

UNITED STATES PATENT OFFICE.

GEORGE R. PERCY, OF NEW YORK, N. Y.

IMPROVED COMPOSITION FOR RENDERING BARRELS IMPERVIOUS TO OIL, &c.

Specification forming part of Letters Patent No. **46,021**, dated January 24, 1865.

To all whom it may concern:

Be it known that I, GEORGE R. PERCY, of the city, county, and State of New York, have invented a new and useful Composition for Rendering Barrels and other Wooden Vessels Impermeable to Oils and Fats; and I do hereby declare that the ingredients or substances used in making such composition, and the process of mixing or compounding them, and the mode of using said composition, are both described in the following specification, so as to enable any person skilled in the art or science to which it most nearly appertains to make and use said composition without further invention or experiment.

The nature of my invention consists in making a composition of certain proportions of water, borax, and gum-shellac, with the addition of a small quantity of either of the following substances, to wit: glycerine, molasses, honey, or glue.

To enable others skilled in the art to make and use my invention, I will proceed to describe the process of making and applying it to use.

I put one pound of borax in about three gallons of water and dissolve it over a fire and add five pounds of gum-shellac, and when it is dissolved I add about half a pint of either glycerine, molasses, or honey, or about four ounces of glue previously melted in a small quantity of water. I coat the inside of barrels or other wooden vessels to hold oils, fats, &c., which barrels may be previously prepared in the following manner to render them indestructible by fire as well as impermeable: The barrels, or the wood of the barrels, after being cut into proper shape to form the barrels or vessels, is put into an air-tight receiver or tank, from which the air is withdrawn or exhausted and a vacuum formed, when a strong solution

of soluble silicate prepared in the manner described in all works on chemistry is admitted into the tank or receiver and hydraulic or other pressure applied to force the soluble silicate into the pores of the wood. After the cells and pores of the wood have been filled the remainder of the solution may be drawn off, and the wood taken out of the tank and made up into barrels or vessels and dried, when they are ready for a coating of the composition described above, which coating may be applied in the following manner: The composition is poured into the barrel or vessel while hot and the barrel or vessel slowly turned or moved around, so that every portion of it shall be covered by the fluid. The barrel or vessel is then emptied and allowed to dry slowly.

The composition which I have invented may be used to coat barrels or other vessels designed to hold oils or fats, whether the wood of such vessels has been previously prepared with soluble silicate or not.

What I claim as my invention for coating barrels and other vessels to contain oils and fats is—

1. A composition composed of water, borax, and shellac, in about the proportions specified, with the addition of a small quantity of glycerine, molasses, honey, or glue.

2. The process of this previous saturation of the wood with soluble silicate, in combination with the coating of the barrel or vessel with the above-described composition.

In testimony whereof I have hereunto subscribed my name this 4th day of January, 1865.

GEORGE R. PERCY.

Witnesses:

SAM R. PERCY,
GILBERT PERCY.