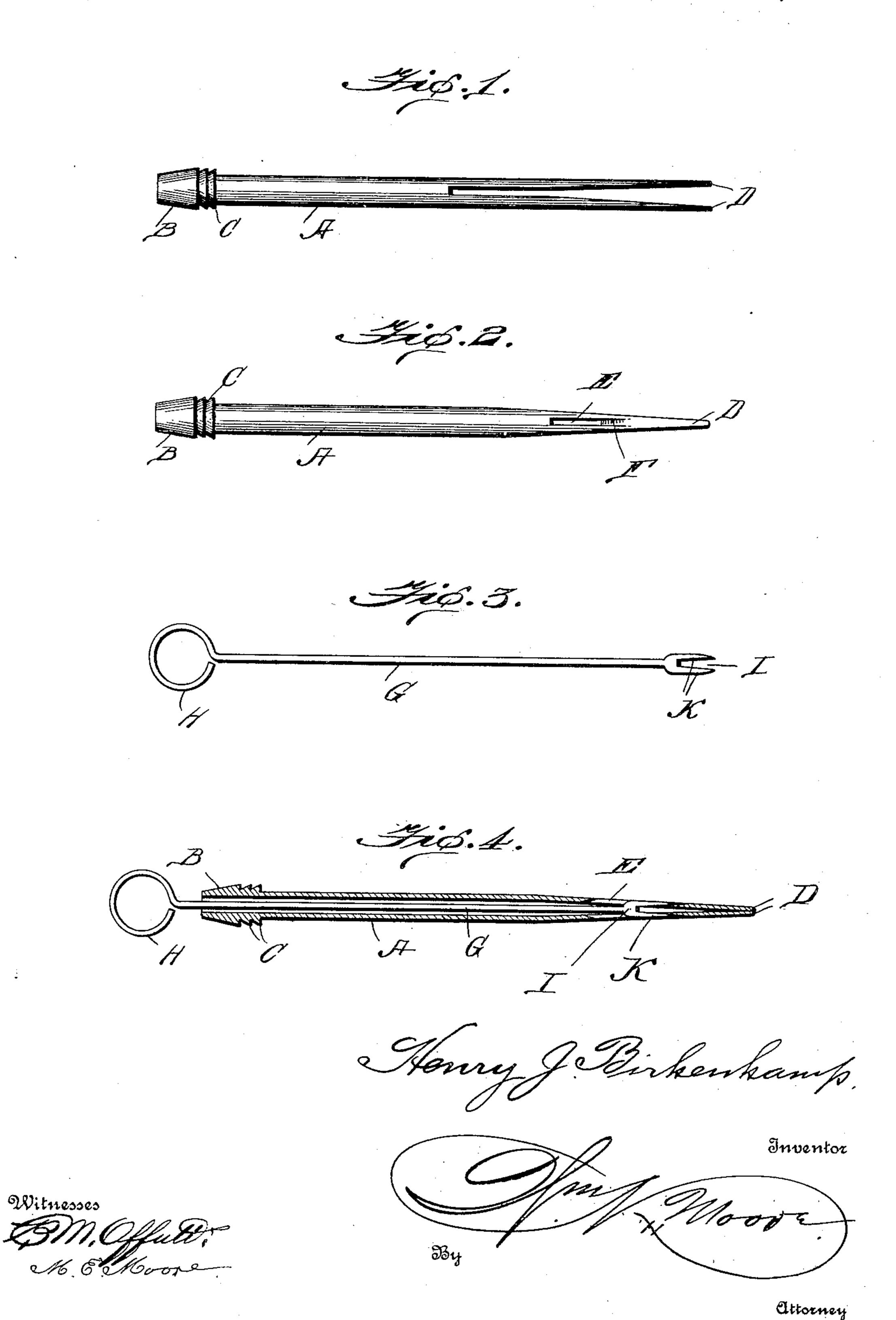
## H. J. BIRKENKAMP. EMBALMING INSTRUMENT. APPLICATION FILED JUNE 7, 1909.

945,741.

Patented Jan. 11, 1910.



