

(Model.)

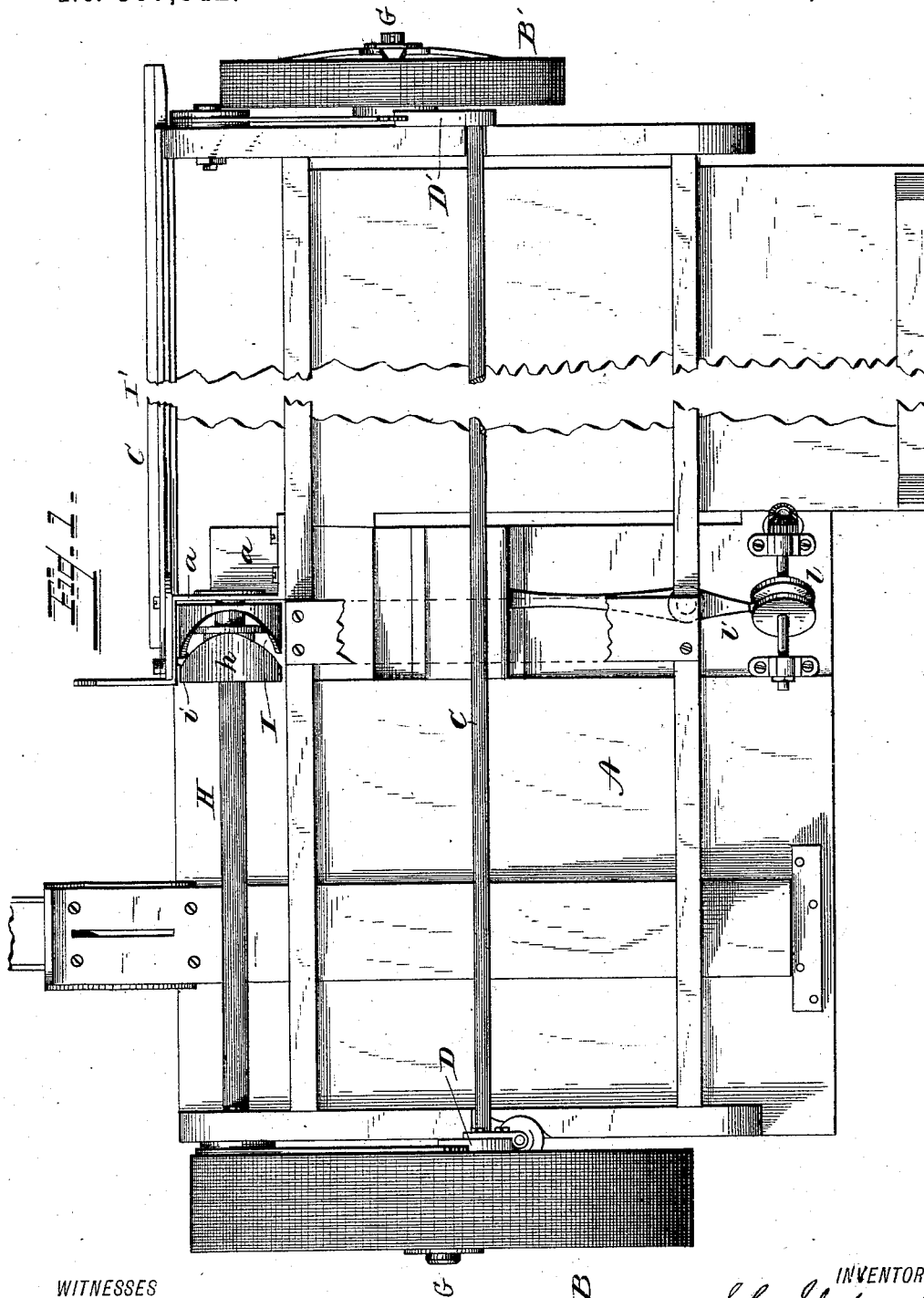
3 Sheets.—Sheet 1.

S. C. SHEPARD.

PLATFORM ADJUSTMENT FOR HARVESTERS.

No. 307,342.

