(No Model.)

J. E. CARVER.

COTTON GIN.

No. 260,660. Patented July 4, 1882

FIG. 1.

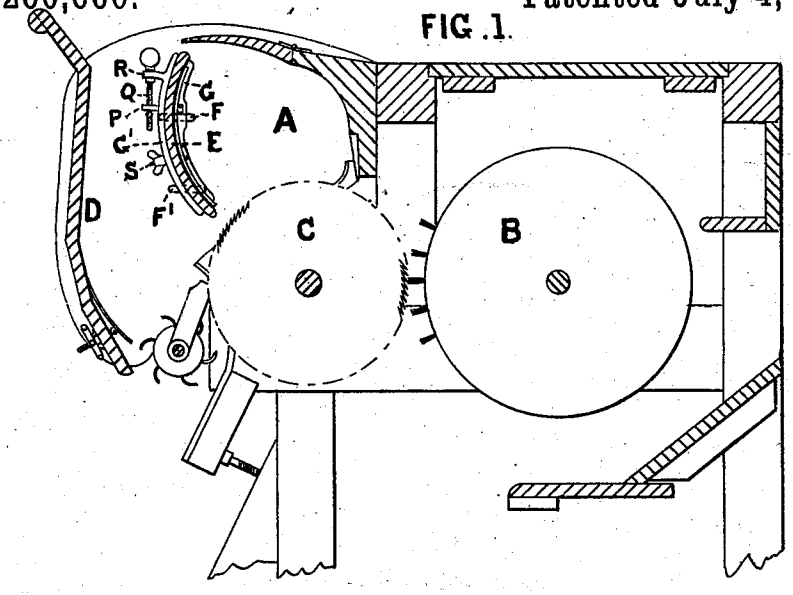


FIG. 2.

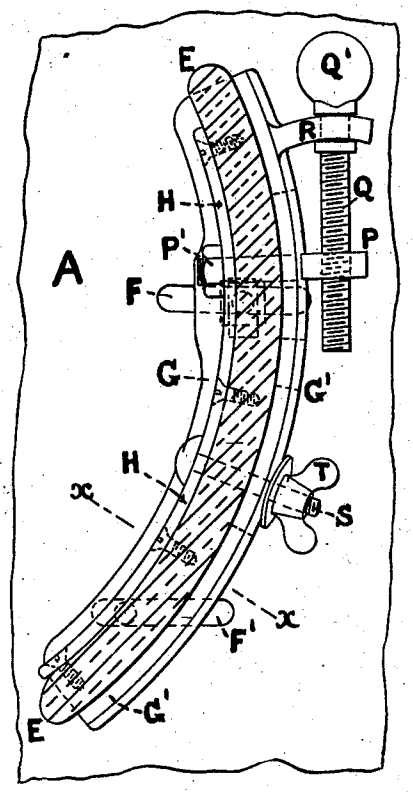


FIG. 3.

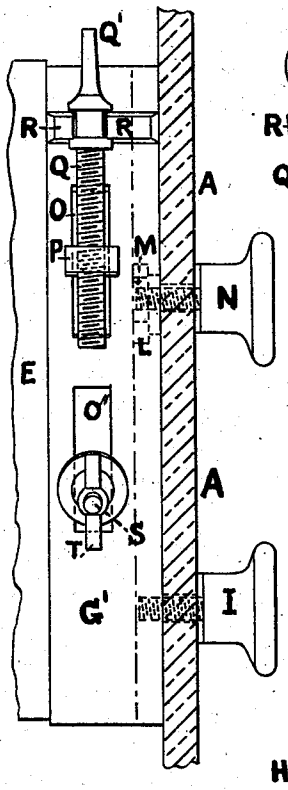


FIG. 4.

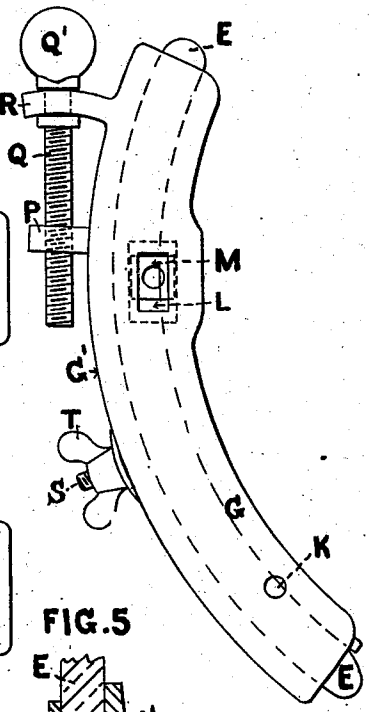
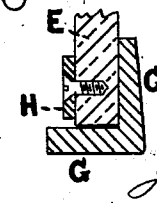


FIG. 5



Witnesses
E. Planta
B. O'Hara.

