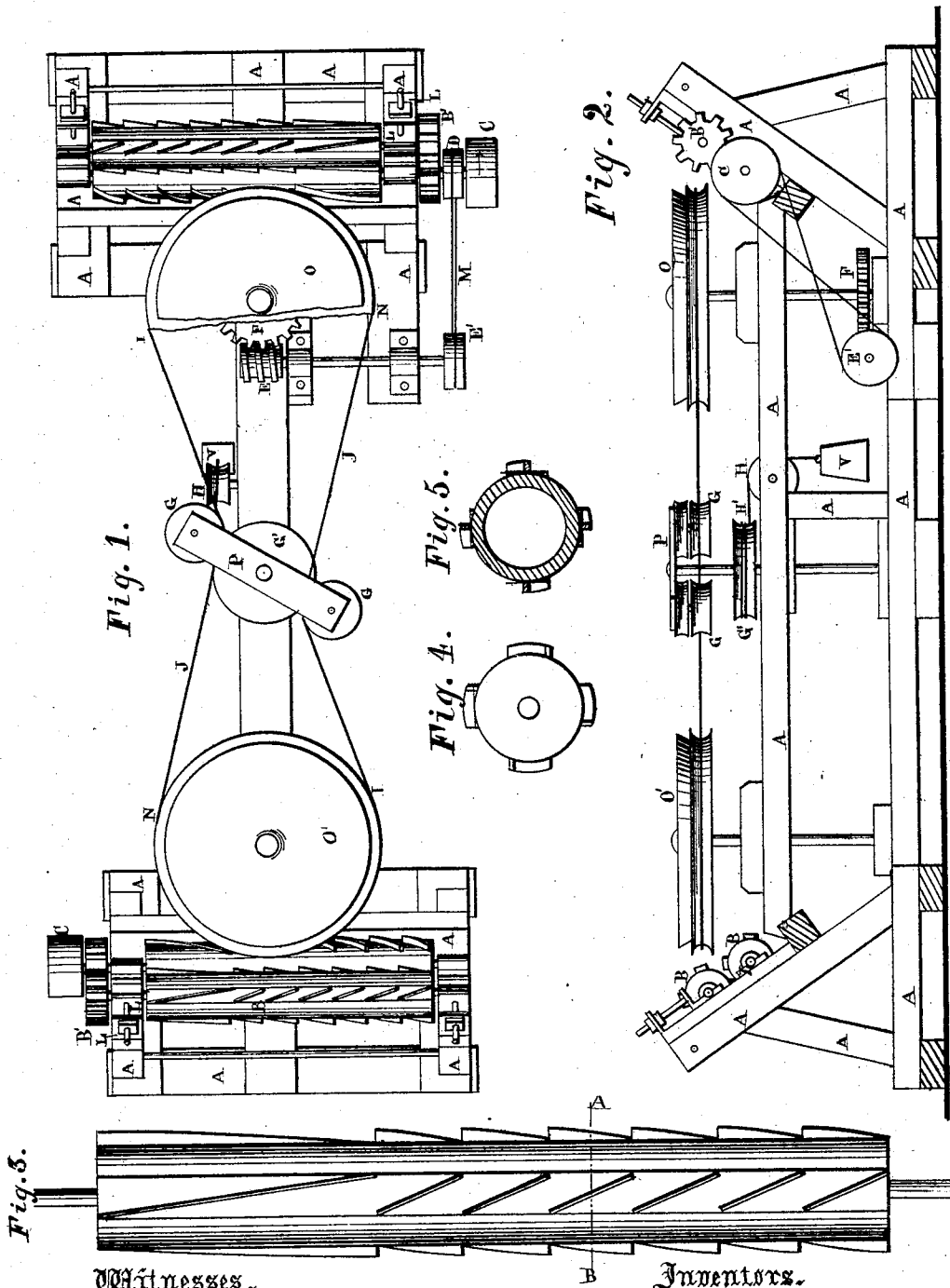


A. BERTHET & P. LABERIE.

Fiber Disintegrators.

No. 145,613.

Patented Dec. 16, 1873.



Witnesses.

J Bledsoe  
Temin

Elle  
ahua

Inventors.

A Berthet  
P Laberie

# UNITED STATES PATENT OFFICE.

ANTOINE BERTHET AND PIERRE LABERIE, OF NEW ORLEANS, LOUISIANA,  
ASSIGNORS OF ONE-FOURTH THEIR RIGHT TO DENIS P. WHITE, OF  
SAME PLACE.

## IMPROVEMENT IN FIBER-DISINTEGRATORS.

Specification forming part of Letters Patent No. **145,613**, dated December 16, 1873; application filed  
June 4, 1873.

*To all whom it may concern:*

Be it known that we, ANTOINE BERTHET and PIERRE LABERIE, of New Orleans, parish of Orleans and State of Louisiana, have invented a Machine for Ramie or Ramie-Fiber Disintegrator, of which the following is a specification:

The object of the invention is to eliminate the ramie fiber from the inner wood and the outer bark of the ramie-plant in its green state. Besides the ramie-plant this machine can be used as effectively in the case of all other textile plants in their green state, such as flax, hemp, jute, agave, musa, bromelia, yucca, &c.

Figure 1 plan view of the machine. Fig. 2, elevation. Figs. 3, 4, 5, are detail views.

A is the frame. B, rotary cylinders, studded lengthwise with rows of cast-iron or brass oblique sectional blunt knives or blades. That part of the rows of the cylinders between which the plants are received and carried through is armed with a number of oblique sectional blades, while the other part at which the fibers make their exit is provided with one single blade less oblique than the others. The cylinders, according to their size, have from three to six of these rows of knives separated by empty intervals covered with wood, leather, india-rubber, or other soft substance. The rows of either cylinder, which are armed with knives, correspond, when in operation, with the empty intervals of the other. B are cog-wheels for the transferring of the motion of one cylinder to the other one; L, adjustable bearings, by means of which the upper cylinder can be elevated or depressed with relation to the lower one; C, driving-pulleys; D, pulley, giving motion to pul-

ley E' through belt M; E and F, worm and worm-wheel giving motion to double-grooved wheel O; O and O', double-grooved wheels, feeders of the scrapers B by means of rope J. The lowest groove and rope are used to feed the ramie-plants. A rope is put on the upper groove, if wished, to clean the butt-ends of the plants. G are double-grooved pulleys giving tension to the rope J; P, bearings of pulleys G moving with shaft of grooved pulley G'; G', grooved pulley giving motion to double-grooved pulleys G through pressure received from weight V attached to rope H' on block H.

The main motion is given to the rotary cylinders or scrapers B by pulleys C. D pulley, through belt M, gives motion to pulley E', moving, by means of E worm and F worm-wheel, the double-grooved wheels O and O' with rope J.

The operation is as follows: Small bundles, of five to twenty plants, are held with their butts between the rope J and lower groove of wheel O or O', so that when moving the belt will grasp them and carry them head forward to the strippers B. These latter take out the rough bark, foliage, and wood, leaving the strips of fiber hanging to the butts, that are then carried around and dropped on the opposite side of wheel.

What we claim is—

The obliquely-bladed rolls B, the double-grooved wheels O O', and the rope J, combined in a ramie-machine, to operate in the manner and for the purpose specified.

A. BERTHET.  
P. LABERIE.

Witnesses:

T. B. LETAREY,  
E. C. SANSON.