

## **Specification of Manuel Leopold Jonas Lavater : injection bottles, &c.;**

### **Contributors**

Lavater, Manuel Leopold Jonas.

### **Publication/Creation**

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A.D. 1859, 28th SEPTEMBER. N° 2199.

SPECIFICATION

OF

MANUEL LEOPOLD JONAS LAVATER.

INJECTION BOTTLES, &c.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

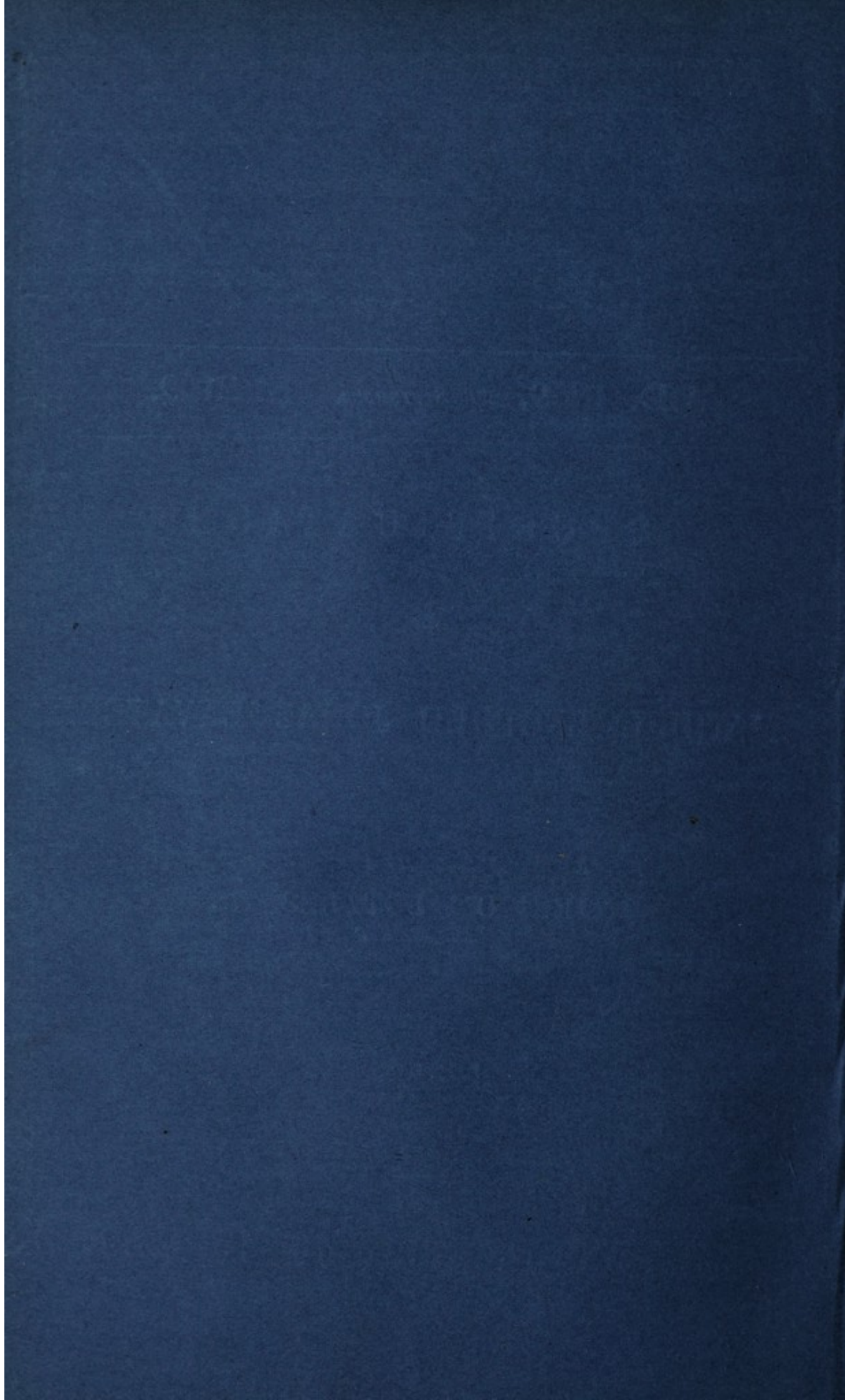
PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

Price 7d.

1860.







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A.D. 1859, 28th SEPTEMBER. N° 2199.

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Injection Bottles, &c.

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**LETTERS PATENT** to Manuel Leopold Jonas Lavater, of the Strand, in the County of Middlesex, India-rubber Manufacturer, for the Invention of "**IMPROVEMENTS IN APPARATUS KNOWN AS INJECTION BOTTLES, AND IN PNEUMATIC DISCS USED IN APPARATUS FOR ADHERING TO GLASS AND OTHER IMPERMEABLE SUBSTANCES.**"

Sealed the 16th March 1860, and dated the 28th September 1859.

