

S. F. KRUPP.
COTTON GIN BRUSH.
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1,018,327.

Patented Feb. 20, 1912.

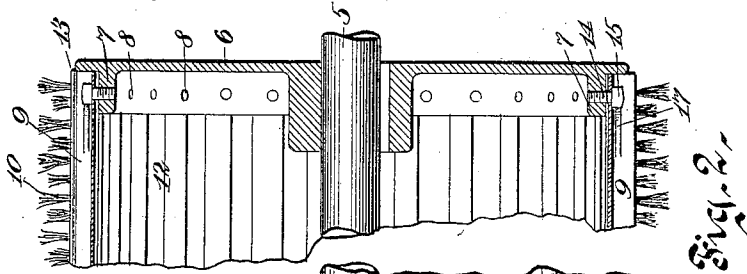


Fig. 2.

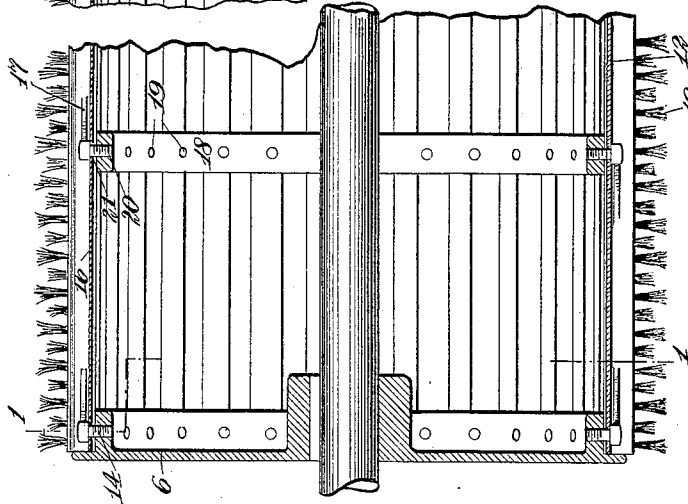


Fig. 3.

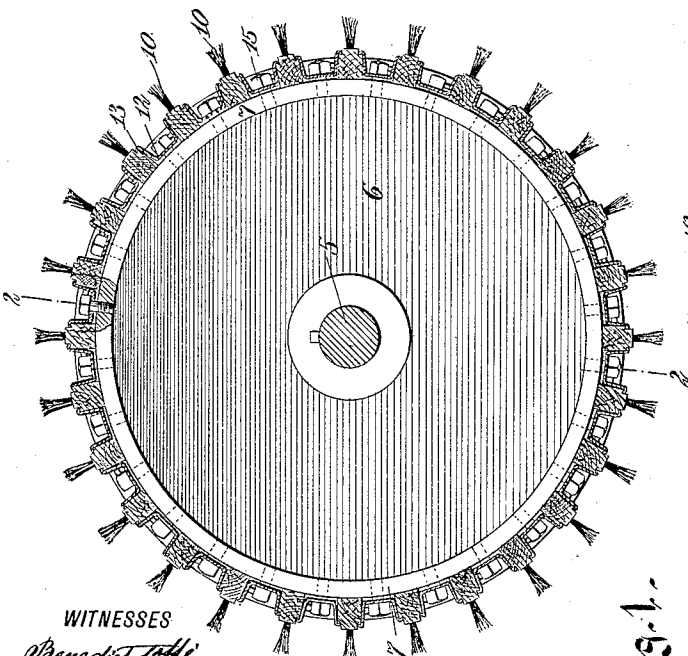


Fig. 1.

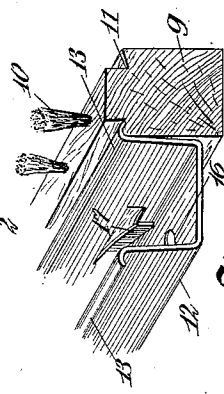


Fig. 4.

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SMITH F. KRUPP, OF MEMPHIS, TENNESSEE.

COTTON-GIN BRUSH.

1,018,327.

Specification of Letters Patent.

Patented Feb. 20, 1912.

