

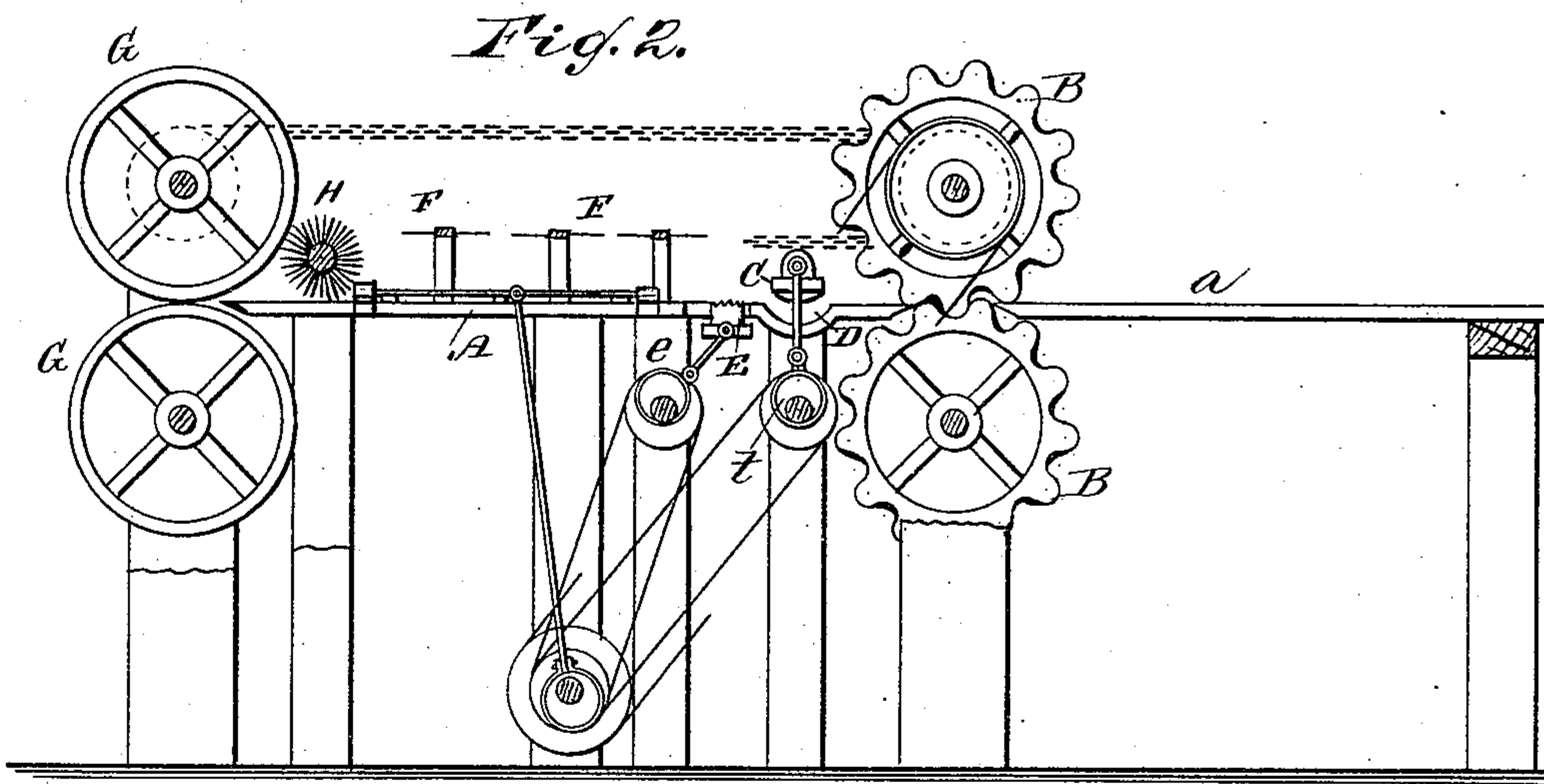
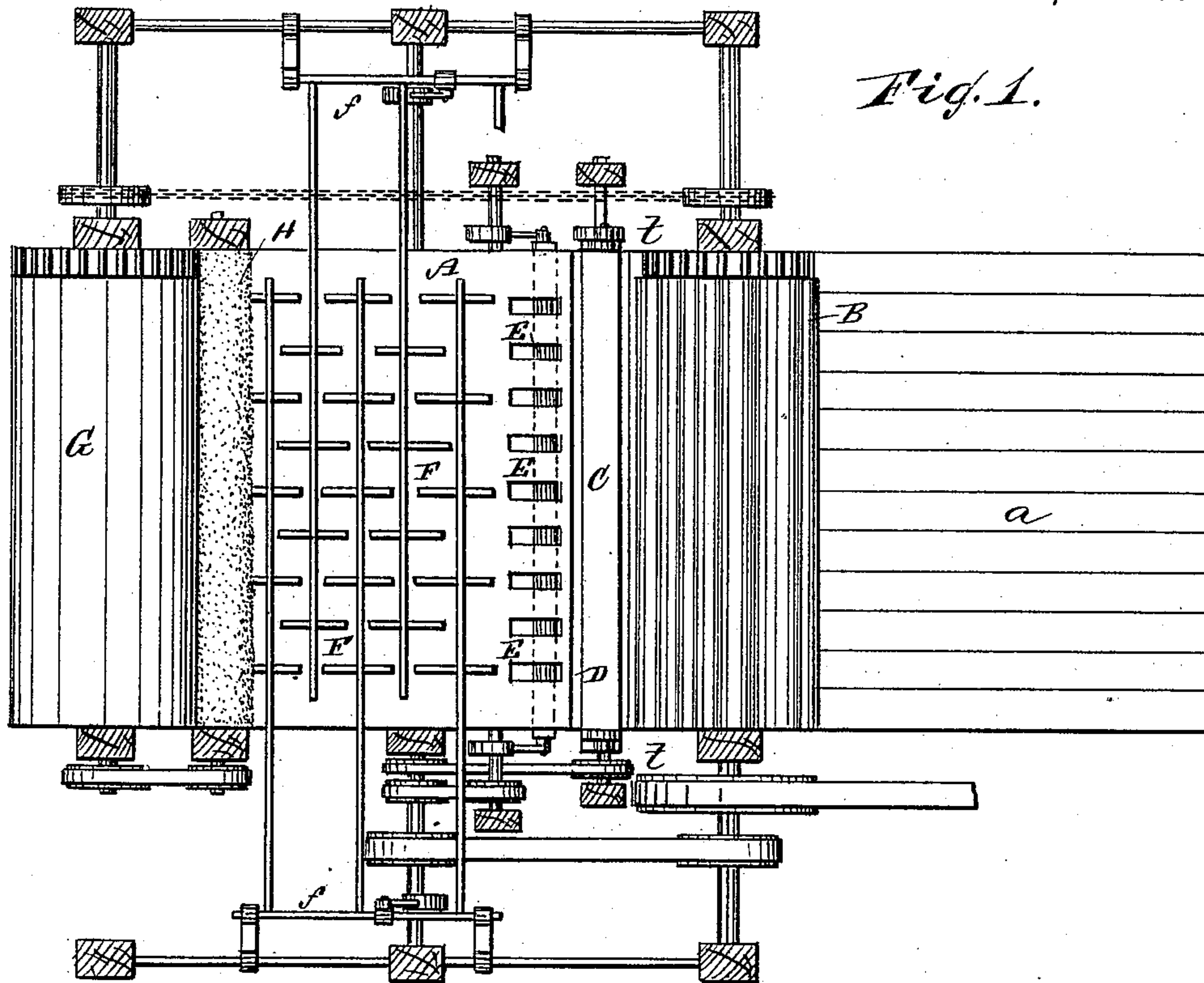
(No Model.)