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**PROVISIONAL SPECIFICATION** left by the said Manuel Leopold Jonas Lavater at the Office of the Commissioners of Patents, with his Petition, on the 28th September 1859.

I, **MANUEL LEOPOLD JONAS LAVATER**, of the Strand, in the County of  
5 Middlesex, India-rubber Manufacturer, do hereby declare the nature of the Invention for "**IMPROVEMENTS IN APPARATUS KNOWN AS INJECTION BOTTLES, AND IN PNEUMATIC DISCS USED IN APPARATUS FOR ADHERING TO GLASS AND OTHER IMPERMEABLE SUBSTANCES,**" to be as follows:—

This Invention has for its object improvements in apparatus known as  
10 injection bottles, and in pneumatic discs used in apparatus for adhering to glass and other impermeable substances.

In the construction of injection bottles, in place of making the india-rubber bottles, as heretofore, so as to receive and have fixed therein tubular mouthpieces of wood or other material, through which the bottles are filled,



*Lavater's Improvements in Injection Bottles, &c.*

and in which the clyster or such like pipes are fixed, the necks of india-rubber bottles are, according to my Invention, cast with such an enlargement or thickening at the outer ends thereof as to dispense with the use of the separate or distinct mouthpiece of wood or of other material heretofore used, the edges of the india-rubber bottles fitting tightly to the exterior of the 5 clyster or such like pipe; or, in the construction of injection bottles, india-rubber bottles of the ordinary form may be used, and the clyster or such like pipe may be fitted into it, the exterior of the pipe being of larger diameter than usual, so as to fit tightly into the mouth of the bottle.

In making india-rubber discs for pneumatic apparatus for adhering to glass 10 and other impermeable substances, each india-rubber disc is made of greater thickness at the outer edges or circumference than in the centre, and so that by deflecting the central portion of a disc within the limits of the thickness of its circumference a sufficient vacuity will be obtained, and consequently such discs will admit of having flat plates fixed to their backs in place of hollow 15 cups or chambers, as has heretofore been the practice.

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**SPECIFICATION** in pursuance of the conditions of the Letters Patent, filed by the said Manuel Leopold Jonas Lavater in the Great Seal Patent Office on the 28th March 1860.

**TO ALL TO WHOM THESE PRESENTS SHALL COME, I, MANUEL 20** LEOPOLD JONAS LAVATER, of the Strand, in the County of Middlesex, India-rubber Manufacturer, send greeting.

**WHEREAS** Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Twenty-eighth day of September, in the year of our Lord One thousand eight hundred and fifty-nine, in the twenty-third year of 25 Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Manuel Leopold Jonas Lavater, Her special licence that I, the said Manuel Leopold Jonas Lavater, my executors, administrators, and assigns, or such others as I, the said Manuel Leopold Jonas Lavater, my executors, administrators, and assigns, should at any time agree with, and no 30 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 APPARATUS KNOWN AS INJECTION BOTTLES, AND IN PNEUMATIC DISCS USED IN APPARATUS FOR 35** ADHERING TO GLASS AND OTHER IMPERMEABLE SUBSTANCES," upon the condition



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*Lavater's Improvements in Injection Bottles, &c.*

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(amongst others) that I, the said Manuel Leopold Jonas Lavater, 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  
5 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 Manuel Leopold Jonas Lavater, do hereby declare the nature of the said Invention, and in what manner the  
10 same is to be performed, to be particularly described and ascertained in and by the following statement thereof, that is to say :—

This Invention has for its object improvements in apparatus known as injection bottles, and in pneumatic discs used in apparatus for adhering to glass and other impermeable substances.

15 In the construction of injection bottles, in place of making the india-rubber bottles, as heretofore, so as to receive and have fixed therein tubular mouth-pieces of wood or other material, through which the bottles are filled, and in which the clyster or such like pipes are fixed, the necks of india-rubber bottles are, according to my Invention, cast with such an enlargement or thickening  
20 at the outer ends thereof as to dispense with the use of the separate or distinct mouthpiece of wood or of other material heretofore used, the edges of the india-rubber bottles fitting tightly to the exterior of the clyster or such like pipe ; or, in the construction of injection bottles, india-rubber bottles of the ordinary form may be used, and the clyster or such like pipe may be fitted  
25 into it, the exterior of the pipe being of larger diameter than usual, so as to fit tightly into the mouth of the bottle.

In making india-rubber discs for pneumatic apparatus for adhering to glass and other impermeable substances, each india-rubber disc is made of greater thickness at the outer edges or circumference than in the centre, and so that  
30 by deflecting the central portion of a disc within the limits of the thickness of its circumference a sufficient vacuity will be obtained, and consequently such discs will admit of having flat plates fixed to their backs in place of hollow cups or chambers, as has heretofore been the practice.

Having thus stated the nature of my Invention, I will proceed more fully  
35 to describe the manner of performing the same.

