

UNITED STATES PATENT OFFICE.

SAMUEL G. MORRISON, OF WILLIAMSPORT, PENNSYLVANIA.

IMPROVED LINING FOR COAL-OIL CASKS.

Specification forming part of Letters Patent No. 36,474, dated September 16, 1862.

To all whom it may concern:

Be it known that I, SAMUEL G. MORRISON, of Williamsport, county of Lycoming, in the State of Pennsylvania, have invented a new and improved mode of rendering barrels and other wooden vessels impervious to rock-oil and other hydrocarbon oils; and I do hereby declare that the following is a full and exact description thereof, reference being had to the specimen of ingredients and composition used, marked S.

The nature of my invention consists in saturating the wood of the vessels, filling the pores of the wood (by using pressure, or by simple soaking) with hard soap in a melted or hot state, and coating the interior of the barrel or other wooden vessel with a skin of hard soap, thereby sealing the vessel.

To enable others skilled in the art to make and use my invention, I will proceed to describe its composition, application, and operation.

I compose my soap, S, of a strong lye (made of wood ashes or its equivalent) and tallow, (or its equivalent,) and, melting the soap, I apply it to the interior of the vessel with a brush or swab. In case it be an open tank, vat, or other open vessel, in case of preparing

barrels, I make the dissolved soap as hot as it will bear, and fill my barrels full of the hot soap. When I use pressure, I insert into the bung-hole a tube of any desired length, according to the amount of pressure to be employed, closing the bung securely, and fill through the tube, and when the barrel is full I also fill the tube or so much of it as to secure the amount of pressure desired. After thus saturating the barrel, I draw off the liquid soap, leaving a sufficient quantity remain in the barrel to cool, and when it begins to concrete I roll the barrel, changing it also from head to head, so as to allow a thin coat of the soap to concrete over the whole inside of the barrel, thus sealing the vessels with an adhesive material, which is impervious to and insoluble in rock-oil or any other hydrocarbon oil.

What I claim as my invention, and desire to secure by Letters Patent, is—

The application of soap, substantially as and for the purpose specified.

S. G. MORRISON.

Witnesses:

JOHN HEPBURN,
R. C. SWAN.