

L. D. BROWN.

Harvester.

No. 30,664.

Patented Nov. 20, 1860.

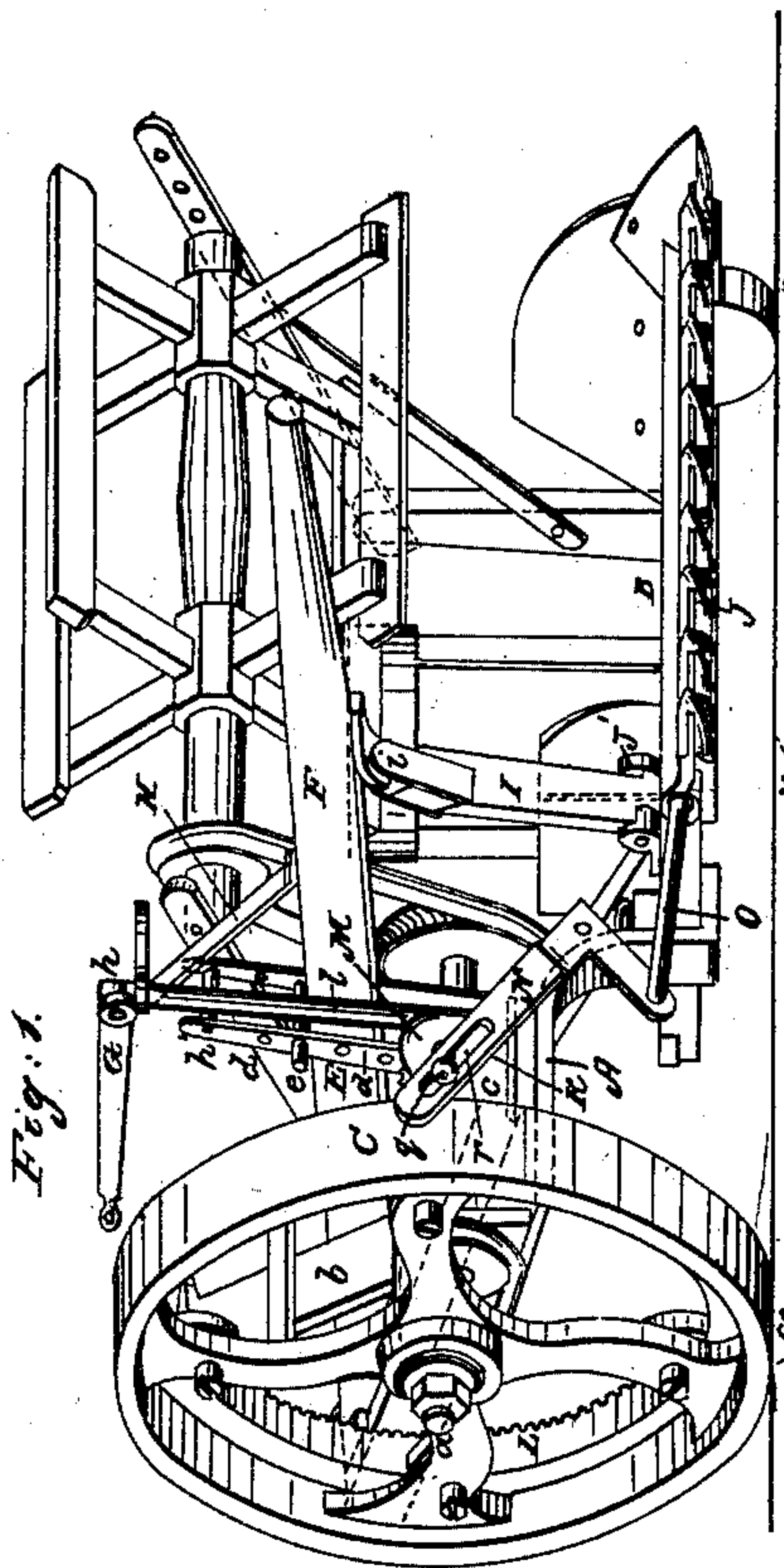


Fig. 1.

Fig. 4.

