

No. 812,020.

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H. M. CRIPPEN.
EMBALMING CATHETER.
APPLICATION FILED NOV. 4, 1905.

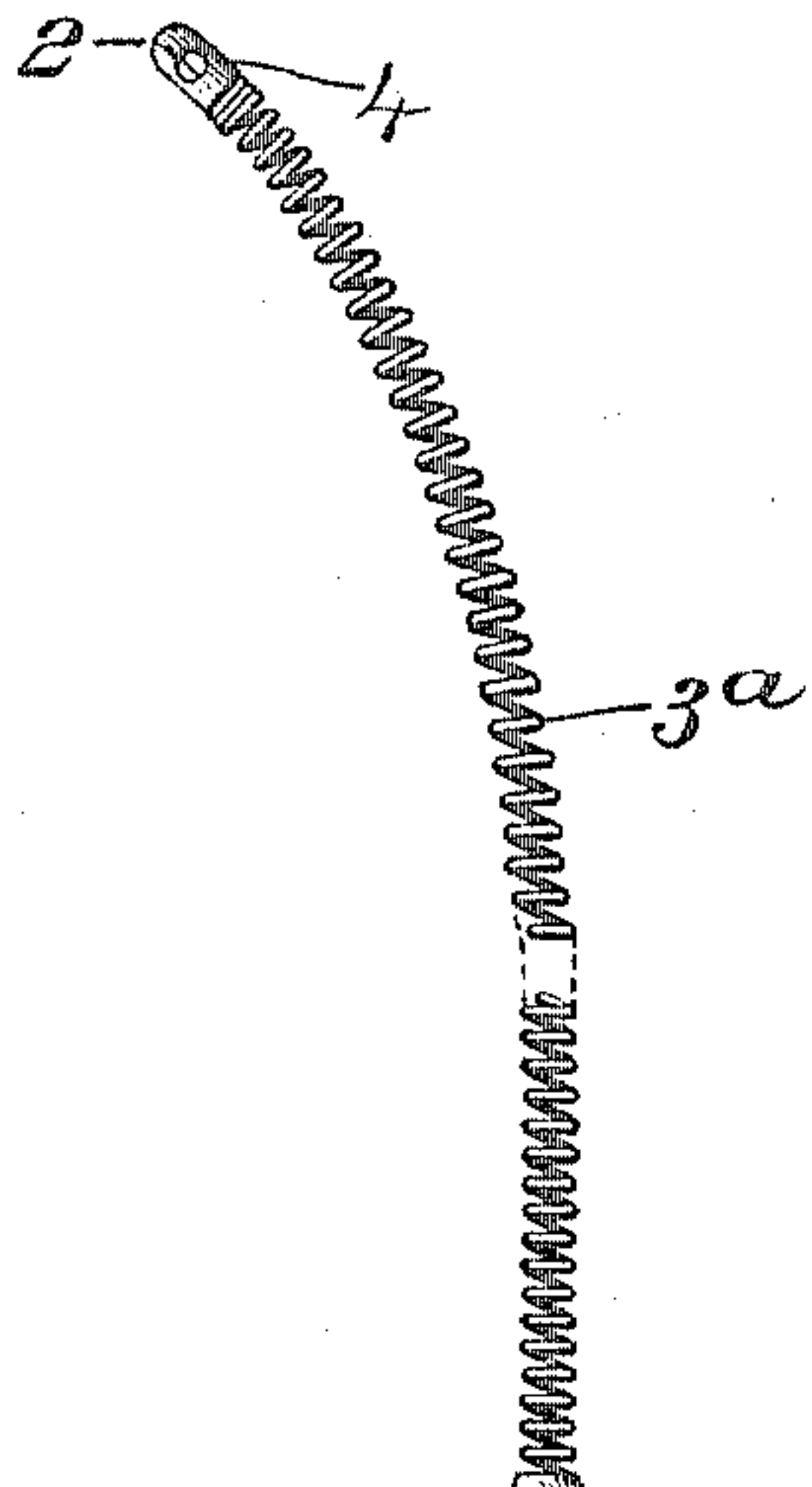


Fig. 1.

