

R. S. MUNGER.
Cotton-Gin Saw-Cleaner.

No. 217,813.

Patented July 22, 1879.

Fig. 1.

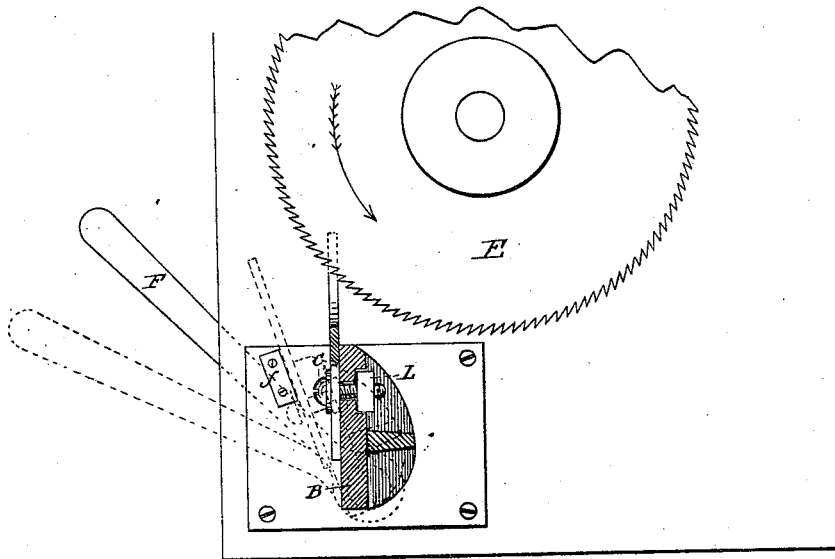
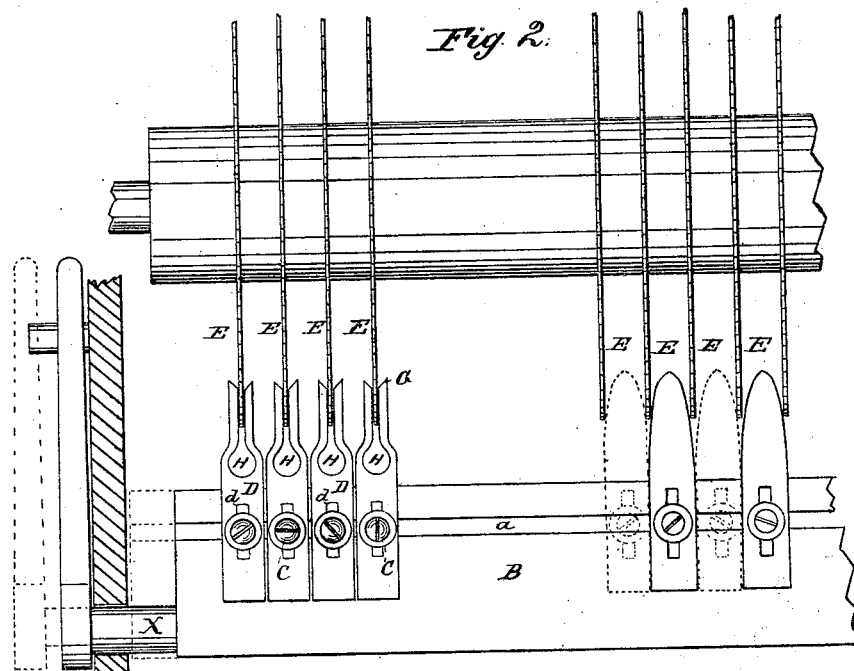


Fig. 2.



WITNESSES:

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ROBERT S. MUNGER, OF MEXIA, TEXAS.

IMPROVEMENT IN COTTON-GIN-SAW CLEANERS.

Specification forming part of Letters Patent No. **217,813**, dated July 22, 1879; application filed May 23, 1879.

