

No. 784,118.

PATENTED MAR. 7, 1905.

J. B. NIX.
COTTON CHOPPER.
APPLICATION FILED JAN. 12, 1903.

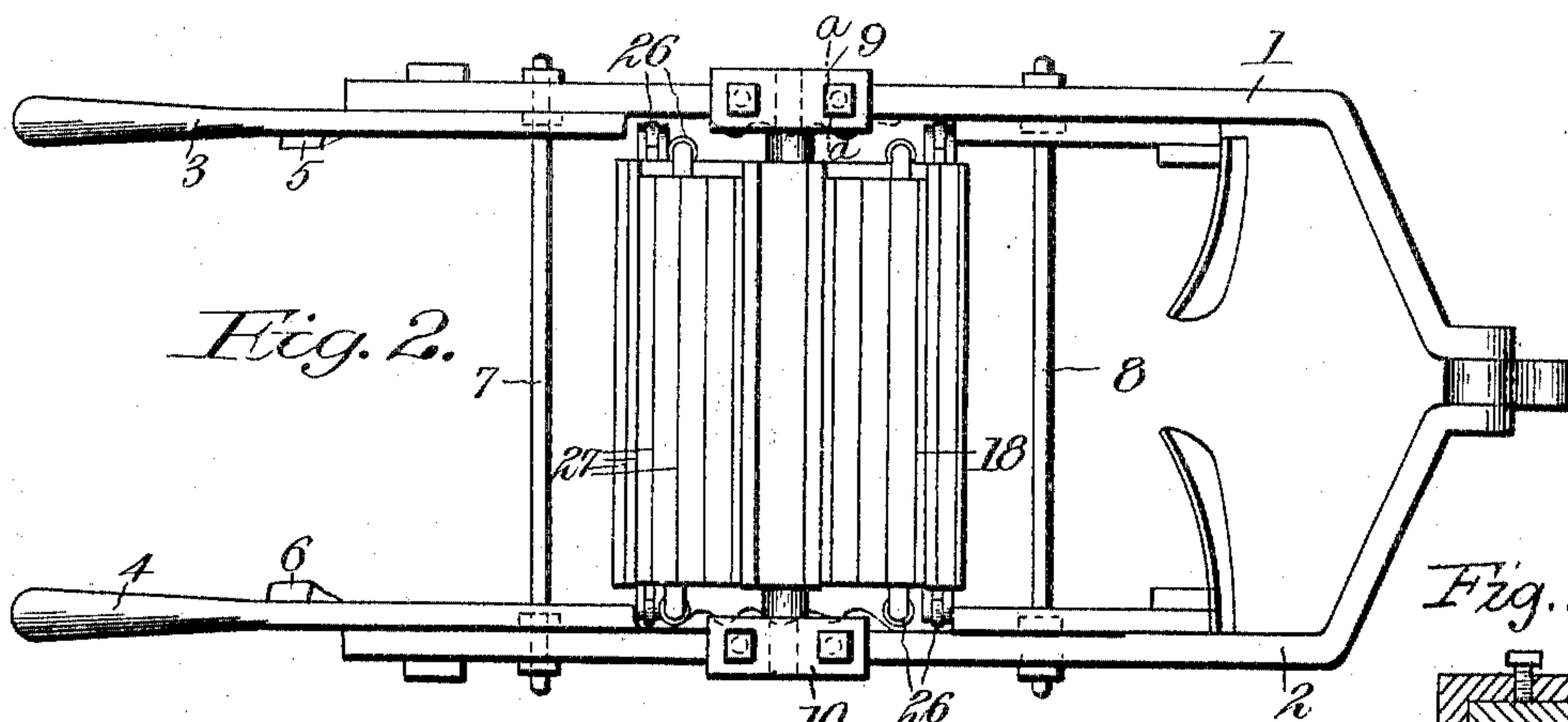
