

(No Model.)

H. W. LIBBEY.

COTTON GIN RIB.

No. 374,193.

Patented Dec. 6, 1887.

Fig. 1.

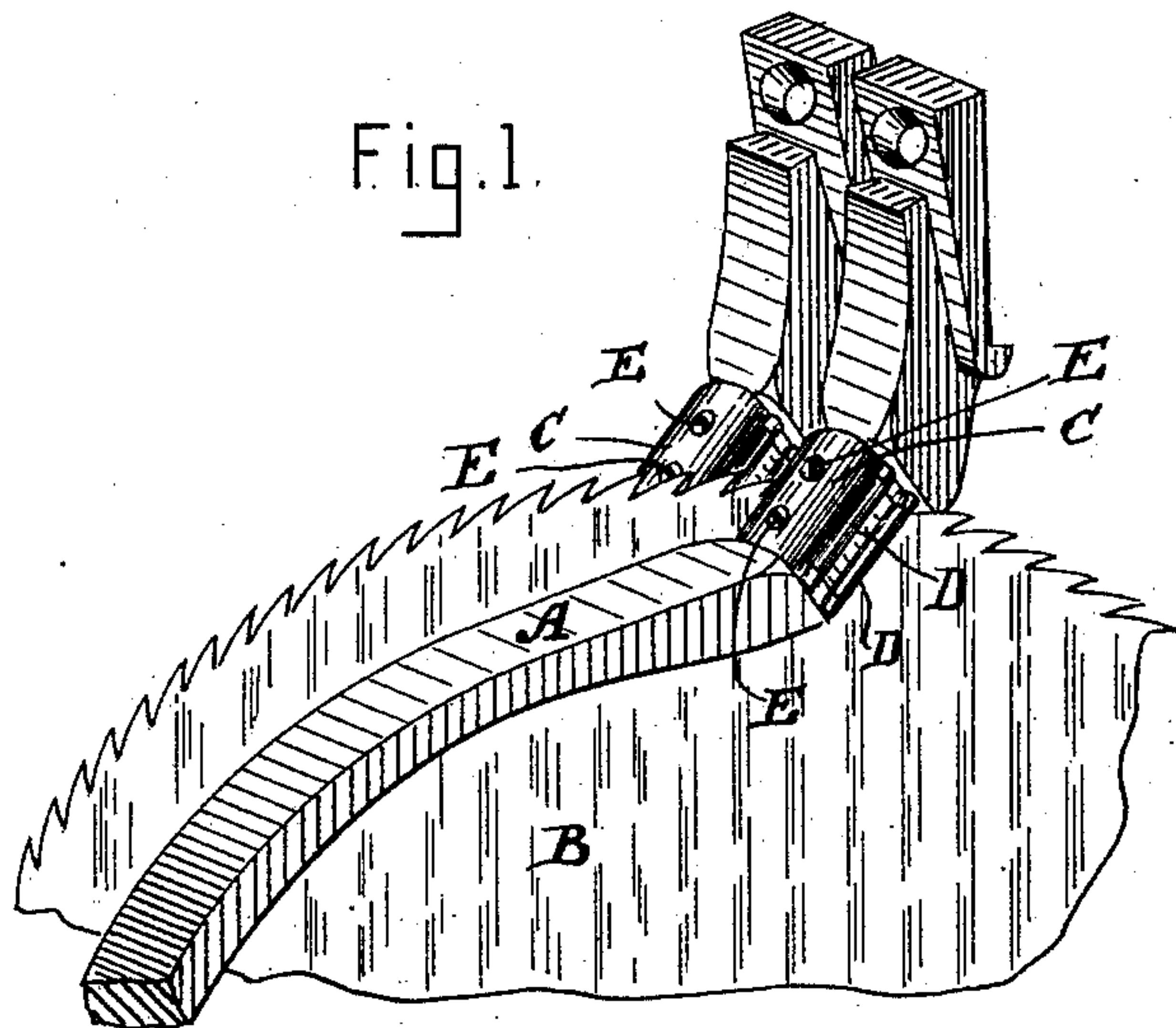


Fig. 2.

