

(No Model.)

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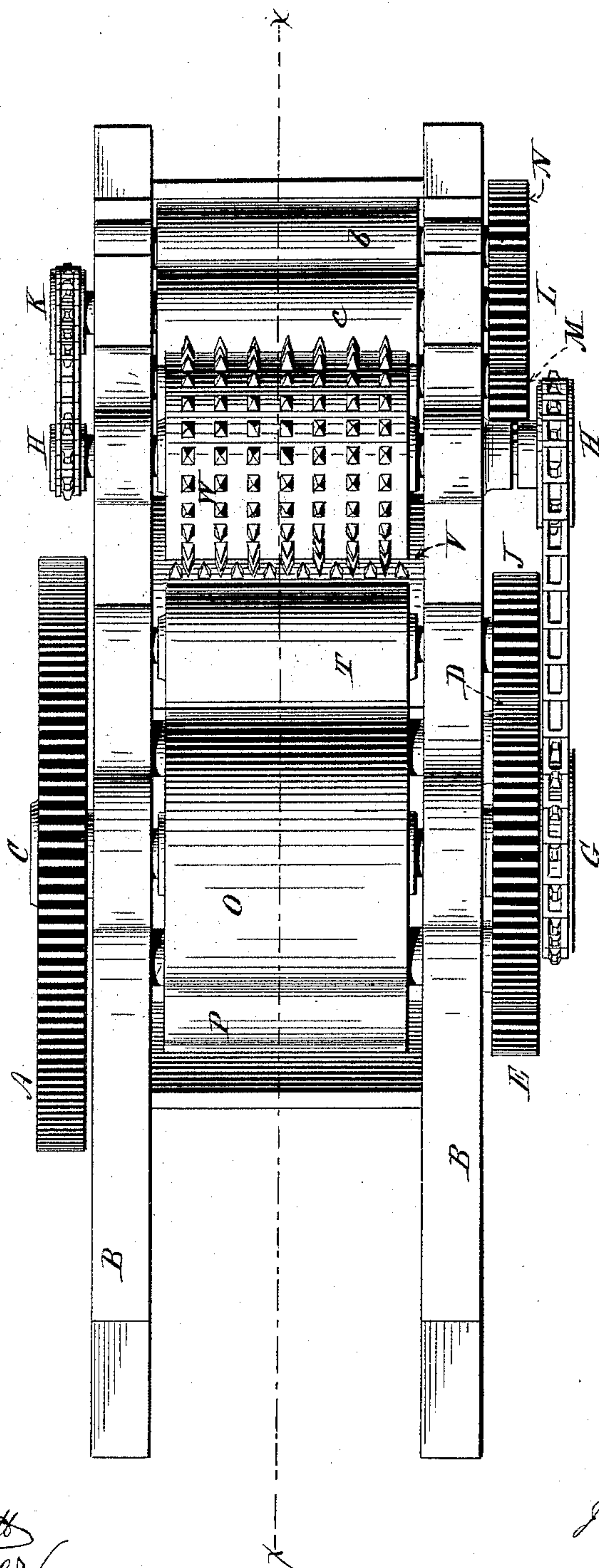
J. H. BROWN.

APPARATUS FOR PRESSING AND DISINTEGRATING FIBROUS MATERIAL.

No. 485,837.

Patented Nov. 8, 1892.

Fig. 1.



Witnesses:

Geo. W. Myatt
Geo. Gardner

Inventor:

John H. Brown
By his attorney
E. N. Dickerson.

(No Model.)

