

UNITED STATES PATENT OFFICE.

JOHN A. BASSETT, OF SALEM, MASSACHUSETTS.

IMPROVED BARREL FOR HOLDING OIL.

Specification forming part of Letters Patent No. **47,273**, dated April 18, 1865.

To all whom it may concern:

Be it known that I, JOHN A. BASSETT, of Salem, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Barrels for Holding Oil; and I do hereby declare that the following is a full, clear, and exact description of the same.

The nature of my invention consists in lining or enameling barrels used to contain petroleum-oil, benzine, &c., or for acids, with a composition of which sulphur is the base, in combination with other ingredients, so that a stone-like coating or enamel is produced which is capable of resisting the action of oils, benzine, and acids, and thus preventing leakage and waste.

It is well known that petroleum-oil, when stored in ordinary barrels, soon permeates the pores of the wood, and the oil is wasted. The compositions which have been used for this purpose—of glue, &c.—are acted upon by the water contained in the oil, and are not wholly efficient. By this means an enamel is made which is not acted upon by water, oil, benzine, or acids. This composition is made by mixing in an iron kettle sixty parts, by weight, of sulphur, twenty parts of powdered white clay, and twenty parts of graphite or plumbago. Heat is applied and the composition is melted and thoroughly mixed together. Care should be taken not to raise the heat sufficiently to burn the sulphur. The fire should now be withdrawn and the mixture stirred. As the temperature is reduced, and just before it

cools, the composition becomes nearly as liquid as water, and while in this state may be poured into a barrel, when it adheres in a thin coating to the staves. As it immediately gets hard, it may be used at once.

It is necessary that the staves of the barrel should be perfectly dry, or the composition will not adhere to it.

It may be desirable in cold weather to heat the inside of the barrel by a current of hot air, or in any suitable way, to prevent the compound from becoming hard before it has covered the whole of the inside of the barrel.

The proportions and some of the ingredients of the compound may be changed, provided sulphur is retained as the principal material. A compound of sulphur and powdered steatite, or soapstone, or lamp-black, or graphite, will all of them accomplish the object more or less perfectly; but I prefer to use the materials and proportions indicated.

If the barrel is intended to contain acids, the clay should not be put into the compound.

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

The herein-described compound, consisting of the materials specified or their equivalents, when used for lining or coating barrels or other vessels, substantially as set forth.

JOHN A. BASSETT.

Witnesses:

ARIEL COOK,
JOHN R. NICHOLS.