

(No Model.)

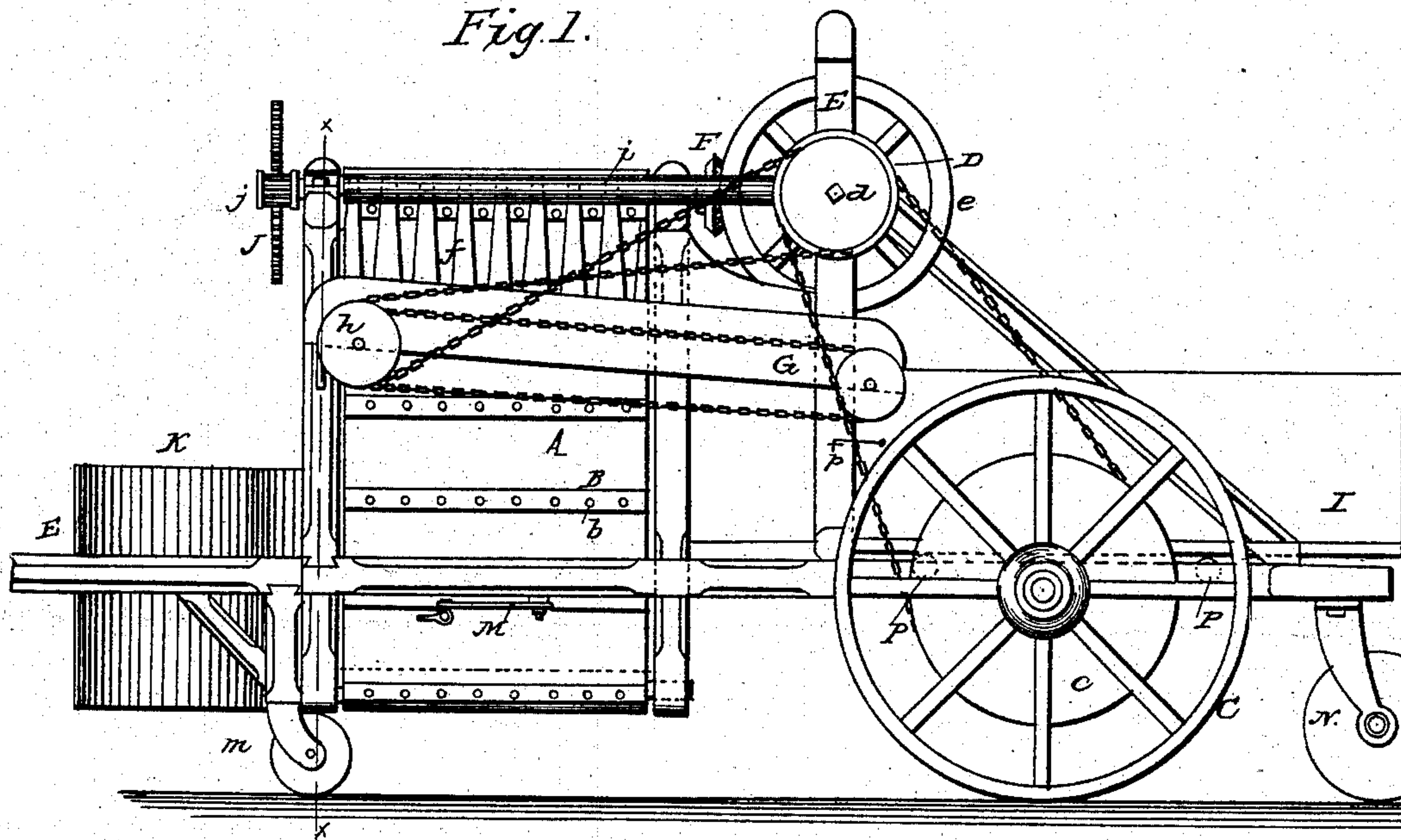
2 Sheets—Sheet 1.

