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A.D. 1862, 8th APRIL. N° 997.

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SPECIFICATION

OF

FREDERICK WILLIAM BREAREY.

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MEDICATED CUPS.

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A.D. 1862, 8th APRIL. N° 997.

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### Medicated Cups.

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**LETTERS PATENT** to Frederick William Brearey, of No. 53, Cornhill, in the City of London, for the Invention of “**IMPROVEMENTS IN MEDICATED CUPS OR VESSELS FOR DRINKING PURPOSES.**”

Sealed the 3rd October 1862, and dated the 8th April 1862.

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**PROVISIONAL SPECIFICATION** left by the said Frederick William Brearey at the Office of the Commissioners of Patents, with his Petition, on the 8th April 1862.

I, FREDERICK WILLIAM BREAREY, of No. 53, Cornhill, in the City of  
5 London, do hereby declare the nature of the said Invention for “**IMPROVE-  
MENTS IN MEDICATED CUPS OR VESSELS FOR DRINKING PURPOSES,**” to be as  
follows:—

This Invention relates, firstly, to an improvement on what are known as  
“bitter cups,” by means of which the medicinal qualities of steel, iron, or  
10 other metals or combination or alloy of metals are combined with the tonic  
or aromatic qualities of the bitter wood or bark, so as to increase or qualify  
the medicinal effect of the same. This part of the Invention consists in  
forming such cups of a combination of metal or alloy of metal with the quassia,  
sassafras, or other medicinal or medicated wood, or Peruvian or other bark,  
15 in such a way that they shall both be at the same time in contact with the  
water or other liquid to be impregnated, the oxydation or decomposition of the  
metal being promoted by slightly acidifying the water or other fluid, or by  
other suitable means.

The second part of the Invention relates to the production of a metallic  
20 medicinal cup, and consists in making a cup or vessel of steel, iron, or other

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metal or alloy, and oxydizing the interior of the same by means of acids or otherwise, so that upon placing water or other fluid therein it shall become medicated or impregnated with the medicinal properties of the metal.

The third part of the Invention relates to the production of what I propose to call the "galvanic cup," which consists of a cup or vessel made of alternate 5 rings, strips, or other combination of opposite or electro-positive and electro-negative metals, such as zinc and copper, so that upon placing in the vessel slightly acidulated water or other fluid, a galvanic action is produced, and the water or other fluid in the vessel becomes chemically affected in a corresponding degree. 10

**SPECIFICATION** in pursuance of the conditions of the Letters Patent filed by the said Frederick William Brearey in the Great Seal Patent Office on the 8th October 1862.

**TO ALL TO WHOM THESE PRESENTS SHALL COME, I, FREDERICK WILLIAM BREAREY, of No. 53, Cornhill, in the City of London, send greeting.** 15

**WHEREAS** Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Eighth day of April, in the year of our Lord One thousand eight hundred and sixty-two, in the fifth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Frederick William Brearey, Her special licence that I, the said Frederick 20 William Brearey, my executors, administrators, and assigns, or such others as I, the said Frederick William Brearey, or my executors, administrators, and assigns, should in any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great 25 Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVEMENTS IN MEDICATED CUPS OR VESSELS FOR DRINKING PURPOSES," upon the condition (amongst others) that I, the said Frederick William Brearey, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascer- 30 tain the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

**NOW KNOW YE,** that I, the said Frederick William Brearey, do hereby 35 declare the nature of the said Invention, and in what manner the same is

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to be performed, to be particularly described and ascertained in and by the following statement, that is to say:—

My Invention has for its object improvements in medicated cups or other vessels for drinking or other purposes.

5 The first improvement of my said Invention consists in the formation of a cup or vessel upon a combined medicating principle, in and by which the medicinal qualities of steel, iron, ironide, or other suitable metal, metals, or metaline, or their oxydes, or mineral or mineraline, simple or compounded, and the tonic or aromatic qualities, or medicinal virtues of bitter wood,  
10 bark, or other vegetable matter are combined and imparted simultaneously to the water or other liquid contained therein. The drinking vessels formed upon this principle I denominate “the improved medicated steel bitter cup.”

The second improvement of the said Invention consists in the formation of a similar cup or vessel, the bowl of which is formed wholly of steel, metal, or  
15 mineral (antimony excepted) otherwise than when used as herein-after described, or of metals or minerals compounded or alloyed with antimony, and the inner surface of such bowl, or cup, or vessel, being oxydized by the application of acids or ammonia in and by which the water or other liquid contained therein is medicated by being impregnated with the medicinal  
20 qualities or virtues of the said metals or minerals. The drinking vessels formed upon this principle I denominated the improved medicated “mineral cup.”

The third improvement of my said Invention consists in the formation of similar cups or vessels in and by which the principle of galvanic action is  
25 obtained either in combination with the medicinal qualities above mentioned or otherwise. The drinking vessel form upon this principle I denominate the improved medicated “galvanic cup.”

