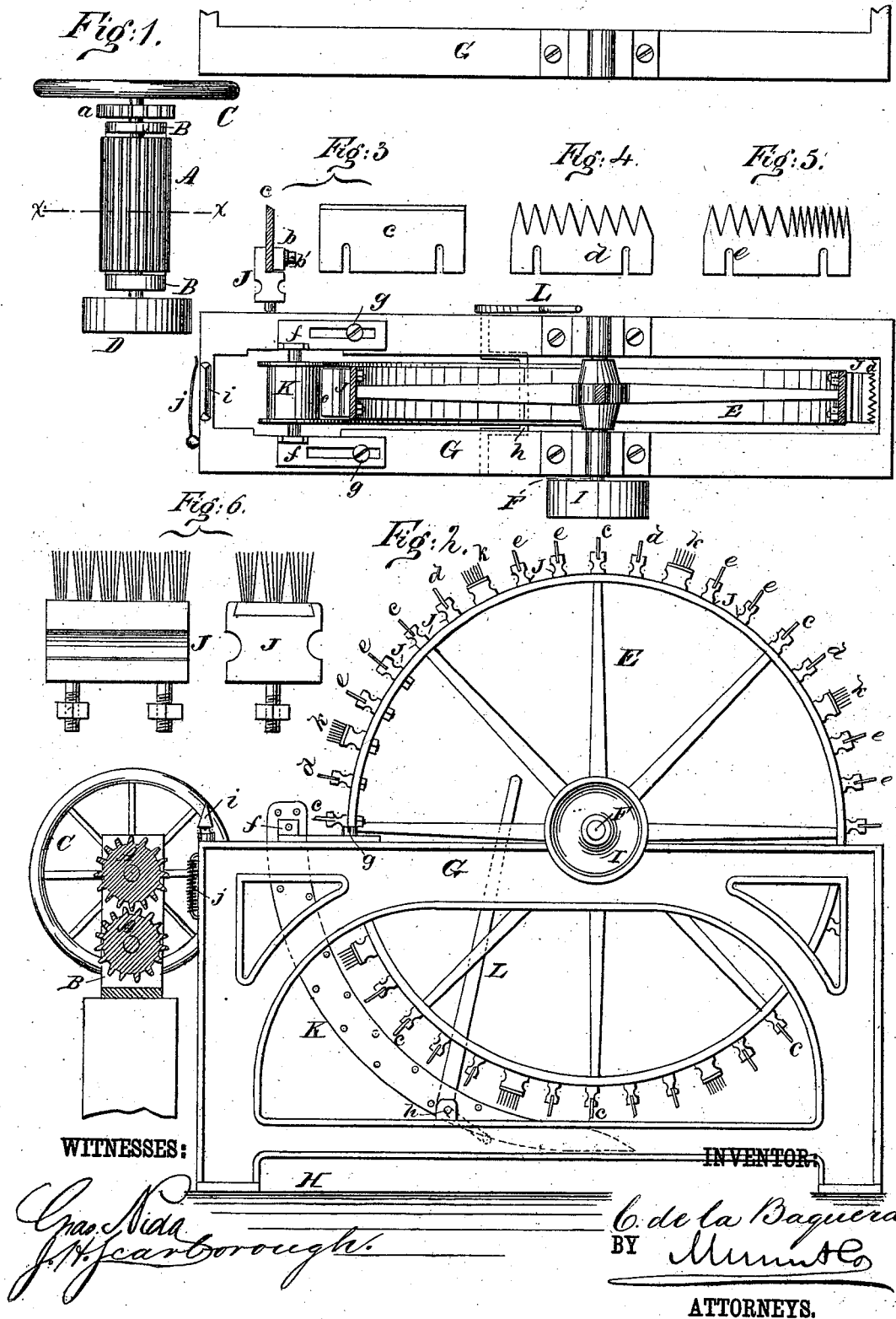


C. DE LA BAQUERA.
Machine for Extracting Fibres from Pita.

No. 197,555.

Patented Nov. 27, 1877.



UNITED STATES PATENT OFFICE.

