(No Model.) 3 Sheets—Sheet 1.

J. M. LANKFORD.

COTTON CHOPPER.

No. 463,232. Patented Nov. 17, 1891.

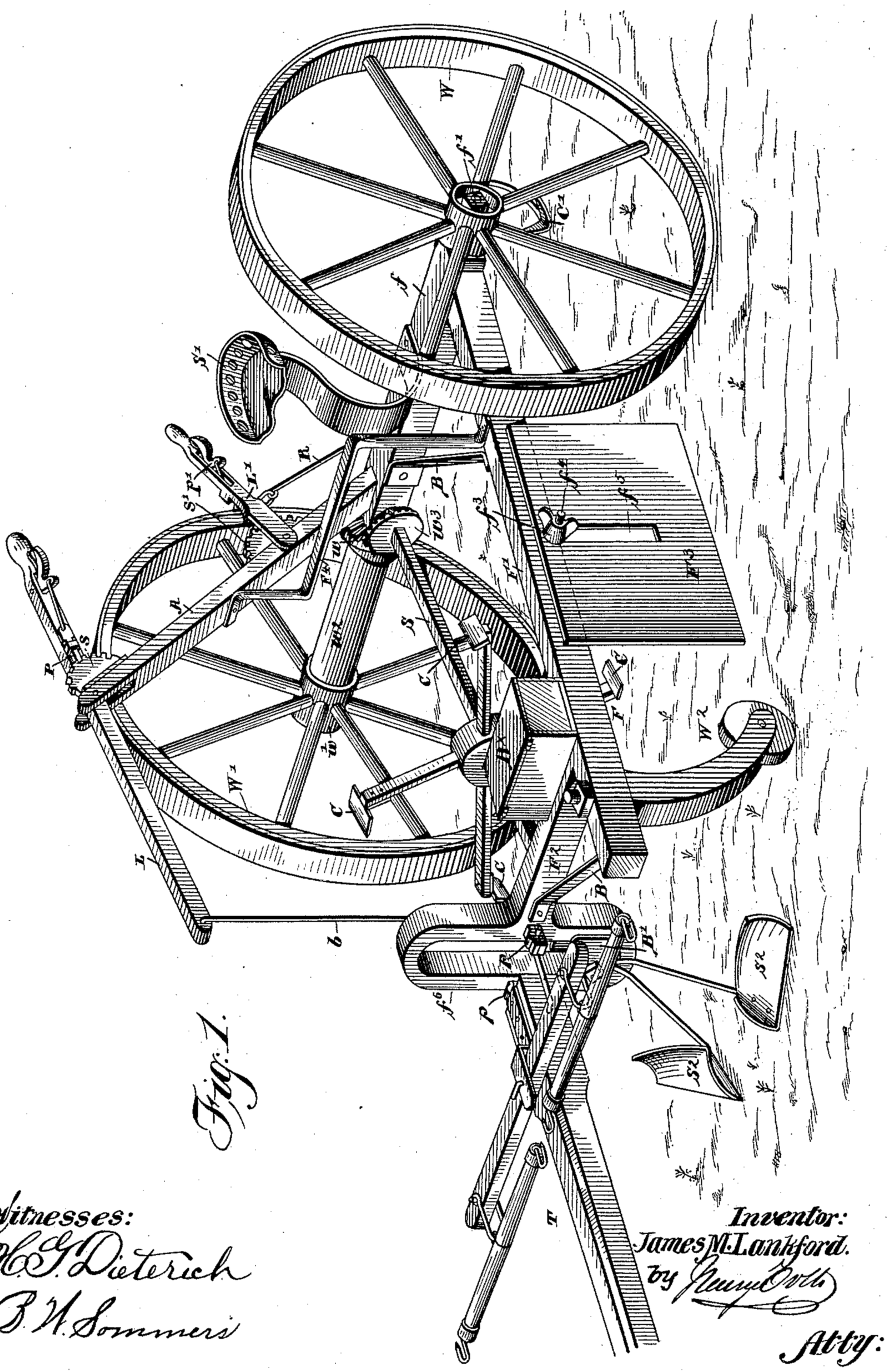

Fig. 1.