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To all whom it may concern:

Be it known that I, SMITH F. KRUPP, a citizen of the United States, and a resident of Memphis, in the county of Shelby and State of Tennessee, have invented a new and Improved Cotton-Gin Brush, of which the following is a full, clear, and exact description.

My invention relates to brushes, and particularly to brushes which in cotton gins are brought into contact with the periphery of the saw cylinder for removing lint cotton therefrom, and discharging it from the machine.

The object of the invention is to provide a durable rotary brush constructed of interchangeable parts which will readily permit of repairs being made, the brush being so constructed that it will preserve its running balance.

In the drawings similar characters of reference indicate corresponding parts in all the views, in which—

Figure 1 is a sectional view on the line 1—1 of Fig. 2; Fig. 2 is a sectional view on the line 2—2 of Fig. 1; Fig. 3 is a fragmentary view of the U-shaped member, showing the bent-up flange which rests against the head of the screw and serves as a lock therefor, and Fig. 4 is a fragmentary view in perspective, showing how the flanges on the U-shaped members engage the shoulders on the ribs.

By referring to the drawings it will be seen that head members 6 are keyed to the shaft 5, these head members 6 having annular flanges 7, there being threaded orifices 8 spaced apart in the said flanges. The heads 6 are spaced from each other and disposed across from one head to the other, and resting on the flanges there is a plurality of ribs 9, the said ribs being spaced from each other. Secured to the ribs 9 are brush members 10. As best shown in Fig. 4 of the drawings, the ribs 9 are constructed with shoulders 11. Disposed between the ribs 9 respectively, and extending across from one of the heads 6 to the other, there are U-shaped members 12, having outwardly extending flanges 13, the flanges 13 being disposed against the shoulders 11 on the neighboring ribs 9. Screw members 14, with square heads 15, are disposed in the orifices 16 in the U-shaped members 12, the said screws 14 meshing in the threaded orifices 8 in the flanges 7 on the heads 6.

The sides of the U-shaped members 12 are punched to form bent-up portions 17, which engage the square heads 15 of the screw members 14, and serve as locks therefor. One or more rings 18 are provided with threaded orifices 19, in which screws 20 mesh, the said screws 20 being disposed through openings 21 in the U-shaped members 12, and being locked in position by the bent-up portions 17 on the ribs 12.

The rotary brush which is described in this specification may be manufactured at very little expense, and as the parts are interchangeable, and may be readily replaced, it will be seen that repairs may be quickly made at very little expense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. In a cotton gin brush, two head members spaced apart, ribs for holding brush members spaced apart and extending from one head member to the other, members U-shaped in cross section spaced from each other and disposed between the ribs, the U-shaped members having flanges for engaging neighboring ribs, and means for detachably securing the U-shaped members to the head members.

2. In a cotton gin brush, a head member, ribs for holding brushes spaced apart around the head member, members U-shaped in cross section spaced from each other and disposed between the ribs, the U-shaped members having flanges which engage neighboring ribs, and means for detachably securing the U-shaped members to the head member.

3. In a cotton gin brush a head member having orifices spaced apart, ribs for holding brush members, spaced apart around the head member, members disposed between the ribs respectively, and having orifices, flanges for engaging neighboring ribs, and additional flanges and screw members disposed in the orifices for holding the second-mentioned members relatively to the head member, the screw members being engaged by the said additional flanges to prevent their being turned.

4. In a cotton gin brush two head members spaced apart, ribs for holding brush members spaced apart and extending from one head member to the other, members disposed between the ribs respectively having bent-up portions, orifices, flanges for

engaging neighboring ribs, and screw members disposed in the orifices for holding the second-mentioned members relatively to the head members, the screw members being engaged by the bent-up portions to prevent their being turned.

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5. In a cotton gin brush a shaft, two head members having threaded orifices, spaced from each other and keyed to the shaft, ribs spaced from each other and extending from one head member to the other, U-shaped members disposed between the ribs having flanges engaging neighboring ribs and orifices in alinement with the

threaded orifices in the head members respectively, screw members disposed through the orifices in the U-shaped members and meshing in the threaded orifices in the head members, a ring member disposed between the head members, and means for securing the U-shaped members to the ring member.

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

SMITH F. KRUPP.

Witnesses:

H. W. BROOKS,
R. L. PIERCE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."