(No Model.) 2 Sheets—Sheet 1.

H. P. DOOLEY.

COTTON PICKER.

No. 458,751. Patented Sept. 1, 1891.

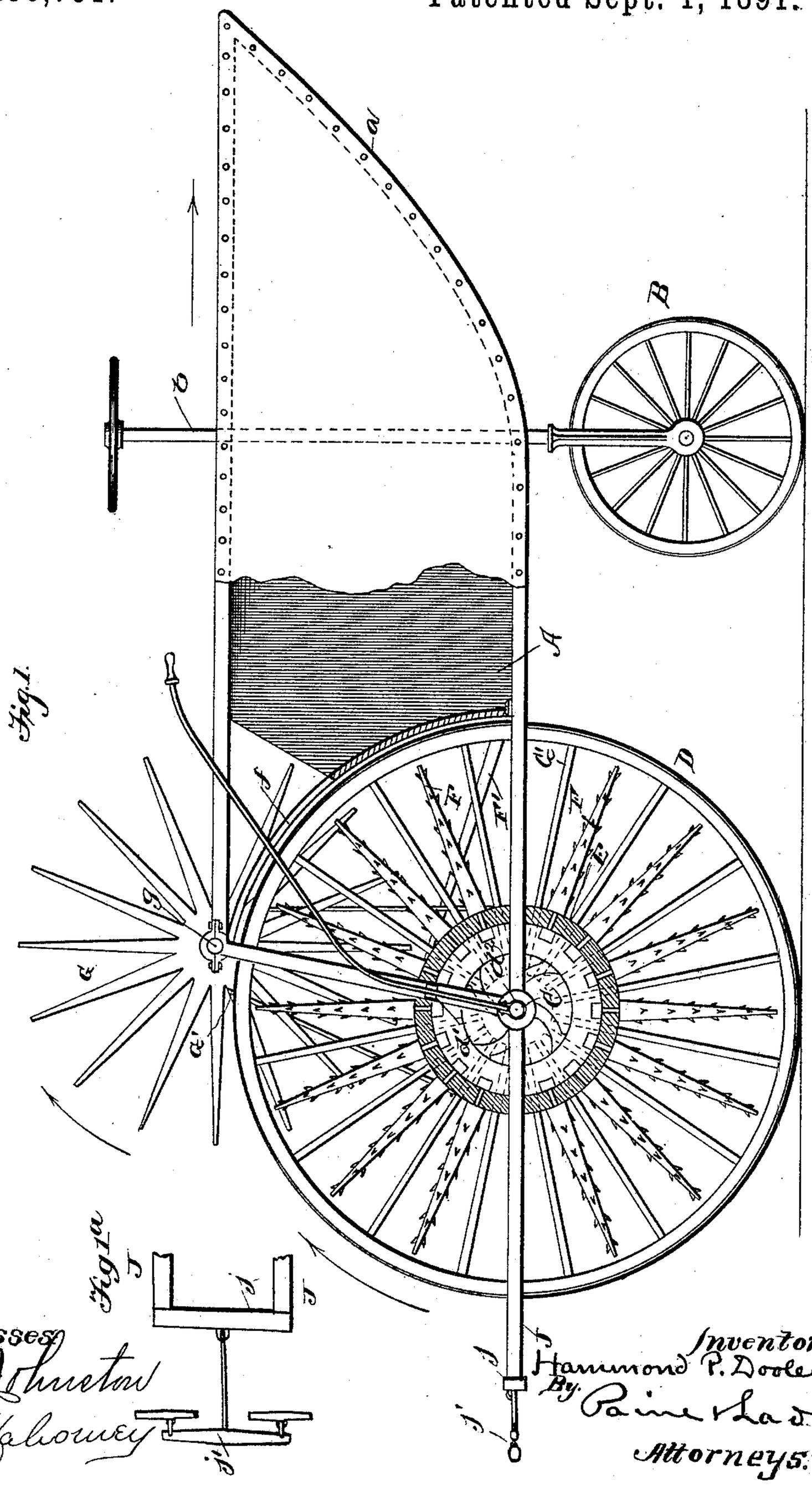

Fig. 1.

