

# UNITED STATES PATENT OFFICE.

JAMES R. BATE AND FREDERICK W. OWEN, OF DETROIT, MICHIGAN.

## PRESERVING COMPOUND.

SPECIFICATION forming part of Letters Patent No. 428,161, dated May 20, 1890.

Application filed February 24, 1890. Serial No. 341,513. (No specimens.)

*To all whom it may concern:*

Be it known that we, JAMES R. BATE and FREDERICK W. OWEN, citizens of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a certain new and useful Embalming Compound for Embalming or Preserving Dead Animal Bodies; and we do hereby declare the following to be a full, clear, and exact description of the invention and the manner of using or applying the same, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to the preservation of dead animal bodies from decomposition; and it consists in subjecting the body, without previous preparation or treatment, to the fumes produced by the combustion of the chemical substances, hereinafter given, of our compound in a chamber, box, or room in which the body is placed. A chemical union takes place between the fumes or gases thus produced and the liquids of the body, producing acids which arrest present and prevent future decomposition.

In the use of our compound for embalming we place the body to be embalmed in a chamber, box, room, or other receptacle sufficiently tight to prevent any rapid or material escape of fumes produced by the burning of the compound, and (if the combustion is to take place within said chamber or box) with means of ventilation sufficient to support combustion. We then ignite our compound, either in the chamber, box, or room containing the body, or in such manner that the fumes from

such combustion come in contact with the body, whereby, without surgical preparation and without removing the clothing enveloping it, absorbs the gases produced by such combustion, which, in combination with the liquids of the body, form preservative gases or acids penetrating the tissues thereof and preserve or embalm the body.

The ingredients of our compound and proportions are as follows, viz: sulphur, three parts; carbon, (consisting of pulverized hard-wood charcoal,) three parts; borax, two parts; chloride of sodium, two parts; chloride of calcium, two parts, all said chemicals or substances being in a dry or powdered condition. We use of the powdered compound from two to four ounces.

Having described our compound and the manner of its use, we claim--

A preservative embalming compound composed of sulphur, three parts; carbon, (consisting of pulverized hard-wood charcoal,) three parts; borax, two parts; chloride of sodium, two parts, and chloride of calcium, two parts, in combination with suitable means for combustion thereof, and the bringing of the fumes or gases of such combustion into contact with the animal body to be preserved, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES R. BATE.

FREDERICK W. OWEN.

Witnesses:

E. S. WHEELER,

R. B. WHEELER.