

(No Model.)

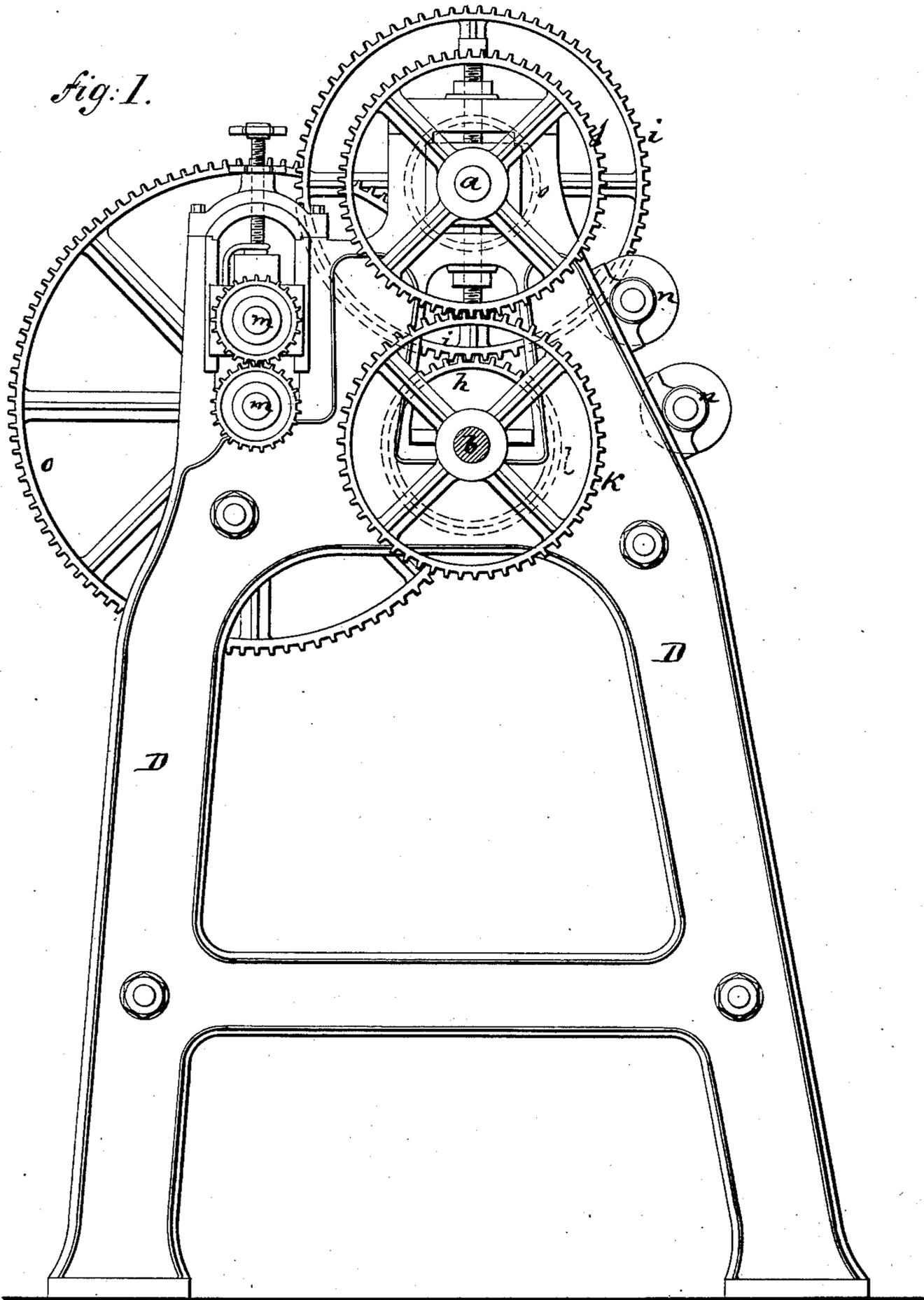
2 Sheets—Sheet 1.

J. B. VOGEL.

DECORTICATING MACHINE.

No. 359,192.

Patented Mar. 8, 1887.



WITNESSES:

Gus. Schnepke.
James Turk

INVENTOR

John B. Vogel
 BY *P. Brien & Steel*

ATTORNEYS

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Fig. 2.