1

5

6

2

3

2

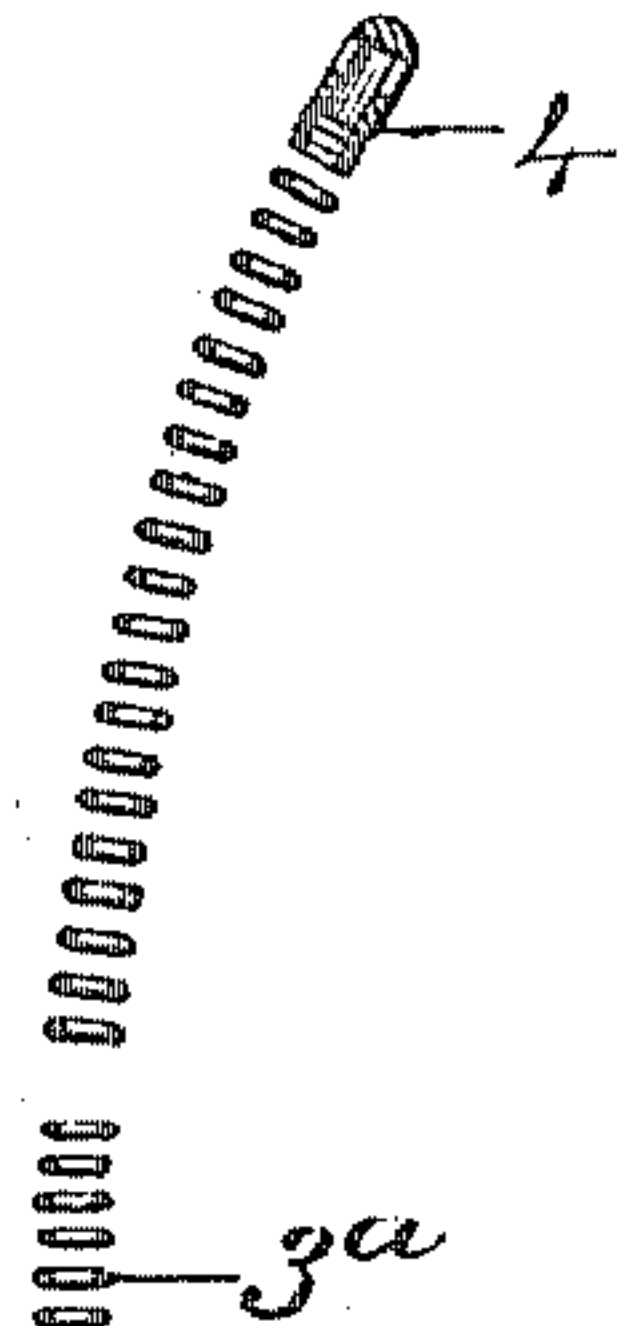


Fig. 2.

1

5

6

2

3

WITNESSES:

H. G. Dieterich

E. E. Ellis

INVENTOR

Henry M. Crippen

BY

Munn & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE

HENRY MABBITT CRIPPEN, OF BALLSTON SPA, NEW YORK, ASSIGNOR TO
THE MAX HUNCKE CHEMICAL CO., OF BROOKLYN, NEW YORK.

EMBALMING-CATHETER.

No. 812,020.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HENRY MABBITT CRIPPEN, a citizen of the United States, and a resident of Ballston Spa, in the county of Saratoga and State of New York, have invented a new and Improved Embalming-Catheter, of which the following is a full, clear, and exact description.

This invention relates to catheters; and it consists, substantially, in the details of construction and combinations of parts herein-after more particularly described, and pointed out in the claims.

The invention has reference more especially to catheters for embalming purposes and of the type for which Letters Patent No. 707,775 were granted to William W. Harris on the 26th day of August, 1902, wherein is shown and described a metal tube of special construction at one end for the attachment thereto of a flexible tube and provided at its other end with a flexible or coil-spring member, said tube and flexible or coil-spring member having a wire extending therethrough for the purpose of temporarily stiffening the member during the time of insertion or introduction of the catheter within a vein or artery of the human body to be embalmed. The structure referred to has many advantages, but also has the disadvantage that in the use thereof the hands of the operator frequently become covered with blood and other matter from the arteries, due to the necessity of handling the flexible or coil-spring member of the structure to guide the same both on its introduction and withdrawal from the body.

One of the principal objects of the present invention is to overcome the above-mentioned disadvantage, as well as others, and to provide a catheter of the type referred to which is simple in construction and comparatively inexpensive to manufacture, besides being effective and reliable for its purposes and possessing the capacity for long and repeated service.

