

UNITED STATES PATENT OFFICE.

CHARLES F. A. SIMONIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
WILLIAM ADAMSON, OF SAME PLACE.

IMPROVEMENT IN TREATING TARRED ROPE, CORDAGE, AND THE LIKE, FOR THE MANUFACTURE OF PAPER STOCK, &c.

Specification forming part of Letters Patent No. 119,186, dated September 19, 1871.

To all whom it may concern:

Be it known that I, CHARLES F. A. SIMONIN, of Philadelphia, county of Philadelphia, State of Pennsylvania, have invented an Improvement in Treating Rope, Cordage, &c., of which the following is a specification:

My invention consists in subjecting to the vapors of hydrocarbon tarred ropes, cordage, &c., with the view of rendering it available as paper stock.

In applying old tarred ropes, cordage, &c., generally termed junk, to the manufacture of paper much difficulty is experienced in depriving the materials of the tar, pitch, and other foreign matter with which the fibrous strands are impregnated. I have found that the best means of effecting this is to subject the ropes, &c., to the action of hydrocarbon vapors, and especially to these vapors under heat and pressure. Although many different appliances may be adopted in carrying out my invention, I prefer to use a closed vessel capable of withstanding a pressure of from ten to thirty pounds per square inch, and on a perforated plate in this vessel to place the rope, cordage, spun yarn, or old sails.

The vapors of hydrocarbon—by preference, gasoline, benzine, benzole, or naphtha—may be introduced into this vessel below the perforated

plate, or the vapors may be generated in the bottom of the vessel itself. These vapors permeate the material and soon dissolve the tar and pitch, as well as the grease with which the strands are impregnated, and the fibers, after washing them, are available for paper stock, and in many cases, where the fibers are not rotten, they may be reconverted into ropes, cordage, &c. The vapors may be carried off through a pipe to a condenser and returned to the still in the form of liquid hydrocarbons, which may be again vaporized and used as before. A loaded valve in the vapor-pipe will serve to maintain any desired pressure in the vessel.

Without confining myself to any specific apparatus for practising my invention,

I claim—

Subjecting tarred rope, cordage, &c., to the action of hydrocarbon vapors, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHS. F. A. SIMONIN.

Witnesses:

JNO. B. HARDING,
W. J. R. DELANY.

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