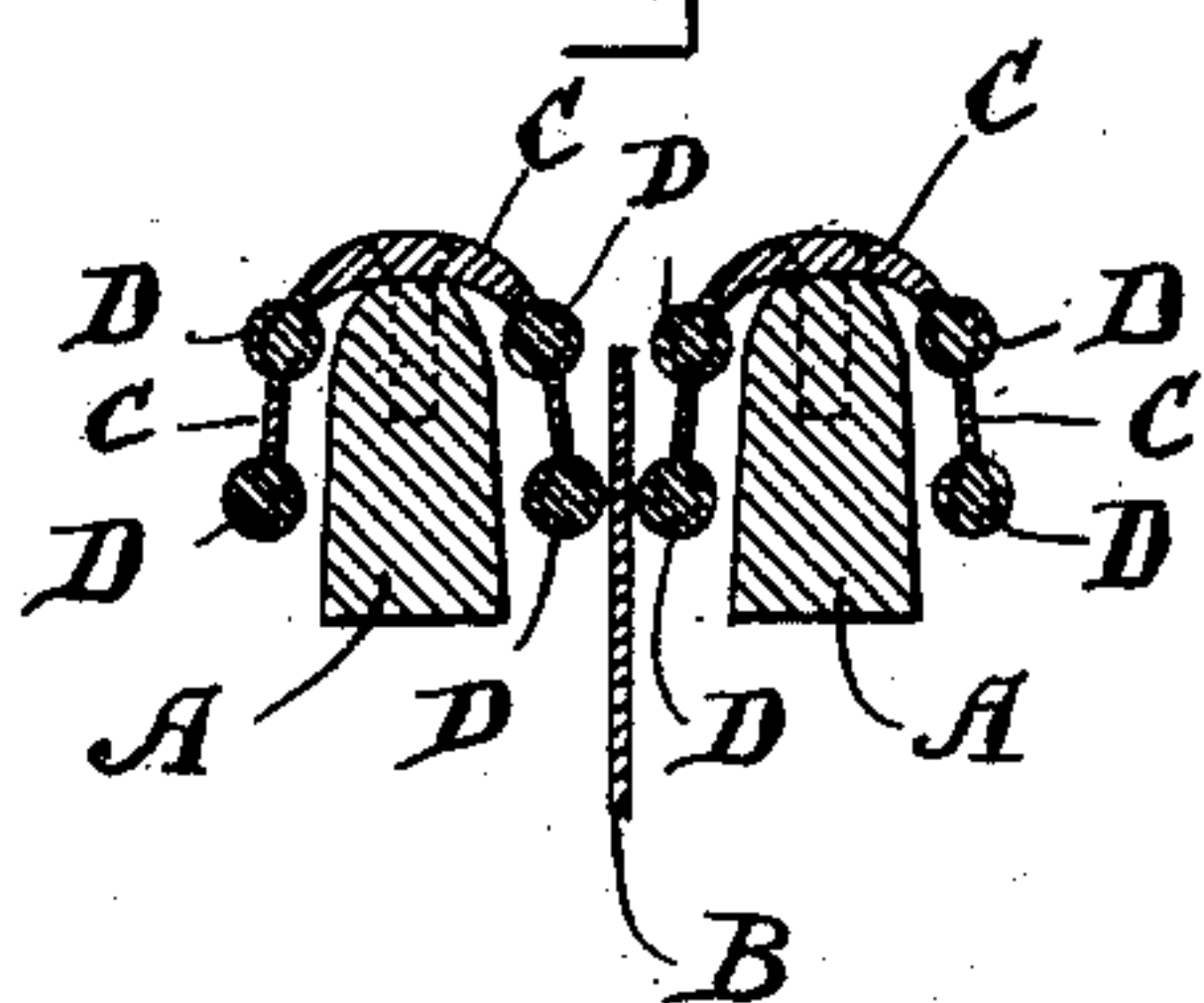


Fig. 3.

