

(No Model.)

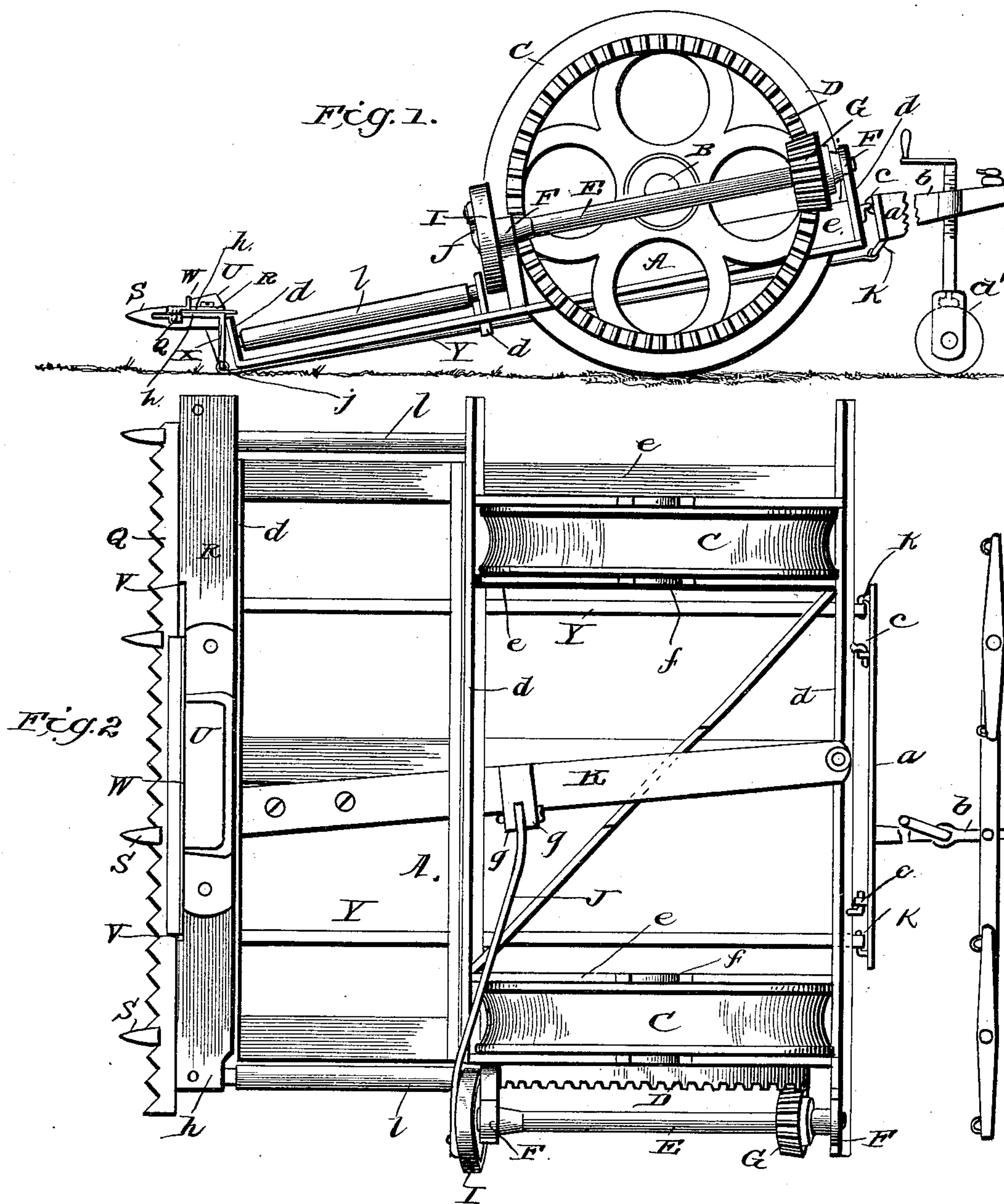
2 Sheets—Sheet 1.

S. J. MYRICK.

GRAIN HEADER.

No. 391,383.

Patented Oct. 16, 1888.



Witnesses,

Joe A. Ryan.
E. G. Figgus

Inventor,

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(No Model.)