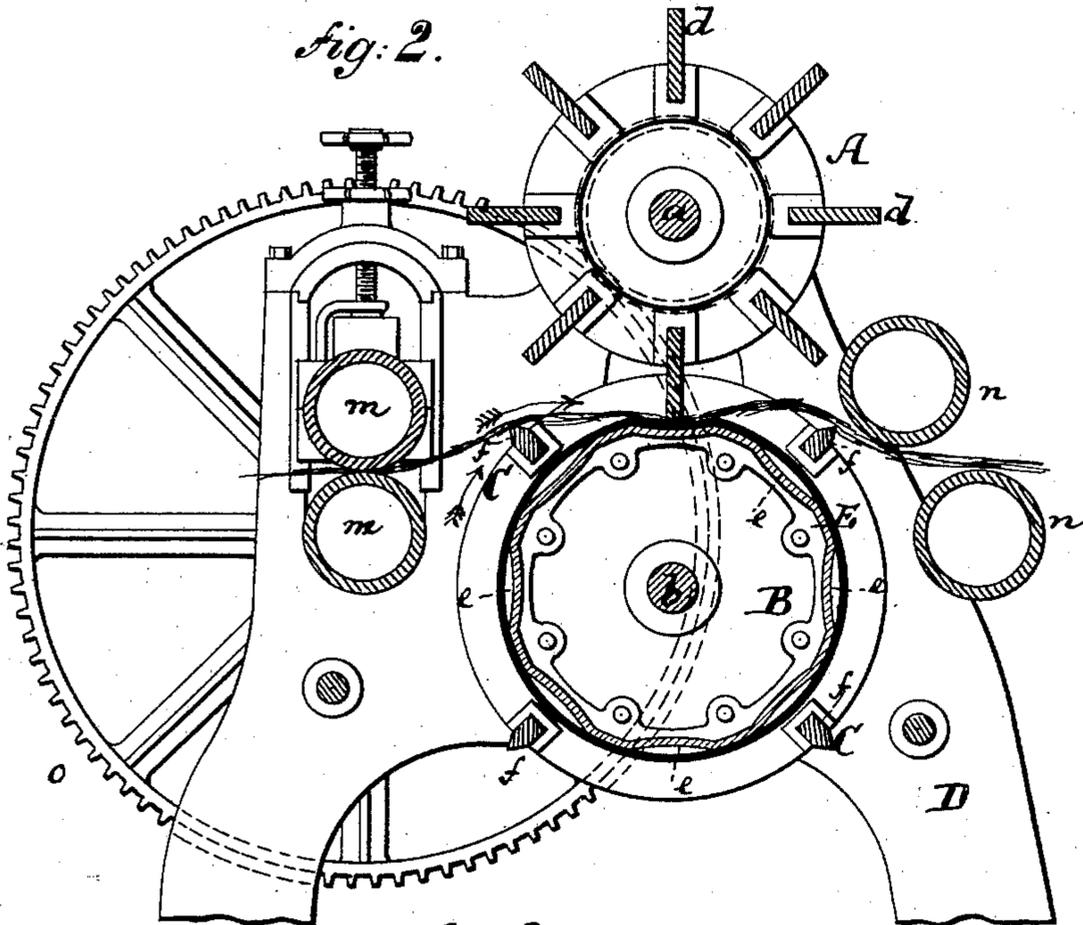
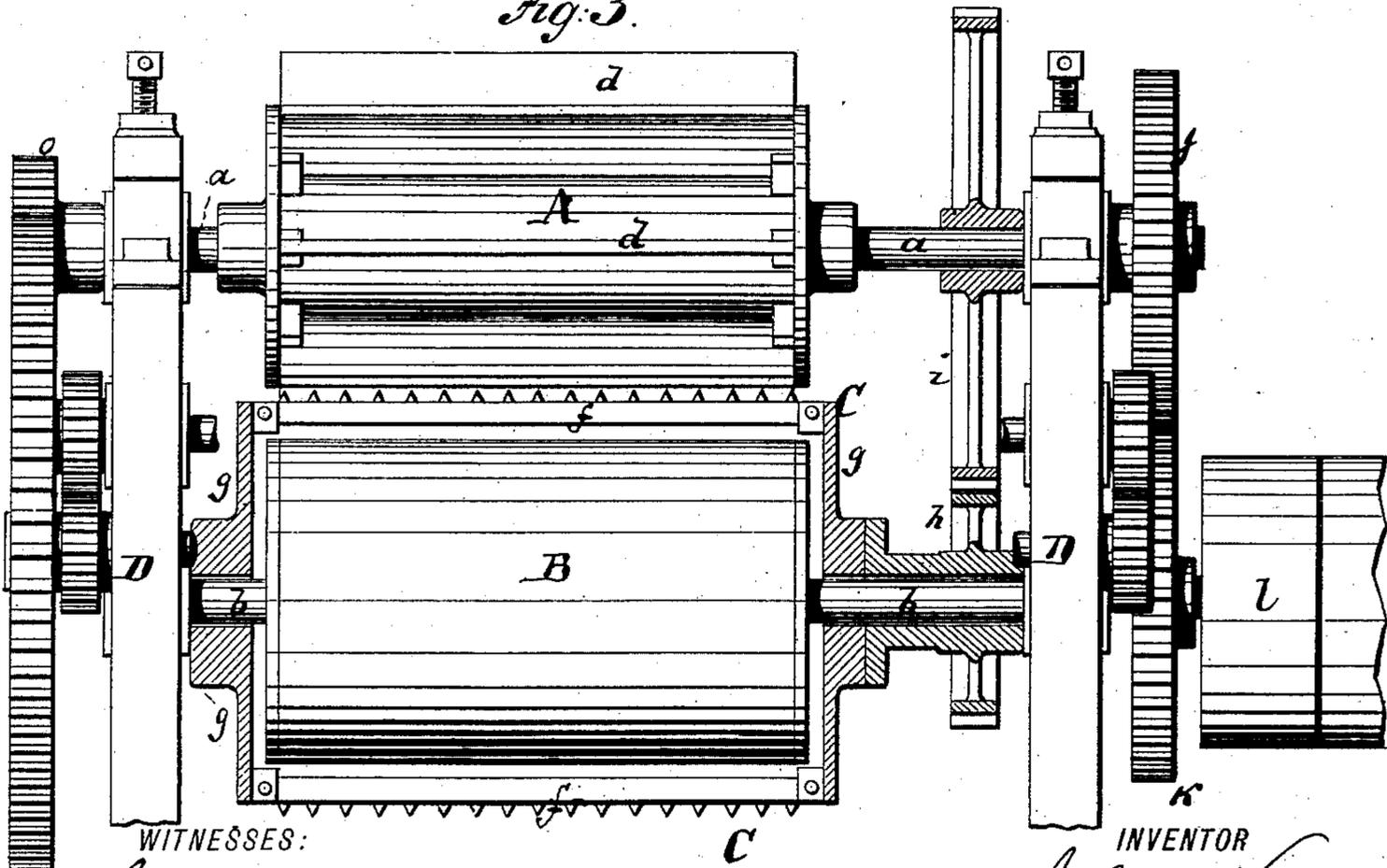