To all whom it may concern:

Be it known that I, ROBERT S. MUNGER, of Mexia, in the county of Limestone and State of Texas, have invented a new and Improved Cotton-Gin-Saw Cleaner; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional side elevation, and represents the cleaner in position for operation. Fig. 2 is a face view of the saw-cleaning knives.

The object of my invention is to provide a more simple, cheap, and efficient means for cleaning the saws of cotton-gins when gummed.

It consists, chiefly, in a series of slotted knives or scrapers of peculiar shape, adjustably attached to a movable revolving support, and adapted to be thrust against the saws when cleaning is desired.

It also consists in the construction and adjustment of the knife-support, as hereinafter fully described.

Referring to the drawings, E are the gin-saws, of the usual description. At a convenient location under the saws and parallel to the saw-shaft is a metal support, B, provided with a longitudinal slot, *a*, extending its full length, the sides of which slot are undercut in such a way that the nut L, which secures the screw C, fits and slides therein, but will not revolve. The slot is for the purpose of adjusting the knives laterally, all that is required being to pass the screw through the knife, fasten the nut on the screw, and slip the nut in the groove, when the knives may be adjusted to any position on the support, thus making it easy to adjust to any saw and on any gin. The ends of the support B are rounded into journals *x*, which rest in bearings in the gin-frame; or the support may be hinged so as to move through an arc.

To the front surface of support B a series of slotted knives, D, are secured by screws C, which latter pass through slots *d* in the knives, through slot *a* in the support, and into the fastening-nuts L. These knives may each have two slots, *d*, for the fastening-screws, and may be connected to the support by two slots, *a*, when desired.

Each knife cleans one saw, and is made beveled in order to present a sharp scraping-edge to the saws. This bevel is, however, not essential, as the knives may be made stiff enough to clean without sharpening; but they may easily be detached and sharpened if desired.

The slot *d* is larger than the screw, to permit the knives to be individually adjusted to or from the saws. The narrow slit or slot G in the end of each knife, through which the saw passes, terminates in the larger slot or opening, H, for the double purpose of making the cleaning-knife more flexible and to provide a free passage for the gummy matter scraped from the saws, thereby keeping the knives clean and preventing them from clogging.

The support B, which is hinged or journaled in the gin-frame, has one of its ends preferably extended out far enough to receive the lever F, for more easily operating the cleaner. When there is no convenient place for this lever, however, it may be left off.

The operation is as follows: When the saws become gummed the gin is stopped and the knives are thrust in contact with the saws, and the saws turned back through one revolution, by which movement the saws are cleaned.

Cleats *f* may be secured to the gin to hold the support in the proper position when in or out of work.

In defining my invention I would state that I am aware of a cotton-gin-saw cleaner in which a rotary knife-support is provided with knives which are made in two separate pieces adapted to scrape opposite sides of the saw-blades; but in such case the separate character of the knives does not permit the twin sections to be held so firmly together as to efficiently clean the saws, as is the case with my construction, in which the twin sections of the knife are made in one piece.

In constructing and arranging the knife-support B this is made with a long bearing at *x*, so that while said support has a rotary adjustment it has also a longitudinal adjustment. The object of this is to allow the knives to be changed collectively from one saw to the next. This adjustment has special value in connection with the knife shown in my Patent No. 202,744, which I propose to use with this

support, since it permits these tapering knives to be shifted so as to rub alternately on both sides of the saws, as shown in dotted lines in the right-hand part of Fig. 2.

Having thus described my invention, what I claim as new is—

1. In a gin-saw cleaner, the flexible slotted knife or scraper, made in one piece and provided with slots G, H, and *d*, as and for the purpose specified.

2. A gin-saw cleaner consisting of knives and a support for the same, having both a rotary and a longitudinal adjustment, as described.

3. The metal support B, provided with the adjusting-slot *a* in the direction of its length, in combination with a set of cleaning-knives, and bolts and nuts for securing the same, as and for the purpose specified.

4. The combination, with the support B, having an undercut slot, *a*, in the direction of its length, of a series of slotted knives, screws C, and nuts L, as and for the purpose specified.

ROBERT S. MUNGER.

Witnesses:

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