Fig. 1a.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 2.

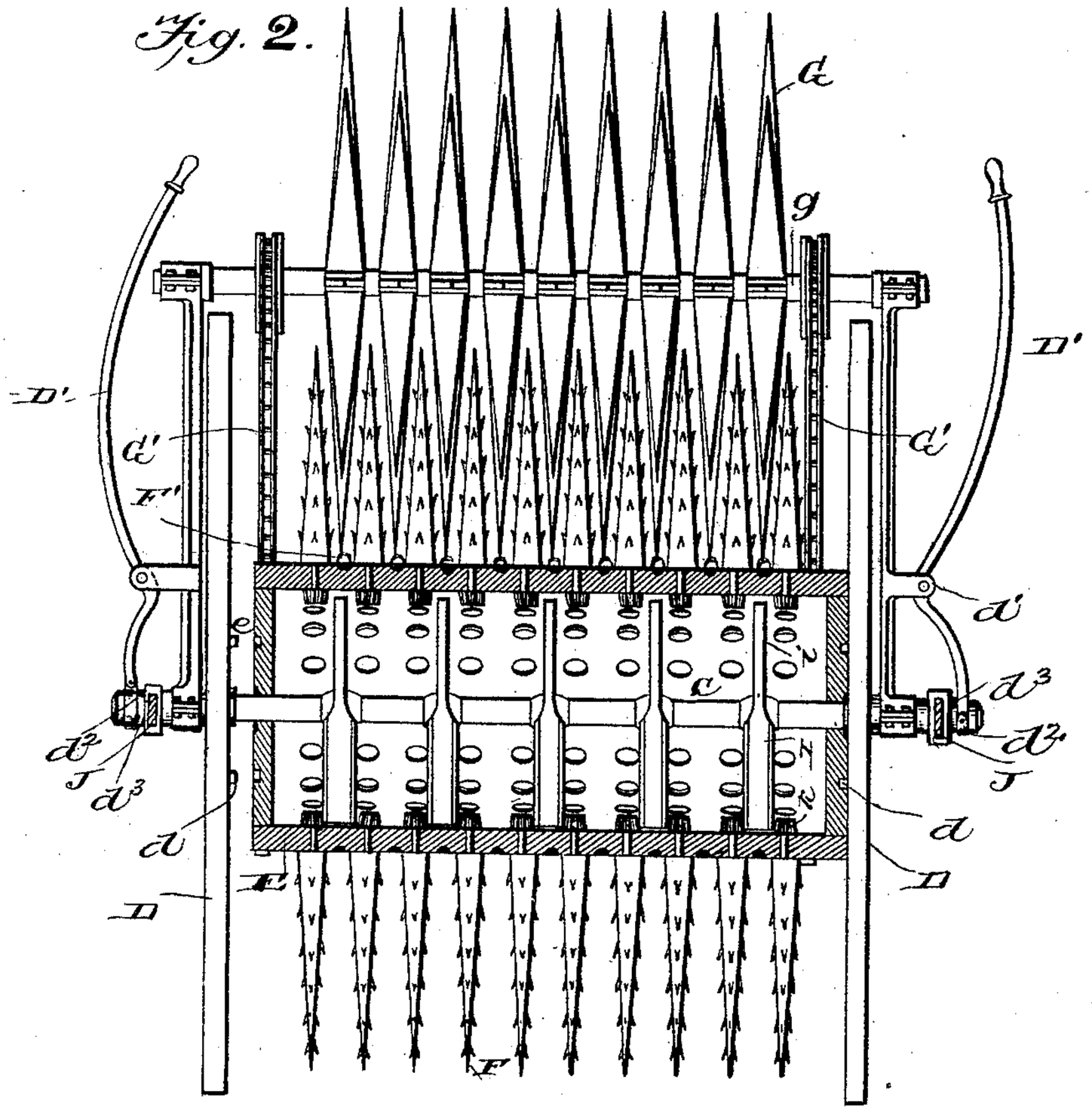


Fig. 3.