F. L. WARNER.  
COTTON HARVESTER.

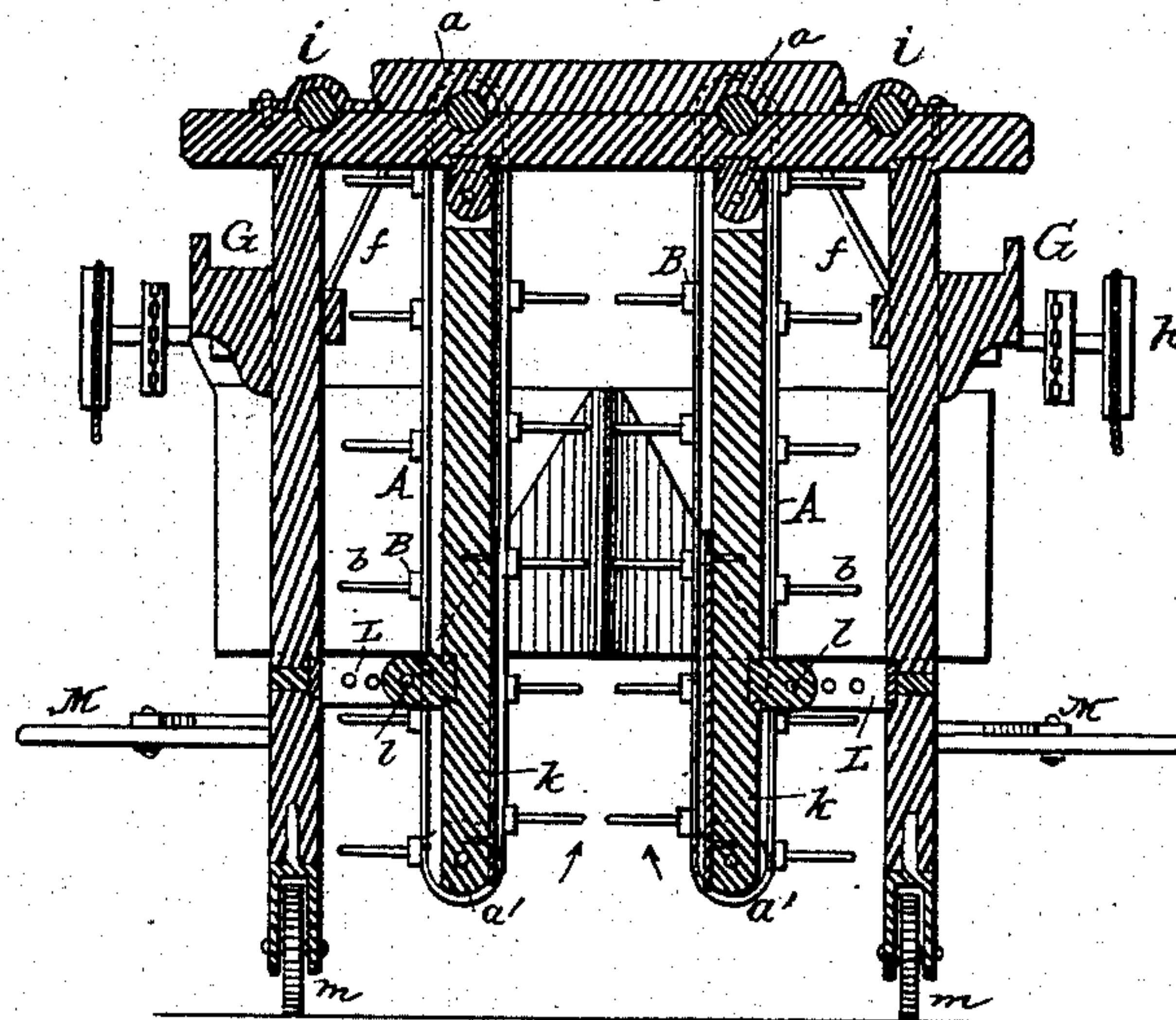
No. 291,438.

Patented Jan. 1, 1884.

*Fig. 1.*



*Fig. 3.*



WITNESSES:

*Ad. S. Dietrich*  
*W. X. Stevens*

INVENTOR.

*F. L. Warner*  
*By Mann & Co*

ATTORNEYS.