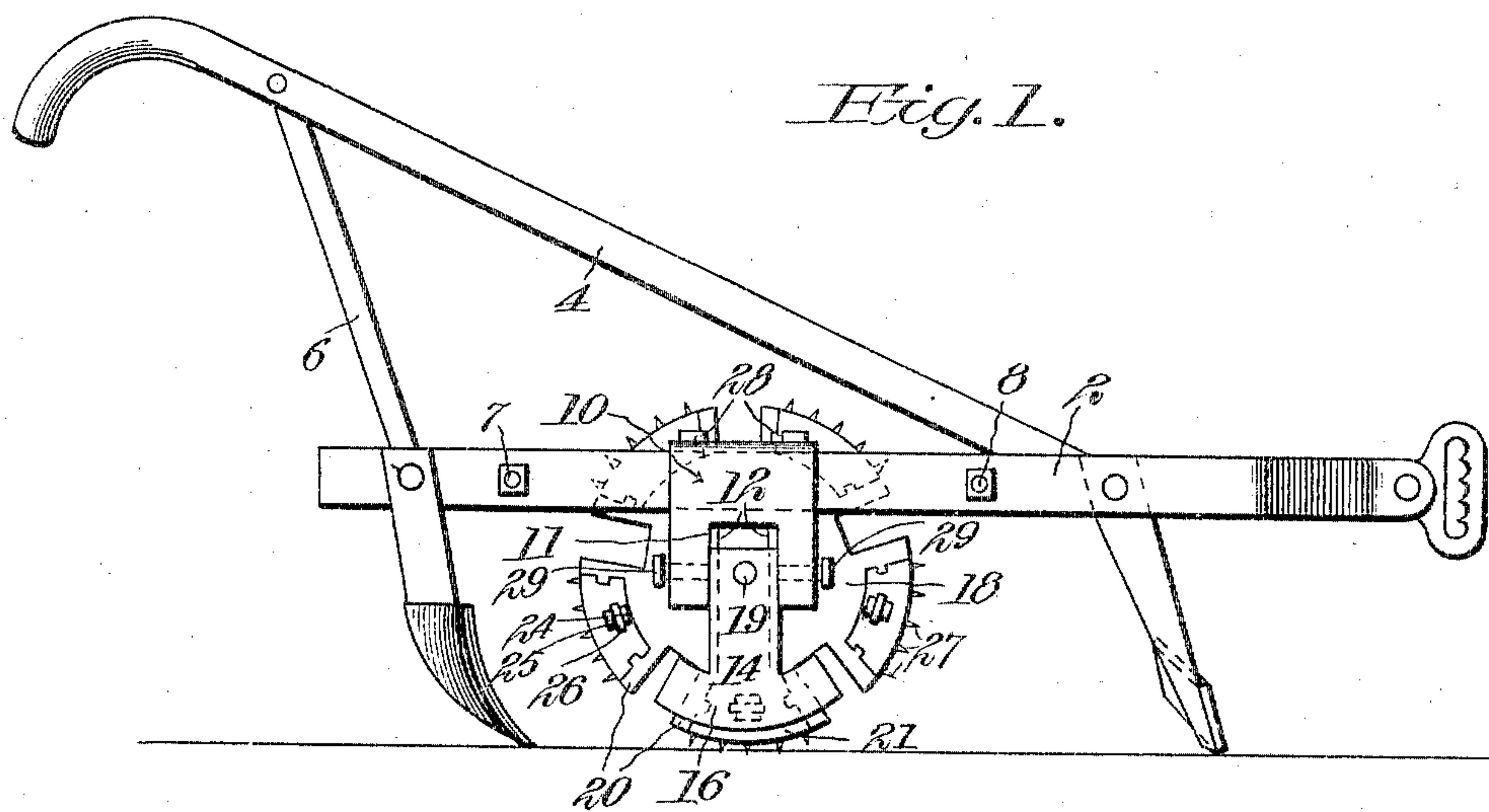
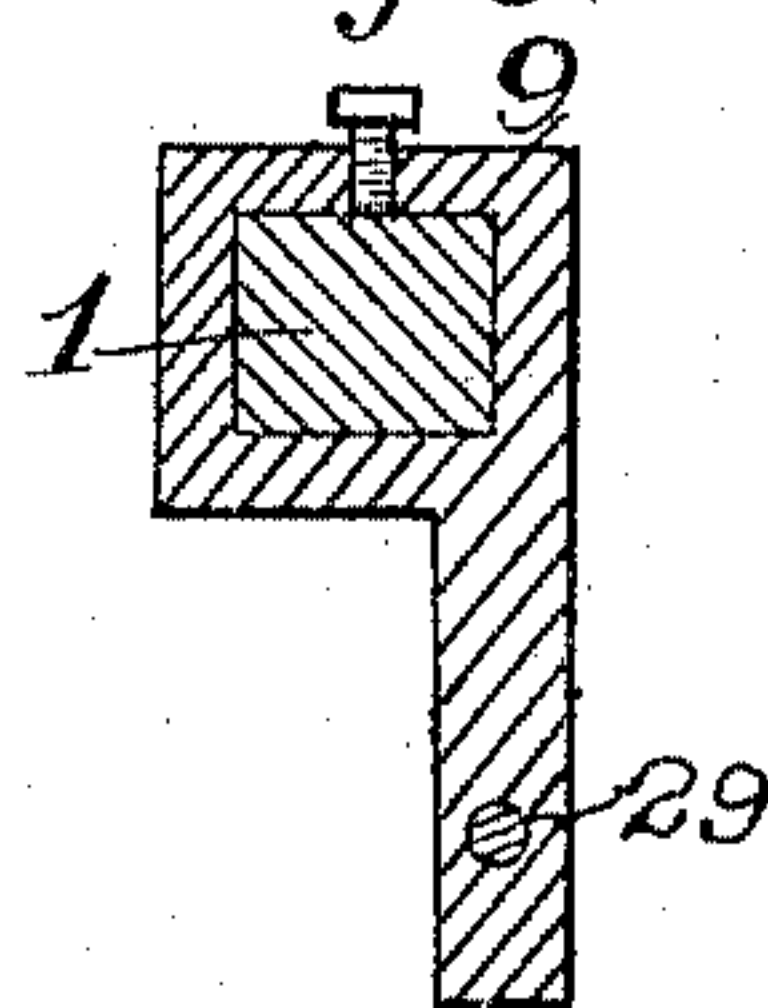
