

No. 778,071.

PATENTED DEC. 20, 1904.

S. W. POWER.
ATTACHMENT FOR SAW GINS.

APPLICATION FILED JUNE 11, 1904.

NO MODEL.

Fig. 2.

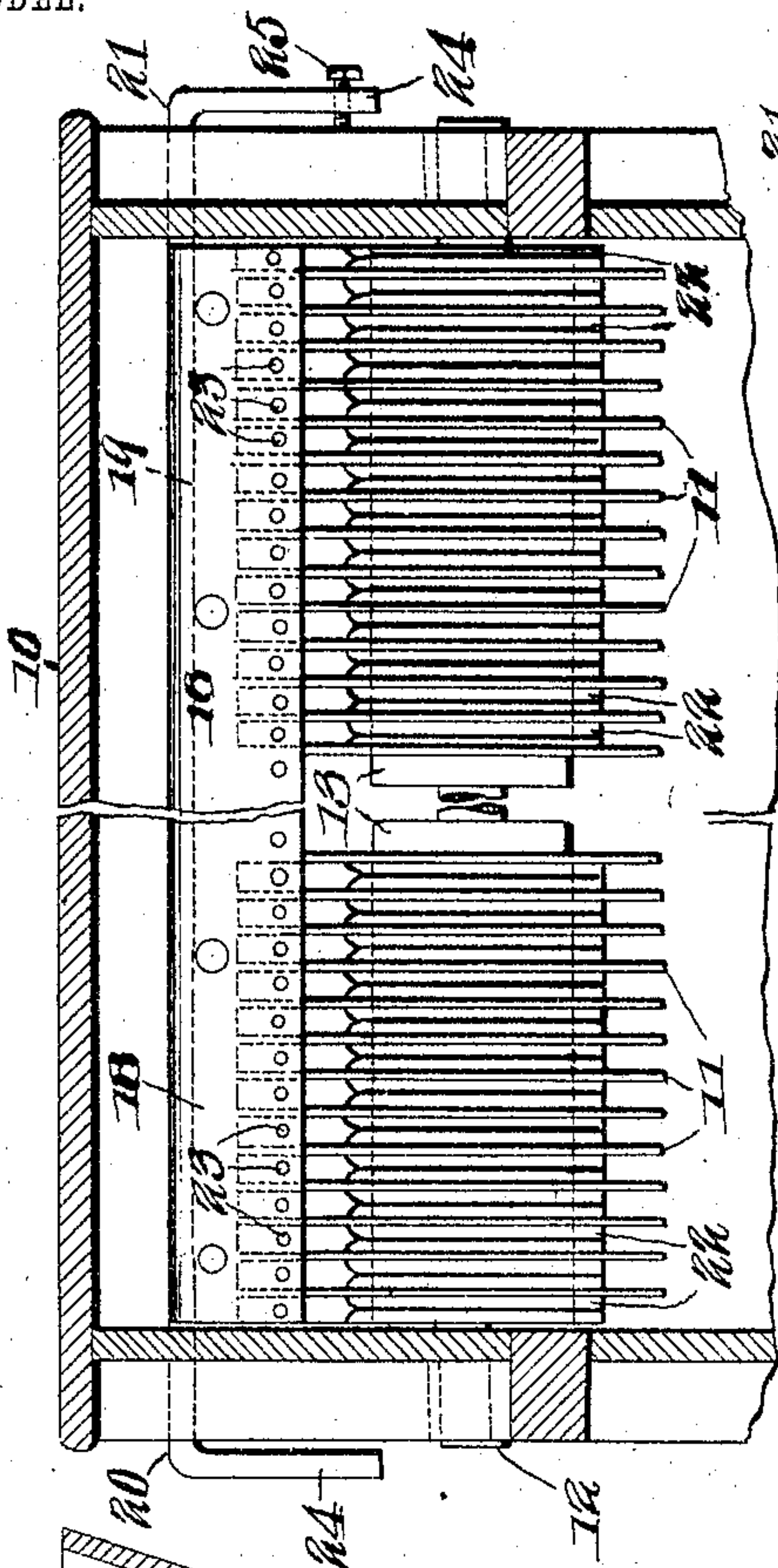


Fig. 1.