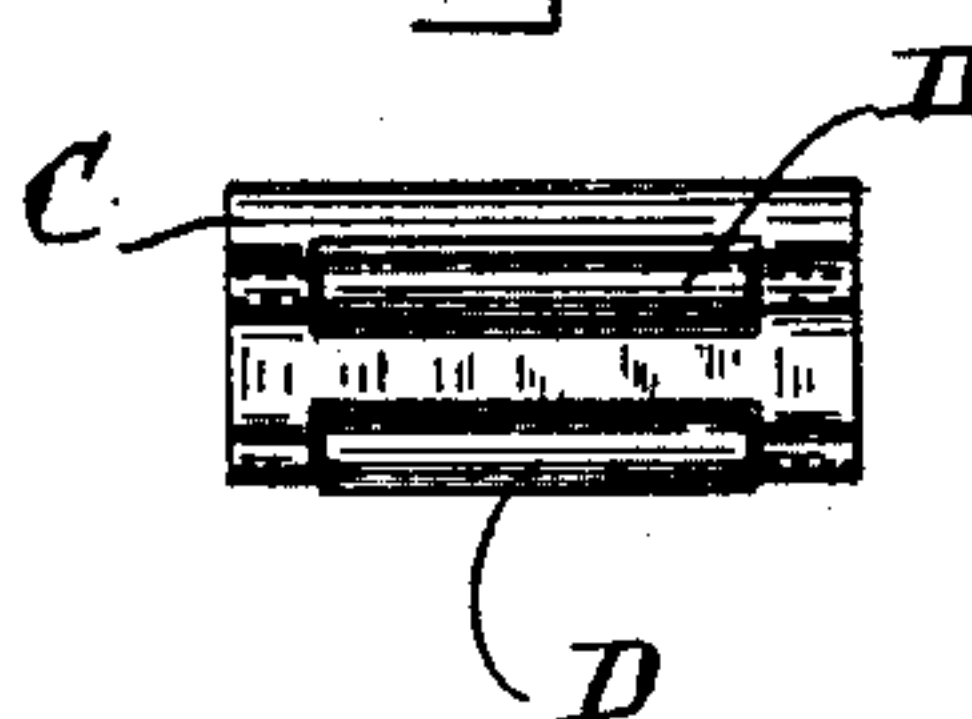


Fig. 5.

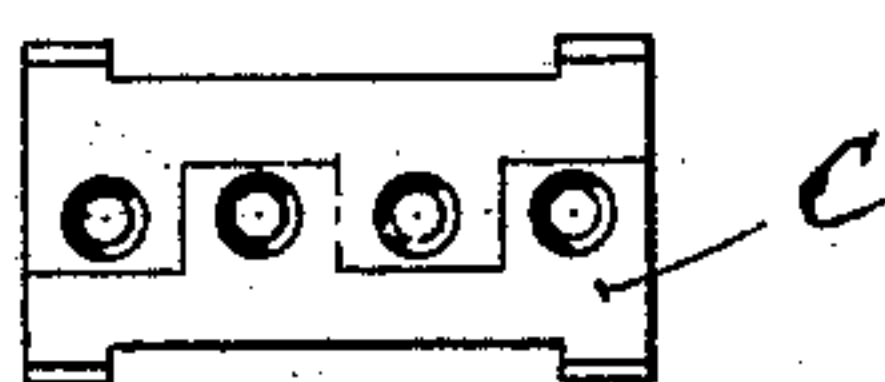
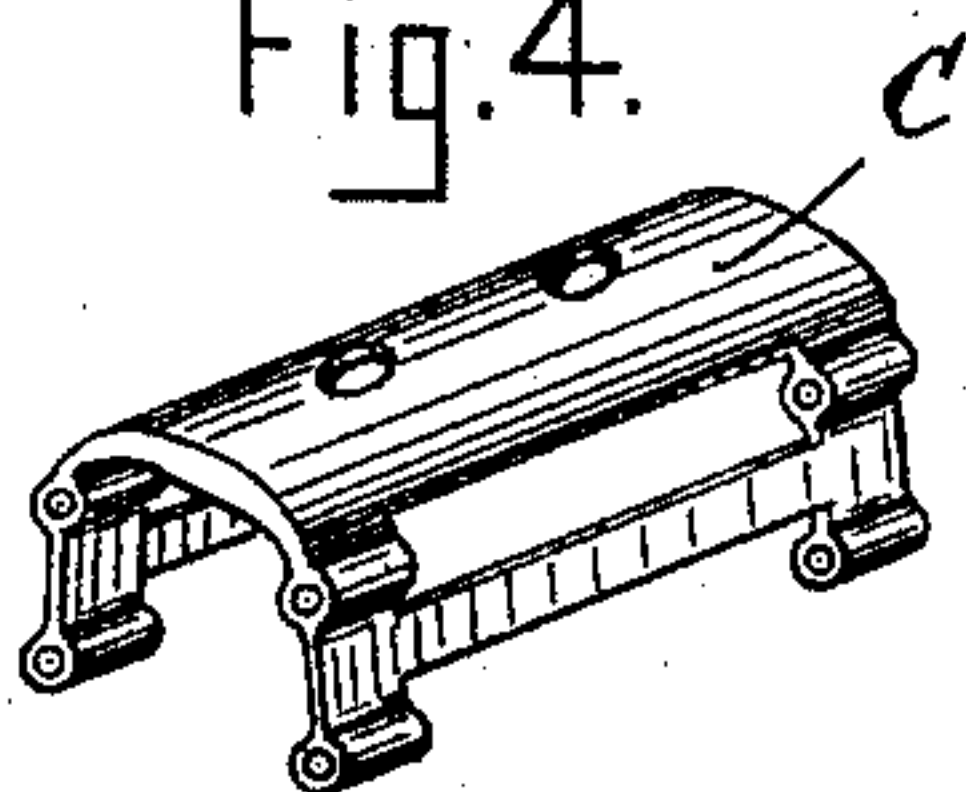


