

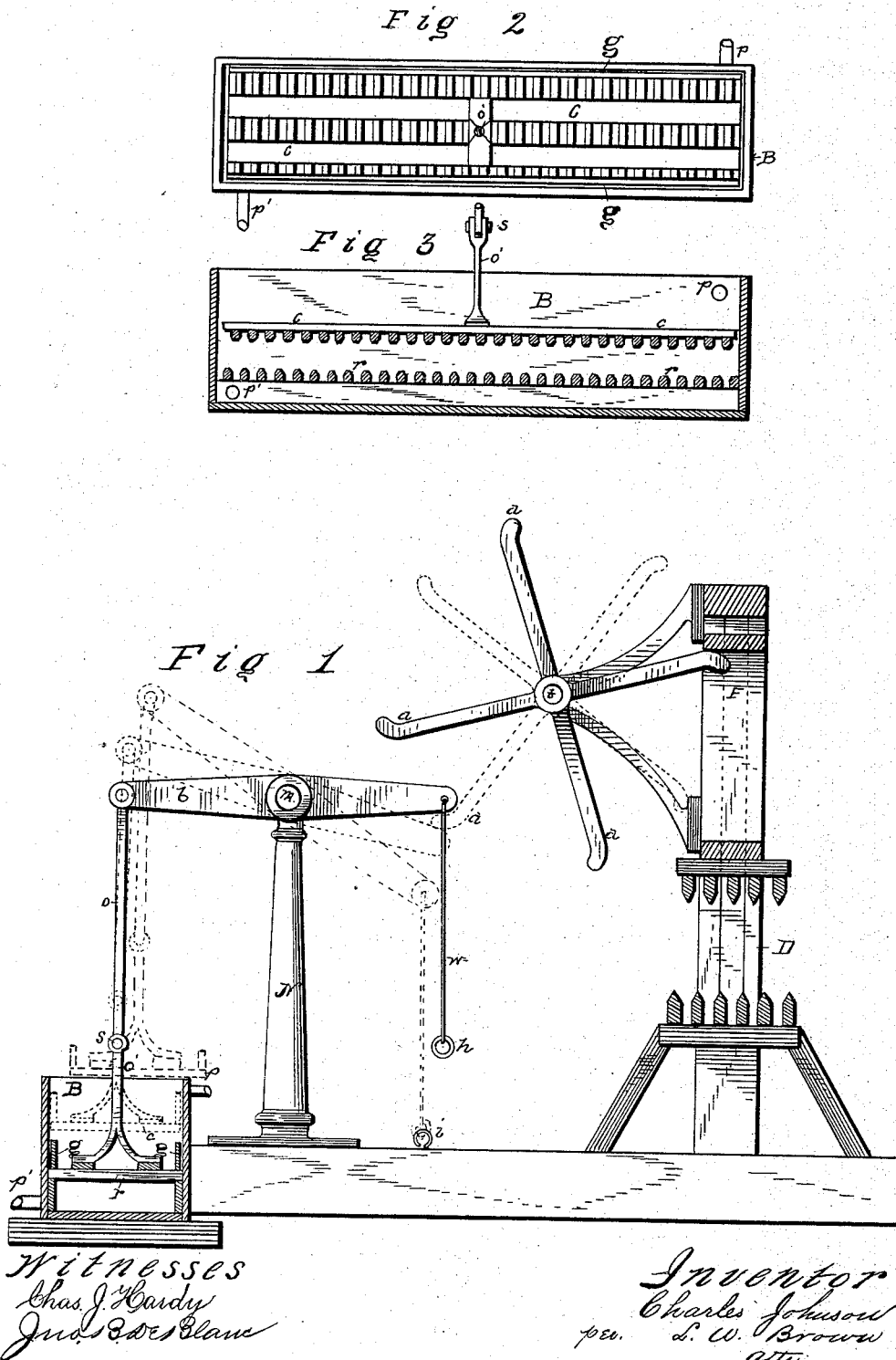
(No Model.)

C. JOHNSON.

MACHINE FOR WASHING OUT THE FIBERS OF PLANTS.

No. 384,851.

Patented June 19, 1888.



UNITED STATES PATENT OFFICE.

CHARLES JOHNSON, OF NEW ORLEANS, LOUISIANA.

MACHINE FOR WASHING OUT THE FIBERS OF PLANTS.

SPECIFICATION forming part of Letters Patent No. 384,851, dated June 19, 1886.

Application filed October 31, 1885. Serial No. 181,451. (No model.)

To all whom it may concern:

Be it known that I, CHARLES JOHNSON, a citizen of the United States, residing in the city of New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Machine for Washing out the Fibers of Plants, of which the following is a specification.

My invention relates to improvements in a machine for washing the vegetable matter, dirt, &c., from the fiber of jute, ramie, or other plants, and has for its object to provide a means by which the fiber of plants can be washed without deteriorating or injuring the fiber, as also to accomplish this end at a reasonable expense, which will encourage the cultivation of fibrous plants. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is transverse section of the washer, showing its position in relation to a decorticating-machine and the mechanism for operating the machine. Figs. 2 and 3 are respectively a plan and longitudinal section of the washer.

Similar letters refer to similar parts throughout the several views.

To a box, B, of any desired dimensions is secured a permanent rack, *r*, which is composed of beveled pieces spaced at the desired distance apart and placed near the bottom of box B, as shown in Figs. 1 and 3. A movable rack, *c*, provided with suitable guides, *g*, to guide the same in the box B, is placed in the box B over the permanent rack *r*, the beveled strips of rack *c* being so arranged as to fit between the strips on rack *r*. This movable rack *c* is attached to the end of a beam, *b*, by rods *o o'*, said rods being connected by the knuckle joint *s*. The beam *b* works on a fulcrum, *m*, at the top of the post or support N, and a reciprocating motion is imparted to the movable rack *c* by the revolving of the shaft *t*, carrying the arms *a*. The revolving of the arms *a* lifts the fall F of the decorticating-machine D, and also operates the washer, as above described. The ring *h* in one end of the

rod *w*, attached to one end of beam *b*, is hooked into eyebolt *i* when it is desired to throw the washer out of gear. The pipes *p p'* are respectively the induction and eduction for water to box B.

The operation of my machine is as follows, viz: The plant of which I desire to secure the fiber is first placed under the beaters of a decorticating-machine, D, which breaks up and dislodges all the wood or solid portion of the plant and leaves the skin containing the fiber. This skin or green fiber is placed in a tank containing pure water at a temperature of about 100°, where it remains for a few days or until the vegetable matter is thoroughly rotten, when it is laid lengthwise in the box B of the washer and gently pounded, sufficiently to dislodge all of the clinging vegetable matter and dirt by the reciprocating motion of the movable rack *c*, all the dirt, &c., falling through the rack *r* to the bottom of box B, and being carried off by water through the pipe *p'*. When the fiber is washed sufficiently, the ring *h* is hooked into eyebolt *i*, which throws the machine out of gear by depressing that end of the lever B out of range of the arms *a*, and also draws the movable rack *c* above the top of box B, as shown by dotted lines in Fig. 1, when the washed fiber can be removed and another charge placed in the washer.

Having thus described the construction and operation of my machine, I desire to secure by Letters Patent—

In a machine for washing fiber, the combination of a box, a rack secured near its bottom, a post, an eyebolt, a beam pivotally secured to the top of the post, a rod secured to each end of the beam, a rack secured to the lower end of one of the rods adapted to be moved vertically within the box, a ring secured to the lower end of the other rod, adapted to be secured to the eyebolt, and means, substantially as described, for operating the beam.

CHARLES JOHNSON.

Witnesses:

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