CARLOS DE LA BAQUERA, OF NEW YORK, N. Y.

IMPROVEMENT IN MACHINES FOR EXTRACTING FIBERS FROM PITA.

Specification forming part of Letters Patent No. **197,555**, dated November 27, 1877; application filed September 10, 1877.

To all whom it may concern:

Be it known that I, CARLOS DE LA BAQUERA, of New York city, in the county and State of New York, have invented a new and Improved Apparatus for Extracting the Fibers from Pita, of which the following is a specification:

Figure 1 is a plan view, partly in section. Fig. 2 is a side elevation, showing the breaking-rolls in section, on line *xx* in Fig. 1. Fig. 3 is a detail view of one of the scraping-blades. Figs. 4 and 5 are detail views of the combs. Fig. 6 shows a side and end view of the wire brush.

Similar letters of reference indicate corresponding parts.

My invention relates to apparatus for treating the leaves of a plant known as "pita," and removing therefrom the silky fibers, for manufacturing purposes.

The invention consists in a scutching and hackling wheel of peculiar construction, and an adjustable chute or holder, all of which are hereinafter fully described.

Referring to the drawing, A A are corrugated rolls, journaled in the housings or standards B, and made to rotate together by the spur-wheel *a*, secured to their shafts.

Upon one end of the shaft of the upper roll there is a fly-wheel, C, and upon the other end a pulley, D, is placed, which receives a driving-belt from a pulley placed on the line-shaft which gives motion to the other machinery of the plant.

E is a wheel, carrying several series of tools, each series consisting of a steel-wire brush, a scutching-blade, and several hackling-combs. The wheel E is mounted on a shaft, F, which is journaled in a frame, G, secured to timbers H. The shaft F is provided with a driving-pulley, I, which receives a belt from a pulley placed on the line-shaft before mentioned.

A number of shoes or holders, J, are secured to the periphery of the wheel E, by means of bolts, for receiving the hackling-combs, wire brushes, and scutching-blades. These holders are placed transversely on the

face of the wheel E, and are provided with a movable part, *b*, that is clamped against the tool contained by the holder by bolts *b'*.

The scutching-blade *c* consists of a plate of steel, beveled or sharpened wholly from one side, and slotted to admit the bolts *b'*. The hackling-combs *d e* are of two kinds, the comb *d* having teeth of uniform size, and the comb *e* having teeth of two sizes. Between the center and one of its ends the teeth are coarse, and between the center and the other end the teeth are finer. These coarse and finer portions of the combs alternate in position on the face of the wheel E.

The brush K is composed of spring-wires of steel or other suitable material.

Under the wheel E a chute, K, is placed, which is concave in the direction of its length, and is pivoted at its upper ends in slotted adjustable supports *f*, which are secured to the top of the frame G by screws *g*, which pass through their slots into the frame.

A lever, L, is attached to a bent shaft, *h*, journaled in the frame G, for raising and lowering the chute K.

At the top of the frame G, near its front edge, there is a triangular support, *i*, across which the leaf is drawn when operated upon by the wheel E, and at the front of the frame there is a spring-clip, *j*, for holding one end of the pita-leaf while the other end is being treated.

A number of the scutching and hackling wheels and their supporting-frames are arranged in pairs, and in front of each pair a pair of breaking-rolls are placed.

After running the leaf to be operated upon through the breaking-rolls A, one end of it is placed under the wheel E, in the chute K. The outer end is drawn over the triangular support A, and is fastened in the clip *j*.

The chute K is now moved upward toward the wheel E by means of the lever L. The action of the scutching-blades, hackling-combs, and wire brush effectually removes the outer coating of the leaf, and also the pulp, and separates from the other substances the fibers, which are clean and unbroken.

After one end of the leaf is treated in this manner, the leaf is reversed, and the other end is treated in the same way.

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

The roll E, having the scutching-blades *c*, combs *d e*, and brushes *k*, constructed and ar-

ranged substantially as described, in combination with the adjustable concave K, as and for the purpose specified.

CARLOS DE LA BAQUERA.

Witnesses:

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