

Specification of Richard Kelly Geldard : preparations of infusions.

Contributors

Geldard, Richard Kelly.

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A.D. 1859, 6th SEPTEMBER. N° 2031.

S P E C I F I C A T I O N

OF

RICHARD KELLY GELDARD.

—

PREPARATIONS OF INFUSIONS.

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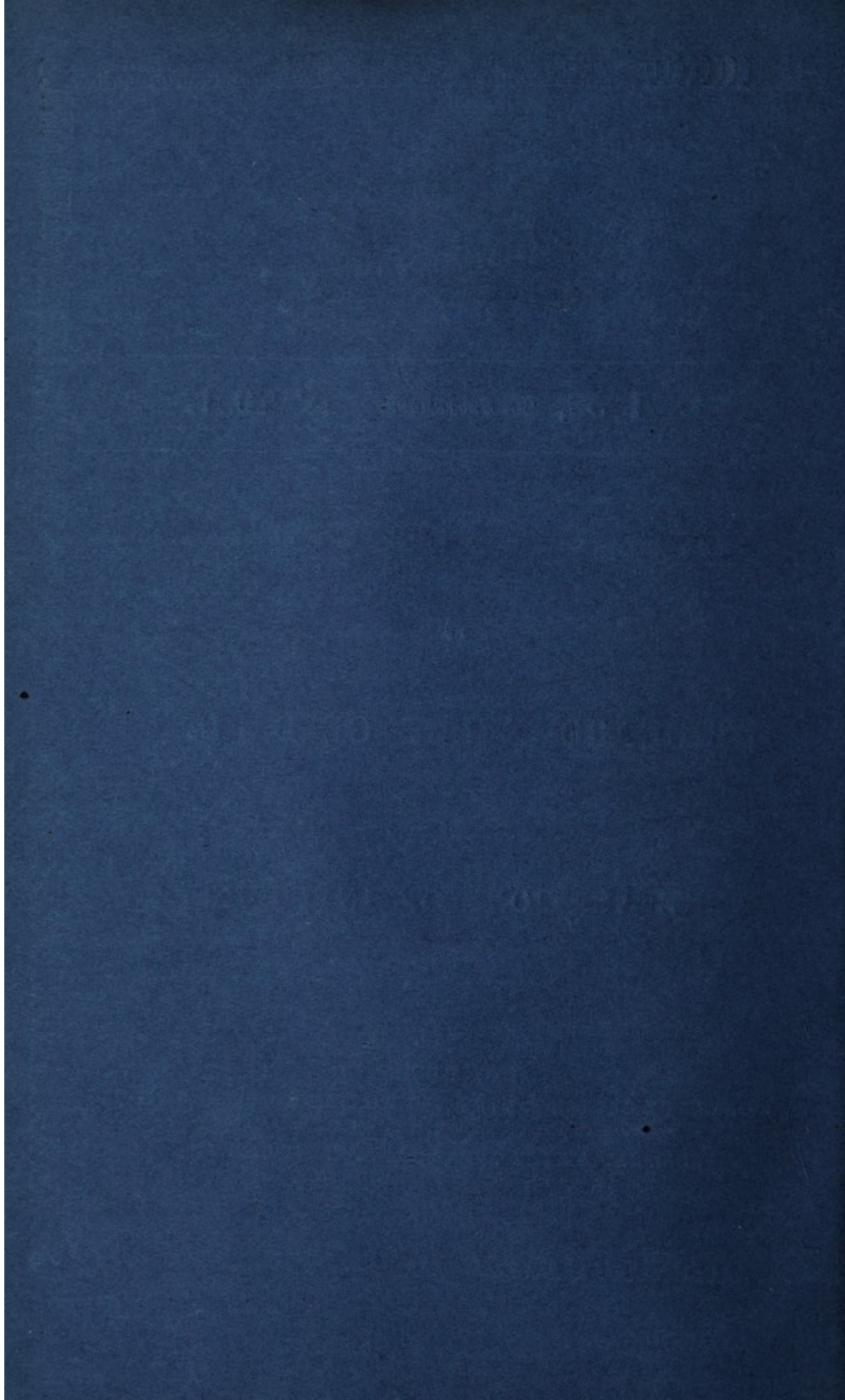
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A.D. 1859, 6th SEPTEMBER. N° 2031.

Preparation of Infusions.

