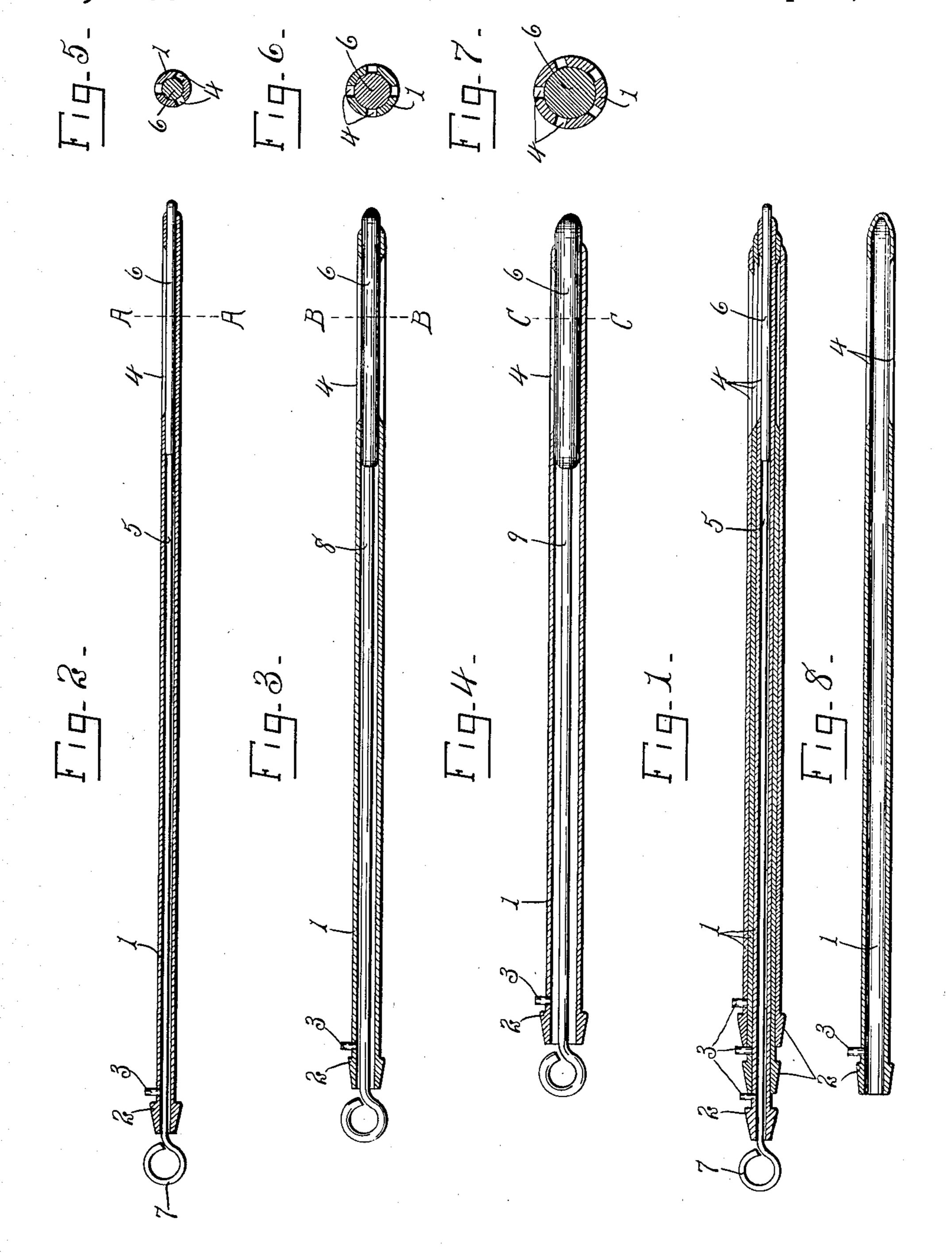
C. A. GENUNG.

EMBALMING INSTRUMENT.

APPLICATION FILED APR. 28, 1906.

918,437.

Patented Apr. 13, 1909.



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CHARLES A. GENUNG, OF WATERLOO, NEW YORK, ASSIGNOR OF ONE-HALF TO H. S. ECKLES & CO., OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

EMBALMING INSTRUMENT.

No. 918,437.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed April 28, 1906. Serial No. 314,238.

To all whom it may concern:

Be it known that I, CHARLES A. GENUNG, of Waterloo, in the county of Seneca and State of New York, have invented a certain 5 new and useful Embalming Instrument, of

which the following is a specification.

My invention has for its object the production of an embalming instrument which is particularly simple in construction, and 10 highly efficient and durable in use; and to this end it consists in the novel combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is 15 had to the accompanying drawing in which like characters designate corresponding parts

in all the views.

Figure 1 is a sectional view of one embodiment of my invention. Figs. 2, 3 and 4 are 20 sectional views of the hollow members seen in Fig. 1, and plungers therefor. Figs. 5, 6 and 7 are enlarged sectional views taken, respectively, on lines A-A, B-B, and C-C, Figs. 2, 3 and 4. Fig. 8 is a sectional view of 25 another form of the instrument embodying

my invention.