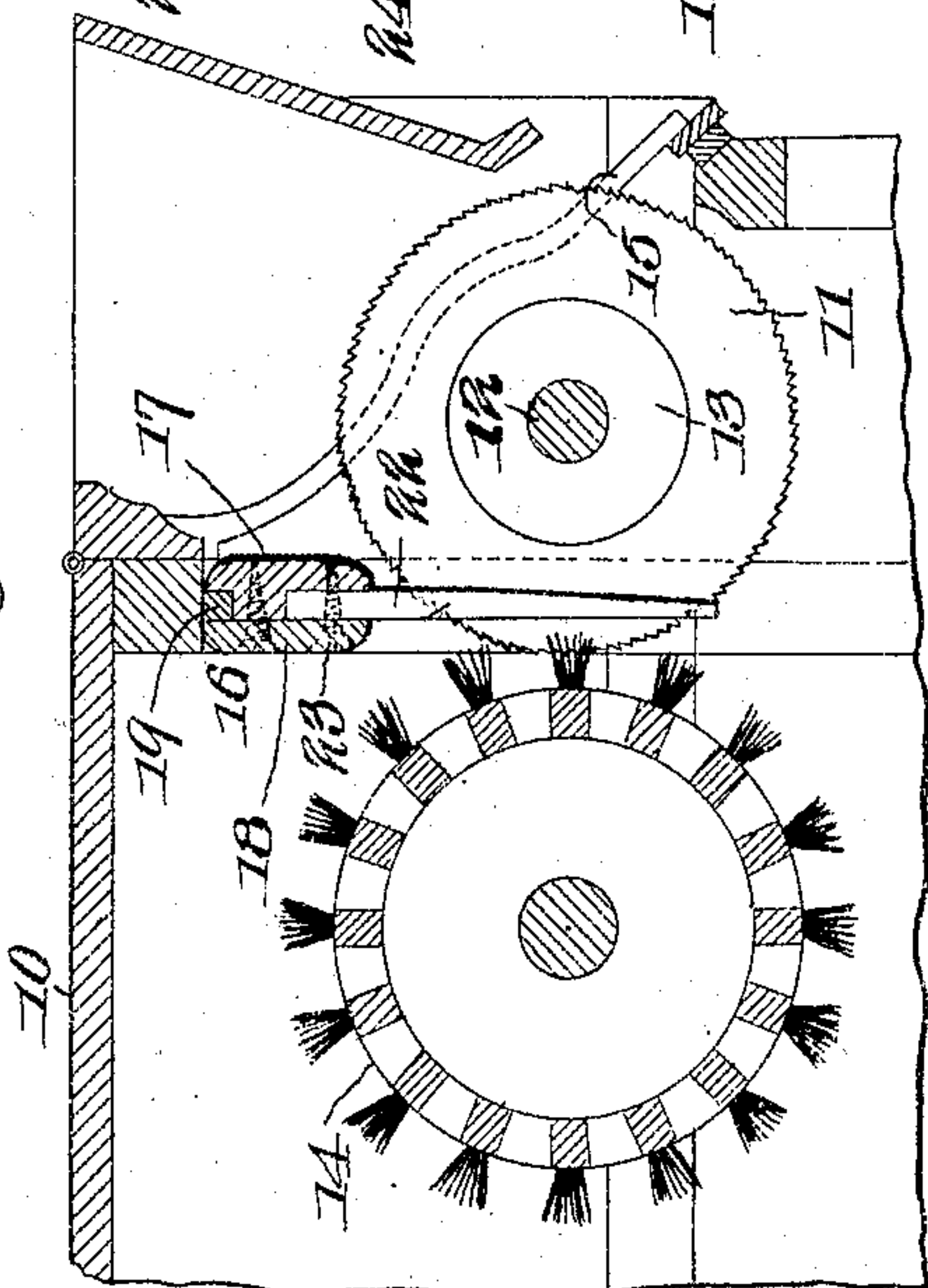


Fig. 4.