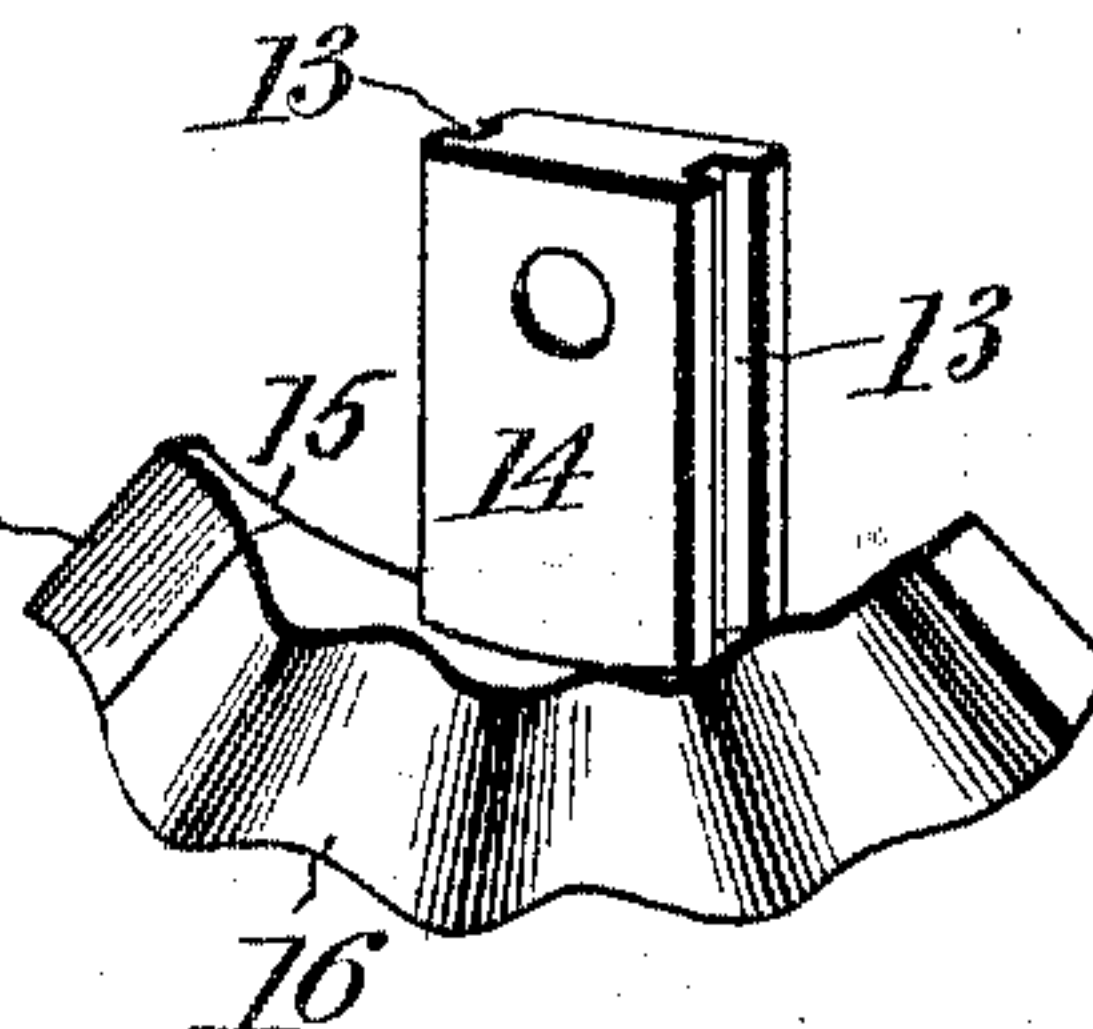
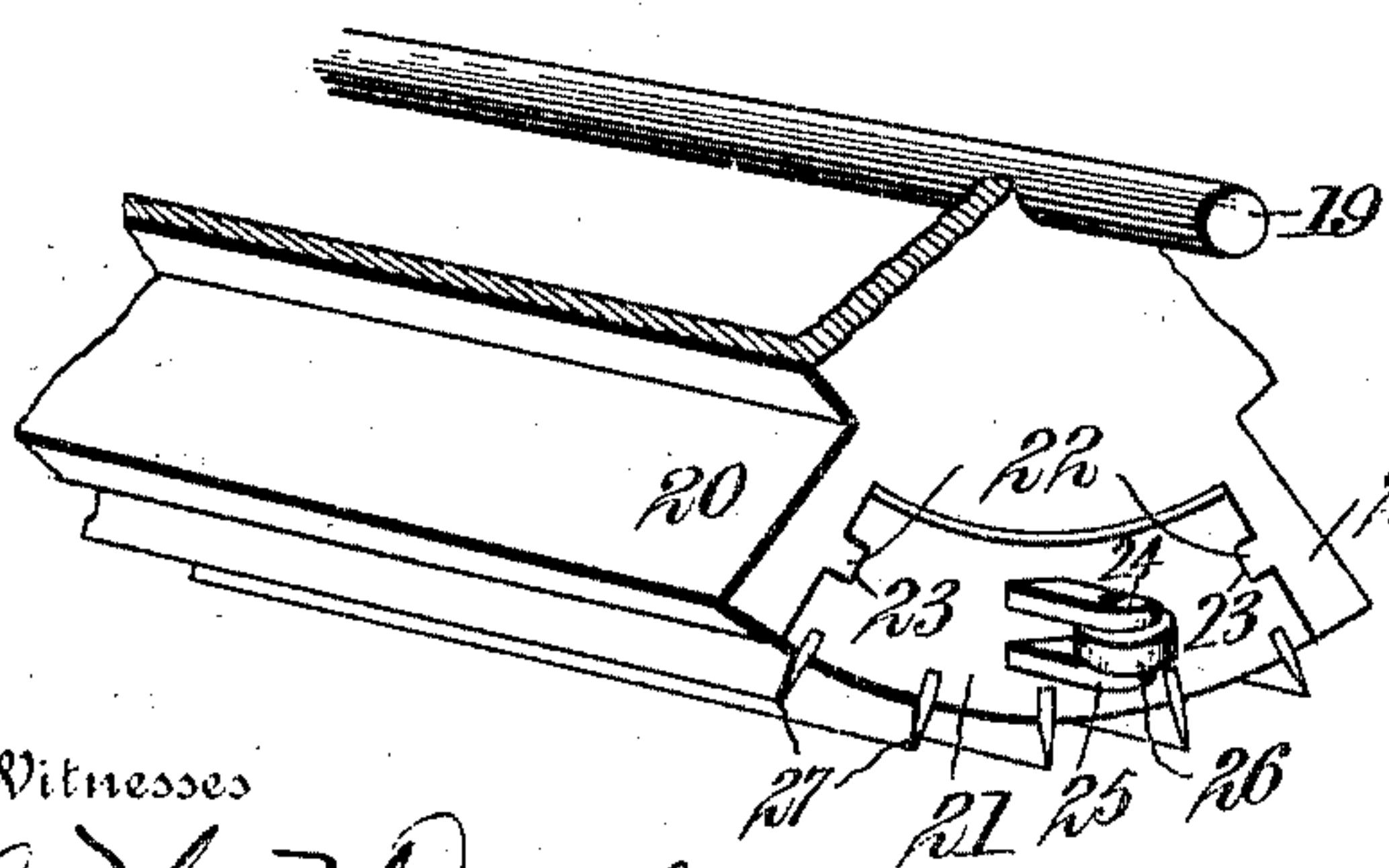


