup, as before  
 65 explained, relieving in the most prompt and effective manner the extreme sensibility, inflammation, and pain, producing, at the same time, a disposition rapidly to heal. In tic-  
 70 douloureux, the positive force is applied to the plexus of nerves in front of the ear, and the other communicated to the seat of pain in the face, with the pressure removed  
 75 as above by the cup. To remove tumors and boils a plate is provided and placed over each cervical vertebra and the positive pole connected with the plate, and the negative  
 80 to the disk in the cup, with the atmospheric pressure reduced by said cup placed over the said boil or tumor. For the purpose of resuscitating dormant irritability of nerves,  
 85 or contractibility of their subordinate muscles, the positive pole must be applied to the former, and the negative to the latter. In the opposite condition of the nerves and  
 90 muscles the negative pole must be applied to the former, and the positive to the latter.

When voltaic, galvanic, or any current electricity is used the plate in the cups must rest on the surface of the diseased part  
 95 under the cup; and when statical electricity is employed the plate in the cup should be depressed and not touch the surface, as above described.

It will be seen from the above description  
 100 in what manner the cup may be made to aid the electrical forces, both positive and negative, also the way in which the positive and negative forces may aid the action of the cup, in the combined action of both in  
 105 their application to diseased parts of the human body, producing such results as neither one nor the other could produce when used separately.

Having thus explained the nature, construction, and operation of my invention, I wish distinctly to be understood as not  
 110 claiming the use of a cupping instrument, nor the employment of electricity, for the reduction of disease in the human body, separately considered, the use of both, singly, having been long known to the medical  
 115 profession, but

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

The within described apparatus, viz: the spiral wire G, disk H, and loop I, combined and attached to a cupping instrument, for the purpose of employing electricity in conjunction with cupping as an adjuvant for  
 120 diseased parts of the human body, as set forth.

LOYALL TILLOTSON.

Witnesses:

J. F. SINGLE,  
 H. STEELE, Jr.