Patented Oct. 28, 1884.



WITNESSES
 Frank L. Curand
 Rex Smith.

INVENTOR
S. C. Shepard
by Edw. Smith
Attorney.

(Model.)

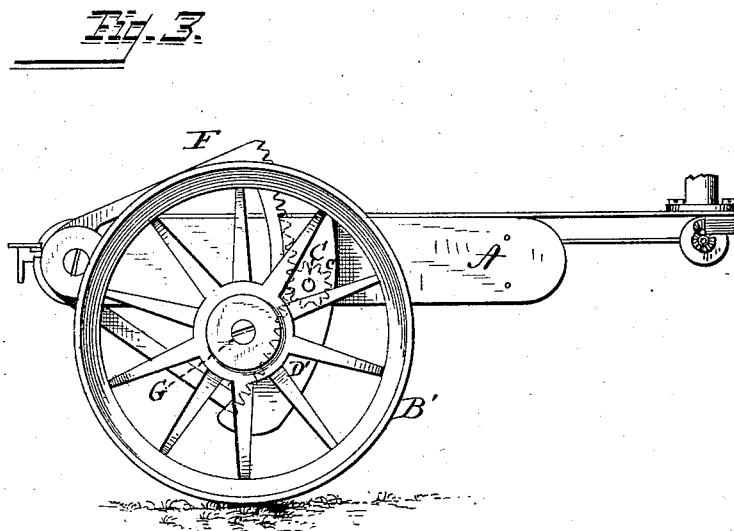
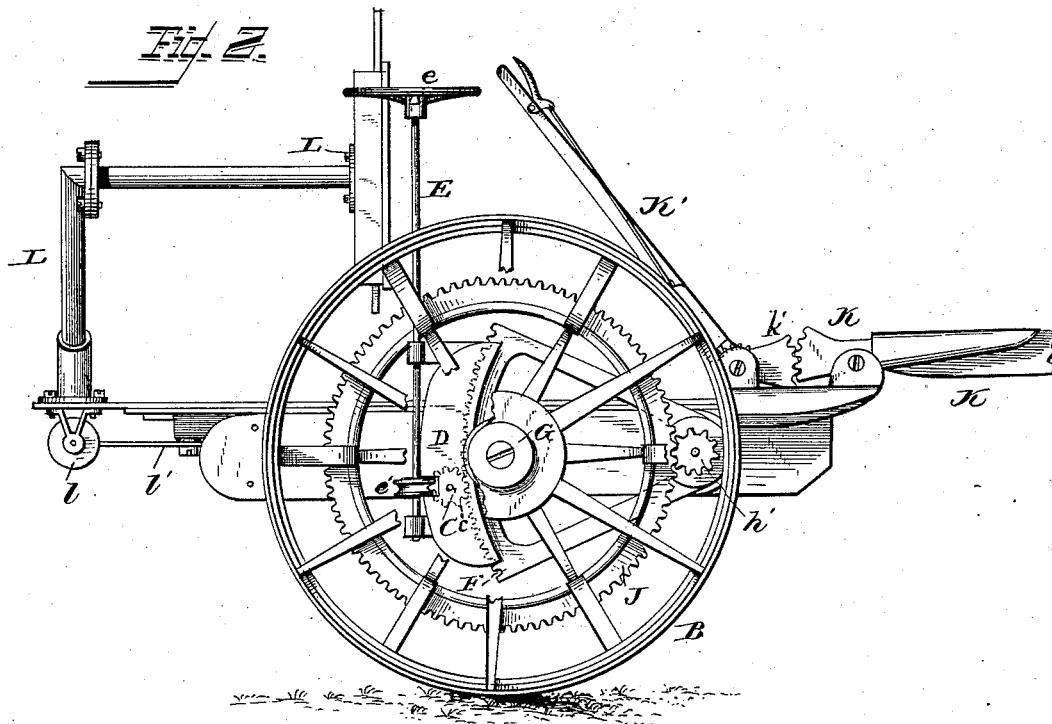