LETTERS PATENT to Richard Kelly Geldard, of Plymouth, in the County of Devon, Pharmaceutical Chemist, for the Invention of "IMPROVEMENTS IN THE METHOD OF AND APPARATUS FOR MAKING PHARMACEUTICAL OR OTHER INFUSIONS."

Sealed the 21st February 1860, and dated the 6th September 1859.

PROVISIONAL SPECIFICATION left by the said Richard Kelly Geldard at the Office of the Commissioners of Patents, with his Petition, on the 6th September 1859.

I, RICHARD KELLY GELDARD, of Plymouth, in the County of Devon, Pharmaceutical Chemist, do hereby declare the nature of the said Invention for "IMPROVEMENTS IN THE METHOD OF AND APPARATUS FOR MAKING PHARMACEUTICAL OR OTHER INFUSIONS," to be as follows:—

This Invention is intended principally for the purpose of facilitating the infusion of pharmaceutical or other ingredients so as to obtain a more perfect infusion, and in less time than by the method and apparatus hitherto in use. The apparatus which I propose to employ for the above purpose consists of a pan of a convenient form for cleansing, and less in height than it is in diameter, formed of block tin or other suitable material, and provided with a handle and

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a lid or cover. In the interior of this pan, and near to the top of the same, are two sieves or strainers made of perforated metal or earthenware, or other suitable perforated material or fabric. The ingredients to be infused are placed between the two sieves or strainers and cold water poured into the pan or vessel until the ingredients are covered. Heat is then applied to the pan or vessel by means of a gas stove or otherwise, until the water is raised to a temperature of 212 degrees; the pan or vessel is then removed and enveloped in felt or other non-conductor of heat for the space of about five minutes; the pan is then placed in an open vessel and cold water is poured on the lid so as to accelerate the cooling operation.

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SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Richard Kelly Geldard in the Great Seal Patent Office on the 6th March 1860.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, RICHARD KELLY GELDARD, of Plymouth, in the County of Devon, Pharmaceutical Chemist, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Sixth day of September, in the year of our Lord One thousand eight hundred and fifty-nine, in the twenty-third year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Richard Kelly Geldard, Her special licence that I, the said Richard Kelly Geldard, my executors, administrators, and assigns, or such others as I, the said Richard Kelly Geldard, my executors, administrators, and assigns, should at 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 Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "**IMPROVEMENTS IN THE METHOD OF AND APPARATUS FOR MAKING PHARMACEUTICAL OR OTHER INFUSIONS,**" upon the condition (amongst others) that I, the said Richard Kelly Geldard, my executors or administrators, by an instrument in writing under my, or their, or one of their hands and seals, should particularly describe and ascertain 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.

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NOW KNOW YE, that I, the said Richard Kelly Geldard, do hereby declare the nature of my said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement in writing, and on reference to the accompanying
5 Drawings, that is to say:—

This Invention is intended principally for the purpose of facilitating the infusion of pharmaceutical ingredients so as to obtain a more perfect infusion, and in less time than by the method and apparatus hitherto in use, but with slight variations the same process and apparatus are equally applicable for the
10 purpose of making infusions of tea, coffee, and other ingredients. The apparatus which I propose to employ for the above purpose consists of a pan or vessel of a convenient form for cleansing, and less in height than it is in diameter, formed of block tin or other suitable material (pure tin hardened with antimony or silver being preferred), and provided with a handle and a lid
15 or cover. In the interior of this pan or vessel, and near to the top of the same, are two sieves or strainers made of perforated metal or earthenware, or of other suitable perforated material or fabric. The ingredients to be infused are placed between the two sieves or strainers and cold water is poured into the pan or vessel until the ingredients are covered. Heat is then applied to
20 the pan or vessel by means of a gas stove or otherwise, until the water is raised to a temperature of two hundred and twelve degrees; the pan or vessel is then removed, and enveloped in felt or other non-conductor of heat for the space of about five minutes; the pan or vessel is then placed in an open vessel, and if the infusion require to be cooled, cold water is poured on the lid so as to
25 accelerate the cooling operation. It will be evident that for making an infusion of tea or coffee this cooling operation is neither necessary nor desirable. These three several operations are for the most expeditious process, but when extreme haste is not required, the first and last operation may be dispensed with, and boiling water poured in the usual way on the ingredients
30 placed between the perforated or other strainers, the vessel having on the envelope of non-conducting material; this is the second operation, and is suitable for tea or coffee making.

