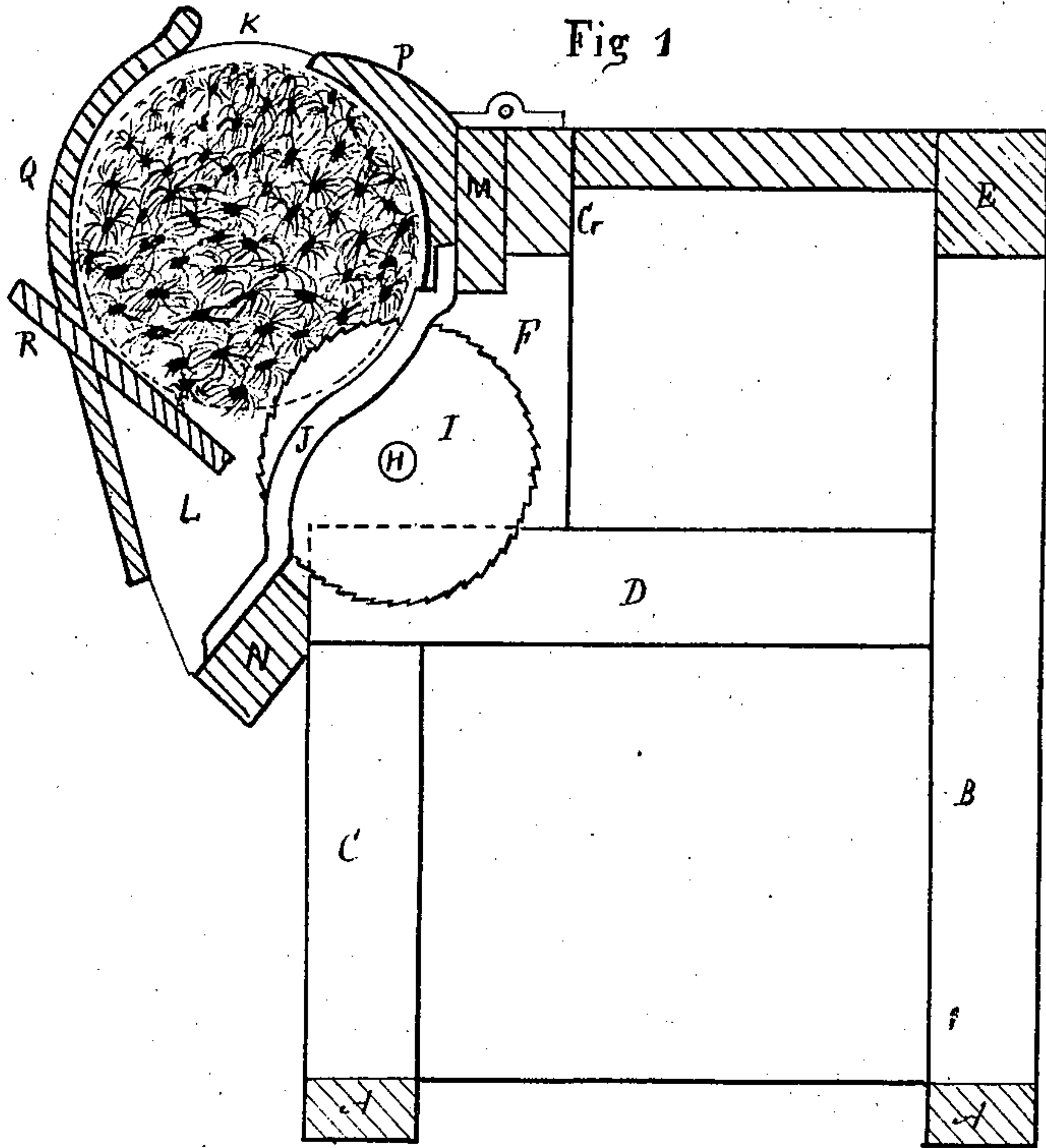


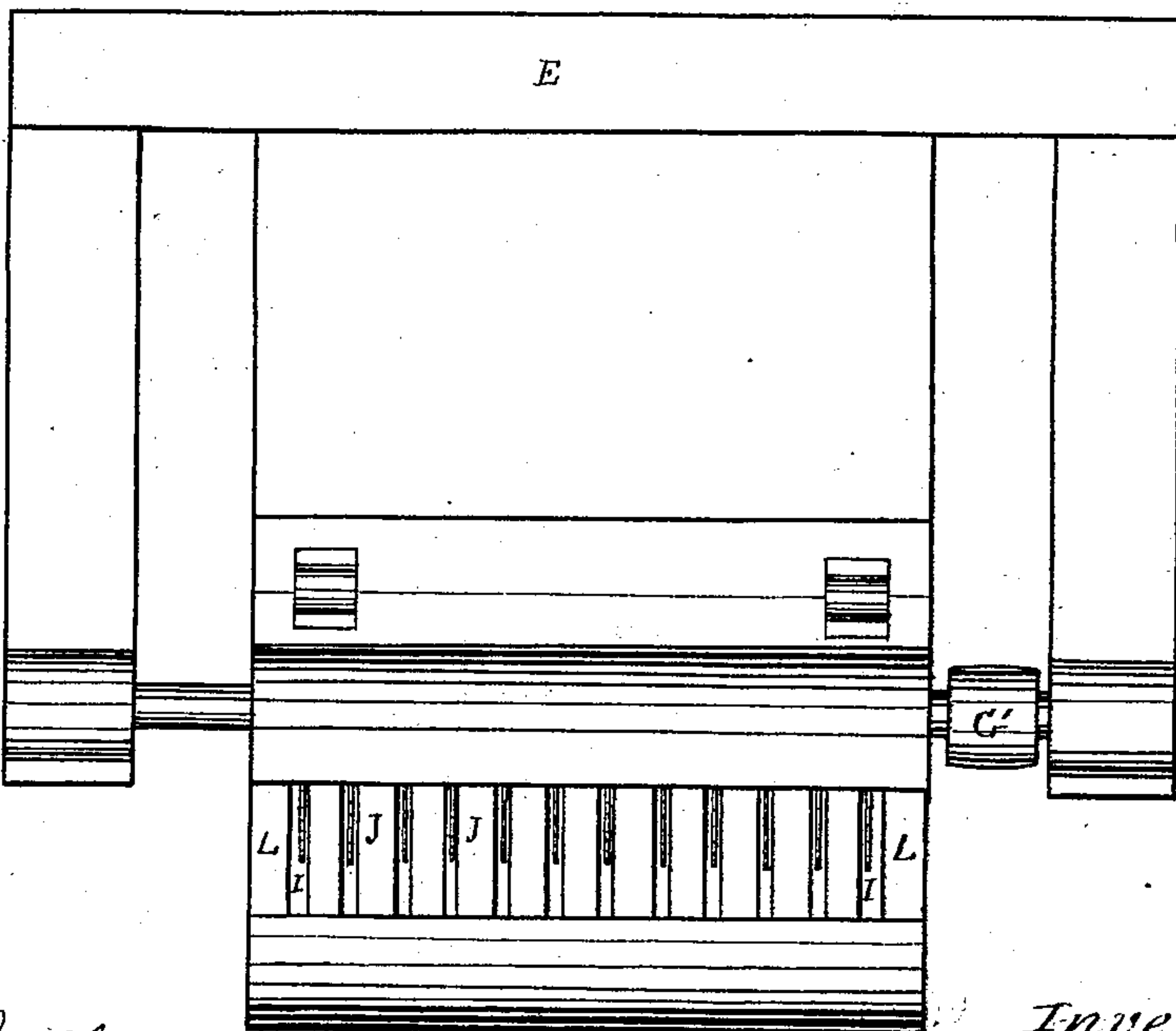
## Cotton-Gin.

No. 167,679.

Patented Sept. 14, 1875.



**Fig 2.**



WITNESSES.

W. E. Chaffee  
Harry Coleman.

*Inventor;*

Oren W. Massey  
By his Atty J. Dennis Jr

# UNITED STATES PATENT OFFICE.

ORREN W. MASSEY, OF MACON, GEORGIA.

## IMPROVEMENT IN COTTON-GINS.

Specification forming part of Letters Patent No. **167,679**, dated September 14, 1875; application filed June 21, 1873.

*To all whom it may concern:*

Be it known that I, ORREN W. MASSEY, of Macon, Bibb county, in the State of Georgia, have invented certain new and useful Improvements in Cotton-Gins; and I hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings forming part of this specification.

The nature or essence of my invention consists in the particular construction and arrangement of devices, forming the improvements described in the following specification, and represented in the accompanying drawings, in which—

Figure 1 is a vertical central cross-section of Fig. 2. Fig. 2 is a plan or top view of a cotton-gin with my improvements.

In these drawings I have shown such parts of a cotton-gin as are necessary to illustrate my improvements.

In these drawings, A A are the sills of the machine, in which the rear posts B B and front posts C C are fastened, which posts support the girder D and top bar E constituting the main frame of the gin. The post F is fastened in the top of the girder D to support the front rail G, to which the feed-box is hinged. The saw-shaft H is mounted in proper boxes on the girders D, and is turned by a belt applied to the pulley G' fastened to the shaft. The saws I I are fastened to the shaft H, and turn between the ribs J J, and catch the fiber and draw it from the seed in the feed-box K, which consists of two end boards in the form shown at L, Fig. 1, connected by the head-piece M and tail-piece N, (to which the ribs J J are fastened,) and also by the rib-board P and front board Q, which are also fastened to the ends L. The seed-board R is fitted to grooves in the ends L, and may be set or adjusted nearer to or farther from the saws.