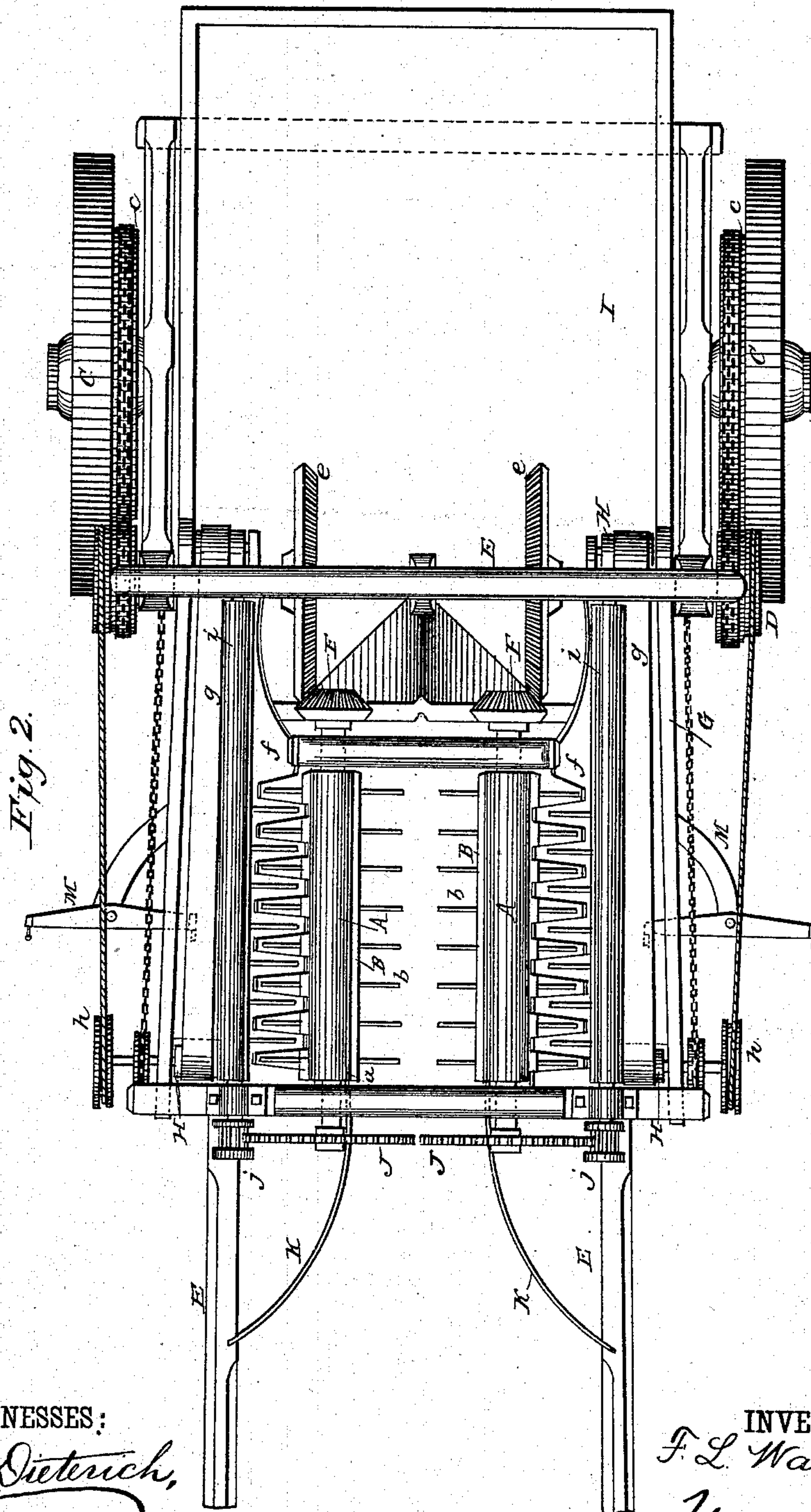
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# UNITED STATES PATENT OFFICE.

FERNANDO L. WARNER, OF MEMPHIS, TENNESSEE.

## COTTON-HARVESTER.

SPECIFICATION forming part of Letters Patent No. 291,458, dated January 1, 1884.

Application filed March 6, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, FERNANDO L. WARNER, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented a new Improvement in Cotton-Harvesters, of which the following is a specification.