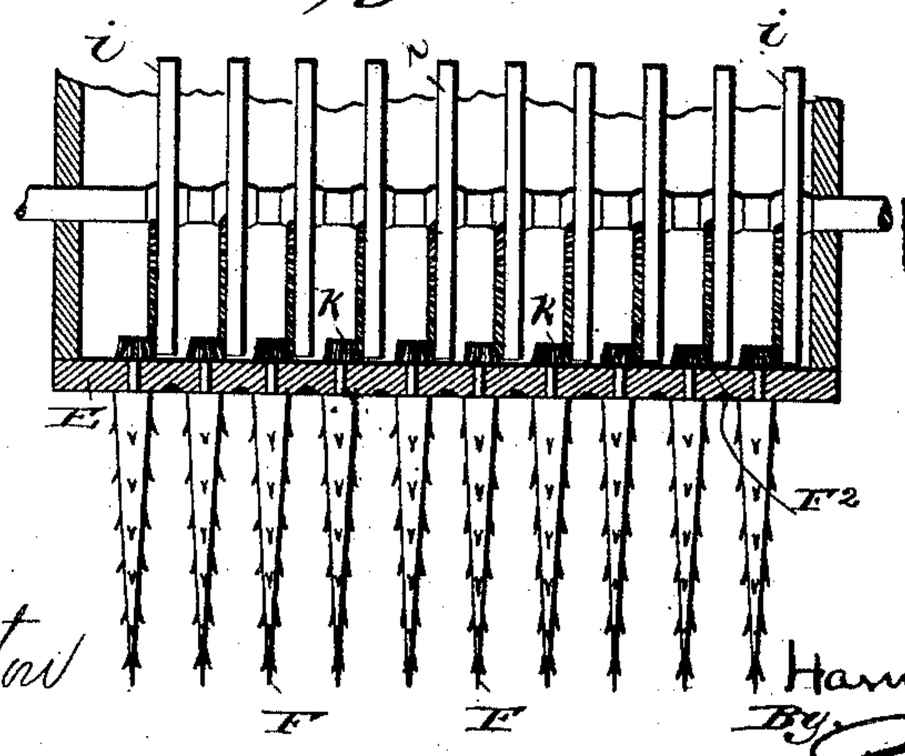
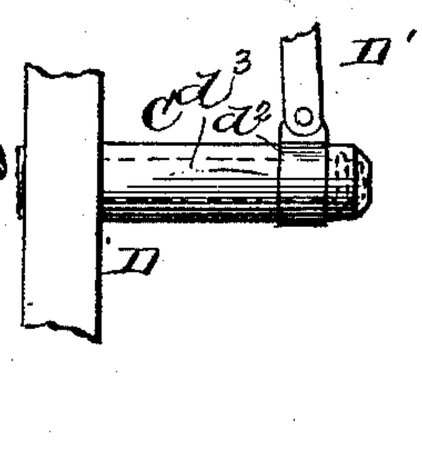


Fig. 4.



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UNITED STATES PATENT OFFICE.

HAMMOND P. DOOLEY, OF FORREST CITY, ARKANSAS.

COTTON-PICKER.

SPECIFICATION forming part of Letters Patent No. 458,751, dated September 1, 1891.

Application filed September 16, 1890. Serial No. 365,185. (No model.)

To all whom it may concern:

Be it known that I, HAMMOND P. DOOLEY, a citizen of the United States, residing at Forrest City, in the county of St. Francis and State of Arkansas, have invented certain new and useful Improvements in Cotton-Pickers; 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.

This invention relates to cotton-pickers of the class shown and described in Patent No. 245,459, issued to me on August 9, 1881; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a side elevation with parts in section. Fig. 1ª is a plan view, on a reduced scale, of the push-bolt and its connection. Fig. 2 is a rear end view of the same, parts being in section. Fig. 3 is a horizontal sectional view with parts broken away, showing the picking-spindles and a modification of the means for revolving them. Fig. 4 is a detail view showing the connection between one of the levers and a wheel-hub.

A is the receiver for the picked cotton, provided with the upwardly and forwardly inclined bottom *a* for depressing the cotton-plants.