In applying the first-mentioned improvement, I make a cup or other vessel in two or more parts, one portion being composed of metal, metals, or mineral,  
30 simple or compounded, and oxydized on the inner surface, and the other portion composed of wood or other vegetable matter, possessing in itself the required bitter, tonic, or aromatic, or other medicinal qualities, or impregnated or saturated therewith, the wood or vegetable portion being fitted to the metal or mineral portion so as to be water-tight when joined together. The water  
35 or other liquid is then medicated is then poured into the cup or vessel, where it comes in contact with and is acted upon by the oxydized surface or surfaces of the metal or mineral portion; and where it also comes in contact with and is acted upon by the surface or surfaces of the wood or vegetable portion, and the combined medicinal qualities of the metal or mineral, and the wood,

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bark, or vegetable portions are thus simultaneously imparted thereto. The cup or vessel may be made of any convenient or required form, and of any required capacity.

The form of vessel of this Invention which I have hitherto adopted for drinking purposes, consists of a metal foot and stem terminating in a hollow or 5 shallow cup (having a small hole in the bottom extending partially into the said stem) and of an open cylindrical top of wood, bark, or vegetable, as the case may be, fitted water-tight into the top of the metal portion, a lamina or packing of cork or other suitable material being inserted between the two parts for rendering the joint impermeable in the interior of the metal portion 10 of the cup thus formed. I also fit an inner cup of wood or vegetable, terminating in a stem, which stem is pressed down firmly and securely into the small hole in the bottom of the metal portion, before described. This inner cup serves the double purpose of increasing the surface of the wood or vegetable matter in contact with the liquid, and also conceals the oxydized 15 metal portion. By preference, I oxydize the latter by the application of a small quantity of liquid ammonia before inserting the same cup; this gives a regular crust of oxyde to the metal or metallic surface. I should also here remark, that I find it preferable to desiccate or compress the wood or vegetable matter before fitting the same to the metal. 20

The combined and simultaneous action herein described may be effected in various ways, as, for instance, by forming a cup or other vessel for drinking or other purposes of any suitable material, and by inserting or imbedding therein the metal or mineral oxyde, metaline or mineraline, and medicinal wood, bark, or vegetable, or by placing the same in suitable cavaties formed 25 for receiving the same either in a solid, granulated, or mechanically separated condition; and the vessel may also be so made as to vary and regulate the proportions of the mineral and vegetable impregnating effects by varying the disposition and extent of the respective surfaces and the holding capacity of the vessel. 30

The mode of applying the second-mentioned improvement is already above described, but I may here observe, that when necessary minerals having various medicinal qualities, as sulphur, antimony, and the like may be inserted or imbedded in the inner surface of the mineral cup, so as to produce a combined medicating action simultaneously or otherwise, and the outer surface 35 may be coated with glass or other protecting or ornamenting matter.

In applying the third above-mentioned improvement of my said Invention, I make a cup or other suitable vessel (for drinking or other purposes) also in two or more parts, and either form the same upon either of the medicated

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principles above described, or otherwise, as may be required, and fix or insert therein a voltaic or galvanic pile, and galvanize and medicate the water or other liquid placed therein by slightly acidulating the same. By preference, however, I form the foot, stem, and outer bowl of these cups or vessels of 5 glass, china, or other non-conducting material, having three or more water-tight cells or compartments therein separated one from the other. I make the centre compartment occupy nearly the whole of the internal space, and make the two side compartments small, but sufficiently large to contain the galvanic media. The latter compartments are closed at the top by moveable 10 stoppers; the central compartment is made open for containing the medicated water or other liquid to be galvanized. The internal surfaces of the central compartment I line with metal or mineral on one part and with wood or vegetable, as before described. Extending across this compartment, and forming a metallic connection between the two side cells, I fix a bar or 15 perforated plate of metal. When using this galvanic cup, the water or other liquid is first placed in the centre compartment, where it is medicated; then by filling the side compartments, one with granulated copper and fine sand and the other with granulated zinc and fine sand, and adding to each a little acidulated liquid, the galvanic essence will pass or flow along and over the 20 metal bar or perforated conductor through the medicated water or liquid, and will impart its medicinal virtues to the same, and thus a combined medicated and galvanized action will be obtained.

Having thus described and ascertained the nature and object of the improvements of my said Invention, and in what manner the same may be performed, 25 I hereby further declare that I do not restrict the application of the said principal of combined simultaneous medicating action to the precise forms of vessels or modes of constructing the same herein described, but include all such modifications in form and construction as are obviously applicable upon and identical with the principal of my said improvements and Invention.

30 In witness whereof, I, the said Frederick William Brearey, have hereunto set my hand and seal, this Eighth day of October, in the year of our Lord One thousand eight hundred and sixty-two.

F. W. BREAREY. (L.S.)

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LONDON:

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