J. C. DELAVIGNE.

JUTE MACHINE.

No. 312,100.

Patented Feb. 10, 1885.



WITNESSES:

Thos. G. Foster
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INVENTOR:

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UNITED STATES PATENT OFFICE.

JOHN C. DELAVIGNE, OF NEW ORLEANS, LOUISIANA.

JUTE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 312,100, dated February 10, 1885.

Application filed October 15, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. DELAVIGNE, of the city of New Orleans, in the parish of Orleans, State of Louisiana, have invented a new and Improved Jute-Machine, of which the following is a full, clear, and exact description.

The object of my invention is the separation and extraction of the woody fibers from dry jute and ramie without wetting or soaking the stalks, as is usual, thereby avoiding the objections that exist to working the jute or ramie in a green state.

In carrying out my invention the green stalks are subjected to a heating and fermenting process, and then after drying are run through the machine, as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a plan view, partly sectional, and Fig. 2 is a longitudinal section, of the machine.

A is the table or bed, provided at one end with a platform, *a*, for receiving the stalks.

B B are corrugated rollers fitted transversely of the bed in suitable bearings, one roller being above and the other below the bed.

C is a heavy plate sustained across the bed above a depression, D, by supports at its ends, which are operated by eccentrics *t*, that give a rising and falling motion to the plate.

E E are feeders, made as blades with saw-teeth and operated by eccentrics *e*, so as to act through slots in the bed to give a forward movement to the crushed material.

F F are beaters hung on rock-shafts *f*, and fitted for operation in alternate order, so as to beat the material.

G G are smooth delivery-rollers at the end of bed A, geared together and driven by a chain from the shaft of the upper roller, B.

H is a rotary brush placed in front of roller G, and operated by the gear-wheel on the upper roller.

In order to prepare the jute and ramie for the machine, the green stalks are piled up in the field and left to heat and ferment, so as to separate the gum, sap, or albumen from the fiber. They are then stacked away until dry, when they are ready for the machine.

The stalks are fed to the machine on platform *a*, and, passing between rollers B, are crushed. The plate or crusher C acts on the crushed material to cause a still further crushing and separation, and the beaters F, striking the material as it moves over the bed, separate the woody substances, dust, and trash from the fiber. The brush H throws off the dust and trash, and the fibers, passing between the rollers G, are delivered in the form of a ribbon. In this manner the fibers are separated from the dry stalks, the usual netting is not required, and it is not necessary to operate on the green stalks, as they can be kept for any length of time.

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

1. The combination, in a jute-machine, of corrugated rollers B, reciprocating crusher C, beaters F, brush H, and delivery-roller G, substantially as described.

2. In a jute-machine, the reciprocating plate C, combined with crushing-rollers B and bed having depression D, substantially as and for the purpose specified.

3. In a jute-machine, the vibrating feeders E, formed with saw-teeth, combined with slotted bed A, for operation as specified.

JOHN C. DELAVIGNE.

Witnesses:

ARMAND PILIÉ,
J. F. MEUNIER.