Fig. 3.



WITNESSES:

o
 Gus. Schneppe
 James Turk

INVENTOR

John B. Vogel
 BY
 Briscoe & Steele
 ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN B. VOGEL, OF NEW ORLEANS, LOUISIANA.

DECORTICATING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 359,192, dated March 8, 1887.

Application filed August 10, 1886. Serial No. 210,527. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. VOGEL, a resident of New Orleans, in the parish of Orleans and State of Louisiana, have invented an Improved Decortivating-Machine, of which the following is a full, clear, and exact description, reference being made to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved decortivating-machine. Fig. 2 is a vertical cross-section of the upper part of the same. Fig. 3 is a vertical longitudinal section thereof.

This invention has for its object to produce a machine for decortivating fiber in such manner that the fiber shall not only be crushed, but also scraped and dragged, for the purpose of obtaining the most satisfactory effect.

The invention consists, principally, in combining a bladed drum with an opposite recessed drum and with a revolving skeleton frame around the recessed drum; and mechanism for revolving the said skeleton frame faster than the bladed and the recessed drums, all as hereinafter more fully described.

In the frame D of the machine are the bearings of two drums or rollers, A and B, which are mounted, respectively, upon shafts *a* and *b*. These shafts have their bearings in the frame D. The upper roller or drum, A, has series of projecting blades *d*. Eight such blades are shown in Fig. 2; but a greater or less number may be used instead.

The lower roller or drum, B, has no projecting blades, but has as many depressions *e* on its periphery as the roller A has blades. Around this lower roller, B, is drawn an india-rubber tube, E, which serves as a cushion for the opposite blades, *d*, of the upper drum, A, when the same press the fibers against a depression, *e*, of the roller B.

C is what I term a "skeleton frame," which has half the number of longitudinal bars that the drum A has blades. The said longitudinal bars (being marked *f* in Fig. 2 of the drawings) are secured at their ends to plates *g*, that turn loosely on the shaft *b*, one of said plates being at its hub connected with a pinion, *h*, which gears into a toothed wheel, *i*, that is mounted upon the shaft *a*, as shown in Fig. 3. The number of teeth of the wheel *i* is

double that of those on the wheel *h*, so that the skeleton frame C, which consists of the parts F G, will be revolved twice as fast as the shaft *a*. The shafts *a* and *b* are geared together by toothed wheels *j* and *k*, which are of equal diameters, so that the drums A B will be revolved with equal speed, the skeleton frame C being revolved twice as fast as said drums; hence whenever rotary motion is imparted to the shaft *b* by belt or pulley *l*, or by other means, that motion will be transmitted to the roller A, and from the shaft *a* to the skeleton frame C. The eight (more or less) blades *d* of the upper roller, A, will always press into the depressions *e* of the roller B; but the skeleton drum or frame C, which moves twice around the roller B while the same turns once around its axis, brings its blades *f* so that they alternately overlap one after another of the eight blades of the drum A. The effect of this combination is that when the blades *d* of the roller A strike in a depression of the roller B the blade *f* of the rapidly-revolving skeleton drum C will scrape the fiber in running along it, and by raising the fiber will also tend to slightly draw it back from between the grasp of the rollers A B.

m m in Fig. 2 are the feed-rollers which supply the fiber to the machine, and *n n* are the discharge-rollers. The feed-rollers are revolved by gear-connection *o* with the shaft *a*, or by other suitable means.

I claim—

1. The combination of the bladed drum A with the recessed drum B and mechanism for revolving them with equal speed with the skeleton frame, which embraces the drum B, and with mechanism for revolving said skeleton frame twice as fast as said drums are revolved, substantially as herein shown and described.

2. The combination of the bladed drum A, recessed drum B, elastic tube E, skeleton frame C, and mechanism for revolving the drums A B and skeleton frame C in the ratio specified.

JOHN B. VOGEL.

Witnesses:

ANDREW HERO, Jr.,
L. FLETTRICH.