Inventor
Jos. E. Carver.
by J. H. Adams
Atty.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

JOSEPH E. CARVER, OF BRIDGEWATER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO THE EAGLE COTTON GIN COMPANY, OF SAME PLACE.

COTTON-GIN.

SPECIFICATION forming part of Letters Patent No. 260,660, dated July 4, 1882.

Application filed July 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH E. CARVER, of Bridgewater, in the county of Plymouth and State of Massachusetts, have invented a new and useful Improvement in Cotton-Gins, of which the following is a specification.

The object of my invention is to provide a means for adjusting the seed-board in a cotton-gin, so that it may be quickly and certainly adjusted by one person, and, what is of great importance, effecting the adjustment while the machine is in operation, and so that the result can readily be seen by the person so adjusting.

Cotton-gins known as "hulling-gins," designed for ginning hully cotton, are provided with two roll-boxes, one within the other—the outer box for separating the hulls and the inner one for separating the seed from the cotton in the usual manner. Their capacity for ginning depends much on the character of the cotton. If gathered with all the hulls and stems, sufficient cotton cannot be carried to the inner roll-box to form a large roll.

The objection to the method of adjustment in common use is that two men are required to move the seed-board, one at each end, often requiring hours to adjust the same properly. By means of my improvement these objections are overcome, and the adjustment of the seed-board is effected by one person and in a very short time by means hereinafter fully set forth.

Referring to the accompanying drawings, Figure 1 is a vertical section of a machine embodying my invention. Fig. 2 is a vertical section of the seed-board, showing my improved means of adjustment. Fig. 3 is a front view of the holding-iron and adjusting-screw. Fig. 4 is a side view of the holding-iron. Fig. 5 is a section on the line *x x* of Fig. 2.

Similar letters indicate like parts in the several figures.

A is the head of the inner roll-box of a cotton-gin. B is the brush-cylinder. C represents a saw. D is the outer seed-board, and E the inner seed-board. These parts, being of known construction, require no further description.

F F′ are the upper and lower slots, the same as those in common use.

To each end of the seed-board, where it is connected to the head A, I attach a holding-iron, G, each having a flange, G′, extending an inch or more in front of the said seed-board, as indicated in Figs. 2, 3, and 5. On the inner or curved side of the edge of the seed-board E is secured a metal strap, H, for the purpose of strengthening the same.

To fasten the holding-irons, a thumb-screw, I, is passed through the lower slot, F′, in the roll-box head into a screw-hole, K, at the lower part of the holding-iron G. (See Fig. 4.) This allows of a lateral movement of the seed-board without permitting it to drop.

Near the upper end of the holding-iron is a recessed slot, L, in which is arranged a sliding nut, M, Fig. 4. A thumb-screw, N, passes through the upper horizontal slot, F, Fig. 2, in the roll-box head A into the sliding nut M. This arrangement admits of the adjustment of the top and bottom of the seed-board in either direction.

In the flange G′ of the holding-iron is a vertical slot, O, Fig. 3, in which is fitted so as to move freely a pin having a screw-threaded eye, P, with shoulders bearing upon the sides of the slot O, the pin passing through the slot and being secured to the seed-board, through which it also passes, by means of a nut, P′, Fig. 2.

A thumb-screw, Q, supported in arms or projections R R on the holding-iron G, passes through the head or eye P. By turning the thumb-screw Q the seed-board E may be adjusted higher or lower to the extent of the slot O, while the holding-irons are securely held to the heads of the roll-box.

The slot O in the flange G′ may be of such length, or there may be a separate slot, O″, that a screw-bolt, S, may be passed through the seed-board and slot, and be provided with a thumb-nut, T, on the outside without interfering with the pin P. By tightening the nut T when the seed-board E is properly adjusted the latter is firmly held in position.

What I claim as my invention is—

1. The combination, with the seed-board E, of the holding-irons G, constructed with flanges G′, extending up the sides of the seed-board, provided with slots, pins having screw-thread-

ed eyes P and nuts P′, and the thumb-screws Q, supported in projections R R on the holding-irons G, substantially as shown and described.

2. The combination, with the head A of the inner roll-box of a ginning-machine, provided with the slots F F′, of the seed-board E, the holding-irons G, provided with recessed slots L, sliding nuts M, and thumb-screws N, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH E. CARVER.

Witnesses:
JOS. H. ADAMS,
B. O'HARA.