D. HARRINGTON.

Galvanic Apparatus.

8736X

Patented March 31, 1835.

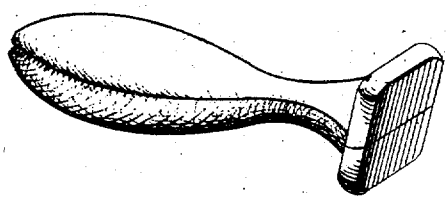
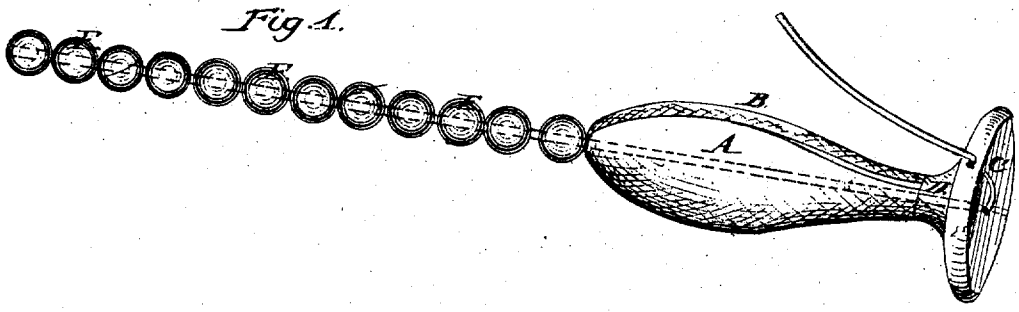


Fig 1.



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Daniel Harrington

The Schedule referred to in the Letters Patent and making part of the same containing a description in the words of the said Daniel Harrington himself of his improvement in an apparatus made or modes for applying Galvanic Electricity in the cavities of the human system for the cure or relief of diseases. To all whom it may concern

Be it known that I Daniel Harrington of the City of Philadelphia in the State of Pennsylvania have invented certain instruments for the application of Galvanic influence to the cure or relief of diseases in some of its forms to which the human body is liable which instruments differ in certain particulars as will herein appear from those which I have previously obtained Letters Patent of the Government of the United States, and I do hereby declare that the following is a full and exact description thereof. In forming the instrument which I will first describe I make a foundation or body of ivory wood or any suitable substance. This ivory is to be turned into the proper shape for entering and remaining in the rectum or other external orifice of the body. The part which is to enter the rectum is in the form of a long oval which may be about three inches in its longest and one inch in its shortest diameter. This is joined by a neck of about half an inch in diameter to a button which swells out to an inch and a quarter or more in diameter. This button may be round or oval, the latter form is perhaps the best all the parts of it are duly curved so that it may not injure the parts to which it is applied. The oval part which enters the rectum is to be covered by two shells of metal having a galvanic action by contact say one of silver and one of zinc. These shells are in contact at the point which first enters the rectum and extend down near to the button or swell before named, this

outlet.

8736X

contact may be produced by passing the rivets through the two shells from side to side. Through the axis of this instrument a hole is drilled sufficiently large to pass a cat gut or string through the same for a purpose to be presently described. Figure 1. in the accompanying drawing represents the instrument of the form and size described A & B. being the shells of silver and ivory (as in C. the button of ivory which bears against the rectum. When the instrument is introduced, by which and the action of the sphincter on the muscle it is retained in its place and may be worn for hours without interfering with the action of the body in sitting walking or riding in a carriage. The intestines then the perforation through the axis of the instrument, the object of which I will describe. It is sometimes desirable to stimulate the intestines to a greater height than can be reached by the instrument as described (or by any other inflexible form that can be devised it is believed) with this view I make a number of metallic forms which may round, oval or cylindrical one half of them of silver and the other of zinc, they may be about half an inch or they may be more or less in their diameter. These I string alternately, the zinc and the silver, upon a cat gut or other suitable cord or string which is secured immoveably in the extreme form round or oval (on the other end of the cord I pass through the perforation in the ivory leaving the end of the cord to extend a few inches beyond the button. These forms or balls as perforated and arranged upon their cord are shewn at E. E. E. In this way a flexible part of any required length may be formed which when passed into the rectum will follow the convolutions of the intestines more readily than a bougie. By drawing the string inside through the ivory instrument they may be by the aid of both hands very readily entered the cavity & their presence together will give to them a requisite stiffness for

for the purpose. A flexible part might also be made by other means, as for example, by winding spirally upon a mandril a wire or narrow flat-strip of silver and another of gold, but this mode of forming a flexible it is thought would have no advantage over the one first described as to its power and would be found more difficult to keep clean and more liable to injury in its correct spiral form from using. One object in using this lining within the metallic shells is to give lightness to the instrument as its operations would be as powerful if the parts inserted were made of solid metal but the weight in some cases might be found inconvenient to the wearer. In some cases it might be found advantageous to use the flexible arrangement as shown at E. E. E. without the first described instrument in which case the means of securing it in its place by the aid of a strap or other-wise will be sufficiently obvious. When from any cause it may be difficult to introduce the instrument first described on account of its form I make it in two parts divided longitudinally, but in this case it is most convenient to make it entirely of gold as to its body & plate one of the halves so far as it is intended to enter a cavity now by one its whole surface with silver. The corners where the two halves fit together are to be rounded off and one half is to be inserted after the other as by so doing the parts will be less disturbed than with the instrument first described.

Either this or the first instrument may be confined or held in place by a strap passing below the coccyx & around the Perinæum. The ends of the strap to be attached to a belt above the hips or to the clothes, this however will not often be found requisite when the instrument is used in the uterus, but when used in the vagina it may not unfrequently be found necessary particularly in cases where a relaxation of the uterus would tend to eject it. Although

instruments of the kind described herein produce continued action which perhaps may not be found to exist in many cases to such an immediate renovating effect as some of those formally patented by me in which the actuating instrumentalities get at they require but little attention on the part of those who use them may be kept in their place in most instances by the action of the parts in consequence of the form given to them and compensate by the length of time which they may be allowed to remain for a more brief and powerful action they will be frequently prefered. When these instruments are used in the vagina or in cases of diseased wombs or for any other purpose such alterations in their form and size may be made as the particular circumstances of the case will require for example the irritability of the parts in certain cases may be such as to render the small part of the instrument which connects the button with the main or large part inconvenient to the vagina only it were made of flexible or elastic material a flexible connecting portion between the two ends of the instrument may be made if wire bent into spiral form and the same spiral may be flattened to a necessary extent and its inner part filled with any flexible substance that could be saturated with gum elastic drying and thereby prevent its imbibing extraneous matter and becoming offensive. I have already indicated the principle difference between these instruments and such as have an intermitting action as described in my former specifications and they differ also from those in which the two different metals are affixed to different parts of the body & connected by a wire or other conductor neither of which is now claimed. but nothing more than an instrument or instruments such as I have herein described (subject to proper variations or modifications necessary to adapt them to

to the respective cases for which they may be deemed suitable) consisting of any two metals which may be found good motors of electricity and combined together in the manner (and for the purpose herein described

Witnesses

Sid. Jones

John D. Clark

Daniel Harrington

1692 words

(Drawing.)

Ex. D. M.G.C.