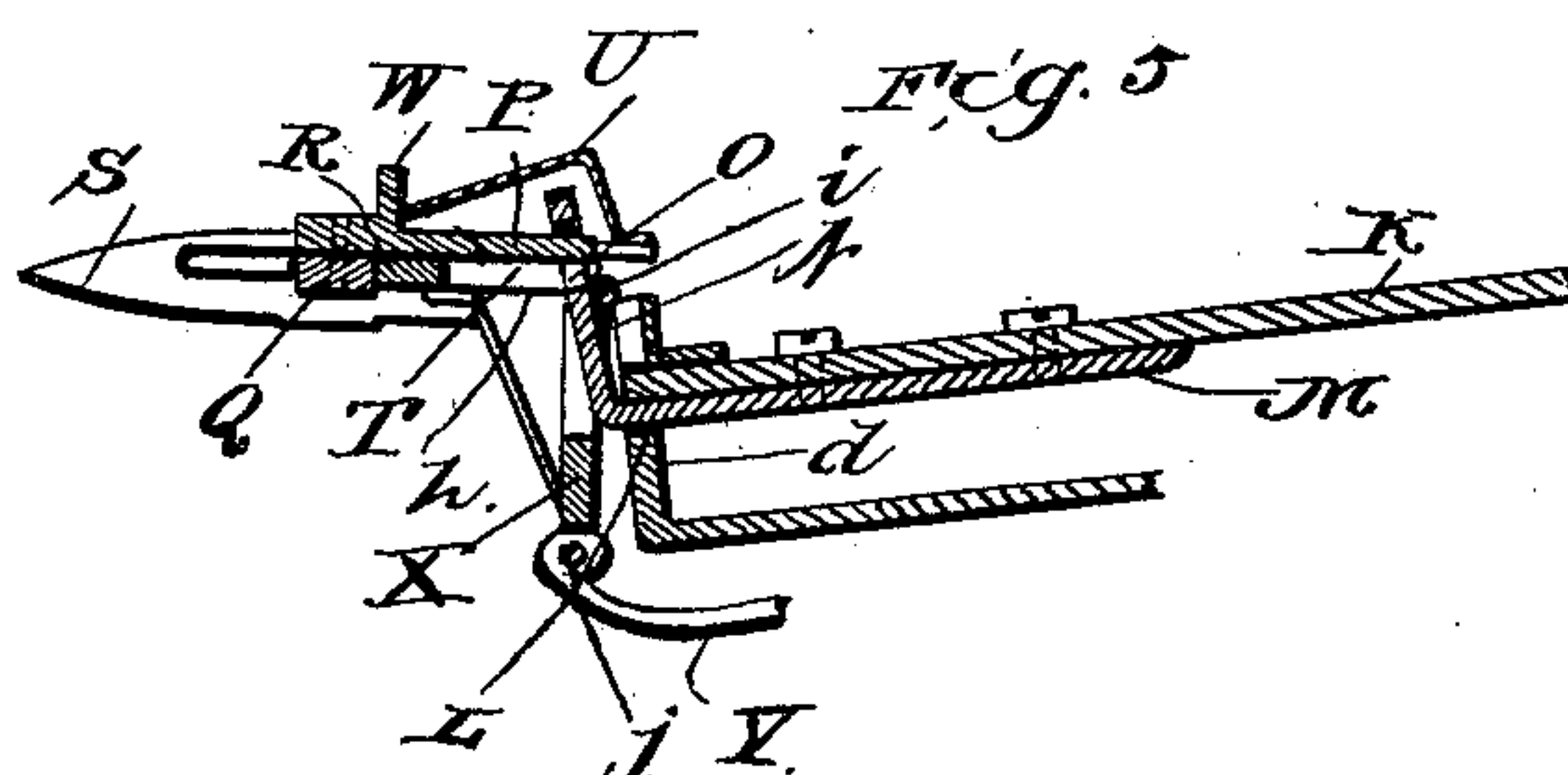
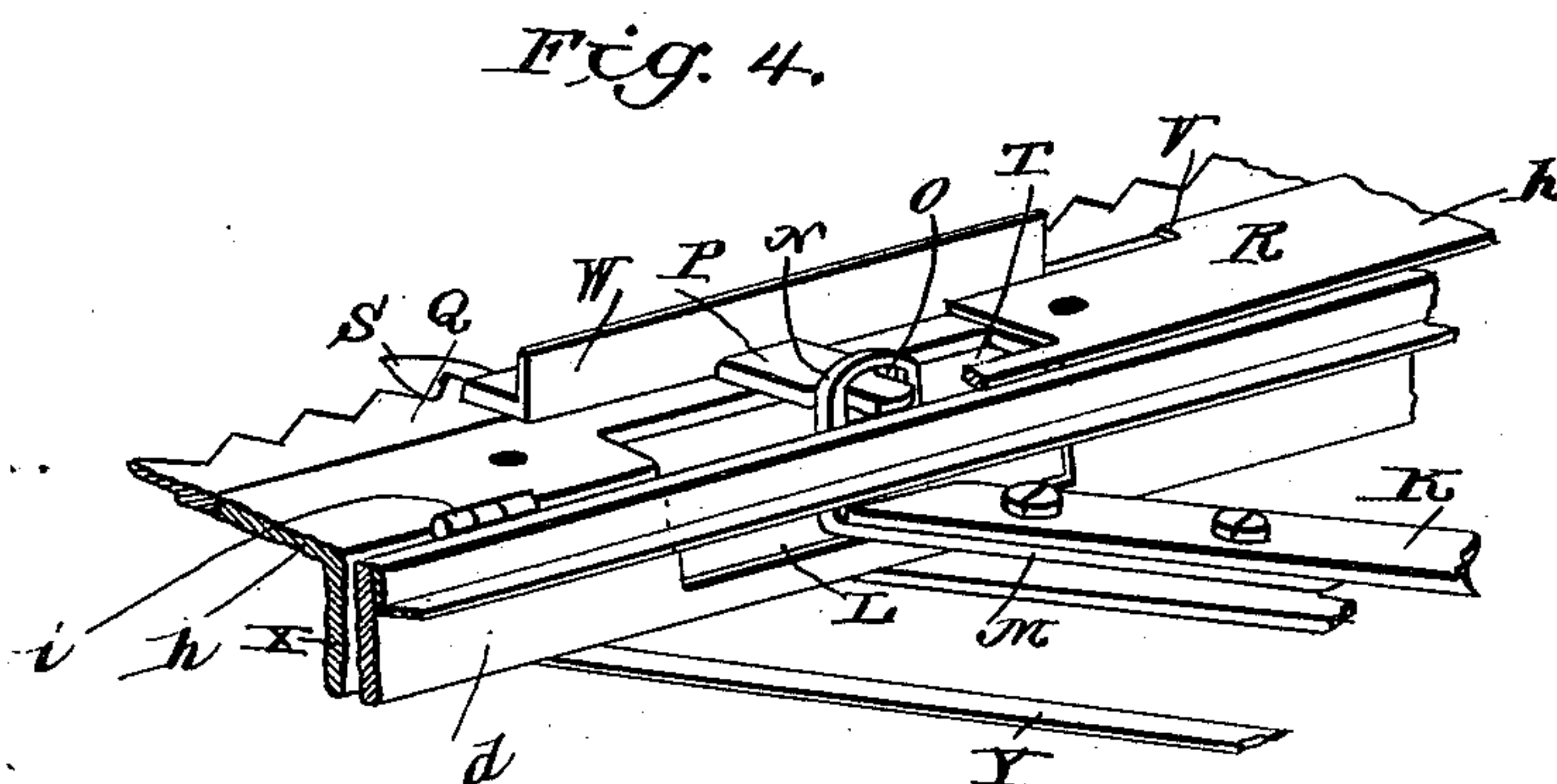
