COTTON-GIN-SAW CLEANER.

Application filed November 4, 1903. Serial No. 170,868. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH Y. CLARK, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented new and useful Improvements in Cotton-Gin-Saw Cleaners, of which the following is a specification.

This invention relates to a cotton-gin-saw cleaner; and the primary object of the same is to provide a device of this class having cooperating adjustable elements whereby the cleaning-teeth may be shifted to adapt the cleaner for use in connection with different types of gin-saws or those having the saws at varying distances apart.

A further object of the invention is to provide a simple and effective construction of cotton-gin-saw cleaner of a strong and durable nature and capable of general application to thoroughly clean the saws and relieve them of adhering material.

With these and other objects and advantages in view the invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is an elevation of a cotton-gin-saw cleaner embodying the features of the invention. Fig. 2 is an edge elevation of a portion of the cleaner, showing the disposition of the teeth thereof. Fig. 3 is an elevation of a portion of the improved cleaner looking toward the side opposite that shown by Fig. 1 with a part of the teeth assembled. Fig. 4 is a side elevation of another part of the cleaner with a portion of the teeth assembled. Fig. 5 is an end elevation of the complete cleaner, showing the handle means broken away. Fig. 6 is an end elevation of a portion of the cleaner with the handle means broken away. Fig. 7 is an enlarged detail elevation of the adjusting means for the two members of the cleaner, showing the mode of fastening the same to one terminal of the cleaner.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numerals 1 and 2 designate backs or bars formed of either metal or wood and of such length as to adapt them to carry the necessary complement of teeth. Secured to the one edge of the back or bar 2 are grips or handles 3, which are adapted to be grasped by the operator in applying the cleaner and are located at opposite extremities of an intermediate clearance 4 to permit the operator to closely approach the cleaner in applying the latter to the gin-saws. The back or bar 1 is longitudinally shiftable on the back or bar 2, and on one end of the said bar 1 is secured a plate 5, having a projecting boss 6, with a screw-threaded opening 7 therethrough. On the adjacent end of the back or bar 2 an angle-arm 8 is attached and has an upwardly-projecting member 9, with a terminal screw guide-socket 10 extending outwardly at a distance from the boss 6, the plate 5 and angle-arm 8 being attached to their respective backs by screws or analogous fastenings, as clearly indicated by Fig. 7.

In the socket 10 and boss 6 an adjusting-screw 11 is mounted and has an outer collar 12 and a front head or bar 13. The back or bar 1, near its opposite ends, is formed with longitudinally-disposed slots 14, through which extend guide-screws 15, secured to the back or bar 2.

The back or bar 1 has a longitudinal seat 16 formed therein to receive the angular terminals 17 of the broad shanks 18 of straight teeth, 19, the said teeth being held in close relation to the bar by screw-bolts 20, individually passing therethrough and having removable nuts 21 applied thereon, the heads 22 of the bolts being located in a longitudinal slot 23, formed in the back or bar 1 adjacent to the edge from which the teeth 19 project. The back or bar 2 also has a seat 24 extending longitudinally thereof, in which the angular terminals 25 of the broad shanks 26 of teeth 27 are inserted, the teeth 27 being curved in the direction of the teeth 19, as clearly shown by Figs. 5 and 6, so that said teeth 27 may project outwardly in the spaces between the teeth 19 and in the same plane. The shanks 26 of the teeth 27 are individually secured to the back or bar 2 by screw-bolts 28, having screw-heads countersunk in the shanks 26 and their-opposite extremities in engagement with nuts 29, mounted-
ed in a slot 30 in the back or bar 2 adjacent to the edge thereof from which the teeth 27 project. In the event that any one of the teeth becomes broken it can be readily removed and replaced by another without disturbing the complete organization of teeth, and in removing the teeth 19 from the back or bar 1 a disconnection of the two backs or bars is unnecessary. In removing the teeth 27 from the back or bar 2 it is necessary that the back or bar 1 be detached, in view of the fact that the latter back or bar is disposed over and closely bears upon the side of the back or bar 2 to which the shanks 26 of the teeth 27 are applied.

The parts of the complete cleaner are all so assembled through the medium of screw devices that they can be easily separated to rectify any irregularities or repair damage to the teeth. As before indicated, it is also intended to construct the several parts of wood or metal, or a combination of both of these materials, and also to vary the proportions and dimensions as may be found necessary in the provision of different types of the cleaner embodying the principle of the invention.

In adjusting the back or bar 1, carrying the teeth 19, the screw 11 is rotated through the medium of the front head or bar 13, and as the collar 12 bears upon the outer end of the socket 10 the back or bar 1 will be caused to slide over the back or bar 2 to vary the distance between the teeth 19 and 27 to accommodate a difference in the spaces between the saws in various types of cotton-gins.

In applying the cleaner the teeth are caused to embrace the saws, and the accumulations of gum on the latter are removed in an expeditious and effective manner. It is preferred that the teeth 19 and 27 be formed of metal to increase their durability. It will be understood that when the cleaner is applied to the saws the latter will be revolved backward in order to obviate injury thereto and fully remove accumulated material thereon.

Having thus fully described the invention, what is claimed as new is:

1. A cotton-gin-saw cleaner, consisting of two bars, each of which has a longitudinal seat and an elongated slot formed therein, and teeth having shanks with angular terminals engaging the seats and securing means projecting into the slots.

2. A cotton-gin-saw cleaner, comprising two bars, each having a longitudinal seat and an elongated slot formed therein, teeth having shanks with angular portions engaging the seats, and securing means for the teeth projecting into the slots, consisting of screw-bolts and nuts.

3. A cotton-gin-saw cleaner, comprising two bars, each having a longitudinal seat and an elongated slot formed therein, teeth having shanks with angular portions engaging the seats, securing means for the teeth projecting into the slots, and means for adjusting one of said bars longitudinally of the other.

4. A cotton-gin-saw cleaner, comprising two bars, each having a longitudinal seat formed therein, teeth for each bar having shanks with angular portions engaging the seat of that bar, and devices for securing the teeth to the bars, the teeth of one bar being substantially straight, and those of the other bar being deflected and having their free extremities located in the spaces between said straight teeth.

5. A cotton-gin-saw cleaner, comprising two bars, each having a longitudinal seat formed therein, teeth for each bar having shanks with portions engaging the seat of that bar, devices for securing the teeth to the bars, and means for adjusting one of the bars longitudinally of the other, the teeth of one bar being substantially straight, and those of the other bar being deflected and having their free extremities located in the spaces between said straight teeth.

6. A cotton-gin-saw cleaner, comprising two bars, each having a longitudinal seat therein, teeth having portions engaging said seats, securing devices for the teeth, and devices for adjusting one of the bars longitudinally of the other.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH Y. CLARK.

Witnesses:
W. R. BARNES,
W. B. TAYLOR.