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INVENTOR
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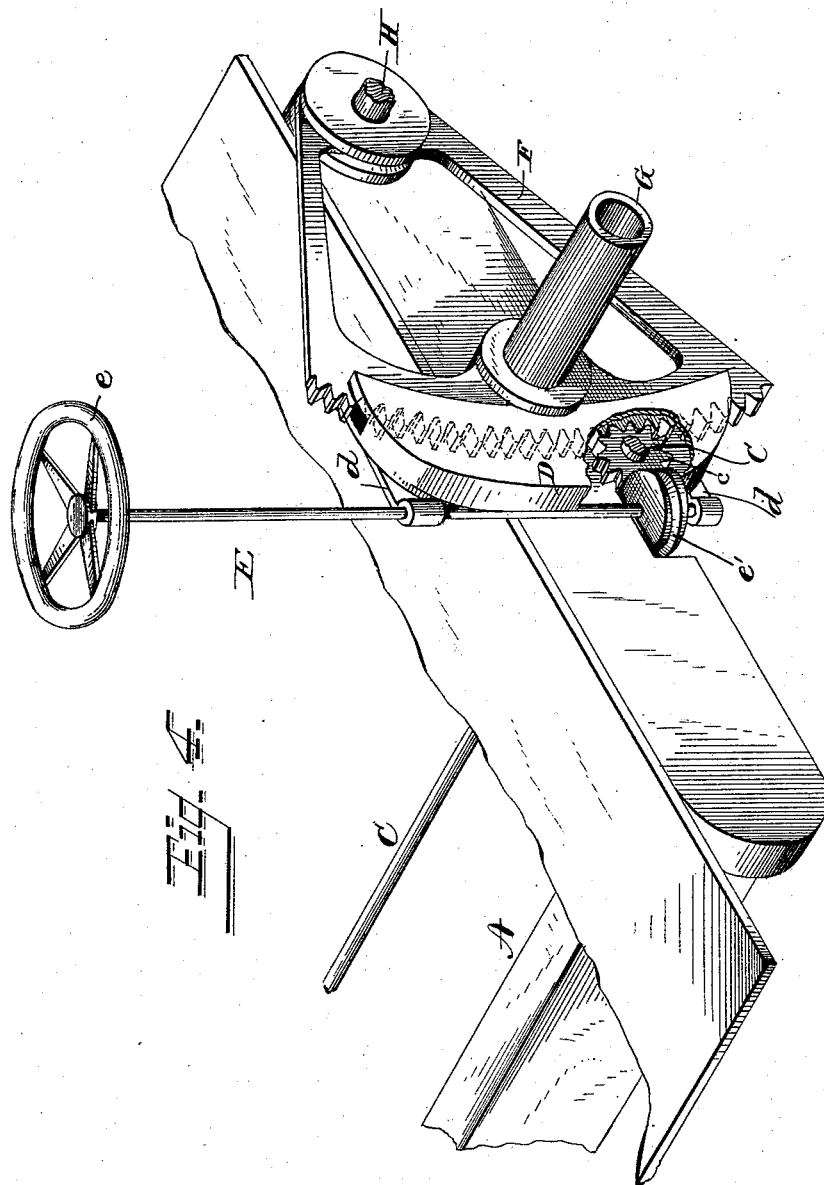
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PLATFORM ADJUSTMENT FOR HARVESTERS.

