

W. B. S. Taylor,

Gas Tube.

No. 46,507.

Patented Feb. 21. 1865.

Fig. 1.



Fig. 2.

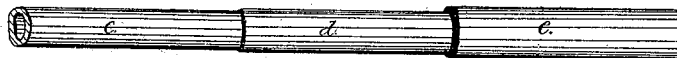


Fig. 3.

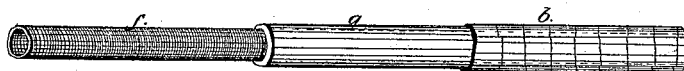
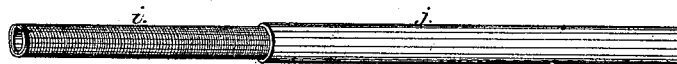


Fig. 4.



Witnesses:

F. C. Henderson

John A. Duncan

Inventor:

W. B. S. Taylor

UNITED STATES PATENT OFFICE.

WM. B. S. TAYLOR, OF NEW YORK, N. Y.

IMPROVED FLEXIBLE TUBING FOR ILLUMINATING-GAS.

Specification forming part of Letters Patent No. **46,507**, dated February 21, 1865.

To all whom it may concern:

Be it known that I, WILLIAM B. S. TAYLOR, of the city and county of New York, and State of New York, have invented a certain new and useful Improvement in Flexible Tubing for Illuminating-Gas and Similar Purposes; and I do hereby declare that the following is a full and correct description thereof, reference being had to the annexed drawings, making part of this specification, and to the letters of reference thereon.

My said invention consists in the use of glue, or a composition of which glue forms a principal ingredient, as a coating or lining for flexible tubing used for the conduction of illuminating-gas, and for the purpose of making such tubing impervious to the gas or its fluids.

Figure 1 of the drawings shows a section of a rubber tube, *a*, with an inner lining or coating of glue, *b*. Fig. 2 shows a rubber tube, *c*, with a glue coating, *d*, and a rubber covering, *e*. Fig. 3 shows a cloth tube, *f*, glue coating *g*, and cloth covering *h*. Fig. 4 shows a cloth tube, *i*, saturated with glue, and a cover, *j*, of rubber or cloth.

I depend upon the glue to prevent the gas from penetrating through the tubing.

In coating or saturating the tubing the glue may be dissolved in water, and a portion—

say one-third—of molasses, honey, or sirup added to preserve the glue in a flexible state. Glycerine will answer as a substitute for molasses. The glue or glue composition is applied hot. In the case of the tube shown in Fig. 1, where the glue is used as a lining or inner coating, the glue may be poured into the tube so as to fill it, and after standing long enough to form a film or coating of the desired thickness the rest is poured out. To cover or coat the tubing on the outside, or to saturate it, the glue may be applied with a brush or by dipping the tubing in a trough of hot glue. When the tubing has an exterior cover of cloth or rubber it is put in while the glue is adhesive, or it may be suffered to dry and a coat of rubber cement applied over the glue, and the outer cover be secured by it.

I claim as my invention and improvement—

In flexible tubing for illuminating-gas, the use and application of glue or glue composition in the tubing, substantially as described, for the purpose of making the flexible tubing gas-tight, whether of cloth or rubber, or other gum.

W. B. S. TAYLOR.

Witnesses:

F. C. TREADWELL, Jr.,
JOHN DUNCAN.