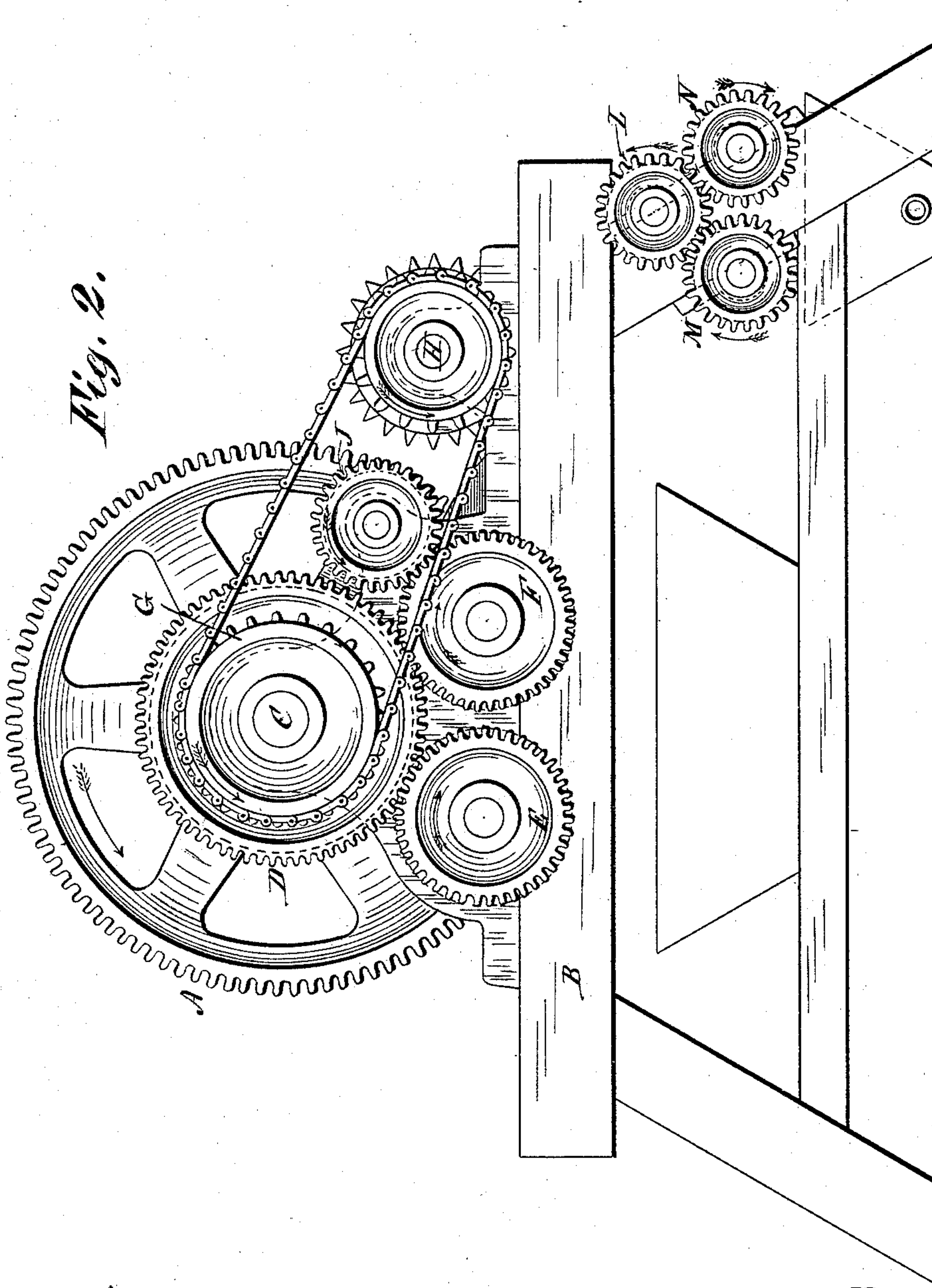
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APPARATUS FOR PRESSING AND DISINTEGRATING FIBROUS MATERIAL.

No. 485,837.

Patented Nov. 8, 1892.



Witnesses:

Geo. W. Mott

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(No Model.)