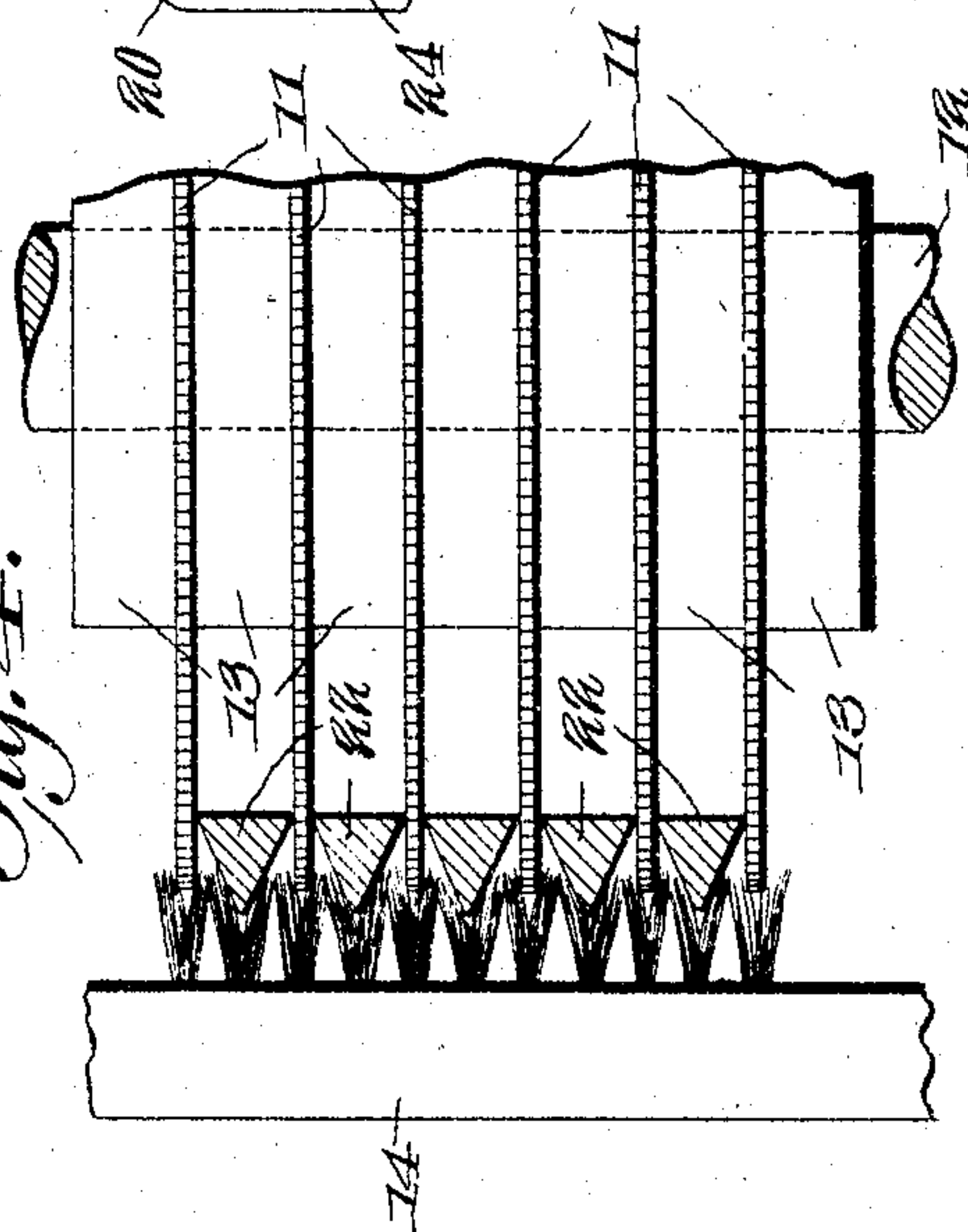
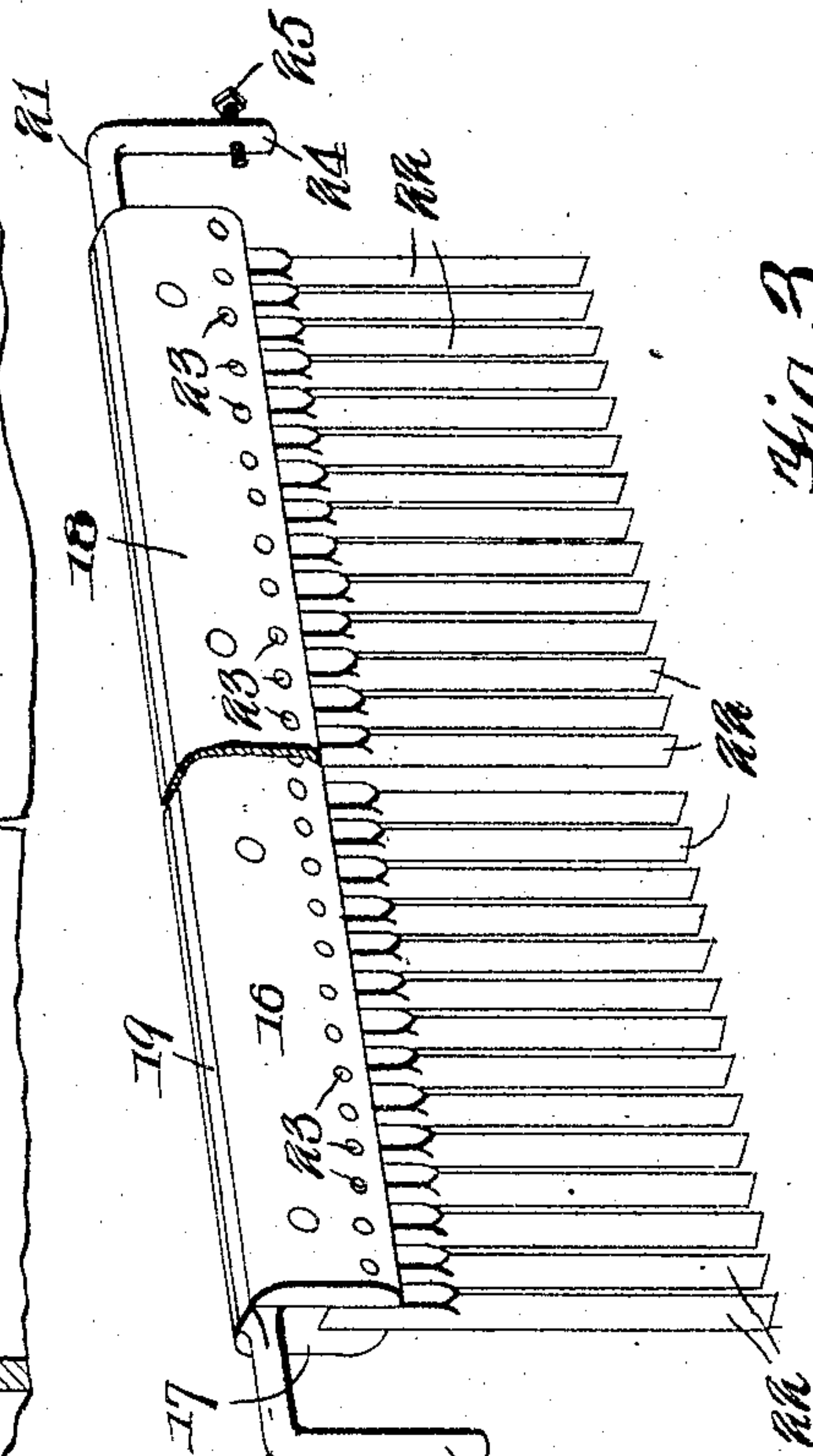