Witnesses:
H. G. Dieterich
B. H. Sommers

Inventor:
James M. Lankford.
by Henry Orth
Atty:

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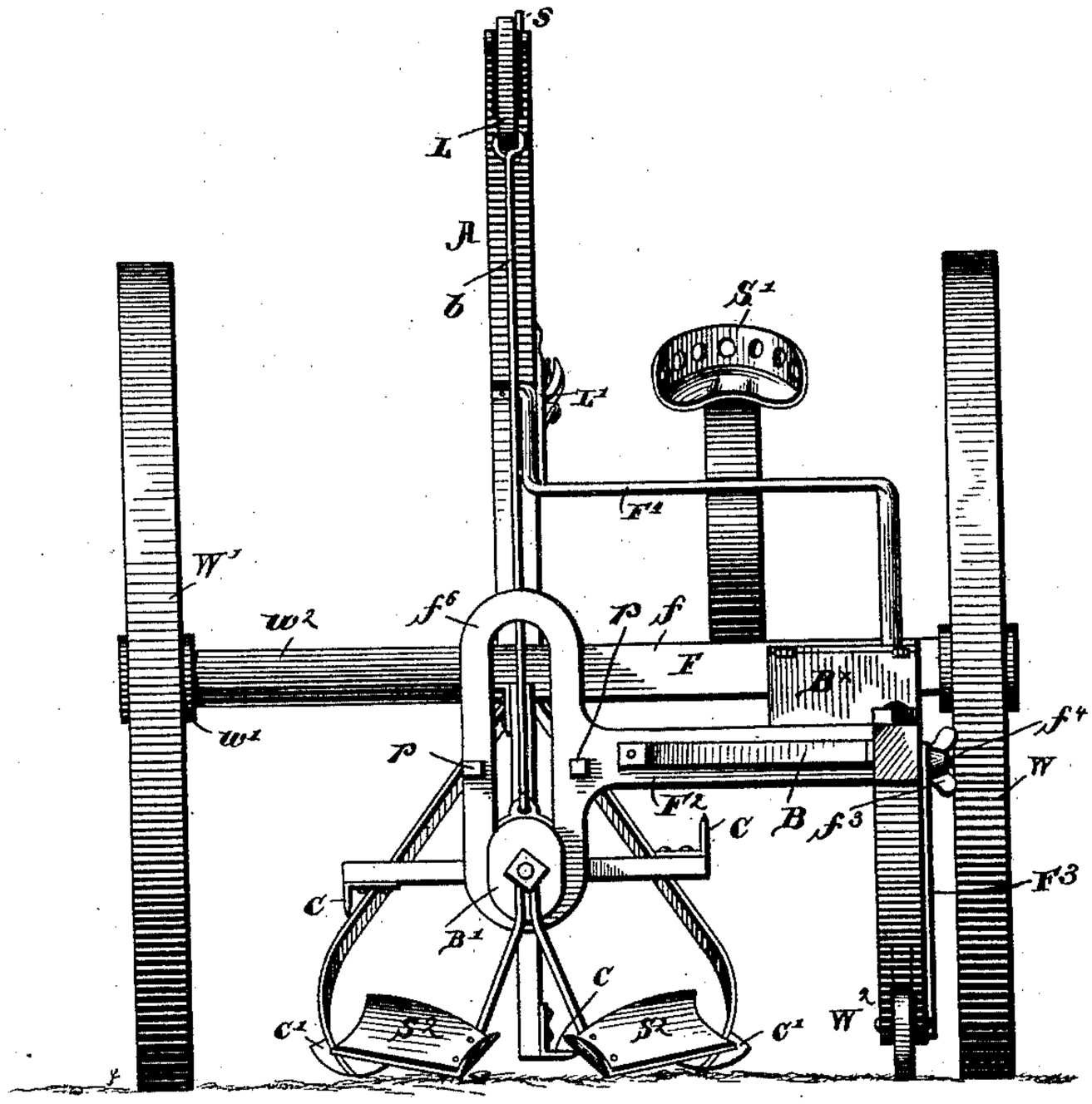
Fig. 2.



Witnesses:
H. G. Dieterich
B. H. Sommers

Inventor:
James M. Lankford,
by Henry Orth
Atty:

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J. M. LANKFORD.

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Fig: 3.