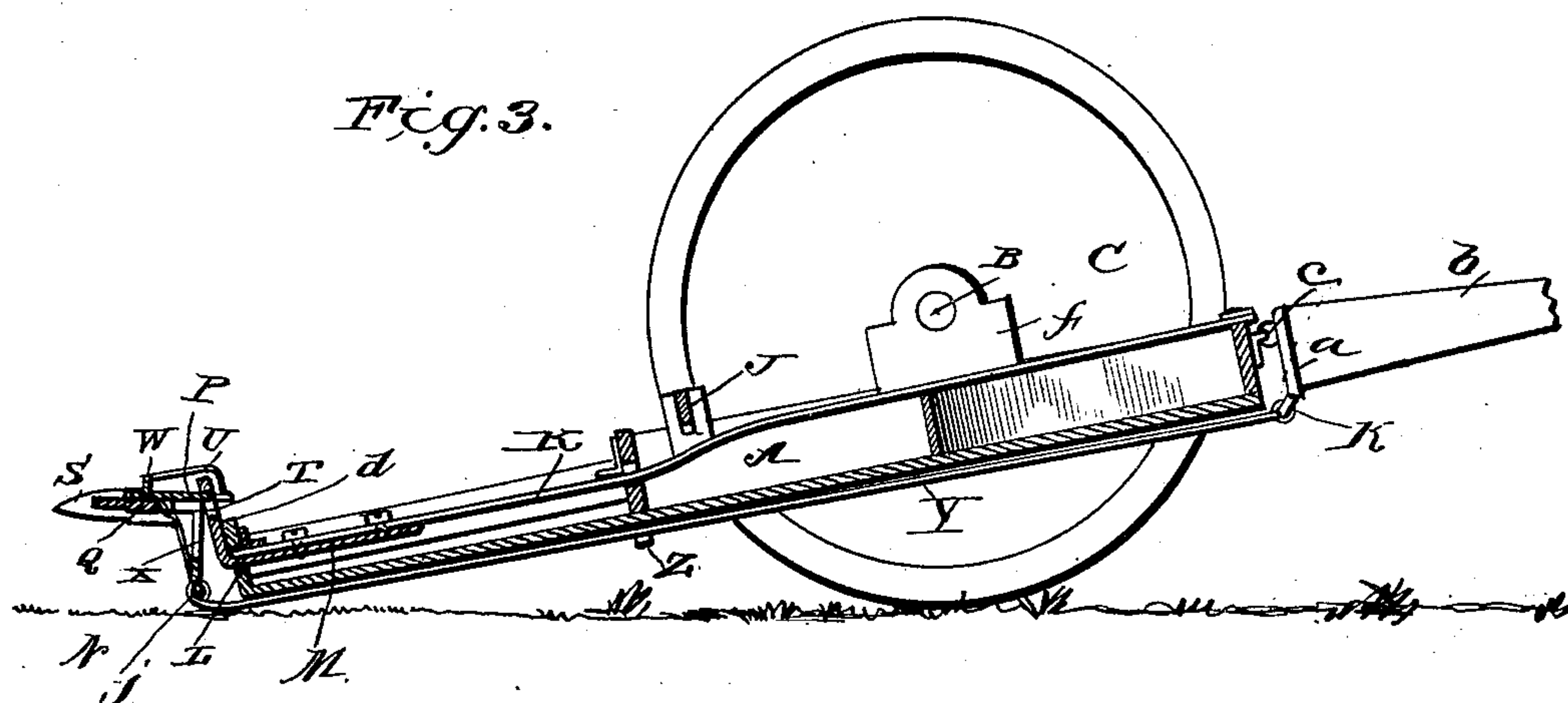
2 Sheets—Sheet 2.

