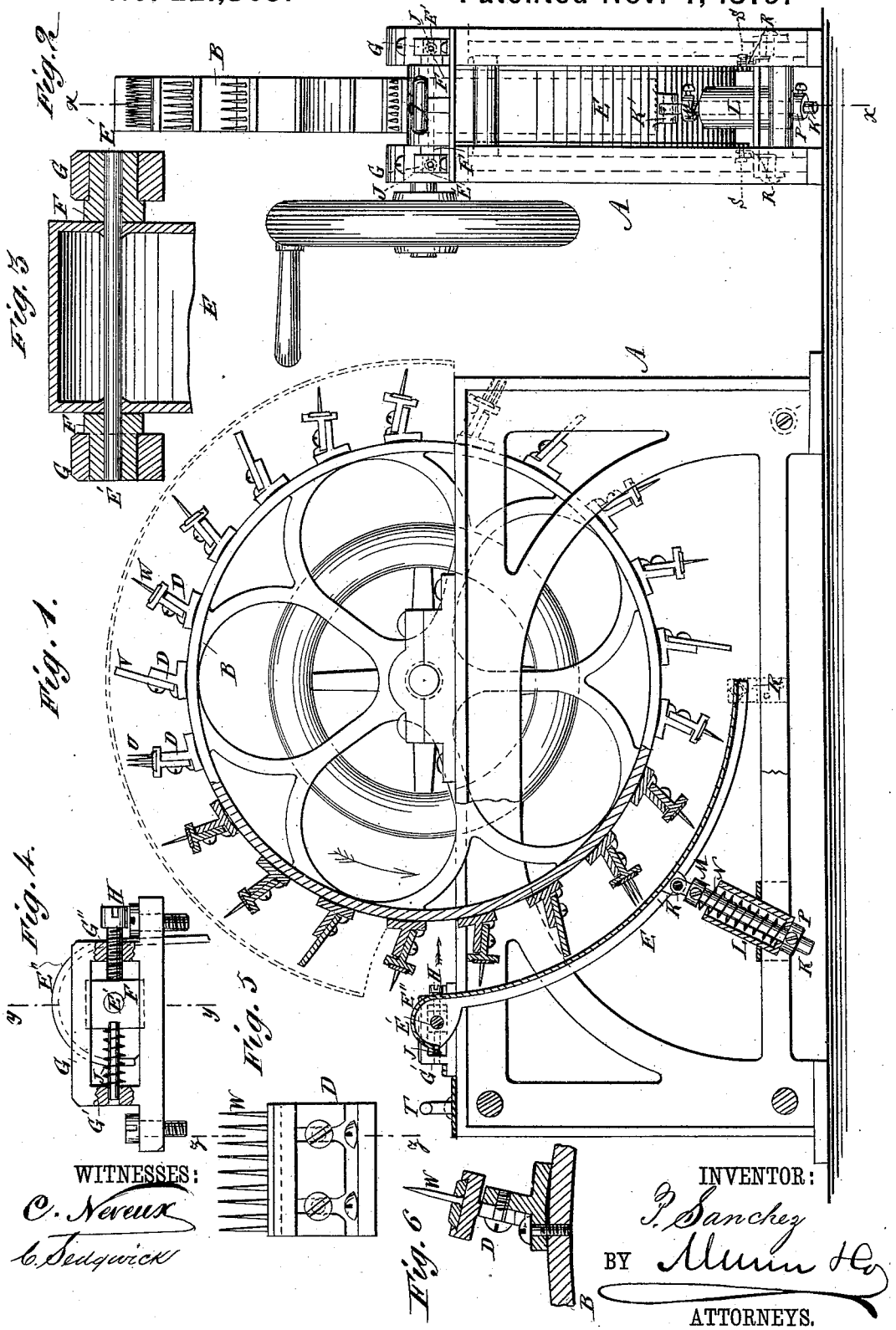
P. SANCHEZ.

Machine for Cleaning and Extracting Fibers.

No. 221,365. Patented Nov. 4, 1879.



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IMPROVEMENT IN MACHINES FOR CLEANING AND EXTRACTING FIBERS.

Specification forming part of Letters Patent No. **221,365**, dated November 4, 1879; application filed March 20, 1879.

To all whom it may concern:

Be it known that I, PEDRO SANCHEZ, of Tabasco, Mexico, have invented a new and useful Improvement in Machines for Cleaning and Extracting Fibers from Fibrous Plants, of which the following is a specification.

Figure 1 is a side view, showing a portion of the machine broken away to the line *x x*, Fig. 2. Fig. 2 is a front view. Fig. 3 is a detail drawing of a section at the line *y y*, Fig. 4, of the upper portion of the chute E and the bearers G and sliding blocks F. Fig. 4 is a detail drawing, showing a side view of the upper portion of E and a bearer, G, partly broken to show the stop-screw H and means for retaining the spring J. Fig. 5 is a detail front view, showing a hackling-comb, W, and its holder D. Fig. 6 is a section at *z z*, Fig. 5.

Similar letters of reference indicate corresponding parts.

The main features of my invention are its springs J J N, by which the concave chute E is urged toward the revolving wheel B, and the stop-screws H and the adjustable collar P, by which this motion of the chute is limited, and the arrangement at an angle with the radii of the wheel B of a series of tools consisting of wire brushes U, scutching-blades V, and hackling-combs W, the main objects being to automatically urge with elastic pressure the "pita" leaf, or other fibrous leaf or plant, against the action of the tools on the wheel B, and by having these tools inclined, as above mentioned, to avoid the cutting or tearing of the useful fibers and the clogging of the tools with the useless portion of the leaf or plant, as is the case when the tools are arranged radially, as heretofore.

The frame A supports the wheel B, which has a number of tool-holders, D, rigidly bolted on its periphery, so that each tool is held at an inclination from the direction in which the wheel B revolves at an angle with the radius of the wheel B that is nearest to it.

The concave or chute E is pivoted at E′ in each sliding block F, which may slide in either direction on the line of the arrow, Fig. 1, on its track, by which its motion between the standards G′ G″ of its bearer G is guided.

The standard G″ of each bearer G has a stop-screw bolt, H, to limit the thrust of its spring J, which is retained between its standard G′ and its sliding block F, so as to act as first mentioned.

The rod K in its box L, which is rigidly secured in the frame A, has a set-screw collar, M, between which and the box L is interposed the spring N, which causes rod K and its pivoted head K′ to bear on the lower portion of the chute E, which is thus urged toward the wheel B, and this action of the spring N is limited by the set-screw collar P, which is rigidly adjusted on the rod K, so as to act as a stop by bearing on the base of the box L.

R R are lugs projecting from the frame A, and have each a set-screw and jam-nut, S, which are adjusted so as to bear lightly on its side of the chute E, and thus limit any lateral movement of the chute.

The fibrous leaf is entered at E″ under the wheel B in the chute E. The outer portion of the leaf being retained at the rest T, its useful fibers are thoroughly stripped of their useless portion by the combined action of the tools on B and the pressure of the springs J J N, as above mentioned.

The dotted lines over the wheel B, Fig. 1, represent a removable hood to protect the workman from flying particles of useless fiber.

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

1. The concave E, pivoted at its receiving end in elastically-yielding bearings and elastically supported from below, in combination with the wheel B, provided with fiber-cleaning tools U V W, substantially as described.

2. The concave E, pivoted at its receiving end in elastically-yielding bearings, said bearings being provided with set-screws H, to adjustably limit its inward movement, and supported from below from the bearings L by rod K, provided with spring N and adjustable collars P M, as shown and described.

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