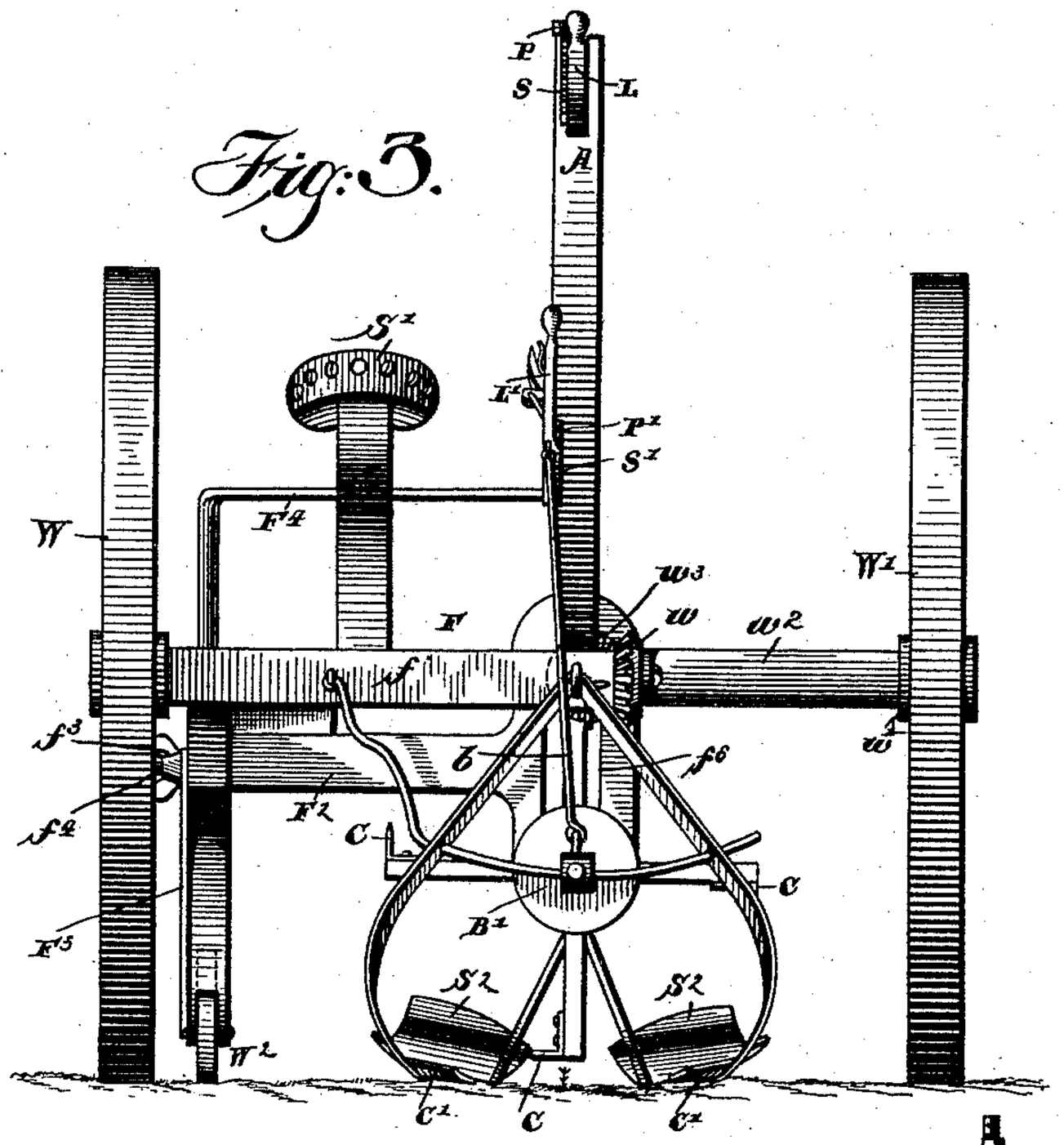