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

STEPHEN W. POWER, OF MURFREESBORO, ARKANSAS.

ATTACHMENT FOR SAW-GINS.

SPECIFICATION forming part of Letters Patent No. 778,071, dated December 20, 1904.

Application filed June 11, 1904. Serial No. 212,156.

To all whom it may concern:

Be it known that I, STEPHEN W. POWER, a citizen of the United States, residing at Murfreesboro, in the county of Pike and State of Arkansas, have invented a new and useful Attachment for Saw-Gins, of which the following is a specification.

This invention relates to attachments to cotton-gins for removing adhering material from the saws of the same, and has for its object to provide a simply-constructed and efficient device which may be adjusted relative to the brush-cylinder to cause the latter to act with increased force upon the teeth of the gin-saws and remove adhering particles therefrom.

Another object of the invention is to produce a simply-constructed and easily-applied device which serves the twofold purpose of a partition or stop member between the gin-saws and as a means whereby the adhering particles are removed from the same. With these and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages, and the right is therefore reserved of making all the changes and modifications which fairly fall within the scope of the invention and the claims made therefor.

In the drawings thus employed, Figure 1 is a transverse sectional elevation of a portion of a cotton-gin including the gin-saws and brush-cylinder with the improved device applied. Fig. 2 is a front elevation with the brush-cylinder removed. Fig. 3 is a perspective view of the improved device detached. Fig. 4 is a sectional plan view, drawn to an enlarged scale,

illustrating the contour in cross-section of the brush-deflecting means and their position with respect to the saw and brushes.