Fig. 4.



Witnesses.

James A. Whelpley  
J. George Settger

Inventor.

Hosea W. Libbey  
by E. Blanta  
Attorney.

# UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

## COTTON-GIN RIB.

SPECIFICATION forming part of Letters Patent No. 374,193, dated December 6, 1887.

Application filed February 12, 1887. Serial No. 227,429. (No model.)

*To all whom it may concern:*

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Cotton - Gin Ribs, of which the following is a specification.

Heretofore various means have been devised for constructing cotton-gin ribs so that the saws will carry the cotton through without breaking it; but all these means have been more or less defective.

Now, the object of this invention is to overcome these defects and to produce a rib by which the cotton will not be broken when carried between them by the saws.

The invention consists in securing to that part of the rib where the saw-teeth pass between them springs carrying rollers arranged so that the rollers will be in or nearly in contact with the saw, but will yield to allow the cotton to pass through without the liability of breaking.

Referring to the accompanying drawings, Figure 1 is a perspective view of a portion of a saw and two cotton gin ribs embodying my invention. Fig. 2 is a cross-section through two of the ribs, taken at the point where the saw passes through. Fig. 3 is a side view of the spring and rollers. Fig. 4 is a perspective view of the saddle-shaped spring. Fig. 5 shows the saddle-shaped spring made in two pieces.

A A represent the ribs, and B the saw. On each of the ribs, at or about the point where the teeth of the saws B pass them, I secure a saddle-shaped spring, C, fitted with rollers D D. The saddle-shaped spring C is secured to the rib A by means of screws E E. The rib A is cut away on each side where the saddle-shaped spring passes down, so as to allow room for it to be pressed back when the cotton is carried between them by the saw B.

It will be seen that by having two rollers on each side, as shown, the cotton is not so

suddenly compressed and released as if only one roller on each side were employed, and as the rollers are mounted upon the spring the motion of the cotton drawn through them will nearly resemble a picking motion of the hands, as the spring, yielding to the amount of cotton being drawn through by each tooth, is alternately compressed and released.

The saddle-shaped spring, instead of being in one piece, may be made in two pieces, as shown in Fig. 5, so that should one side give out it may be replaced by a new side, thereby saving the expense of an entire new spring.

If desired, only one roller on each side may be employed, in which case the spring must be sufficiently long to allow it to yield freely and must be so placed that it will overcome any resistance caused by the cotton leaving the rear of the rib.

I am aware that rollers mounted in bearings rigidly attached to a cotton-gin rib have been employed. This I do not claim; but

What I do claim as my invention is—

1. In combination with a cotton-gin rib, a saddle-shaped spring provided with rollers and placed at or about the point where the saw-teeth pass between the ribs, substantially as shown and described.

2. The saddle-shaped spring C, fitted with rollers D D on each side, in combination with a cotton-gin rib, substantially as and for the purposes set forth.

3. In combination with a cotton-gin rib, rollers mounted in a spring and placed at or about the point where the saw-teeth pass between them, substantially as shown and described.

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

HOSEA W. LIBBEY.

Witnesses:

CHAS. STEERE,  
E. PLANTA.