

W. C. ALLEN.
COTTON CONDENSER AND PACKER.
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Fig. 1.

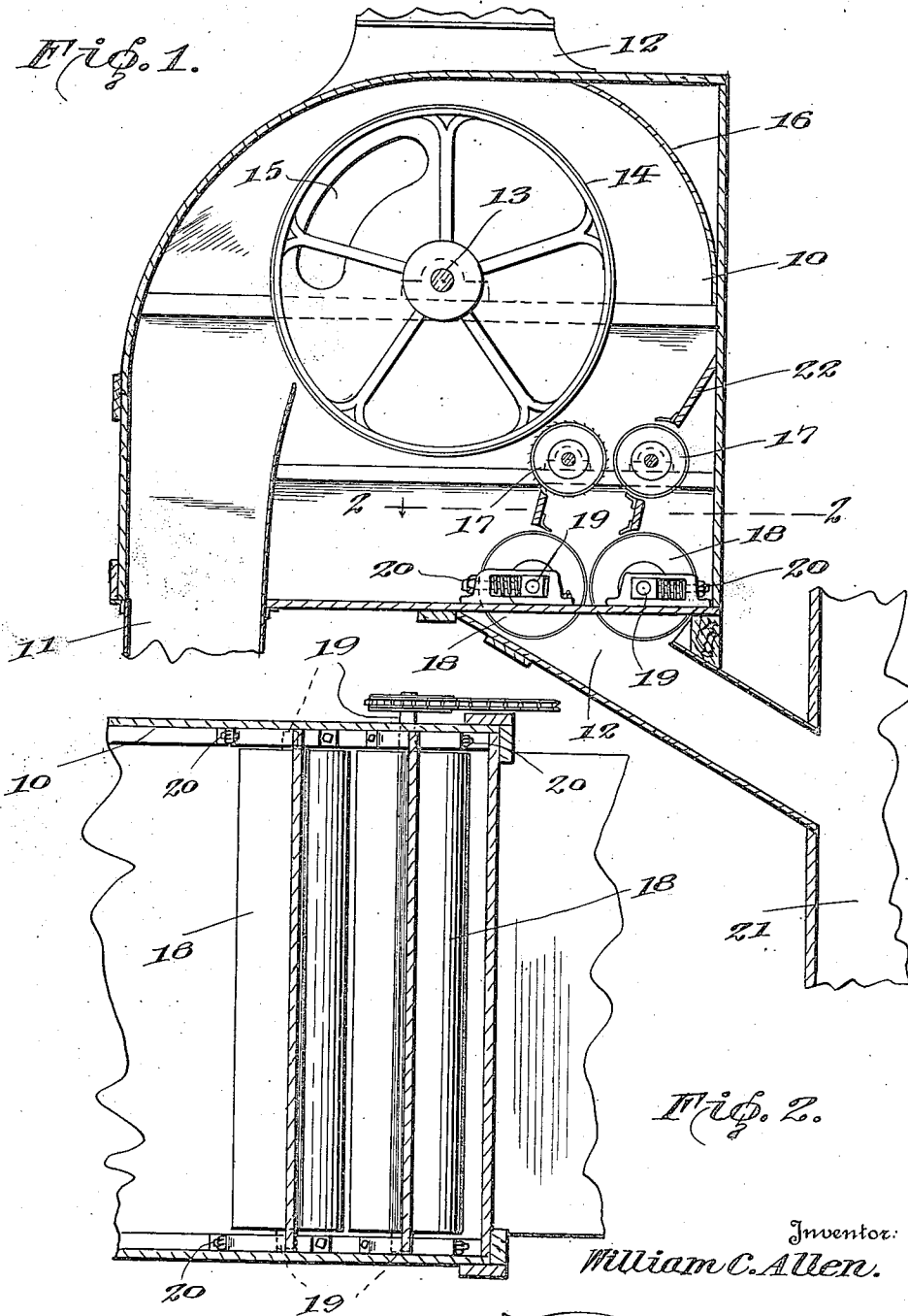


Fig. 2.