In order that my said Invention for “Improvements in the Method of and Apparatus for Making Pharmaceutical and other Infusions” may be perfectly
35 understood, I have annexed hereunto a Sheet of Drawings representing, for the sake of illustration, two views of the apparatus which I propose to employ for making pharmaceutical infusions, and have marked the same with figures and letters of reference corresponding with those in the following explanation thereof.

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Figure 1 is an exterior view of the infusion pot or vessel; and Figure 2 is a sectional view of the same, shewing the position of the strainers in the interior thereof. *a, a*, is a vessel of tin or other suitable material provided with a handle *b, b*, and a polished lid *c, c*, of the same metal, which accurately fits and prevents evaporation; *d, d*, is a strainer of perforated metal or other suitable material on which the material to be infused is laid; and *e, e*, is a second perforated or other strainer to be placed over the material. The ingredients or material to be infused being laid on the strainer *d, d*, and the strainer *e, e*, placed above, cold water is poured into the vessel till the ingredients are covered, and the lid *c, c*, is then placed thereon. The vessel *a, a*, 10 is then placed on a gas or other stove till the water boils, when it is immediately removed and placed in an envelope or jacket of felt or other suitable non-conducting material for about five to eight minutes. The felt jacket is then removed, and the vessel *a, a*, is placed in a suitable tray or other shallow vessel, and cold water is to be poured over the lid *c, c*, until it rises in the tray 15 to the height of the side of the pot, care being taken that it does not enter the latter, and in five or six minutes the infusion will have been cooled sufficiently to strain off. It will be found that pharmaceutical infusions made by this process and apparatus will be much more uniform than those made in the ordinary manner, and the ingredients will be found to be as completely 20 exhausted of their medicinal qualities as they would be if treated for a much longer time in the usual way. The rationale of the process is as follows:—The water is kept in continued motion from beginning to end of the process; as soon as heat is applied, each particle of water goes to the bottom of the vessel, is heated, and rises to the top, being replaced by a fresh portion carrying with it the soluble matter of the ingredients. Again, on removal from the fire, and being covered with a non-conductor, the radiation of heat and consequent cooling goes on from the broad surface of the lid, and an opposite motion is effected; and, lastly, a disturbance on all sides is brought about by the operation of rapid cooling. 30

Having now described the nature and object of my said Invention for improvements in the method of and apparatus for making pharmaceutical or other infusions, together with the manner of carrying the same into practical effect, I would remark in conclusion that I do not intend to confine myself to the precise form or dimensions of the apparatus, as these will be varied 35 according to circumstances, but what I claim as my Invention is,—

Firstly, the method of making pharmaceutical and other infusions substantially as above described.

And secondly, the adaptation for such purposes of the apparatus shewn in

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the Drawings and above described, or any mere modification thereof, and especially the use of the envelope or jacket of felt or other non-conducting material for keeping up the circulation or displacement of the water during maceration.

5 In witness whereof, I, the said Richard Kelly Geldard, have hereunto set my hand and seal, this First day of March, in the year of our Lord One thousand eight hundred and sixty.

R. K. GELDARD. (L.S.)

LONDON :

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Printers to the Queen's most Excellent Majesty. 1860.

the drawings and above described, or any more modified in detail, and especially the use of the envelope or jacket of felt or other non-conducting material for keeping up the circulation or displacement of the water during operation.

In witness whereof, I, the said Richard Kelly (John), have hereunto set my hand and seal, this 1st day of March, in the year of our Lord One thousand eight hundred and sixty.

R. K. GILDARD. (s)

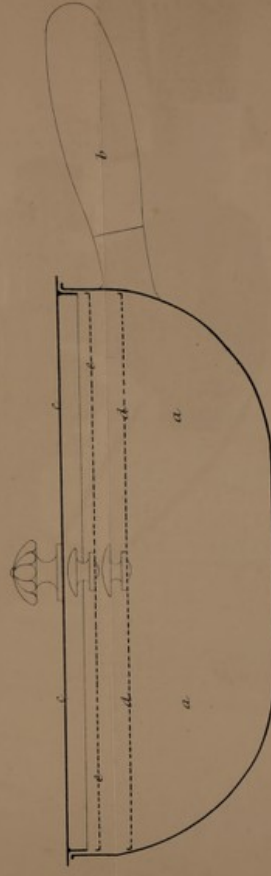
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F I G. 1.



F I G. 2.



The filed drawing is not colored.

Drawn on Sheet by Mulby & Sons