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No. 391,383.

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Witnesses,

Jas. A. Ryan,
 E. L. Siggers.

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UNITED STATES PATENT OFFICE.

SAMUEL J. MYRICK, OF HELIX, OREGON.

GRAIN-HEADER.

SPECIFICATION forming part of Letters Patent No. 391,383, dated October 16, 1888.

Application filed April 16, 1888. Serial No. 270,787. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL J. MYRICK, a citizen of the United States, residing at Helix, in the county of Umatilla and State of Oregon, have invented a new and useful Improvement in Grain-Headers, of which the following is a specification.

My invention relates to improvements in grain-headers; and it consists in certain novel features, hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of my improved machine. Fig. 2 is a plan view of the same. Fig. 3 is a central longitudinal section. Fig. 4 is a detail perspective view of the connection between the reciprocating lever and the cutter-bar. Fig. 5 is a detail section of the same.

Referring to the drawings by letter, A designates the main rectangular frame composed of suitable longitudinal bars, *e*, and transverse bars *d*, securely fastened together and having the axles B journaled in suitable bearing-boxes *f*, secured to the longitudinal side bars of the frame. The specific construction of the main frame, however, is not an essential element of my invention, and a detailed description thereof is considered unnecessary. The driving and supporting wheels C are mounted on the axles B, and one of the axles is extended to one side of the frame A and has a gear-wheel, D, mounted on said extended portion. A longitudinal shaft, E, is journaled in suitable projections, F, on the side of the frame, and is provided at its rear end with a pinion, G, meshing with the gear-wheel D, and at its front end with a crank-disk, I. This crank-disk is connected, through a pitman, J, with a reciprocating lever, K, having its rear end pivoted to the rear cross-bar of the frame and its front end connected to the cutter-bar. The outer end of the pitman J is connected to the crank-disk by a suitable wrist-pin, and its inner end is connected to the lever K by being pivoted between two lugs or offsets, *g*, on the top side of said lever. The front end of this lever plays in a longitudinal slot, L, in the front cross-bar of the frame, and to the said front end of the lever I secure an angle-plate, M, which projects through the slot L and has the front upwardly-projecting end N provided with a ver-

tical slot or perforation, O, which is engaged by a projection, P, on the rear edge of the cutter-bar Q.