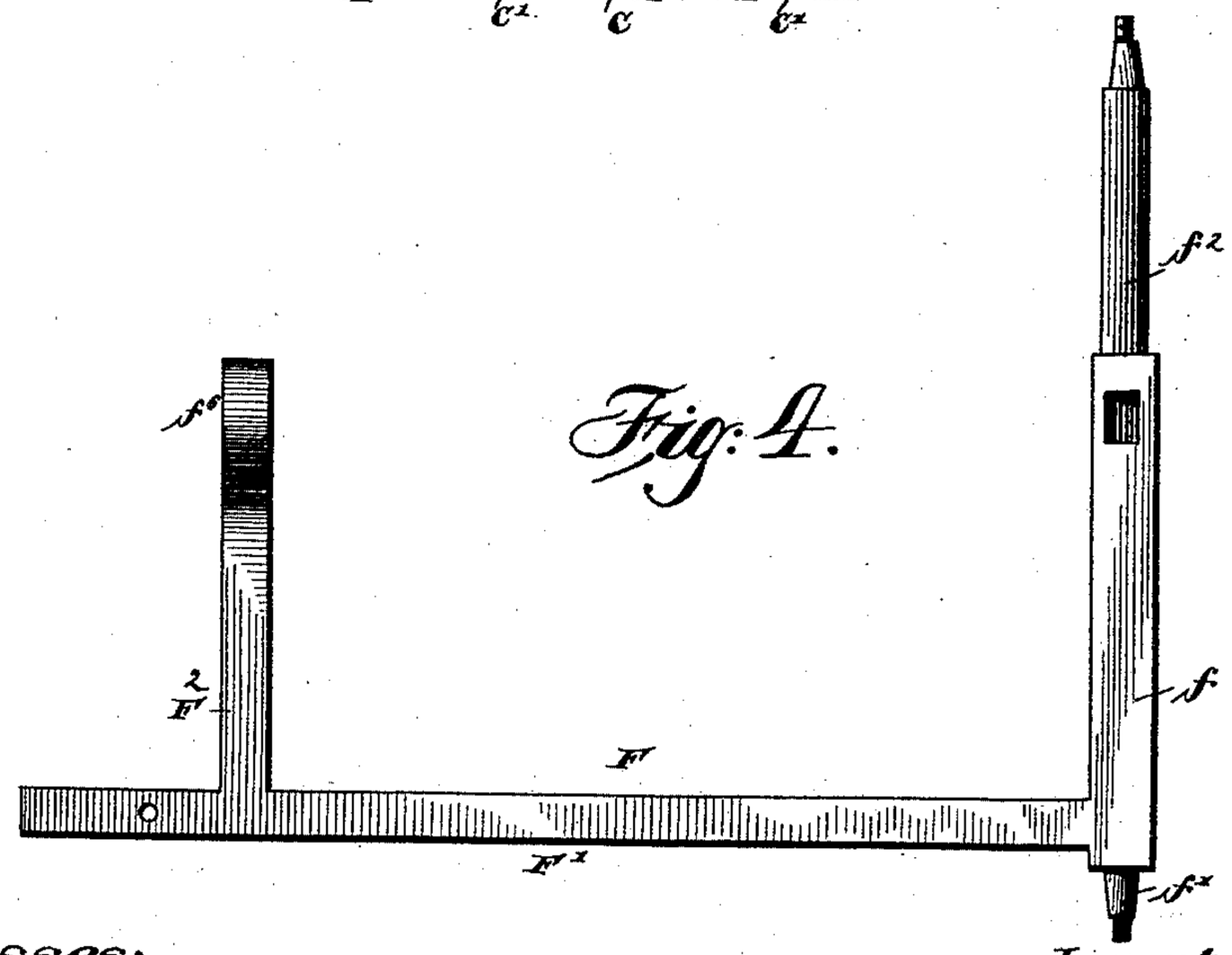


