

## **Specification of William Donald Napier : facilitating dental operations.**

### **Contributors**

Napier, William Donald.

### **Publication/Creation**

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A.D. 1865, 13th MARCH. N° 706.

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

OF

WILLIAM DONALD NAPIER.

—  
FACILITATING DENTAL OPERATIONS.  
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LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,  
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1865.









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### Facilitating Dental Operations.

*(This Invention received Provisional Protection only.)*

**PROVISIONAL SPECIFICATION** left by William Donald Napier at the Office of the Commissioners of Patents, with his Petition, on the 13th March 1865.

I, WILLIAM DONALD NAPIER, of 22, George Street, Hanover Square, in the County of Middlesex, do hereby declare the nature of the said Invention for "**IMPROVEMENTS IN APPARATUS TO FACILITATE DENTAL OPERATIONS,**" to be as follows :—

This Invention has for its object improvements in apparatus to facilitate dental operations. In the process of stopping teeth with gold or other material the greatest difficulty the dentist has to contend with is the accumulation of saliva which takes place in the mouth, for it is well known that a tooth cannot be satisfactorily stopped unless the cavity as well as the material employed to stop it be kept dry. The plan usually practised by dentists is to insert small napkins in the mouth in order to absorb the moisture, which mode of treatment, although the best means hitherto resorted to has its drawbacks by reason of their tending to increase the action of the salivary glands and so necessitating their constant removal ; the napkins have also heretofore been much in the way of the operator.

Now my Invention consists in the construction and use of apparatus by the employment of which the saliva is caused to flow away from the mouth as quickly as it is secreted. For these purposes a tubular or hollow frame consist-



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*Napier's Improvements in Apparatus to Facilitate Dental Operations.*

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ing of two hollow branches is introduced into the mouth and is retained in position by the lip of the patient. The stem of this frame is connected to one end of a flexible tube, by preference of vulcanized india-rubber, whilst the other end is connected to a short tube which descends through a stopper of a bottle or small vessel, so that the saliva as it flows from the mouth through the ducts 5 or passages in the frame passes down the flexible tube into the bottle or vessel with which the tube is connected. The bottle or vessel is kept partially exhausted by a suitable pump connected therewith, by preference by a flexible tube ; it is preferred that the pump should consist of a flexible hollow spherical or other shaped vessel provided with two valves, one opening inwards and the 10 other outwards. By means of such or other suitable pump or exhausting apparatus the air is removed from the bottle or vessel, and consequently the saliva is caused to flow away from the mouth both exterior and interior of the gums, and it is preferred that the arrangement of the apparatus should be such as to admit of the patient working the pump. When using the apparatus 15 the suction end of the tube is to be introduced on the opposite side of the mouth to that on which the tooth to be stopped is situated and as much out of the way of the operator as may be, the pump is to be kept in action to keep up the requisite exhaustion. It should be stated that it is not essential that there should be an exhausted vessel or receiver introduced between the 20 pump and the suction tube, as the saliva may be allowed to pass into the flexible elastic pump and be ejected therefrom.

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LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,  
Printers to the Queen's most Excellent Majesty. 1865.