

## **Specification of Louis Fontana : substances for surgical and therapeutical application.**

### **Contributors**

Fontana, Louis.

### **Publication/Creation**

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A.D. 1872, 22<sup>nd</sup> APRIL. N<sup>o</sup> 1201.

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SPECIFICATION

OF

LOUIS FONTANA.

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SUBSTANCES FOR SURGICAL AND  
THERAPEUTICAL APPLICATION.

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LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY :

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

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*Price 4d.*

1872.









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A.D. 1872, 22nd APRIL. N° 1201.

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**Substances for Surgical and Therapeutical Application.**

*(This Invention received Provisional Protection only.)*

PROVISIONAL SPECIFICATION left by Louis Fontana at the Office of the Commissioners of Patents, with his Petition, on the 22nd April 1872.

I, LOUIS FONTANA, of Number Forty-eight, Rue des Marais, Paris, 5 in France, Merchant, hereby declare the nature of the said Invention for "IMPROVEMENTS IN THE TREATMENT OF CERTAIN SUBSTANCES EMPLOYED FOR SOME SURGICAL AND THERAPEUTICAL APPLICATIONS," to be as follows:—

(1.) My Invention or improvement consists of the combination of pharmaceutical preparations with substances woven, milled, felted, or 10 made of paste, or pulp, or vegetable fibre, and fibrous or filamentary materials of cotton, hemp, flax, wool, or tow, mixed or unmixed with antiseptic matter; which substances may be employed for certain surgical applications, such as the treatment of hemorrhage and wounds and in certain therapeutical applications, such as the reduction of swellings 15 or incipient tumors, for whitlows, burns, scalds, chilblains, and in certain nervous and muscular affections; and further, it consists of the protection of such prepared substances so far as practicable from ulterior deterioration by atmospheric contact.

(2.) The substance to be used being previously cleaned by removing 20 any injurious foreign matter it may be submitted to a preservative saturation, or a coating by way way of paint, if not already endued with



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*Fontana's Substances for Surgical and Therapeutical Application.*

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an analogous quality; as for example is tarred tow. This preliminary treatment is only requisite when the substance is to be kept long for use; but it may otherwise be dispensed with, and in respect to my second pharmaceutical preparation herein-after mentioned it may be wholly dispensed with. 5

(3.) In its dry state after this preliminary process the substance in that condition if so prepared or otherwise in its cleansed and dry state is impregnated or coated sufficiently to render it energetic in action with a pharmaceutical amalgam or solution the base of which has the properties of being anti-hemorrhagic or styptic, allopathic, and 10 anodyne for certain purposes.

(4.) For this impregnation or coating I use preferentially a liquid or mixture composed, 1st., of tritochloride or hydrochloride of peroxide of iron, and a curative stimulant such as arnica, or any other therapeutical ingredient having the like effect, which I empirically find 15 intensifies and accelerates the curative action, in solution with water in greater or less proportion according to the nature of the application and substance for which it is intended; secondly, another pharmaceutical liquid or mixture which I employ for some of the purposes aforesaid is composed of the specific called "eau hémostatique de 20 Pagliari," or Pagliari's styptic water, with arnica or other curative stimulant of similar nature in admixture with water.

(5.) This part of my combination consisting of the impregnation or coating of the substance to be used, and which I call the "pharmaceutical preparation," may be effected by hand in trays or troughs by 25 steeping or soaking superficially or, by saturation, or by laying on the substance one or more coatings with a tool contrived as a feeder (which I call "alimenteur"), or with a brush or other suitable instrument to convey on to the surface the pharmaceutical composition described in the preceding paragraph, either as a solution or as a paint or plaster, 30 according to the thickness of the application required.

(6.) But for economy of time and labour in treating substances in considerable quantity I pass them through an apparatus which I call a preparer or "apprêteur," which consists of a receptacle or bath containing the pharmaceutical composition, through or over which the 35 passage of the substance is directed on drums, or rollers, or other suitable appliances, acted on by any sufficient motive power and machinery. The



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substance on passing from the "preparer" is conveyed by hand or by automatic appliances to be divided into suitable portions for use, and to be parcelled or packed as required.

(7.) Another apparatus of which I make use for the same purpose is  
5 an endless band set in a framework, for which may be substituted any other suitable kind of channel or support for the substance, which is laid upon it so as to receive its impregnation or coating above or below from an automatic feeder or "alimenteur," and with proper appliances for returning the superfluous pharmaceutical composition to the feeder  
10 or the receptacle for the supply of such feeder.

(8.) The difference of the operation for giving a complete or partial impregnation or merely one or more superficial coatings in either case may be regulated with sufficient exactitude by the movement of the substance and by the supply from the feeder, which may be controlled  
15 at pleasure according to the degree of pharmaceutical preparation to be given.

(9.) There is an advantage not wholly indispensable in excluding as far as practicable atmospheric contact after the preparation herein-before described. To that end the prepared substance in packing is enclosed  
20 in an envelope of any material normally impermeable and at the same time more or less sufficiently incorrodible or insoluble by impact of the prepared substance. This envelope will reduce to the minimum, if not entirely preclude, deterioration from exposure to the atmosphere. Laminated gutta percha in "thin" sheets, called sometimes gutta percha  
25 cloth or tissue, is suitable for this purpose, and metallic envelopes of which the metal does not develop or evolve easily or copiously deleterious oxide, which might prejudicially affect the application of the prepared substance if such oxide were absorbed by it. For stationary use and other exceptional purposes, glass and vitrified argillaceous  
30 casings may be usefully employed, or vitrified coatings may be applied to the interior of the casings of metallic or other material, or such glass or vitrified envelopes may be properly protected for portability by external coverings.

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Printers to the Queen's most Excellent Majesty. 1872.



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