J. Thursby,

Oil Still.

No. 3067. Patented May. 2. 1843.

Fig: 2.

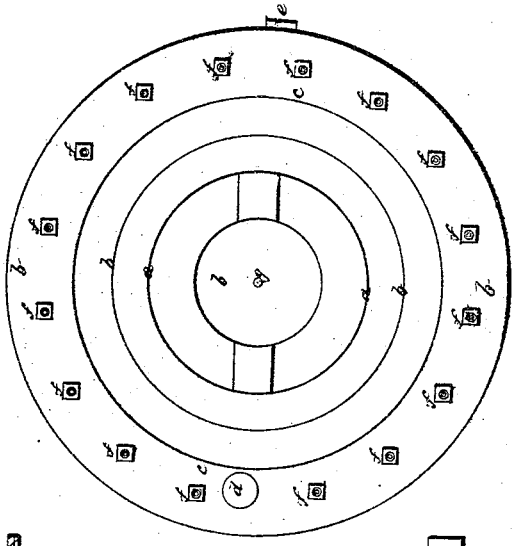
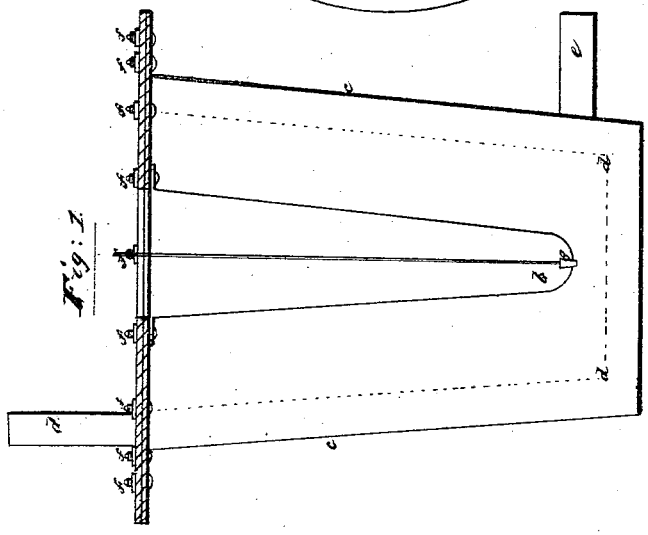


Fig: 1.



UNITED STATES PATENT OFFICE.

JOHN THURSBY, OF BUSHWICK, NEW YORK.

IMPROVEMENT IN TARRING YARN.

Specification forming part of Letters Patent No. **3,067**, dated May 2, 1843.

To all whom it may concern:

Be it known that I, JOHN THURSBY, of Bushwick, in the county of Kings and State of New York, have invented a new and improved method of tarring yarn, such as is usually employed in rope-making; and I do hereby declare that the following is a full and exact description thereof.

First, the nature of my invention consists in the app'ication and combination of tallow or other oleaginous substances with turpentine, oil of tar, gum-elastic, spirits of turpentine, and tar, in greater or less quantities, as the nature or qualities of those ingredients may require for tarring the yarn, and thereby preserving the yarn free from stiffness, unimpaired in strength, and of a bright color; second, the application of heat in such manner as to melt the lastly-described amalgam for tarring the yarn by means of steam or boiling water, and thereby preserving a limpid and equal temper in the tar throughout the process of tarring, and thus effecting a uniform and perfect saturation of the yarn without the smallest risk of burning the fiber or injuring its strength in any degree, whether the yarn be made of hemp, manila, or any other material usually employed in rope-making. Consequently, cordage thus made will possess the greatest possible degree of strength the fiber will admit of and be the least subject to the bad effects of weather, as this composition will preserve the pliability, strength, and color of cordage much longer than that which is tarred in the usual way.

Figure 1 represents a side view of the boiler upon the principle which I employ; *a a*, bottom of the tar-kettle placed inside of the boiler *c c*, and made to contain another kettle, *b*, which is intended to receive the different ingredients used in the amalgam for tar, and after being melted and properly combined in this kettle *b* the tar is made to pass from this by the opening *g* into the larger kettle *a*, where the yarn is placed and thoroughly saturated by a greater heat of the fluid tar in this vessel. I should also here observe that while the composition is melting down in the receiving-kettle *b* the process of tarring from the heated fluid in the kettle *a a* may be continually carried on, and the heated fluid in the kettle *a a* may thus always be kept up without loss of time in melting down a fresh supply, as was the case before this improvement.

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

1. The compound or admixture of tallow or other oleaginous substances with turpentine, oil of tar, gum-elastic, spirits of turpentine, and tar, as herein described.

2. The kettle *b*, as placed in combination with the kettle *a* and boiler *c* for melting and mixing the different ingredients, in manner herein described.

JOHN THURSBY.

Witnesses:
PETER V. REMSEN,
NATHANIEL PARISH.