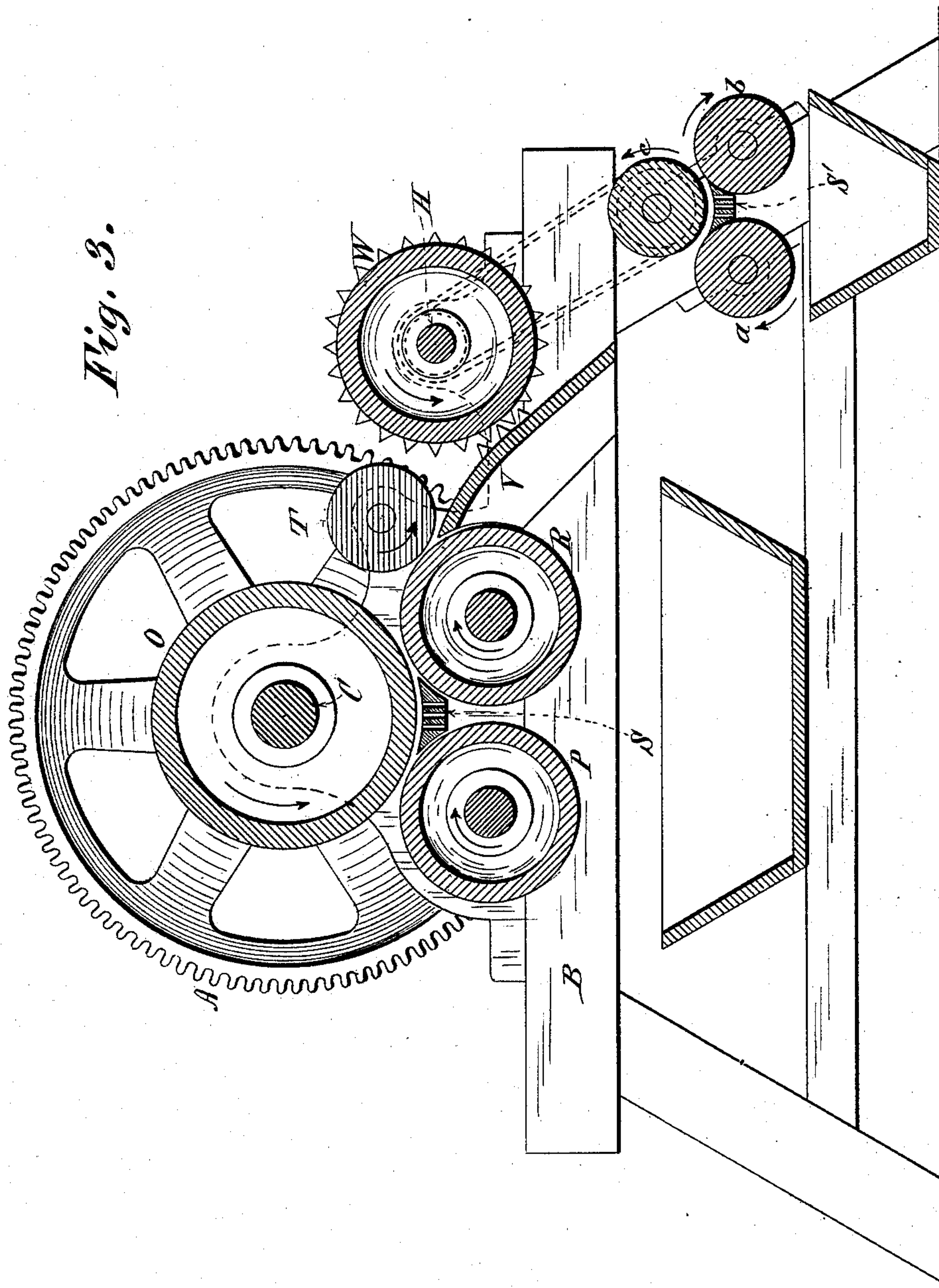
3 Sheets—Sheet 3.

J. H. BROWN.

APPARATUS FOR PRESSING AND DISINTEGRATING FIBROUS MATERIAL.

No. 485,837.

Patented Nov. 8, 1892.