1, 1, 1 are a plurality of hollow members fitting one within the other and each having internal cavities and open ends, said members 30 and cavities being preferably cylindrical. Preferably the advance ends of the members 1 are rounded or beveled, and each member of smaller diameter extends through the opening in the advance end of the member of 35 larger diameter to a point in advance of said end. The rear ends of the members 1 are provided with peripheral shoulders 2 and lateral projections 3, and each member of smaller diameter preferably projects through, and beyond, the open rear end of the member of next larger diameter. The advance portions of the members 1 are provided with a plurality of openings 4 in their sides, said openings being preferably elongated but the 45 number thereof being unimportant.

5 is a removable plunger within the innermost member 1 and having a part 6 fitting the internal cavity thereof, said part 6 projecting through the opening in the advance 50 end of such member to a point in advance of said end. The advance end of the plunger 5 generally decreases in diameter toward its extremity, and the rear end thereof is provided with a suitable hand-piece, as an eye 7. 55 The projections 3 on the inner members 1,

and the eye 7 on the plunger 5 coact with the contiguous end faces of the members of next larger diameter for limiting the inward move-ment of said inner members and plunger. Although I preferably construct the mem- 69 bers 1 with openings in their advance ends, it is apparent that each may be provided with a, closed advance tapered end, as seen in Fig. 8. The described construction of the advance ends of the members 1 and the plunger 5 65 greatly facilitates the entrance of the instru-

ment into a vein. While my instrument is being introduced or withdrawn, the members 1 and the plunger 5 are preferably in position, and conse- 70 quently, all leakage of blood or other fluid is prevented, owing to the close fit between the members 1 and the plunger 5. After the instrument assumes its operative position in the vein, the latter is tightly drawn about the 75 rear or outer end of the member 1 of largest diameter by a suitable ligature, not illustrated, thus preventing leakage between said member and the wall of the vein. This ligature is fastened in any desirable manner to 80 the lateral projection 3 of said member for preventing removal thereof. Upon securing the ligature in place, the inner members 1 and the plunger 5 are withdrawn, whereupon the blood flows through the openings 4 and 85 the internal cavity of the remaining member 1 into a suitable conduit which may be held in position by the shoulder 2. In case embalming fluid is introduced through this member 1, the flow thereof will be in the op- 90 posite direction. If said member 1 should become clogged, one or all of the members 1 of smaller diameter, and the plunger 5 may be introduced therein and rotated, thus causing the lengthwise edges of the openings 4 in 95 the member of largest diameter, and the member of next smaller diameter to shear past each other and cut off or displace the clogging material. Or if desired, the members 1 of smaller diameter and the plunger 5 100 may be introduced therein and moved end-

greatly facilitated, and the liability of injury to the veins reduced to a minimum. If desired my instrument may be provided 110

sent smooth exterior surfaces to the veins 105

wise, thus forcing any accumulation from

within the outermost member 1 and freeing

the openings 4 therein. The members 1 pre-

into which they are introduced, and thus the

insertion and withdrawal of said members is

with two additional plungers 8 and 9 for respectively fitting the outermost member 1 and the member 1 of next smaller diameter, and when the instrument is provided with 5 these additional plungers, each member 1 and its plunger may be readily inserted and withdrawn as a single instrument.

What I claim is:—

1. A vein tube comprising a hollow mem-10 ber provided with an opening in its side at the end which enters the vein, and a plunger slidably arranged within and closely fitting the portion of the hollow member provided with said opening, for controlling the flow

15 through said opening.

2. A vein tube comprising a hollow member provided with an opening in its side at the end which enters the vein, and with an opening in its advance end and a plunger of 20 greater length than said first mentioned opening, slidably arranged within and closely fitting the portion of the hollow member provided with the first mentioned opening, and controlling the flow through said first men-25 tioned opening, said plunger being movable through the second mentioned opening.

3. A vein tube comprising a plurality of hollow members, one fitting within the other, and each being provided with an opening in 30 its wall, said openings communicating with the bore of the inner member, and a movable closure within the innermost member for controlling the communication between the

said openings and said bore.

4. A vein tube comprising a plurality of hollow members, one fitting within the other, and each being provided with an opening in its side, and with an opening in its advance end, a member of smaller diameter extending 40 through the opening in the advance end of a member of larger diameter to a point beyond said end.

5. A vein tube comprising a plurality of hollow members, one fitting within the other, the advance end of each member being ta- 45 pered, and each member being provided with an opening in its side, and with an opening in its advance end, the openings in the sides of the members communicating with each other, a member of smaller diameter extend- 50 ing through the opening in the end of a member of larger diameter, and a removable plunger within the innermost member for controlling the flow through said innermost member, said plunger being movable through 55 the opening in the advance end of the innermost member.

6. A vein tube comprising a plurality of hollow members, one fitting within the other, and each being provided with an opening 60 in its side and with an opening in its advance end, and the edges of the members adjacent to such openings in the advance ends being beveled, a member of smaller diameter extending through the opening in the advance 65 end of a member of larger diameter to a point beyond said end, and the beveled edge of the inner member being a continuation of the beveled edge of the larger member, and a removable plunger fitting within the innermost 70 member, the projecting end decreasing in diameter forming a blunt point, and the surfaces of such blunt point being a continuation of the beveled end edge of said member, substantially as and for the purpose specified.

In testimony whereof, I have hereunto signed my name in the presence of two attesting witnesses, at Waterloo, in the county of Seneca, in the State of New York, this 16th

day of April, 1906.

CHARLES A. GENUNG.

Witnesses:

EUGENE GRAHAM, HOWARD L. CONE.