It is very important in ginning successfully to have the cotton and seed or seed-cotton

form into a roll or cylinder in the feed-box, which roll is constantly rotated by the action of the saws on the under side of the roll of seed-cotton, as shown in Fig. 1.

To facilitate the formation of the seed-cotton in the feed-box into a roller, and also to facilitate the rotation of the cotton in the box, I curve the upper portion of the ribs, the inside of the rib-board P, and the inside of the front board Q, all in the same circle, or make them in the form of segments of one and the same circle, and arrange them, so as to nearly form a circle or cylinder, as shown in Fig. 1, with a representation of the seed-cotton in it.

The teeth of the saws are made sharp to catch the fiber of the cotton and draw it in between the ribs which retain the seed, which seed, after the cotton is drawn from them, roll down on the ribs between the saws and pass out at the bottom. There will be some short fiber hanging to the seed which is not detached by the saws, which, as the roll turns, passes up between the ribs; and to prevent the rib-board from impeding the motion of the roll of cotton I set the lower edge of the rib-board back a little from the front of the ribs, so that the cotton can pass out freely from between the ribs; and in order to let the swell of the top of the roll and the seed-cotton fed onto it pass freely by the front board Q, I set the top edge of the board off, or curve it off, so that it shall not impede the motion of the roll of seed-cotton.

I claim—

The front board Q with interior curve, the rib-board P with interior curve, and the curved upper portion of the ribs J, combined and forming the major part of a circle in the roll-box, so that the cotton is ginned by the saws in a circular roll, substantially as set forth.

O. W. MASSEY.

Witnesses:

J. DENNIS, Jr.,

THOMAS C. CONNOLLY.