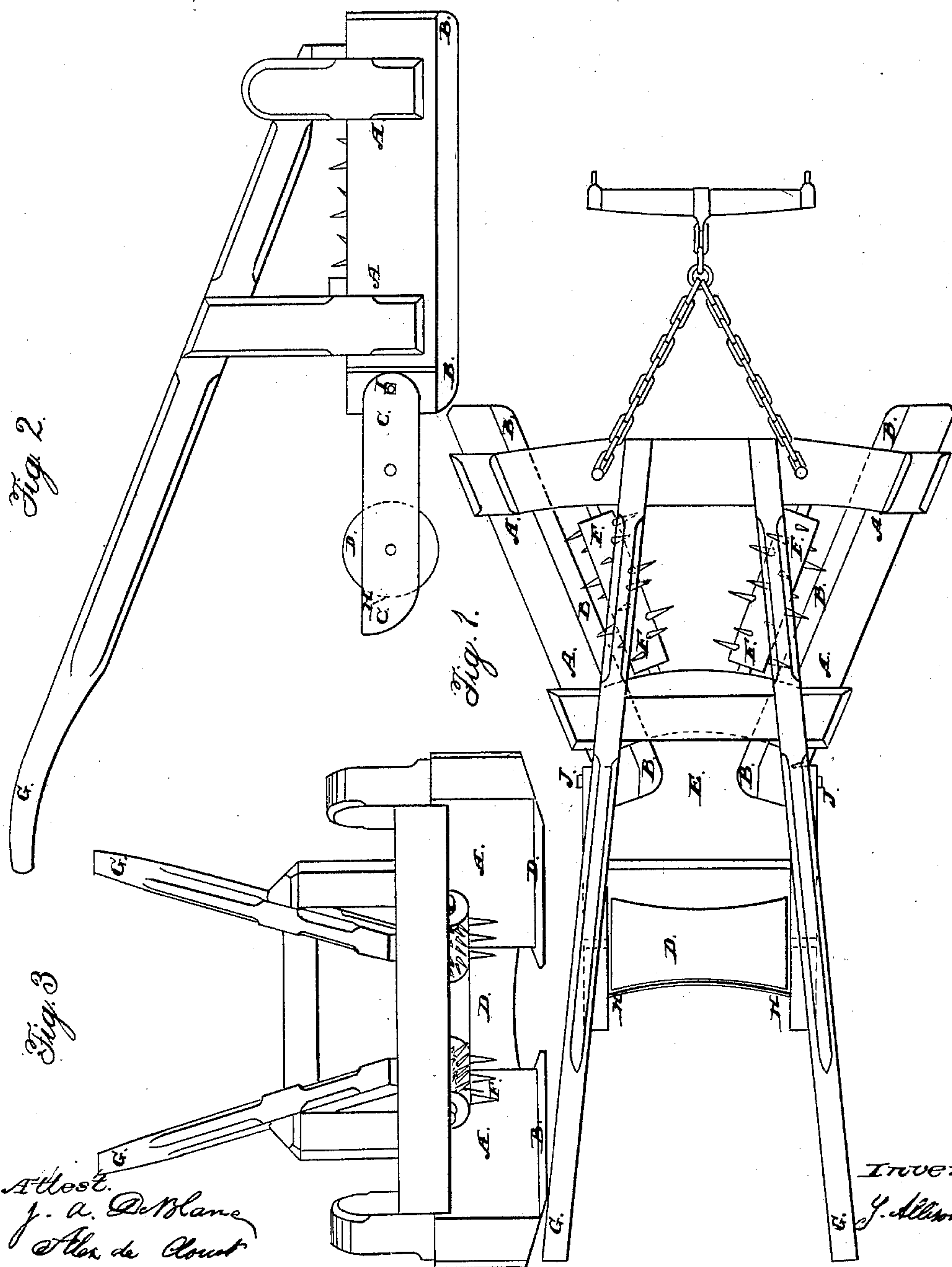


J. ALLISON.  
Rotary Harrow.

No 18,666.

Patented Nov. 24, 1857.



# UNITED STATES PATENT OFFICE.

JOHN ALLISON, OF ST. MARTINSVILLE, LOUISIANA.

## IMPROVEMENT IN MACHINES FOR COVERING SUGAR-CANE.

Specification forming part of Letters Patent No. 18,666, dated November 21, 1857.

*To all whom it may concern:*

Be it known that I, JOHN ALLISON, of St. Martinsville, parish of St. Martin's, in the State of Louisiana, have invented a new and useful Machine to Cover Cane; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure I is a plan. Fig. II is a side elevation, and Fig. III is a front elevation.

*Construction of the machine.* A A are two lateral boards, having attached to their lower edges the iron or steel blades B B, with an inclination downward, as shown in the drawings. These lateral boards A A are joined together in such a manner that they are in front five feet apart, (more or less,) closing toward the back end, so as to leave an opening, E, fourteen inches wide. The distance or opening in front of the two lateral boards A A, depends on the width of the rows to be covered, as will be easily understood when I come to the explanation of the manner in which the machine operates. Attached to the back ends of these lateral boards A A is a frame, C C, carrying the roller D, whose circumference is smaller in the middle than on the two ends. This frame C C, with roller D, is movable around the bolts J J, by which it is attached to the sides A A. Close to the roller D is a knife or scraper, H, attached in such a manner that it will scrape from the roller D all the dirt which may clog to it while in operation. Inside of the lateral boards A A, and parallel with them, are attached two revolving harrows, F F, for the purpose of breaking and pulverizing the ground when it is rough and cloddy. It is not understood to make these harrows revolve by any mechanical means; but they will revolve more or less, when the machine is in operation, by the lumps of dirt striking them.

The operation of the machine is as follows: One or more horses being hitched to it, it is brought in such a position to a row of cane or seed to be covered that the row is in the center under the machine in its longitudinal position. By drawing the machine forward the dirt will be taken and scraped up by the blades B B, accumulated and raised by the lateral boards A A, and forced to the opening E, where it escapes, filling completely the furrow opened previously by a plow to receive the cane or seed. Then comes the roller D and presses the dirt escaping through the opening E down to a convex ridge over the cane or seed. Should any dirt clog to the roller D, the knife or scraper H will scrape it off and keep the roller free and clean. If the ground is rough and cloddy, the revolving harrows F F will break the lumps and prepare the ground properly to cover cane or seed.

I said before, in the explanation of the construction of the machine, that the space in front between the lateral boards A A depends on the width of the rows to be covered. This space should not be greater than the width of the rows, otherwise the lateral boards would accumulate dirt from more than one-half of the row on each side and would take from one row the dirt which belongs to another.

I do not claim as my invention the lateral boards A A nor the blades B B. I do not claim the revolving harrows F F nor the roller D.

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

The boards A A, provided with the blades B B and revolving harrows F F, in combination with roller D, arranged and operating in the manner and for the purposes as set forth.

JOHN ALLISON.

Witnesses:

ALEX. DE CLOURT,  
J. A. DEBLANC.