May 11, 1926. 1,584,077

J. W. CARTER

CLEANER BRUSH ATTACHMENT FOR THE ROTARY DRUMS OF COTTON GIN FEEDERS

Filed March 12, 1925

Fig. 1.

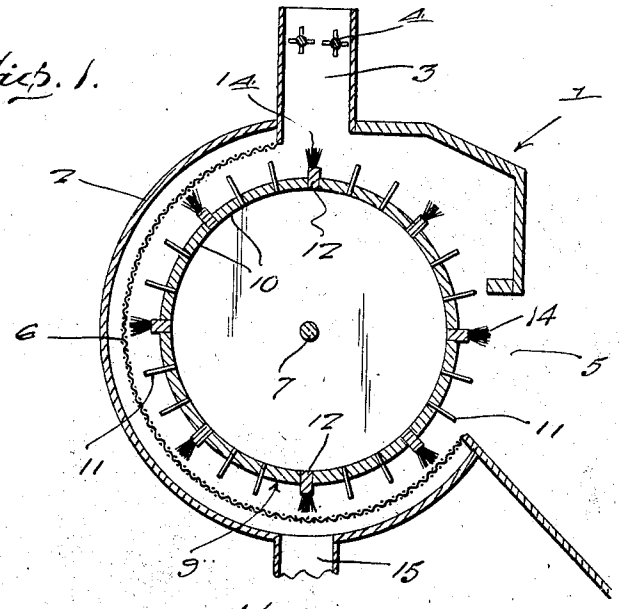
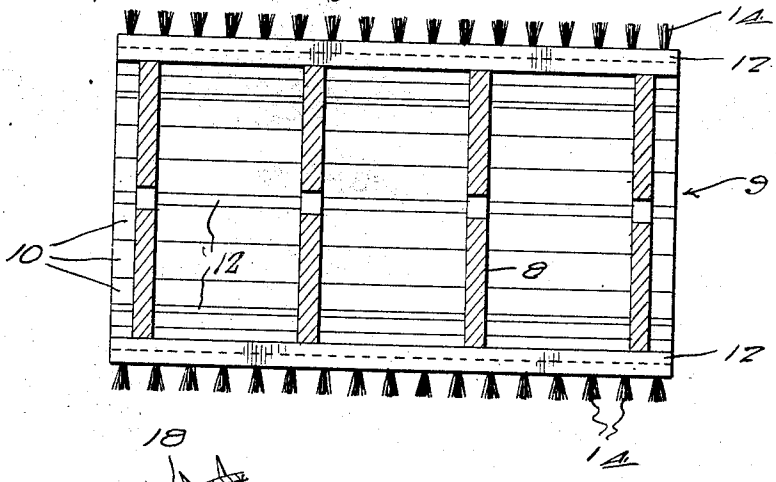


Fig. 2.



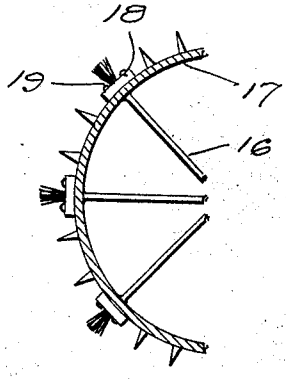


Fig. 3.

Inventor.
J. W. Carter

By Clarence O'Brien

Attorney

Patented May 11, 1926. 1,584,077

UNITED STATES PATENT OFFICE.

JOHN WALTER CARTER, OF ARLINGTON, TEXAS, ASSIGNOR OF ONE-THIRD TO WILLIAM I. LUCKIE AND ONE-THIRD TO MACK C. LUCKIE, BOTH OF ARLINGTON, TEXAS.

CLEANER-BRUSH ATTACHMENT FOR THE ROTARY DRUMS OF COTTON-GIN FEEDERS.

Application filed March 12, 1925. Serial No. 14,968.

This invention relates to improvements in feeders and cleaners for cotton gins and is more particularly adapted to a cleaner brush attachment for the rotary drum of the feeders.