Fig. 3.

Fig. 4.

Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN B. NIX, OF NIX, ARKANSAS.

COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 784,118, dated March 7, 1905.

Application filed January 12, 1903. Serial No. 138,694.

To all whom it may concern:

Be it known that I, JOHN B. NIX, a citizen of the United States, residing at Nix, in the county of Dallas and State of Arkansas, have
5 invented certain new and useful Improvements in Cotton-Choppers; 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
10 to make and use the same.

This invention relates to cotton-choppers, and particularly to that class wherein a drum is employed in conjunction with a plow-frame.

The object of the invention is to provide a
15 device of the character mentioned wherein the drum is journaled transversely of the beams of the plow, the surface of said drum being interrupted at desired intervals, whereby the cutting action of the knives carried thereby
20 will operate only upon the desired portion of the plants.

A further object of the invention is to provide means whereby said drum may be easily adjusted both longitudinally and vertically to
25 any desired relative position as the character of the work may suggest.

Another object of the invention is to provide means whereby a reciprocating motion will be imparted only to that portion of the knives
30 carried by the drum which are passing through the zone of contact with the plants.

Finally, the object of the invention is to produce a device of the character noted which will be simple in construction, satisfactory in
35 use, and comparatively inexpensive to produce.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully
40 set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts
45 in the several views, in which—

Figure 1 is a side elevation of my invention. Fig. 2 is a plan view of same. Fig. 3 is a detail perspective view of a fragment of the

drum, and Fig. 4 is a detail perspective view
50 of the journal-block for the drum. Fig. 5 is a transverse section on the line *a a* through the plate 9 and the beam 1.

In the drawings, 1 and 2 are beams of a suitable plow-frame; 3 and 4, handle-bars; 5 and
55 6, braces, and 7 and 8 cross-rods thereof. Secured to the beams and slidable thereon are the plates 9 and 10. Said plates depend downwardly and are provided centrally of their bottom edge with recesses 11, having tongues
60 12 protruding from their side edges, which by engagement with the grooves 13 of the journal-blocks 14 render said journal-blocks adjustable vertically. The journal-blocks 14
65 terminate at their lower ends in the segmental portions 15, extending a slight distance on either side of the stem of said journal-block and having their inner faces 16 cammed, as shown in Fig. 4. The front ends of the segmental portions terminate in the flaring ends
70 17 for a purpose to be hereinafter described.

A drum 18 is journaled at 19 in the blocks 14, said drum being provided with radial ribs 20, each pair of said ribs carrying a segmental block 21, whereby an alternately plain and
75 interrupted or recessed cylindrical surface of the drum is had. The inner surfaces of each pair of ribs 20 are provided with the tongues 22, which register in the grooves 23 in the sides of the segmental block, allowing said blocks
80 to slide freely between its retaining-ribs. Protruding from the ends of the segmental blocks are the ears 24 and 25, having journaled therebetween the rollers 26. Suitable knives 27 are embedded in the blocks 21 longitudinally thereof. A desired longitudinal
85 adjustment of the drum is maintained by the binding-bolts 28 and a vertical adjustment is maintained by the binding-bolts 29.

It will be apparent from the foregoing that
90 an easy and effective adjustment of the drum both longitudinally and vertically is secured and that a reciprocating motion is imparted during the rotation of the drum to only those knives which are in the zone of contact with
95 the plants, thereby obviating the friction incident to the reciprocation of all the cutting knives simultaneously. The flaring ends 17

of the segmental portions 15 serve to give the rollers 16 proper initial engagement with the cam-surfaces of said portions.

It will be noted that various changes in the proportions and construction may be resorted to without departing from the scope of the invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a cotton-chopper, the combination with a plow, of a drum journaled transversely of the beams of said plow, knives protruding from the surface of the drum, plates having recesses in their lower edges adjustably secured to the beams of the plow, blocks vertically adjustable in said recesses and forming journal-bearings for the drum.

2. In a cotton-chopper, the combination with a plow, of a drum journaled transversely of the beams of said plow, said drum having its surface interrupted at equal intervals, knives protruding from the uninterrupted surface of said drum, plates having recesses in

their lower edges adjustably secured to the beams of the plow, blocks vertically adjustable in said recesses and forming journal-bearings for the drum.

3. In a cotton-chopper the combination with a plow, of a drum journaled transversely of the beams of said plow, said drum having its surface interrupted at equal intervals, knives protruding from the uninterrupted surface of said drum, plates having recesses in their lower edges adjustably secured to the beams of the plow, blocks vertically adjustable in said recesses forming journal-bearings for the drum and terminating in segmental portions having cammed inner surfaces and means carried by the drum for engaging the cammed surfaces and imparting a reciprocating motion to the knives.

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

JOHN B. NIX.

Witnesses:

R. K. HIGGS,

W. C. CABLER.