

J. L. TOOLE

Portable Cotton-Ginning, &c., Machine.

No. 169,206.

Patented Oct. 26, 1875.

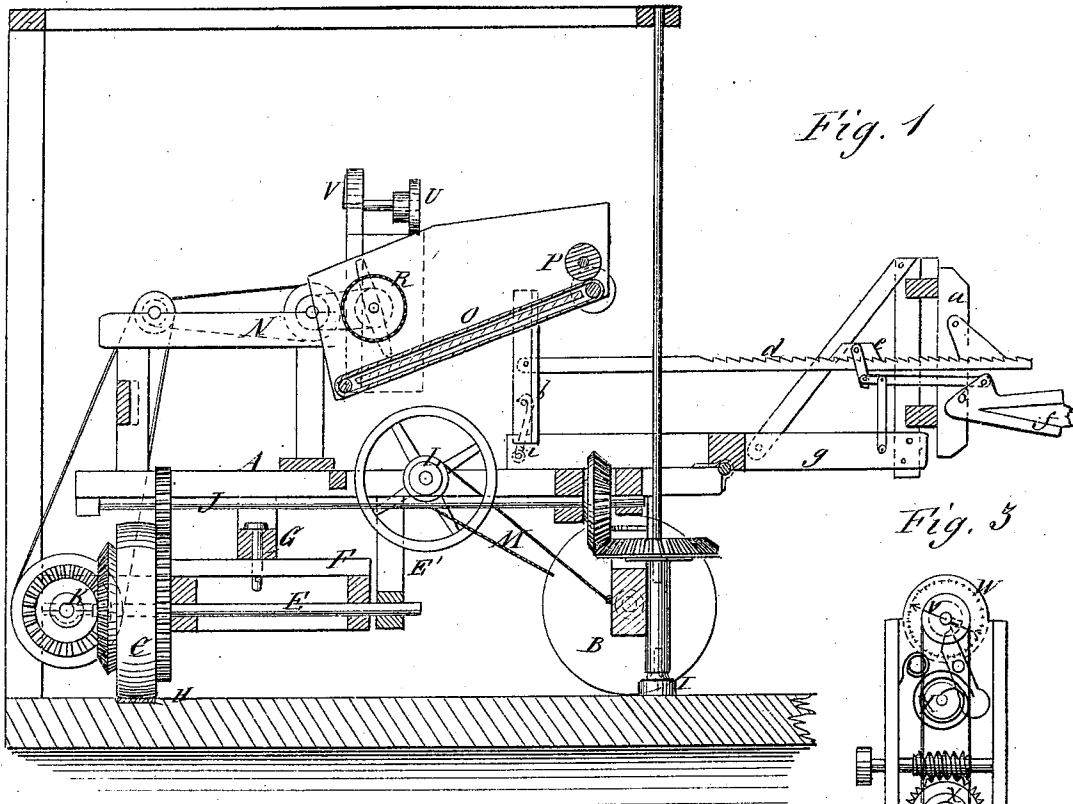


Fig. 1

Fig. 5

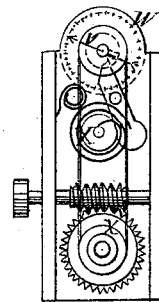
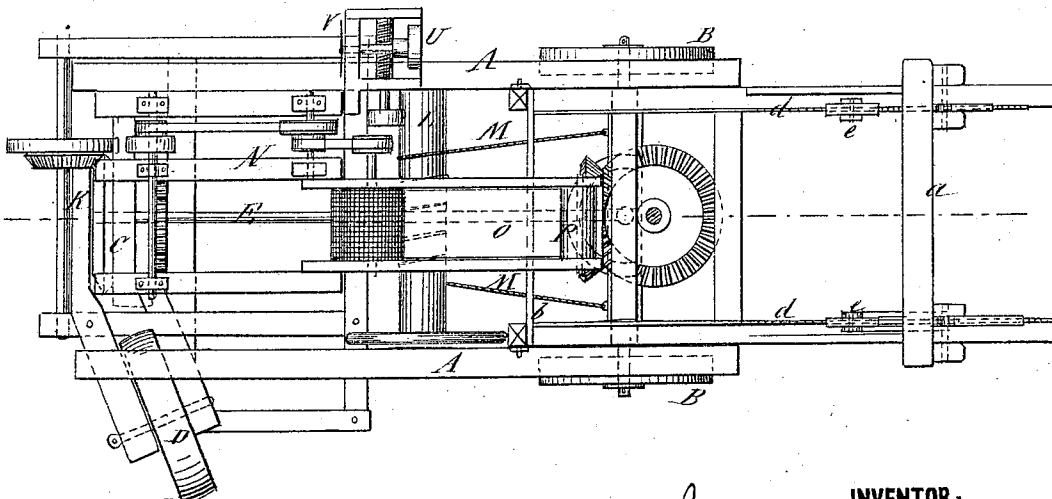


Fig. 2



WITNESSES:

E. Veroux
A. F. Terry

INVENTOR:

Julius L. Toole
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JULIUS L. TOOLE, OF WILLISTON, SOUTH CAROLINA.

