

UNITED STATES PATENT OFFICE.

SYDNEY P. COOK, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN THE MANUFACTURE OF HOSE AND TUBING FOR WATER, STEAM, AND OTHER FLUIDS.

Specification forming part of Letters Patent No. 125,175, dated April 2, 1872.

To all whom it may concern:

Be it known that I, SIDNEY P. COOK, of the city and county of San Francisco, State of California, have invented Improvements in Water-Proofing and Preserving Fabrics; and I do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

My invention relates to an improved process or composition for treating canvas or other closely-woven fabrics which are intended for the manufacture of hydraulic hose, such as are employed in connection with steam and other fire-engines, and such like purposes. When used for this purpose it not only closes up the pores or interstices of the fabric with an insoluble substance, but shields the fabric from injury and renders it tough and unyielding.

My composition is composed of the following ingredients: First, resin; second, benzine; third, tallow, paraffine, or any fatty substance; fourth, India rubber in solution. In preparing the fabric I form a compound of these ingredients by making a simple mixture and apply it profusely to the surface of the fabric. The liquid permeates every fiber of the fabric, and

when it has once become dry, by the evaporation of the benzine or volatile portions, it will be firmly set or fixed in the fabric and cannot be removed by any ordinary means. The proportion of each of the ingredients to be used is not material so long as an ordinary mixture is made; but it can be regulated according to the quality of the fabric to be treated and the purpose to which it is to be applied. The rubber solution serves to seal up the other ingredients and prevent their being removed by frequent handling or rubbing. Sample No. 2 represents a piece of canvas treated with the full formula. By this means I am able to render canvas and other fabrics completely water-proof, lasting, and of greater tenacity than by any other means with which I am acquainted.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The improved hose or tubing described herein, made by saturating canvas or equivalent fabric with a paraffine compound, substantially as and for the purpose set forth.

In witness whereof I have hereunto set my hand and seal.

SYDNEY P. COOK. [L. S.]

Witnesses:

JNO. L. BOONE,

THOMAS STUTTERD.