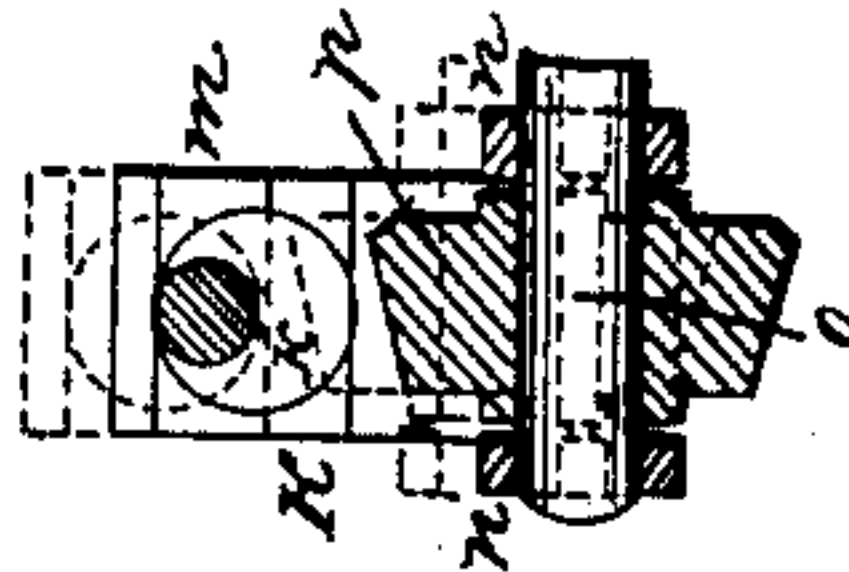
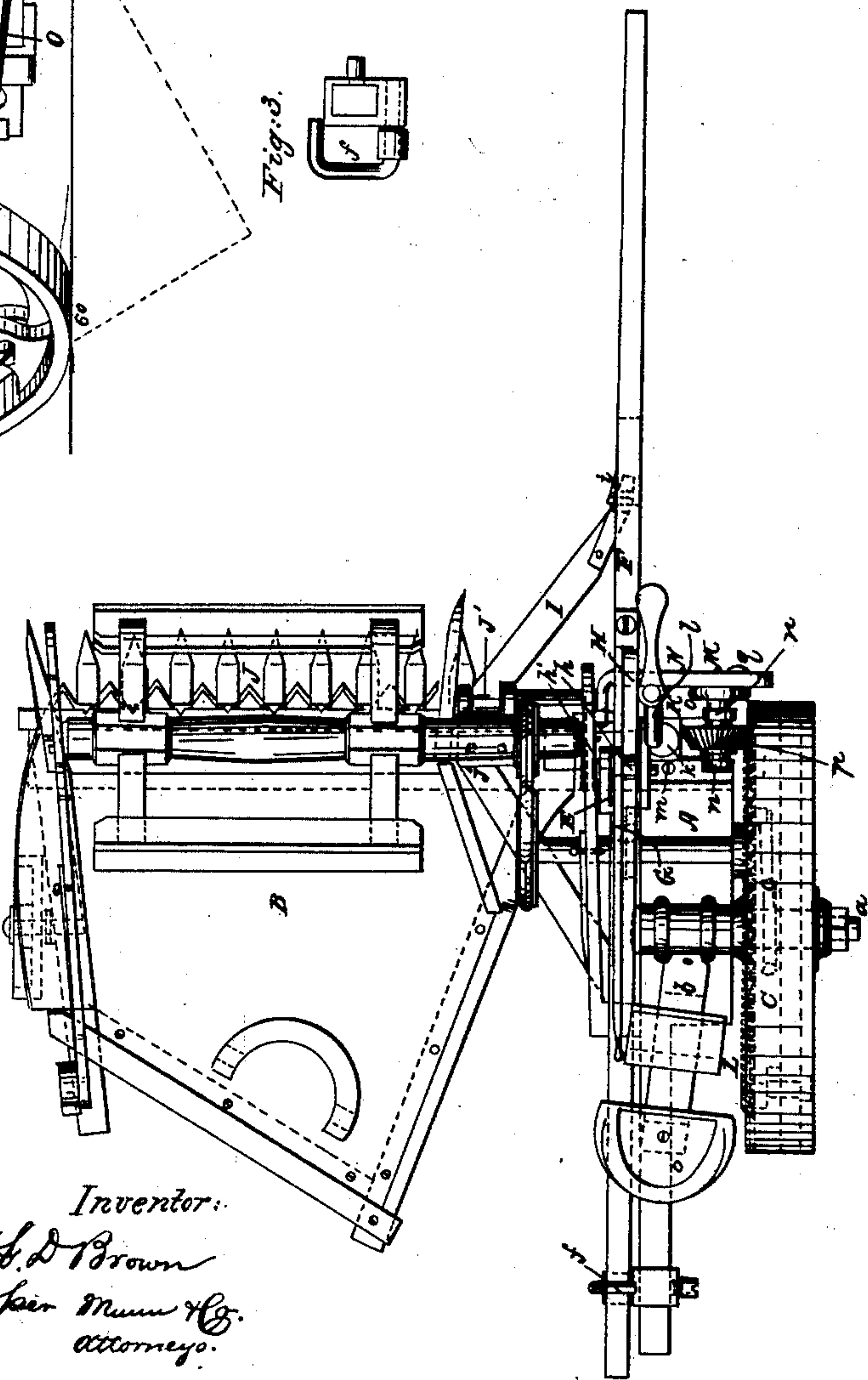