One of the important objects of the present invention is to provide a means in connection with the rotary drum of the feeders and cleaners whereby the dirt and leaves may be separated from the cotton before the latter is fed to the gin, the cleaner brushes cooperating with the usual screen in separating the dirt from the cotton.

A still further object is to provide a device of the above mentioned character, which is simple in construction, inexpensive, strong and durable and furthermore adapted for the purposes for which it is designated.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawing forming a part of this specification and in which like numerals designate like parts throughout the same:

Figure 1 represents a sectional view through a conventional form of cotton gin feeder illustrating my attachment associated with the rotary drum.

Figure 2 is a longitudinal sectional view through the drum, and

Figure 3 is a fragmentary sectional view of a modification.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates generally the feeder which is of the conventional type as used in conjunction with a cotton gin in the manner well known in the art. The casing of the feeder is substantially cylindrical and is indicated at 2, the same being provided at its top with the usual inlet 3 in which are mounted the feeding rollers 4. The outlet to the cotton gin is indicated at 5. A screen 6 is arranged within the cylindrical casing 2 in spaced relation with respect to the inner wall in the manner clearly shown in Figure 1 and as is further well known in the art.

The usual axle 7 extends centrally through the casing and has its ends journaled in the respective ends of the casing. The feeder drum which is adapted for rotation within the casing comprises a plurality of discs or heads 8 which are adapted to be supported on the axle 7 in spaced relation, the drum 9 which is formed of a plurality of staves or strips, the latter being secured to the peripheral edges of the spaced discs or heads in the manner clearly illustrated in Figure 2. The staves of the drum are illustrated at 10. Extending radially from the drum 9 are the usual spikes or teeth 11 for assisting in feeding the cotton as the same is delivered to the casing 2 from the inlet 3 to the outlet 5.

A drum of the construction above set forth and such as is now commonly used in connection with gin feeders does not remove any of the dirt or leaves from the cotton while the same is in the feeder and therefore the principal object of this invention is to provide a means in connection with the drum for cooperation with the screen 6 whereby such dirt and leaves may be separated before the cotton is delivered to the gin. To this end, I provide a series of brush heads 12 which are in the form of elongated strips, the same being interposed between the adjacent longitudinal edges of certain of the staves which constitute the drum 9, any number of these brush heads being provided as is desired, the same being further arranged in spaced relation with respect to each other. The bristles of the brush head are illustrated at 14 and the same are adapted to extend in close proximity to the screen 6 as is clearly illustrated in Figure 1. Thus when the cotton enters the casing 2, the bristles 14 will force the cotton against the screen 6 during the rotation of the drum thereby enabling the dirt and leaves to be separated from the cotton so that the latter may be delivered to the cotton gin free of such foreign matter. The dirt will be forced through the screen into the casing 2 and will be discharged through the outlet 15.

In Figure 3 of the drawing, a modification of the drum is illustrated wherein the drum is formed of metal and is supported by the outer ends of the spokes 16 which extend radially from the axles 7, it being understood of course that the inner ends of the spokes are associated with a suitable hub (not shown). Where a metallic drum 17 is used, the brush heads 18 are secured on the outer periphery of the metallic drum as is illustrated at 19. The usual spikes and teeth or

bristles are associated with the metallic drum and the brush head respectively.

While I have shown the preferred embodiment of my invention, it is to be understood that various changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claim.

Having thus described the invention, what I claim is:—

In a rotary drum for the feeders and cleaners of a cotton gin wherein the feeder includes a casing, and a screen arranged therein, a rotatable drum comprising a series of spaced discs, wooden staves extending across the peripheral edges of the discs and secured thereto, said staves being arranged in groups, the adjacent groups of the staves being spaced with respect to each other, brush heads in the form of elongated strips, interposed between the spaced groups of staves, said brush heads extending across the peripheral edges of the discs and secured thereto, teeth extending radially from the staves of each group, and bristles extending from the brush heads, the outer ends of the bristles being arranged in close proximity to the screen for cooperation therewith in separating dirt from the cotton during the movement of the latter in the casing.

In testimony whereof I affix my signature.

JOHN WALTER CARTER.