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UNITED STATES PATENT OFFICE.

WILLIAM C. ALLEN, OF NEWTON, MISSISSIPPI.

COTTON CONDENSER AND PACKER.

Application filed March 10, 1921. Serial No. 451,181.

To all whom it may concern:

Be it known that I, WILLIAM C. ALLEN, a citizen of the United States, residing at Newton, in the county of Newton, State of Mississippi, have invented certain new and useful Improvements in Cotton Condensers and Packers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in cotton treating machines and particularly to machines for preparing the cotton as it comes from the gin, so that the cotton can be more readily baled.

One object of the invention is to provide a cotton condensing and packing machine wherein the cotton is completely confined within a casing, thus obviating the usual flying around of dust and lint, and the consequent saving of a large amount of cotton that is ordinarily lost.

Another object is to provide guiding and packing means whereby the bat will be of more uniform width and thickness.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawings.

In the drawings:

Figure 1 is a vertical sectional view through a condenser and packer made in accordance with the invention, the ends of the drum and rollers being shown in elevation.

Figure 2 is a horizontal sectional view through the vertical partitions, on the line 2-2 of Figure 1.

Referring particularly to the accompanying drawing, 10 represents a casing having a flue 11 leading into one side, and having a discharge opening 12 in the bottom, adjacent the other side, the flue 11 serving to receive the ginned cotton from a gin, and deliver the same to the interior of the said casing. Extending transversely in the casing is a shaft 13, and rotatably mounted on the shaft is a screen drum 14, onto which the cotton falls as it is delivered from the flue 11. Air is blown out through the ends of the drum 14, into the dust passages or flues 15, whence it is discharged at the most convenient point.

The flue 11 extends into the casing sufficiently far to insure that the cotton will be discharged over the upper portion of the drum 14. A guard plate, curved in its outline, extends concentrically with the upper right hand portion of the drum 14, as viewed in the drawing, to insure the proper path of travel of the cotton over the drum, and downwardly at the other side thereof, as shown at 16.

Mounted in the casing, longitudinally thereof, and below the portion of the drum 14, remote from the flue 11, are the parallel rollers 17 which strip the cotton from the condensing drum and guide it downwardly. Mounted below the rollers, in parallel relation to the rollers 17, are the packing rollers 18, between which is received the cotton bat delivered by the rollers 17. A guiding wall 16' carried by the casing extends from a point adjacent the lower face of each upper roller 17 to a point adjacent the upper face of the corresponding lower roller 18. The bearings 19, in which the rollers 18 are mounted, are spring pressed so that the rollers will be held resiliently in firm contact with the opposite sides of the cotton bat. The bearings are adjustable by the screws 20, so that the tension of the springs can be increased or diminished, to regulate the thickness of the bat of cotton passing therebetween. The bat, as it issues from between the rollers, is received in a baling press receptacle 21, disposed between and below the rollers 18.

Extending longitudinally of the rollers 17 and 18, and each being disposed vertically between a roller 17 and 18, are the partition or guiding walls, which confine the cotton bat to the rollers 18, as it issues from between the rollers 17, and thus prevents escape of any of the cotton. An inclined wall 22 extends from the upper side of one of the rollers 17, to the adjacent wall of the casing, to guide the cotton between the rollers 17, as it falls from the condensing drum 14.

What is claimed is:

A cotton bat forming and feeding attachment for a cotton press including a casing having an inlet and an outlet, the outlet being connected with a press and the inlet being connected with a gin, a condensing drum mounted in the casing, a pair of rollers dis-

posed below and at one side of the drum, a pair of rollers mounted directly below the first rollers and within the outlet opening to the press, a guiding wall carried by the casing and extending to the upper face of one of the first-named rollers, and a guiding wall extending from a point adjacent the lower face of each of the first rollers to a

point adjacent the upper face of each of the second rollers.

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

WILLIAM C. ALLEN.

Witnesses:

HORACE E. WATTS,
GLOVER E. RUSSELL.