Witnesses:
Geo. W. Meath
O. W. Gardner

Inventor:
John H. Brown
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UNITED STATES PATENT OFFICE.

JOHN H. BROWN, OF NEW YORK, N. Y., ASSIGNOR TO THE AMERICAN FIBER ASSOCIATION, OF GEORGIA.

APPARATUS FOR PRESSING AND DISINTEGRATING FIBROUS MATERIAL.

SPECIFICATION forming part of Letters Patent No. 485,837, dated November 8, 1892.

Application filed January 11, 1890. Serial No. 336,656. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BROWN, of the city, county, and State of New York, have invented a new and useful Improvement in Apparatus for Pressing and Disintegrating Fibrous Material, especially Sugar-Cane, of which the following is a full, true, and exact description, reference being had to the accompanying drawings.

10 This invention relates to an apparatus by which fibrous material—such as sugar-cane—can be simultaneously disintegrated or reduced to a fibrous condition and pressed so as to give up its juice or sap.

15 My apparatus consists generally of a series of pressing-rollers, a series of disintegrating-rollers, and a series of pressing-rollers working consecutively upon the material to be treated.

20 My invention will be readily understood from the accompanying drawings, in which—

Figure 1 represents a plan view of my apparatus; Fig. 2, a lateral elevation, and Fig. 3 a section through Fig. 1 on the line $x x$.

25 A represents generally the main driving-wheel of the apparatus, driven through a suitable power-pinion, and B the supporting-frame. Through the shaft C the wheel A drives the wheel D, which gears into the two
30 wheels E F. The shaft C likewise drives the sprocket-wheel G and by the sprocket-chain the shaft H. The wheel F likewise gears with and drives the wheel J. The shaft H likewise by a sprocket-wheel and chain drives the
35 shaft K, at the opposite end of which shaft the gear-wheel L drives the gear-wheels M N. The shaft C carries the main crushing-roller O, which works in conjunction with the rollers P R, as plainly shown in Fig. 3. Between
40 these rollers a perforated guiding-table S is arranged. The wheel J operates the feeding-roller T, which feeds along the surface of the guide-table V, which is provided with teeth of any suitable configuration, adapted to operate in conjunction with the teeth upon the
45 roller W, carried by the shaft H. The roller T, which is positively driven, operates to positively draw or feed the material from the crushing-rollers O P R, so that all danger of
50 the machine being stopped up at this point is avoided, and at the same time it changes the

direction of the material and directs it downward to the table V and roller W. The table V guides the material between the rollers $a b$ and the roller c , driven by the shaft K, as
55 clearly shown. Suitable receiving-vessels may be arranged beneath the rollers, as indicated. It is advisable to make the roller O adjustable with reference to the rollers P R and the roller c adjustable with reference to the rollers $a b$ in the manner well known for adjusting
60 pressing-rollers. Though I have shown as a preferable form two rollers P R acting in conjunction with the roller O and two rollers $a b$ acting in conjunction with the roller
65 c , yet it is plain that one roller might be substituted for these two with less advantageous results. It is desirable, likewise, that the roller W should be speeded up to a higher rate of
70 speed with reference to the roller O than the one indicated by the relative sizes of the wheels, and likewise in that event that the speed of revolution of the roller c should be reduced, which is simply a question of the relative
75 sizes of the sprocket-wheels.

The operation of my apparatus can now be readily understood. The material to be treated is fed between the rollers P O. It is then guided by the roller T to the table V, disintegrated by the roller W, and passes thence
80 to its final pressing between the rollers $a b c$.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the crushing-rollers O P R, the positively-driven feed-roller T,
85 situated in rear of these rollers, and the rollers $a b c$ in rear of or beyond the rollers T, substantially as described.

2. The combination of the crushing-rollers O P R, the positively-driven feed-roller T,
90 situated in rear of these rollers, the toothed table V, situated below the roller T, and disintegrating-roller W above the table, substantially as described.

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

JOHN H. BROWN.

Witnesses:

H. CAUTANT,
ANTHONY GREF.