#### DESCRIPTION OF THE DRAWING.

Figure 1 shews an external view of an injection bottle, having its neck or mouthpiece constructed according to my Invention ; Figure 2 is a section



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thereof. From these views it will be seen that the ordinary mouthpiece of wood or other material, which has heretofore been fixed in the neck of such a description of bottle, in order to receive the end of a clyster or other pipe, is dispensed with, and in place thereof the neck or mouthpiece of the bottle itself is made of greater substance, in order that, by the greater strength 5 thereof, the holding of the end of a clyster or such like pipe may be made more secure than when a wood or other mouthpiece is used to receive the end of a clyster or other pipe, as was formerly the case. The bottles, as heretofore, are made of vulcanized or converted india-rubber. *a* is the elastic mouthpiece, and *b* a clyster pipe fitted therein, the hole or passage in the 10 mouthpiece being smaller in diameter than the exterior of the clyster pipe, so that when the end of the clyster pipe is forced in, the elastic mouthpiece embraces the same very strongly, and in such manner as to prevent the passage of the fluid in that direction when the bottle is pressed in with a view to force the fluid through the clyster pipe. In the Drawing the ordinary 15 form of clyster pipe is shewn, but, if preferred, the end may be made larger, and the mouthpiece or neck of the bottle also larger than that shewn, and made similar to those heretofore made when intended to receive and have fixed therein a mouthpiece of wood or other material, but in this case also the thickness or substance of the india-rubber is to be made of greater strength, 20 and sufficient to hold the end of the clyster or other pipe securely.

Figure 3 shews a plan and section of a disc of india-rubber (by preference vulcanized or converted india-rubber) suitable for pneumatic apparatus for adhering to glass and other impermeable surfaces for which plain discs of 25 india-rubber have heretofore been used. Figure 4 shews a plan and section of another form of india-rubber disc; and I would state that the shape may be varied, but the circular or elliptical form is preferred; but in all cases they are to be made similar in respect to having their outer edges or parts thicker or of greater substance than the central parts, and they should also in all cases be made similar in respect to having tubular portions produced at the 30 centres, in order more securely to attach the end of the stem air-tight thereto. These india-rubber discs are formed in moulds, and retained therein during the process of vulcanizing or curing the same by hand, as is well understood, when making other articles of vulcanized or cured india-rubber in moulds. I would remark, that although it is preferred to employ india-rubber and 35 sulphur without the admixture of other matters, I do not confine myself thereto, as other substances may be combined therewith.

Having thus described the nature of my Invention and the manner of performing the same, I would have it understood that what I claim is,—



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First, the manufacture of flexible elastic india-rubber bottles with mouth-pieces, as herein described.

And, secondly, I claim the manufacture of india-rubber discs for pneumatic apparatus, with extra thickness or substance at the edges, and tubular centres,  
5 as herein described.

In witness whereof, I, the said Manuel Leopold Jonas Lavater, have hereunto set my hand and seal, this Twenty-seventh day of March, in the year of our Lord One thousand eight hundred and sixty.

L. J. LAVATER. (L.S.)

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LONDON:

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1860.



I first saw a number of of flexible elastic india-rubber bottles with mouths  
and, accordingly, I obtain the manufacture of india-rubber discs for pneumatic  
apparatus with extra thickness of substance at the edges, and tubular centres,  
in a mass whereof, I, the said Samuel Jacobus James Latimer, have  
heretofore set my hand and seal, this Twenty-seventh day of March,  
in the year of our Lord One thousand eight hundred and sixty.

J. J. LATIMER. (Sd.)

LONDON:

Printed by GEORGE KILGUS and WILLIAM PROCTORWOOD,  
Printers to the Queen's most Excellent Majesty, 1860.



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FIG. 1.

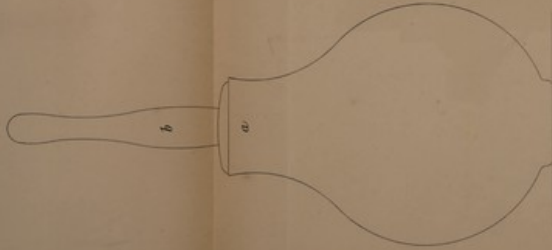


FIG. 2.

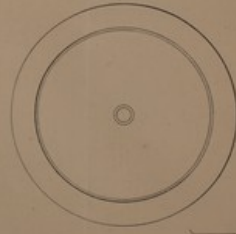
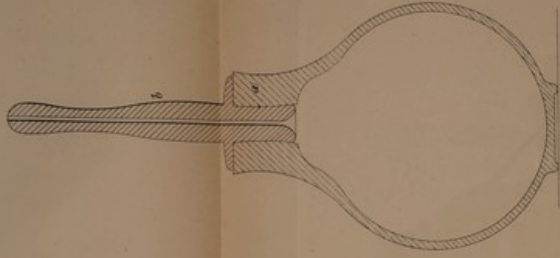


FIG. 3.



FIG. 4.



The filed drawing is partly colored.

Drawn in Sheet by M. J. & S. Co.

LOWSON: Pyramidal Lavatory, Lowson's Lavatory, and Washbasin, Specification.  
Printed under Queen's Instructions by M. J. & S. Co. 1853.