Fig: 4.



Witnesses:
H. G. Dieterich
B. N. Sommers.

Inventor:
James M. Lankford:
by Henry Orth
Atty

UNITED STATES PATENT OFFICE.

JAMES M. LANKFORD, OF EUFAULA, INDIAN TERRITORY, ASSIGNOR OF ONE-HALF TO CORNEALUS E. FOLEY, OF SAME PLACE.

COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 463,232, dated November 17, 1891.

Application filed July 2, 1891. Serial No. 398,259. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. LANKFORD, a citizen of the United States of America, residing at Eufaula, Creek Nation, Indian Territory, have 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 to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The invention relates to cotton or cane cultivators; and it has for its object to combine therewith chopping and scraping devices with a view to saving labor.

The invention consists in structural features and combinations of parts, as will now be fully described, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a cultivator embodying my invention. Figs. 2 and 3 are respectively a front and rear elevation, and Fig. 4 a detail top plan view, of the main frame of the machine.

Similar symbols indicate like parts wherever such may occur in the above-described figures of drawings.

F indicates the main frame, and consists of the axle portion *f*, that has at one end a short axle *f'* for one of the carrying-wheels W and at the opposite end a longer axle f^2 for the other carrying-wheel W', whose hub *w'* on the inner side of the wheel is extended and terminates in a circular flange w^2, to which is secured a bevel-wheel *w*, which latter, if desired, may form an integral part of the hub *w'*. From the axle portion of the frame F projects the longitudinal girt F' and from near the forward end of the latter a cross girt or arm F^2. The forward end of the longitudinal girt F' of the frame F is supported from a caster or other suitable furrow-wheel W^2, and to said girt is secured a fender or shield F^3, that is adjustable vertically by means of a thumb-nut f^3, working on a bolt f^4, that projects through a slot f^5 in the fender, which is arranged to one side of the choppers hereinafter to be described, so that when the machine is at work the chopper-shaft revolves from the fender, the plants chopped by the choppers being thrown against the fender into the furrow, instead of being scattered over the field. From the axle portion *f* of the frame projects a forwardly-inclined arm A, that supports the adjusting mechanism, as well as the operative devices, when elevated above the ground. The frame F, constructed as described, may be of any desired or appropriate material, and, if desired, the entire frame may be made of metal and cast in one piece. B B are braces, that brace the axle portion *f* and the arm F^2 to the longitudinal girt, and F^4 is a foot-rest for the driver when on his seat S', which latter is secured to the axle portion *f* of the frame, the said foot-rest serving also as a brace for the overhanging or forwardly-inclined standard or arm A, to which one end of said foot-rest is secured, the other being secured to the longitudinal girt F'. In the axle portion *f* of the frame is formed a bearing for the rear end of the longitudinal shaft S, whose forward end revolves in a bearing B', that is connected by a chain or rod *b* to the outer end of a lever L, fulcrumed in the overhanging arm, said lever being provided with the usual locking-pawl P, adapted to engage notches or teeth in the surface of a sector *s*, secured to the said arm A, and by means of which lever L the shaft S is adjusted vertically, said shaft carrying the choppers C, of any usual or preferred construction. The bearing B' for the forward end of the shaft S is fitted and guided in a vertical slot formed in the cross-head f^6, formed at the outer end of the cross-girt or laterally-projecting arm F^2, on the face of which cross-head f^6 are formed or secured the bearings for the pivots or journals *p* of the tongue or shaft T. At its rear end the shaft S carries a bevel-wheel w^3, that meshes with the like wheel *w* on the hub *w'* of the carrying-wheel W', and whereby said shaft S, and with it the choppers, is revolved.

To the front end of the shaft S, that projects sufficiently from the bearing B', are secured a pair of scrapers S^2, arranged to straddle the row; but, if desired, a pair of straddle-row cultivator teeth or plows may be substituted instead of scrapers, according to the nature of the work to be performed by the

machine, so that both the scrapers and choppers can be simultaneously adjusted relatively to the land by one and the same lever L.

To the axle portion *f* are pivoted a pair of straddle-row cultivators C′ C′, which are connected by a chain or rod R to a hand-lever L′, that, like lever L, is fulcrumed to the arm A and provided with the usual locking-pawl P′, adapted to engage notches or teeth on the surface of a sector *s*′. Both levers are shown as being within easy reach of the driver when on his seat. Those familiar with machines of the class to which my invention pertains will readily comprehend not only the advantages, but also the operation, of my said machine, and a further description of such advantages and operation will therefore not be necessary here.

In practice, and as is usual, I secure to the longitudinal girt F′ a tool-box B×, as shown.

Having now particularly described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a machine of the class described, a revoluble and vertically-adjustable chopper-shaft, in combination with a vertically-adjustable fender on one side of the choppers of said shaft, for the purpose set forth.

2. In a machine of the class described, the main frame consisting of the longitudinal girt F′, a furrow-wheel at the forward end of said girt, the cross-girts *f* and F², said girt *f* having a short axle at one end and a long axle at the other, and said girt F² terminating in a vertically-slotted cross-head, in combination with the drive-wheels W and W′ on the short and long axles, respectively, the bevel-wheel *w*, connected with said wheel W′, the chopper-shaft S, having its bearings in said cross-head and the cross-girt *f*, and the bevel-wheel w^3 in gear with said bevel-wheel *w*′, for the purpose set forth.

3. In a machine of the class described, the combination, with the chopper-shaft S, the scrapers mounted thereon, the straddle-row cultivator C, and the main frame, having wheel-axle portion *f*, to which said cultivators are pivoted, and a forwardly-inclined standard or arm A, of the sectors *s* and *s*′, the levers L and L′, supported by said arm A, and connections between the levers, the shaft S, and the cultivators C, for the purpose set forth.

In witness whereof I have hereunto set my hand in the presence of two attesting witnesses.

JAMES M. LANKFORD.

Witnesses:
I. Q. LANKFORD,
his
G. A. × RICH.
mark