

# UNITED STATES PATENT OFFICE.

SAMUEL RODGERS, OF NEW YORK, N. Y., ASSIGNOR TO THE NEW YORK  
SANITARY COMPANY, OF SAME PLACE.

## EMBALMING.

SPECIFICATION forming part of Letters Patent No. 227,654, dated May 18, 1880.

Application filed February 9, 1880.

*To all whom it may concern:*

Be it known that I, SAMUEL RODGERS, of New York city, in the State of New York, have invented certain new and useful Improvements in the Means or Methods of Preserving Dead Bodies, of which the following is a full and exact description.

The importance, for various reasons, of being able to preserve the bodies of the dead for considerable periods increases with the facilities for traveling and the general increase of wealth, and is universally acknowledged; but till very recently the mutilation of the surface or the great elaboration of the necessarily disagreeable manipulations required, or both, have prevented the general employment of anything further than the maintaining of a low temperature by ice, which is very illy adapted to the transportation of a body by rail or by ship.

A patent issued to me, dated August 27, 1878, No. 207,551, describes a hollow probe, which I term a "needle," adapted to be readily connected at will to a pump or syringe, and which, when disconnected, can be operated on percussively to drive it into a body at any desired point. I have in operating with such an instrument, of considerably greater length than there intimated, arrived at a method of operating which overcomes the difficulties and is adapted to be used by undertakers and others with little labor and the necessity for little skill, while it preserves the bodies perfectly for a very long period.

The fluid injected may be any sufficiently powerful antiseptic.

I have discovered that the highly resilient and contractile tissue at the umbilicus possesses the property of closing immediately on the withdrawal of my needle, and of retaining, without sewing or other labor, all the fluid injected. By using a sufficiently long needle to reach therefrom to all parts of the chest-cavity as well as the abdominal cavity, I operate through this point to puncture and inject all the parts earliest subject to decay. The conformation of the umbilicus in most subjects allows that this puncture may be entirely out of sight. This treatment, without any other, will preserve bodies under favor-

able conditions; but it may be supplemented by any other which may be desired.

I have in my former patent referred to set forth the injecting of the brain-cavity by inserting my short needle through the nose. The two punctures will preserve a body in any previous stage of decomposition short of absolute destruction of the tissues. The muscles in the vicinity of the injected organs, and even the distant ones in the limbs, imbibe enough to arrest their destruction, and my treatment is followed by no further change but a gradual drying and shrinking for many weeks or months.

I believe no drawing will be necessary or desirable to fully acquaint those skilled in the art with the whole detail of the operation. I use a hollow tube, contracted at one end, with one or more lateral openings near the point, and at the other end screw-threaded, with a central extension beyond the screw-threads, to receive the blows to force the needle through the tough and elastic tissue. Having forced a passage beyond the immediate vicinity of the umbilicus, a gentle force will pass it through the softer tissues, and the syringe or forcing means may be kept engaged while the needle is successively withdrawn nearly to its whole length and again thrust in, giving it a new direction. From two to ten thrusts should be made in a body of ordinary size, directed to reach nearly or quite to the farthest of the organs in the abdomen and thorax. After each the needle is first slightly withdrawn, and then the syringe worked to inject the preservative fluid in the puncture and the connected passages.

I use a needle about seventeen inches long and one-fifth inch in diameter, of highly-polished and nickel-plated metal.

My treatment avoids most of the exposure of the body required in cutting and injecting through the femoral artery. It preserves by thoroughly infusing the preservative fluid at once into all the rapidly-decaying parts, and attains the entire results desired with very trifling labor.

I wash the surface of the corpse with antiseptic fluid; but I do not claim that as involving novelty.

The screw-threads in the needle may be omitted if other reliable connection is made; but I esteem the general construction of my needle essential. It is not easy to puncture  
5 the tough material at the navel with the ordinary pen-like points. A smooth taper point, with the holes at the side, is necessary to successfully carry out this method of operating. In most cases a strong man can puncture  
10 without removing the hose by forcing the needle either by a direct grasp and constant pressure, or by blows of the hand on a folded portion of the hose.

I am aware that dead bodies have been pre-  
15 served by the introduction of antiseptics through the natural openings, and also by puncturing many holes in various parts of the body in order to reach the soft parts; and I claim neither of such methods, for neither of  
20 these is my invention, as I make but one aperture and use none of the natural open-

ings of the body. This one aperture is made in a part most easily and completely concealing it, and where the fluid can most readily reach all the soft parts.

What I claim is—

The method of embalming herein described, consisting of introducing the preserving-fluid into the body through the navel by means of a long needle, and in thrusting it in several  
30 directions, whereby both the inside and out of the intestines are reached by the fluid in every direction without mutilating the body, as set forth.

In testimony whereof I have hereunto set  
35 my hand this 2d day of February, 1880, in the presence of two subscribing witnesses.

SAMUEL RODGERS.

Witnesses:

E. D. GRANT,  
E. B. FOOTE, Jr.