IMPROVEMENT IN PORTABLE COTTON-GINNING, &c., MACHINES.

Specification forming part of Letters Patent No. **169,206**, dated October 26, 1875; application filed June 26, 1875.

To all whom it may concern:

Be it known that I, JULIUS L. TOOLE, of Williston, in the county of Barnwell and State of South Carolina, have invented a new and Improved Portable Cotton-Ginning, Condensing, and Packing Machine, of which the following is a specification:

My invention consists of a peculiarly contrived power apparatus for driving a gin and condenser, (also applicable for other purposes,) with which there is combined a gin, also a condenser, and a press, which is attached to the machine, so as to receive the cotton from the condenser ready for pressing.

Figure 1 is a longitudinal sectional elevation of my improved machine, taken on the line *xx* of Fig. 2, and Fig. 2 is a side elevation of the automatic indicator.

Similar letters of reference indicate corresponding parts.

A is a truck and supporting-frame, mounted on the wheels B at the hind end and the wheels C D at the front end, the latter wheels being fixed on the axle E, so that one can be readily taken off, and the axle is mounted in a bolster, F, which is pivoted to the inverted arch-piece G, so that it can swing around to the position indicated in Fig. 1, when the contrivance is to be worked as a power, for the wheels C D to run around on a circular track, H, to obtain motion by traction for working transmitting-gears, the truck-frame being turned on the pivot I, which is contrived so as to readily adjust the hind end of the truck to mainly take the weight off the wheels B, so as to lessen the friction, but allowing them to touch sufficiently to balance the truck. Wheel D is detached from shaft E, and arranged in advance of wheel C, also for balancing the truck, but so as not to sustain much weight, which is required on wheel C, for producing the requisite traction for turning the transmitting-shafts J and K. The hind axle of the truck is also pivoted, and it is connected with a drum, L, by a cord, M, which winds off one way, and on the other way when the drum is turned to aid in guiding the machine for short turns, the machine being longer than an ordinary truck. N represents a cotton-gin, mounted on the front portion of the truck, and geared with the shaft K. O

represents the belt, and P the rolls of a condenser, for receiving the cotton from the gin and delivering it in a bat to a press, Q, to be pressed into bales. The condenser is to be turned by a belt from the gin, and also a duster, R, of wire-cloth, arranged in front of the gin and over the belt of the condenser to improve the appearance of the cotton and drive away the dust, said duster being a reel covered with wire-cloth, extending from side to side of the chest, to draw the dust out of openings through the chest by air-currents. In practice, I purpose employing the automatic weighing contrivance, composed of a train of gears, T U, and a belt to be turned by a belt from the gin, for slowly turning a pointer, V, around a dial to indicate the accumulation of sufficient cotton in the press for a bale, and to sound a bell, X, to call the attention of the attendant. The press consists of the stationary head *a*, and movable head *b*, with notched bars *d*, pawls *e*, and pawl-levers *f*, mounted on the frame *g*, which is pivoted to the hind end of the truck-frame so that the press can be tilted upright for tramping down the cotton to fill in enough for a bale. The press is turned up in the horizontal position represented in the drawing, when the follower is to be worked by the levers. The rotation of shaft J imparts a like movement to shaft *h*, and motion is transmitted to any other apparatus by means of a belt (not shown) passing around pulley *i*. Axle E will have a detachable hanger, E', to hold it up when wheel D is taken off, and the press is provided with hooks *l* to hold it down.

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

1. The portable power apparatus, comprising the truck A, wheels B, pivot I, traction-wheels C D, and transmitting-gears, combined and arranged substantially as specified.

2. The portable cotton cleaning and pressing apparatus, comprising the power mechanism, gin, condenser, and the press, combined and arranged substantially as specified.

JULIUS LUCIUS TOOLE.

Witnesses:

JOHN M. WOODWARD,
ROBT. M. MIXSON.