Fig. 3.



Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

L. D. BROWN, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 30,664, dated November 20, 1860.

To all whom it may concern:

Be it known that I, L. D. BROWN, of St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Grain and Grass Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a perspective view of my invention; Fig. 2, a plan or top view of the same; Figs. 3 and 4, detached views of portions of the same.

Similar letters of reference indicate corresponding parts in the several figures.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the main frame of the machine, and B the platform, attached to the frame A in any proper way. C is the driving or ground wheel, the axle *a* of which is permanently attached to the main frame, the wheel C turning loosely on its axle. D is the driver's seat, which is secured to the upper end of an inclined bar, *b*, on the main frame.

To the front end of the main frame A there is attached by a joint, *c*, a slotted guide-bar, E, in which the draft-pole F is fitted. The guide-bar E is perforated, as shown at *d* in Fig. 1, and a pin, *e*, passes through either of said perforations above the draft-pole, for the reason hereinafter stated. The back part of the draft-pole F is fitted in a loop or guide, *f*, attached to the back part of the main frame A. (See Figs. 2 and 3.)

In the upper part of the guide-bar E a bent lever, G, is fitted, and to the angle of this lever there is attached by a pivot, *h*, a bar, H, which is secured to the draft-pole F. The lever G is fitted on a rod, *h'*, in the upper part of the guide-bar, and is allowed to work freely thereon.

To the under side of the draft-pole F there is attached by a joint, *i*, the upper end of a bar, I, and the lower end of this bar is attached by a joint, *j*, to the front part of the platform B.

From the above description it will be seen that the height of the sickle J, which is at the front part of the platform B, may be adjusted higher or lower, according to the height it is desired to have it cut, by placing the pin *e* higher or lower in the guide-bar E, and at

any time when it is necessary to elevate the sickle to pass over an obstruction which may lie in its path the driver from his seat D simply elevates the back end of lever G, and the result is attained. When the sickle J is at work and cutting the grass or grain at the proper height, the back end of lever G is depressed to its fullest extent, so as to throw the connection *h* of the bar H back of the rod *h'* in the guide-bar E, and on which rod the lever G is fitted. This arrangement or disposition of parts retains under the draft or pull the pole F in proper position, causing the pole to bear against the pin *e* in the guide-bar E.

On the front part of the main frame A there is placed a slide, K. This slide works transversely on the main frame, and is operated by an eccentric, *k*, which is at the lower end of a shaft, *l*, and is fitted in a yoke or recess, *m*, in the slide K, as shown clearly in Fig. 4. To the outer end of the slide K there are attached two bearings, *n n*, in which a small shaft, *o*, is fitted, and on which a bevel-pinion, *p*, is fitted, said pinion, when the sickle J is in operation, gearing into a toothed rim, L, attached concentrically to the wheel C. The front end of the shaft *o* has a crank-pulley, M, attached, the pin *q* of which is fitted in a slot, *r*, of a bent lever, N, the fulcrum *s* of which is at *t*. To the lower end of the lever N there is attached a pitman, O, said pitman being connected to the sickle J, which may be of the usual reciprocating kind, working in fingers *a*. It will be seen, therefore, that when the pinion *p* is in gear with the rim L the crank-pulley M will vibrate the lever N, and the latter will, through the medium of the pitman O, give a reciprocating movement to the sickle J. It will also be seen that the driver at any time, by turning shaft *l*, may throw the pinion *p* in or out of gear with the rim L.

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

The arrangement of the adjustable guide-loop *f* and diagonally-hinged bar I with the pole F, frame A, platform B, slotted guide-bar E, lever G, and bar H, as and for the purposes herein shown and described.

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Witnesses:

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