No. 307,342.

Patented Oct. 28, 1884.



WITNESSES
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UNITED STATES PATENT OFFICE.

SYLVANDER C. SHEPARD, OF AKRON, OHIO, ASSIGNOR OF ONE-HALF TO
LEWIS MILLER, OF SAME PLACE.

PLATFORM-ADJUSTMENT FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 307,342, dated October 28, 1884.

Application filed August 23, 1883. (Model.)

To all whom it may concern:

Be it known that I, SYLVANDER C. SHEPARD, of Akron, in the county of Summit and State of Ohio, have invented a new and useful Improvement in Platform-Adjustments for Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to mechanism for adjusting the frame and cutter-bar of the machine, so as to regulate the height at which the grain shall be severed; and its object is to provide a mechanism for the above purpose which shall operate simultaneously and equally upon both sides of the machine, and the operation of which shall be produced by the manipulation of a hand-shaft so placed as to be conveniently accessible to the operator.

To the above ends my invention consists in the provision of a revolving shaft acting through the medium of gear-pinions upon toothed sectors pivoted to the frame for the purpose of raising and lowering said frame and its attached cutter-bar, the said revolving shaft being actuated by a worm or hand rod or shaft, as hereinafter explained.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is an under side plan view of my improved machine. Fig. 2 is a side elevation of the same, taken from the stubble or drive-wheel side. Fig. 3 is a similar view of the opposite or grain side of the machine. Fig. 4 is a perspective view, on an enlarged scale, of a portion of my improved mechanism in operative position.

In the said drawings, A designates the frame or body of the machine, which may be of any suitable form, and B B' designate the carrying-wheels. Extending entirely across and beneath the frame is a shaft, C, which is journaled at its ends in two curved and-grooved standard pieces or castings, D D', secured to the sides of the frame. At each extremity the shaft C carries a gear-pinion, e, which lies inside the curved castings D D', as indicated in Fig. 4.

E designates a shaft carrying at its upper end a hand-wheel, e, and at its lower end a worm, e', the said shaft being journaled in lugs d upon the casting D. The thread of the worm e' meshes with the teeth of the pinion e, while the latter in turn meshes with the teeth of the rack-sector F. There are two of these rack-sectors, each of which is pivotally secured to the frame at the forward ends of the sides. The spindles or axles G, upon which the carrying-wheels B B' are mounted, are formed upon or secured to the segmental section of each of the sectors F.

H designates a shaft which extends partly across the frame A, the inner end of the said shaft being journaled in a bracket or hanger, a, and its outer end journaled in the side beam of the frame. Upon its inner end the shaft H carries a cylinder, h, having a wave cam-groove, I, formed in its periphery, within which works a pin, i, carrying a friction-roller journaled on a stud formed upon or secured to a reciprocating bar, I', which forms a heel-extension of or is suitably connected to the cutter-bar. The outer extremity of the shaft H, which passes freely through an eye in the apex or center of the contiguous sector F, carries a gear-pinion, h', and the teeth of said pinion mesh with the teeth formed upon the periphery of the ring J, secured to the inner side of the wheel B, concentrically with the same. The rack-sector F upon the opposite side of the machine is secured pivotally to the frame by a nut and bolt, as shown, or in any other suitable manner.

K designates the draft-pole, provided with a toothed segment and pivoted to the frame, as shown. The teeth of the segment K mesh with those of a similar segment, k', attached to an operating-lever, K', which is also pivoted to the frame.

The parts L, l, and l' designate devices pertaining to a binder mechanism, (which is embodied in a separate application,) and have no especial connection with the present invention.

The operation is as follows: The height of the frame and cutter-bar is adjusted by turning the hand-wheel e, the movement of which is communicated through the shaft E and worm

to one of the gear-pinions *c*, and from said pinions to the toothed sectors *F*, whereby the frame *A* is raised or lowered upon the carrying-wheels *B B'*, carrying the cutter-bar with it. It will be seen that the relation between the gear-pinion *h'* upon the shaft *H* and the toothed rim *J* upon the wheel *B* is not affected by the various adjustments of the frame, but remains constant under all circumstances.

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

1. The combination, with the transverse shaft carrying a gear-pinion on each end, and the curved standards or castings forming the support for said shaft and inclosing its gear-pinions, of the hand-shaft journaled upon one of said curved castings, and provided with a worm engaging with the contiguous gear-pinion, substantially as specified.

2. In a harvester, a shaft carrying a cam-wheel and pinion, and the driving-wheel having the toothed ring or gear for actuating said pinion, in combination with toothed sectors pivoted in line with said shaft, and provided, respectively, with the drive and grain wheel axles, the transverse shaft having a pinion on each end for actuating said sectors, and the worm-wheel engaging with one of said pinions for actuating said shaft and sectors, substantially as and for the purpose specified.

30 In testimony whereof I have hereunto set my hand this 14th day of August, A. D. 1883.

S. C. SHEPARD.

Witnesses:

H. S. RHODES,

O. L. SADLER.