

# UNITED STATES PATENT OFFICE.

THEOPHILE HARANG, OF BANANA GROVE PLANTATION, LOUISIANA.

IMPROVEMENT IN THE PROCESSES OF TREATING SUGAR-CANE LEAVES, &c., FOR OBTAINING FIBROUS MATERIALS.

Specification forming part of Letters Patent No. 126,293, dated April 30, 1872.

Specification describing a new and Improved Process of Treating Sugar-Cane Leaf, Bagasse, and Sorghum for obtaining the Fiber, invented by THEOPHILE HARANG, of Banana Grove Plantation, in the parish of La Fourche and State of Louisiana.

The object of this invention is to devise a practical plan whereby the refuse leaves and bagasse of the sugar-cane and sorghum plants may be put into shape for convenient transportation and final conversion into textile fabric of suitable kind.

The great bulk of such leaves or bagasse, and the consequent expense and difficulty of transporting the same to mills where the fibrous material may be extracted for use, make the same at present an unprofitable burden to planters, which it is most economical to destroy. In this manner enormous quantities of valuable material are utterly lost to the people and the Government.

By the use of my invention planters will be enabled cheaply and conveniently to extract the fiber from their refuse sorghum or sugar-cane plant, and then transport the valuable matter to cities or places where it can be worked into paper or woven fabric. The fabric alone is not bulky, and comparatively inexpensive to transport.

The following is a description of my mode of preparation and manufacture:

The leaves must be operated upon while green. The disintegration of the textile being

difficult, and the leaves being brittle, they should be submitted to the action of hot water or steam and boiled before coming in contact with the rollers, as otherwise they will be cut or chopped up and yield nothing but dust or powder, or a finely-granulated substance resembling hominy or corn-meal.

The leaves, duly saturated with hot water or steam which is impregnated with lime, are next passed between a certain number of rollers—say three, more or less, sets—which gradually crush them, with intermediate combs or teeth to separate and disintegrate the fibers. They are then placed into large reservoirs or tanks, and suffered to remain there several days, until the non-fibrous matter has been satisfactorily dissolved. The fiber must then be washed, passed through wringers, allowed to dry, and finally submitted to the action of a gin, or of any machine that will properly clean and separate them.

The same operation is performed with regard to the bagasse and sorghum refuse.

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

The process of converting sugar-cane leaves, bagasse, and sorghum refuse into fiber, herein specified.

THEOPHILE HARANG.

Witnesses:

HURBAIN PHÎLOCLES POCHÉ,  
LOUIS AMÉDÉE BABIN.