(No Model.)

F. LUFT.

MACHINE FOR DISINTEGRATING JUTE, &c.

No. 330,988. Patented Nov. 24, 1885.

Fig. 1.

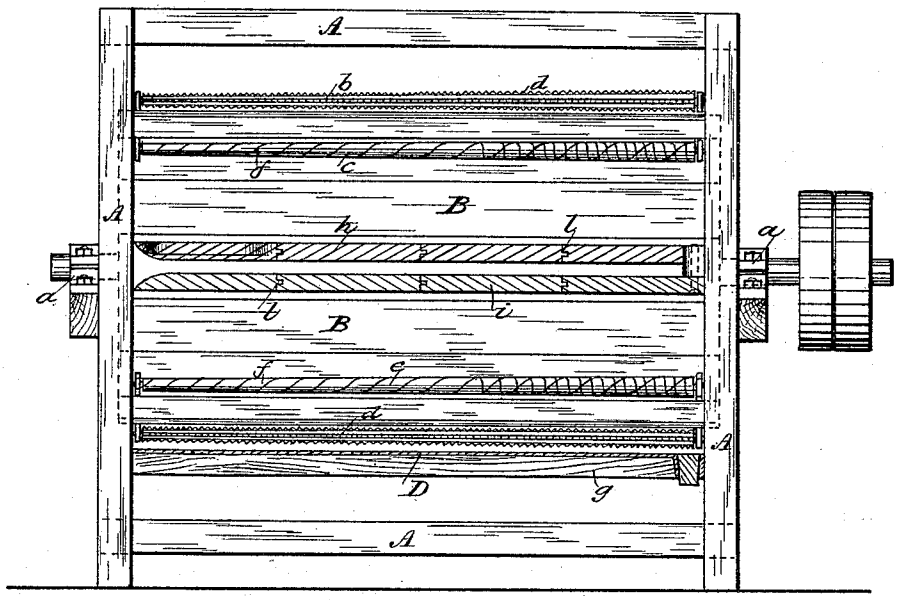


Fig. 2.

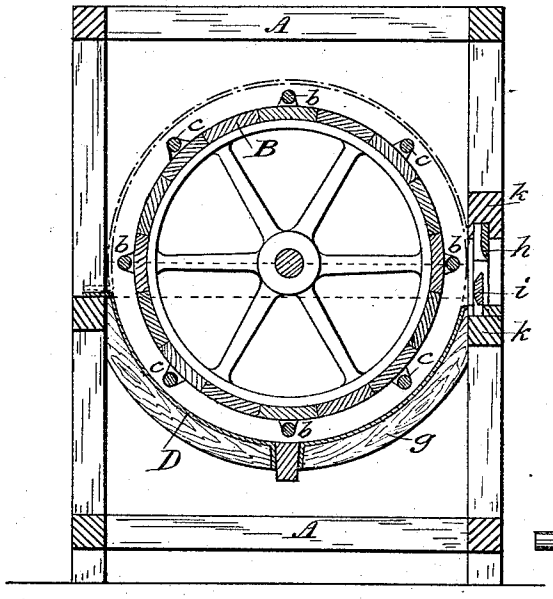


Fig. 3.

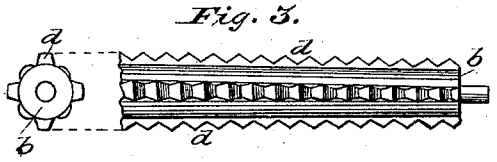


Fig. 4.

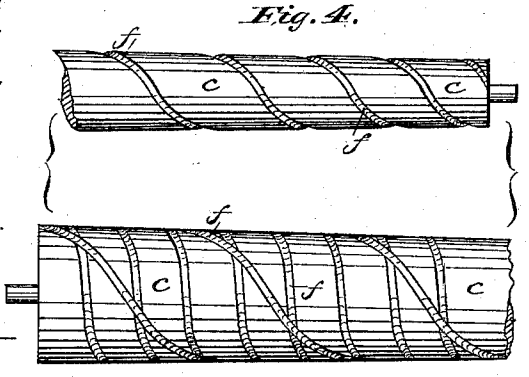
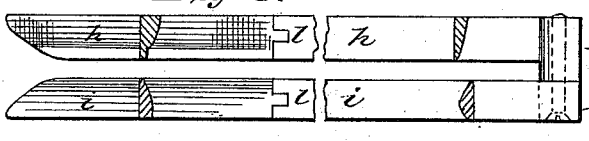


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

FRANZ LUFT, OF NEW ORLEANS, LOUISIANA.