R designates the finger-bar, consisting of two parallel plates, *h h*, secured to and projecting from the front cross-bar of the frame, and having the guard-fingers S projecting forward therefrom. The lower plate is composed of angle-iron, as shown, the guard-fingers being secured to the forwardly-projecting horizontal flange of the same. The plates *h h* of the finger-bar are provided with longitudinal slots T, to permit movement of the angle-plate M, and these slots or openings are covered by a plate, U, secured to the top plate to prevent the collection of dirt in the openings, and consequently choking and clogging of the working parts. This plate U is peaked or made to taper downward toward its edges, as most clearly shown in Figs. 2 and 5, thereby providing room for the play of the upper end of the angle-plate M. The front edge of the upper plate *h* is provided with shoulders V, between which plays a rib or flange, W, secured to the upper side of the cutter-bar. This rib or flange, by contacting with the shoulders V, limits the play of the cutter-bar, as will be readily understood.

The finger-bar is not secured rigidly to the front bar of the frame, but is hinged thereto, as shown, by means of hinges *i*. To the lower edge of the depending flange X of the lower plate *h* are secured, by means of hinges *j*, the front ends of the links or connecting-bars Y. These links or connecting-bars pass backward through suitable guides, Z, on the frame A, and have their rear ends hinged at *k* to the lower edge of the cross-head *a* of the tongue *b*. The upper edge of this cross-head is connected by hinges *c* to the rear cross-bar of the frame, as shown. A vertically-adjustable steering-wheel, *d'*, is mounted in the rear end of the tongue.

A transverse carrying-belt of the usual or any preferred construction is arranged in rear of the cutter-bar, and is mounted on the longitudinally-arranged rollers *l*. This belt receives the cut grain and carries it to a wagon drawn along by the side of the header. This carrying-belt is well known in the art, and forms no part of my invention, and for the

sake of clearness in the illustration of the essential features of my invention I have omitted the mechanism for operating the belt.

5 In use the draft animals are hitched to the tongue and driven over the field in the usual manner. As the machine is pushed forward over the grain, the driving-wheels are rotated and the motion of the same is communicated to the reciprocating lever, as will be readily
10 understood, through the medium of the gear-wheels, crank-disk, and pitman. The lever being connected to the cutter-bar, the same will be reciprocated and the grain will be cut.

15 It will be observed that, as the cutter-bar is hinged to the front end of the main frame, it will have a limited play, and will readily accommodate itself to the unevenness of the ground. The angle formed by the cutter-bar and the front end of the main frame can be
20 readily varied by manipulating the tongue.

By adjusting the steering-wheel so as to elevate the rear end of the tongue the lower edge of the cross-head will be drawn rearward and pulling on the links or connecting-bars will
25 depress the cutter-bar. On depressing the rear end of the tongue the cutter-bar will be raised. It will thus be seen that the cutter-bar will be maintained in a horizontal position at all times, so as to cut the grain squarely, and can
30 be readily adjusted to the height of the grain.

The cutting apparatus being arranged close to the carrying-belt, the cut grain will fall directly onto said belt, and will thus be prevented from accumulating on the cutter-bar and clog-
35 ging the same. The connection between the cutter-bar and the pitman will permit the cutter-bar to maintain its horizontal position while the main frame is being raised or lowered.

40 Having thus described my invention, what I

claim, and desire to secure by Letters Patent, is—

1. In a grain-header, the combination of the main frame, the finger-bar hinged at its top edge to the front end of the said frame, the
45 tongue also hinged at its upper edge to the rear end of the same, and the links having their front and rear ends hinged, respectively, to the lower edge of the finger-bar and the corresponding edge of the tongue, as set forth. 50

2. The combination, with the main frame, of the finger-bar hinged at its top edge to the front end of said frame, the tongue also hinged at its upper edge to the rear end of the frame, guides
55 secured to the under side of the main frame, and the links passing through said guides and having their opposite ends hinged, respectively, to the lower edge of the finger-bar and the corresponding edge of the tongue, as set
60 forth.

3. The combination, with the main frame, of the lever pivoted thereon, mechanism for reciprocating said lever, the finger-bar hinged to the front end of the main frame and provided with a longitudinal slot, T, and having
65 shoulders V in its front edge, the cutter-bar supported by the finger-bar and provided with a rearward projection, P, and having a longitudinal rib on its upper side playing between
70 the shoulders V, a plate covering the slot T in the finger-bar, and a perforated angle-plate secured to the reciprocating lever and engaged by the projection P, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses. 75

SAMUEL J. MYRICK.

Witnesses:

T. J. LUCY,

J. B. KENNEDY.