B are wheels for supporting the front end of the said receiver and provided with the vertical bar *b*, whereby the direction of the machine may be guided by a man inside the receiver, who also gathers together the picked cotton and delivers it at the ends of the field.

C is an axle secured at the rear of the receiver in suitable supports.

D are the ground-wheels journaled upon said axle and adapted to slide longitudinally upon it.

E is a revoluble drum journaled upon the said axle, but not adapted to slide longitudinally upon it. The wheels D are provided with projections *d*, adapted to engage with holes *e* in the ends of the drum, so that the drum may be revolved by either ground-wheel or remain stationary in taking the machine back and forth from the cotton-field.

D′ are hand-levers pivoted in the supports *d′* and adapted to slide the wheels D upon the axle, said levers being provided with collars d^2, encircling the elongated cylindrical portions d^3 of the wheel-hubs. These levers are carried up to a position so that they may be worked conveniently by the man inside the receptacle.

F are bearded picking-spindles for removing the cotton from the pods. They taper to a point and are provided with beards pointing outward from the drum, so as to catch and hold any cotton that they come in contact with and also to permit the cotton to be stripped therefrom when they are subsequently presented to the strippers or cleaning-shaft. These spindles are journaled in the drum E in parallel circumferential rows.

G is the stripper, which consists of a series of tapering arms projecting from the shaft *g* in radial circumferential rows, which revolve between the bearded spindles and detach the cotton by a forward motion and deliver the same into the receiver. The shaft *g* is journaled in suitable supports above the picker-drum and between it and the receptacle.

G′ are drive-chains which pass around suitable chain-pulleys upon the picker-drum and on the said shaft *g* and impart a rotary motion to the stripper while the picker-drum is revolving. The stripper-arms pass between the picker-spindles and remove the cotton from them.

F′ are tapering springs secured to the rear of the receptacle and projecting between the picker-spindles below the stripper, with their free ends resting in grooves F^2 upon the circumference of the picker-drum. These springs remove all the cotton from the picker-spindles which may have been left by the stripper. A series of bent or curved arms *f* are also provided and project upwardly from the bottom of the receptacle between the arms of the stripper to prevent the cotton from adhering to the stripper. The picker-spindles are caused to revolve rapidly by means of the friction-wheels I, secured upon the axle C and provided with depressions *i* upon a portion of their surfaces. These wheels are so arranged

that each wheel serves to set in motion two rows of picker-spindles, as shown in Fig. 2, each spindle being provided with an india-rubber friction-pinion *k*, secured upon its lower end and bearing against a friction-wheel, and the adjacent rows of spindles being driven in opposite directions. The spindles may all be caused to revolve in the same direction, if desired, by having a separate friction-wheel to each row of spindles, as shown in Fig. 3. The wheels I are so arranged upon the axle that the pinions bear against them and are revolved rapidly while the picker-spindles are in the cotton, and the said pinions come opposite the depressions *i* and cease to revolve while the said spindles are being subjected to the action of the stripper.

J are side frames or bars which support the ends of the axle and the stripper-shaft. They are attached at their forward ends to the sides of the receiver, and, extending rearward behind the machine, are provided with a suitable cross-bar *j* and push-bolt *j'*, to which the horses are harnessed for pushing the machine in advance of them.

What I claim is—

1. In a cotton-picker, the combination, with a stationary axle, of a picker-drum journaled upon the said axle and provided with revoluble picker-spindles arranged in circumferential rows, the ground-wheels journaled upon said axle and provided with projections adapted to engage with recesses in the ends of the said drum, and pivoted hand-levers for sliding the said wheels in and out of gear with the picker-drum, substantially as and for the purpose set forth.

2. In a cotton-picker, the combination, with the stationary axle and the friction-wheels secured thereon and provided with depressions, of the revoluble picker-drum provided with picker-spindles having pinions engaging with the said wheels, the revoluble stripper provided with arms projecting between the said picker-spindles, the stationary springs projecting between the picker-spindles below the stripper, and the stationary arms projecting upwardly between the arms of the stripper, whereby the cotton may be removed from the picking and stripping devices, substantially as set forth.

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

HAMMOND P. DOOLEY.

Witnesses:
W. F. HORNEY,
A. BECKER.