The above and additional objects are attained by means substantially such as are illustrated in the accompanying drawings, in which—

Figure 1 is an elevational view of my improved catheter, and Fig. 2 is a longitudinal sectional view thereof on the line 2 2 in Fig. 1.

Before proceeding with a more detailed description it may be stated that in the form of my improvements herein shown I employ a catheter comprising a tube and a flexible or coil-spring member, combined with which is a special slidable member, performing not only the function of a stiffener for the said flexible or coil-spring member, but also that of a shield for preventing the hands of the operator from becoming soiled in the use of the catheter, as will presently be explained. Said slidable member is provided with special means by which the same is held or maintained in any position to which it may be adjusted on the catheter, said means also constituting a grip to be taken hold of by the hand to operate the slidable member, and also a packing for preventing leakage of blood and other matter between the slidable member and tube of the catheter.

Reference being had to the drawings by the designating characters thereon, 1 represents my improved catheter in entirety, the same comprising a tube 2, having at what for convenience may be termed the "inner" end thereof an enlargement 3 for the attachment thereto of a suitable rubber or other flexible tube in a manner well understood. At the outer end thereof the tube 2 has applied thereto in any suitable way the inner end of a flexible or coil-spring member 3^a, the coils of which may be of an external diameter somewhat less than that of the tube, or, in any event, they should preferably not be of greater external diameter than that of the tube, the outer end of said member being provided with a perforated nipple 4 for facilitating the insertion of the member within an artery or vein of the human body for embalming purposes.

Fitted upon the tube 2 and being slidable thereon is a shield 5, the contact between the two preferably being as close as possible while still permitting the shield to be moved along the tube, said shield having at what for convenience may be termed its "inner" end a grip 6, formed of a short sleeve of india-rubber or other elastic material, part of which fits closely upon the inner end portion of the shield and the remaining part of which closely fits upon the tube 2, and it is apparent that by taking hold of said grip at the part thereof which surrounds the said inner

end portion of the shield and exerting a sufficient amount of force said shield may be moved in either direction upon the tube. The said grip also serves as a packing for the joint formed between the inner end of the shield and the tube for preventing leakage of matter from between the shield and the tube while the structure is being employed for its purposes. By this construction I am enabled to employ a flexible coil-spring member of considerable length and by moving the shield 5 along the tube 2 to the desired extent any desired proportion of the flexible or coil-spring member may be introduced or inserted in an artery or vein, the said shield automatically stiffening the catheter during its insertion, due to the fact that only as much of the flexible or coil-spring member is permitted to project from the outer end thereof as is intended to be first pushed into the artery or vein. The shield also serves as a means for holding the catheter with one hand while manipulating the tube 2 with the other both on the insertion and withdrawal of the catheter, whereas in the absence of the shield it would be necessary to take hold of the said flexible or coil-spring member, and thus would the hand grasping the same become soiled or covered with blood or other matter from the body being embalmed.

In Fig. 1 the flexible or coil-spring member is projected from the shield 5 for practically the full length thereof, whereas in Fig. 2 the shield 5 is shown as having been moved along the tube 2 for a suitable distance, it being apparent that said shield may be moved to cause more or less of the flexible or coil-spring member to project beyond the outer end thereof as may be desired.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. A catheter of the character specified, comprising a tube and a flexible member, and an outer slidable shield thereon.

2. A catheter of the character specified, comprising a tube and a coil-spring member, and an outer slidable shield thereon.

3. A catheter of the character specified, comprising a tube and a flexible member, an outer slidable shield thereon; and an elastic sleeve engaging the inner end of the shield and the tube, whereby to prevent leakage therebetween.

4. A catheter of the character specified, comprising a tube and a coil-spring member, an outer shield slidable thereon, and a sleeve engaging the end of the shield and the tube for preventing leakage of matter from between the inner end of the shield and the tube.

5. A catheter of the character specified, comprising a tube and a flexible member, and an outer slidable shield provided with a sleeve at the inner end thereof for engaging the tube.

6. A catheter of the character specified, comprising a tube and a flexible member, an outer shield slidable thereon, and a sleeve of an elastic member surrounding the joint between the tube and the inner end of the shield, a portion of which fits upon the tube and the remaining portion of which fits upon the inner end portion of the shield.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY MABBITT CRIPPEN.

Witnesses:

GEORGE F. PITTS,

JESSIE B. BROWN.