## UNITED STATES PATENT OFFICE.

HENRY JOHN BIRKENKAMP, OF TOLEDO, OHIO.

## EMBALMING INSTRUMENT.

945,741.

Specification of Letters Patent. Patented Jan. 11, 1910.

Application filed June 7, 1909. Serial No. 500,677.

To all whom it may concern:

Be it known that I, Henry J. Birken-Kamp, a citizen of the United States, residing at Toledo, in the county of Lucas and 5 State of Ohio, have invented certain new and useful Improvements in Embalming Instruments, of which the following is a specification.

My invention relates to improvements in embalming instruments, and the leading object of my invention is the provision of an instrument which can be quickly inserted into a vein or artery without displacing or tearing the same.

Another object of the invention is the provision of an injecting tube which will automatically expand to permit the passage of the fluid into the circulatory system yet which can be inserted into the same easily and with but slight incision being made therein.

With these and other objects of a like nature in view my invention consists in the novel features of construction and combination and arrangement of parts substantially as disclosed herein and as illustrated in the accompanying drawings.

Figure 1, is a side elevation of my injector tube. Fig. 2, is a top view of the tube. Fig. 3, is a side view of the locking rod, and Fig. 4, is a longitudinal sectional view showing the locking rod in position in the tube.

In the drawings: the letter A, designates the injector tube, having the tapered end B to permit of the easy fitting of a tube or hose thereover, and being provided with the ribs or flanges adjacent thereto, said flanges C insuring a tight joint between the tube and hose and preventing the accidental disconnection thereof. A portion of the other end of the tube is cut away on each side, forming the blunt-ended prongs D, said prongs lying opposite each other and having formed therein the oppositely disposed slots E having their outer faces beveled as at F.

In operation, I make a small incision in the vein or artery into which it is desired to inject the embalming fluid, then, having pressed the ends of the prongs D together, I insert in the tube A at its opposite end the

locking rod G having the loop H at one end for the hand of the user to grasp and terminating at the other end in the forked or bifurcated portion I having two prongs K, 55 said prongs gradually spreading apart and having their outer faces beveled. The prongs K as they pass along the interior of the tube strike against and engage the beveled faces F at the end of the slots E and as the rod 60 is pressed inward the prongs bearing against said inclined faces force the members D into tight engagement with each other, the beveled outer faces of the bifurcated portion I of the rod being so constructed as to be be- 65 low the level of the outer faces of the prongs D of the tube, as is clearly shown in Fig. 4. As will be seen by reference to this figure, the outer ends of the prongs D are rounded and when locked in engagement with each 70 other form a practically integral point without any projections to engage and tear the vein. The device having been thus locked together, the point formed by the prongs is inserted in the incision previously made and 75 the device is pushed into the vein until it reaches a point beyond the cut away portions of the tube A, the vein being gradually stretched as the device is inserted and forming a tight joint with the tube. Having 80 been inserted the desired distance, the rod C is withdrawn, releasing the prongs D which then spring apart and assume the position seen in Fig. 1, forming an open tube. A hose or other connection may now be placed 85 over the outer end of the tube and the embalming fluid injected into the circulatory system, after which the device is withdrawn.

It will be understood that my device may be inserted and means connected thereto for 90 draining the body or that it may be used in a variety of similar ways, and that it is adapted for use in veins of varied sizes and is extremely simple, efficient, durable and inexpensive.

I claim:

1. The combination with an injector tube terminating in a pair of prongs having slots formed therein, of a rod having bifurcated portions engaged in said slots for securing 100 the prongs together.

2. In an embalming device, a tube, means

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formed integral with one end thereof for providing a non-slipping connection, prongs having oppositely disposed slots therein formed on the other end of the tube and nor-5 mally held apart, the faces of the prongs adjacent to the outer ends of said slots being beveled, and a rod terminating in a bifur-cated portion inserted in the tube, the said bifurcated portion extending into the slots

and engaging the beveled faces of the prongs 10 for locking said prongs together.
In testimony whereof I affix my signature,

in presence of two witnesses.

## HENRY JOHN BIRKENKAMP.

Witnesses: CHAS. F. PHILLIPS, T. F. CONNELL.