My invention relates to that class of cotton-harvesters which are drawn by a team straddling the row of cotton-plants, the picking mechanism being actuated by the rotation of the supporting-wheels carrying the machine and the cotton gathered thereby.

It has for its object to provide means for gathering the cotton automatically, as herein-after fully described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my cotton-harvester. Fig. 2 is a plan or top view of the same, and Fig. 3 is a transverse vertical section at *x x*, Fig. 1.

A represents a belt or apron, of any suitable kind, such as a strip of leather or of two or more chains running over rollers *a a'*. This belt is provided with pickers consisting of wire teeth *b* from two to six inches long, as the particular kind of cotton to be picked may require; or these teeth may be part short and part long on the same belt, to equalize the strain and suit the varying position of the cotton-bolls on the plants. The teeth are fastened to the belt by means of slats B, of thin metal, in pairs, the two slats of each pair clasping the belt and holding to it by the pickers extending through both. The rotation of these belts is caused by the rotation of the supporting-wheels C, in advancing along the ground, as follows: *c c* are pulleys or sprocket-wheels, secured upon the wheels C, to carry belts or driving-chains, which pass over pulleys or sprocket-wheels D, to revolve two independent shafts, *d d*, which are journaled in the main frame E of the machine.

*ee* are two large beveled-gear wheels secured on shafts *d d*, and engaging pinions F on the shafts of the upper belt-rollers, *a*. By means of the two independent shafts the connection of each picker-belt with its drive-wheel is made independent of the other, so that whether turning corners or running straight one of the belts is sure to be working.

*ff* are combs placed adjacent to each gathering-belt A, to strip the cotton from the teeth *b* and cause it to drop into a trough, G, in the bottom of which a belt or endless apron, *g*, travels on two rollers, H H, driven by a belt from pulley D, passing over pulley *h*, to carry the cotton into the receptacle I. I further provide a rotary stripper, *i*, for each belt, consisting of a cylinder having one or more rows of wire teeth revolving in the same direction that the cotton is carried by the pickers, but a great deal faster, so as to strip the cotton from the pickers into the carrier-trough G with certainty. The strippers *i* are provided with pinions *j*, which engage larger spur-gear wheels J on the rollers *a*. Thus the relative speed of the picker-rolls and the strippers is made positive.

K K represent sheet-metal guides flaring in the direction of travel of the machine, and secured to the frame E at their forward ends, and to the swinging frames *k* of the picker-belts A at their rear ends, to guide the branches of the cotton-plants between the picker-belts.

That the picker-belts may be adapted to the varying width of cotton-rows, or, more properly, to the size of the plants, the supports *k* of the lower rollers, *a'*, are hung to the frame on hinge-bolts at their top ends to swing at their lower ends to and from the row, and they are provided with braces L, in which are several holes to receive the stay-pin *l*, by which means the picker-belts may be fixed at the desired width apart. This adjustment is more necessary at the bottom than at the top of the picker-belts, as the cotton-plants have more and stiffer branches near the ground than higher up.

The team may be hitched to the machine in any usual manner, as by the whiffletrees M, attached to the frame.

*m m* are two caster-wheels supporting the forward part of the machine, and N is a hind wheel, to prevent a heavy load of cotton from tipping the rear end of the machine down.

For convenience in unloading the machine, I provide a box-body, I, to rest on rollers P, journaled in the main frame, and to be held from sliding off backward by means of hooks *p*, or any similar device.

When the body becomes filled with cotton, the hooks *p* are disengaged and the body easily drawn back over its rollers P and dumped.



Having thus described my invention, what I claim, and wish to secure by Letters Patent, is—

1. The combination, with the toothed belts A, two pairs of rollers, *a a'*, and the pinions F 5 on the upper rollers, *a*, of the gear-wheels *e*, the two independent shafts *d*, the wheels D thereon, the pulleys secured on the supporting-wheels C, and the driving-belts, as described, whereby each picker-belt is run by 10 its own supporting-wheel independently of the other, as specified.

2. The combination, with the frame E, of two toothed belts, A, their rollers *a'*, journaled in the swinging frames *k*, and means for adjusting said frames relative to a vertical plane, 15 for the purpose specified.

FERNANDO L. WARNER.

Witnesses:

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J. T. PETTIT.