MACHINE FOR DISINTEGRATING JUTE, &c.

SPECIFICATION forming part of Letters Patent No. 330,988, dated November 24, 1885.

Application filed May 6, 1885. Serial No. 164,596. (No model.)

To all whom it may concern:

Be it known that I, FRANZ LUFT, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Machines for Disintegrating Jute, &c.; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in machines for disintegrating and separating the fibers of jute, cane, pita, ramee, or other materials or substances containing fibers of any kind for any useful purpose.

The object of my invention is to improve the construction and operation of machines by which such fibers can be obtained from any material or substance containing them in a very expeditious and economical manner.

The invention consists in improvements on the patent granted to me the 17th day of October, 1882, and numbered 266,038, and in the construction of certain parts and arrangement of details, as will be more fully described hereinafter, and more specifically pointed out in the claims, reference being had to the accompanying drawings and the letters of reference marked thereon.

Like letters refer to like parts in the drawings, in which—

Figure 1 is a front elevation of my machine embodying my improvements. Fig. 2 is a vertical cross-section of the same. Figs. 3, 4, and 5 are enlarged detail views of some of the parts, more definitely described hereinafter.

In the drawings, A represents a strong frame, in which a cylinder, B, is journaled in bearings *a* at each end.

The cylinder and its shaft are constructed as described and shown in my former patent, with the following exceptions: Instead of the graduated saw-teeth and knives employed there, I now employ rollers *b* and *c*. These rollers are journaled at each end of the cylinder and on its outer surface, and the former ones, *b*, are provided with serrations or corrugations *d*, while the latter ones, *c*, have spiral grooves or depressions *f*, which form cutting-edges, by which the material containing the fibers is disintegrated or separated as it is exposed to their action between the semicircular sheet-metal receptacle D, which is also constructed with wooden ribs *g*, as in my former patent. It is closed at its ends and is filled with water, and has an outlet-opening for withdrawing the water and disintegrated material. The rollers *b* and *c* are made slightly tapering, so as to more readily carry the fibrous material from one side to the other.

In place of the feed-bars employed in my former patent I employ pivoted bars *h* and *i*, of the form best shown in Fig. 5 on an enlarged scale. They are supported at the front of the machine in the frame-pieces *k*, being pivoted together at one side and having their ends rounded to admit the more ready feeding of the fibrous material to the machine. These bars are made in sections, and are united by tongue and grooved ends, as at *l*, in two or more sections, so that they can be easily removed and replaced when desired. They are especially adapted when it is desired to disintegrate "pita," "ramee," and similar material, and are substituted for that purpose. The cross-sections of these bars are preferably made of the form shown in Fig. 5, and assist in feeding the material to the machine. The rollers may also be made in sections, if desired, and joined together, and may be all serrated or all grooved. Any suitable material may be employed for this machine.

The operation is the same as described in my former patent, and will need no further elucidation here.

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

1. In a disintegrating-machine for fibrous material, the cylinder B, provided with tapering rollers on its circumference, and said rollers alternately provided with serrations and spiral grooves, as shown, and for the purpose set forth.

2. The combination of a cylinder, B, provided with rollers *b* and *c*, as shown, with the feed-bars *h* and *i*, constructed and arranged substantially as and for the purpose herein described.

3. In a disintegrating-machine for fibrous material, the feed-bars *h* and *i*, arranged as

shown, in combination with a cylinder, B, provided with rollers *b* and *c*, provided alternately with cutting-edges and spiral grooves, and the receptacle D, all substantially as specified.

4. In a disintegrating-machine for fibrous material, the feed-bar *h* and *i*, made in sections and arranged as shown, in combination with a cylinder, B, having rollers *b* and *c*, the receptacle D, and frame A, all as set forth.

In testimony whereof I hereby affix my signature in presence of two witnesses.

FRANZ LUFT.

Witnesses:
H. MARINONI,
ANDRÉ DORIOCOURT, Jr.