The improved device may be attached to any of the various constructions of cotton-gins and similar devices manufactured by making slight and immaterial modifications in the means of connecting the same, but for the purpose of illustration is shown applied to a conventional form of cotton-gin, in which the supporting-frame 10, gin-saws 11, mounted on a shaft 12 and separated by the spacer-disks 13, brush-cylinder 14, and breast-ribs 15 are shown in the usual form and in the usual relative positions.

The improved attachment comprises a "head" member (represented as a whole at 16) comprising two plates 17 18, connected together longitudinally and with longitudinal grooves in the opposite edges of the plate 17, one to receive a rod 19, with its ends 20 21 extended through bearings in the opposite sides of the frame 10, and the other groove to receive a plurality of ribs 22, extending between the gin-saws 11.

The ribs 22 will be secured between the plates 17 18, as by screws 23, and will be V-shaped in transverse section where they extend between the gin-saws, with the angular side presented toward the brush-cylinder 14.

The outer ends of one or both of the journal portions 20 21 of the rod 19 will be turned into a crank 24 to enable the rod to be rocked in its bearings in the frame to swing the head 16 to cause the ribs 22 to be moved toward or away from the brush-cylinder, as required.

Some means, such as a set-screw 25, will be employed to hold the rod and its attached head and ribs in any required position.

The widths of the ribs 22 will be sufficient to closely engage the sides of the gin-saws and will present relatively sharp edges constantly to the same, as will be obvious, so that particles of material will be prevented from adhering to the saws. The ribs when thus supported serve the purpose of the partition ordinarily employed in gins; but in event of the "gumming" of the saws, as when operating on damp cotton, by simply adjusting the rod 19 by means of the crank 24 the ribs can be forcibly moved toward and in contact with

the brush members, with the effect of distending the bristles laterally and causing them to be forcibly compressed against the saw-teeth and by thus concentrating the action of the
 5 bristles of the saws effectually remove all adhering particles. Thus the gin-saws can be very easily cleaned while the machine is running and as often as required and when operating upon dry cotton, which does not "gum"
 10 the saws, the device can be secured in position to serve only as a guard or partition, as above noted.

The device is very simple in construction, may be inexpensively manufactured, and can
 15 be readily applied to any of the various forms of cotton-gins manufactured and will be found very efficient for the purposes denoted.

The parts may be of any suitable material and of any suitable proportions to adapt them
 20 to the work required.

Having thus described the invention, what I claim is—

1. In a cotton-gin, the combination with the saws and brush-cylinder, of means for concentrating the action of the brushes on the saws.
 25

2. In a cotton-gin, the combination with the saws and brush-cylinder, of means for deflecting the brush-bristles into contact with the saws.

30 3. In a cotton-gin, the combination with the saws and brush-cylinder, of a plurality of spaced ribs arranged between the saws and having inclined faces for deflecting the brush-bristles into contact with the saws.

35 4. In a cotton-gin, the combination with the saws and brush-cylinder, of a plurality of ribs V-shaped in cross-section and extending be-

tween said saws, said ribs serving to deflect the brush-bristles into contact with the saws.

5. In a cotton-gin, the combination with the
 40 saws and brush-cylinder, of a plurality of spaced ribs extending between the saws and adjustable to a position to coact with said brush in cleaning the saws.

6. In a cotton-gin, the combination with the
 45 saws and brush-cylinder, of a plurality of ribs having angular faces for contact with the brushes, and means for adjusting said ribs from and toward the brush-cylinder.

7. In a cotton-gin, the combination with the
 50 saws and brush-cylinder, of a pivotally-mounted frame, a plurality of ribs carried thereby and extending between the saws, and means for adjusting the position of the frame and ribs to move the latter ribs into and out of op-
 55 erative relation with the brush-cylinder.

8. In a cotton-gin, the combination with the saws and brush-cylinder, of a head member formed of a pair of rigidly-united plates, one
 60 of said plates having longitudinal grooves in its opposite edges, a pivot-rod secured in one of the grooves, and a plurality of ribs secured in the other of such grooves and spaced apart for entrance between the saws, the head member being adjustable on its pivot-rod to alter
 65 the relative positions of the ribs with respect to the brush-cylinder.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

STEPHEN W. POWER.

Witnesses:

JOS. C. PINNIX,

CHARLES KELLEY.