2 Sheets—Sheet 1.

H. A. ADAMS.

HARVESTER-REEL.

No. 191,631. Patented June 5, 1877.

Fig. 1.

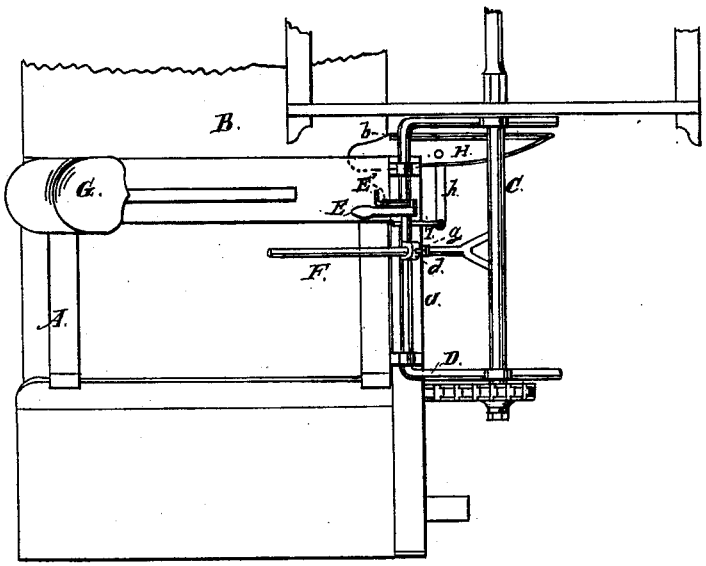
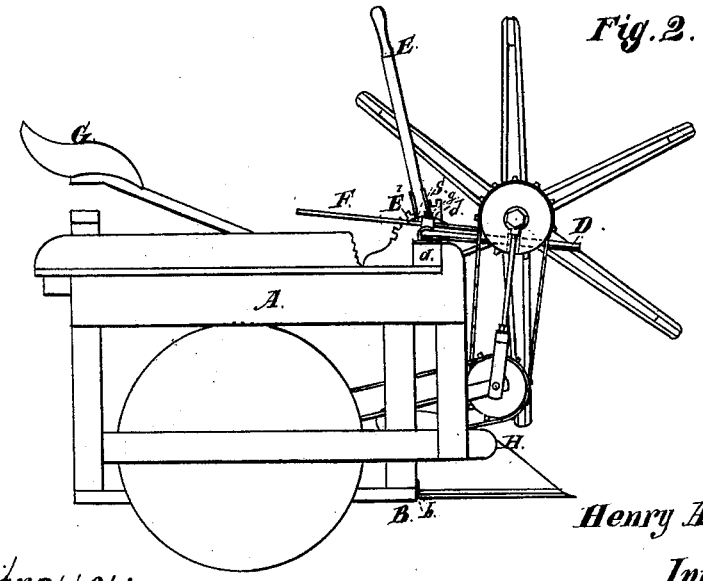


Fig. 2.



Witnesses:

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L. M. Harris

Henry A. Adams,

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By Coburn & Thacher

Attys.

2 Sheets—Sheet 2.

H. A. ADAMS.

HARVESTER-REEL.

No. 191,631. Patented June 5, 1877.

Fig. 3.

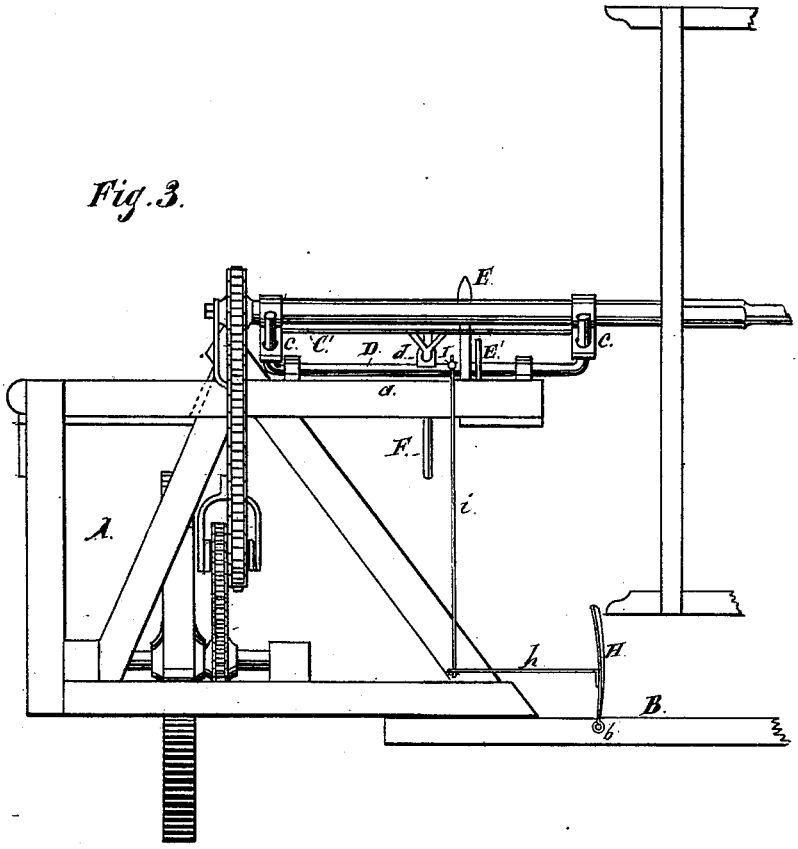
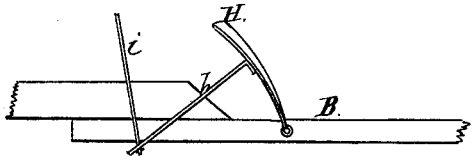


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY A. ADAMS, OF SANDWICH, ILLINOIS.

IMPROVEMENT IN HARVESTER-REELS.

Specification forming part of Letters Patent No. **191,631**, dated June 5, 1877; application filed December 21, 1875.

To all whom it may concern:

Be it known that I, HENRY A. ADAMS, of Sandwich, in the county of De Kalb and State of Illinois, have invented a new and useful Improvement in Harvester-Reels, which is fully described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of so much of a harvesting-machine as is necessary to illustrate my invention; Fig. 2, an end elevation of a harvester; Fig. 3, a front elevation of the same with the outer end of the platform and reel broken away; and Fig. 4, a detached view, showing the position of the vibrating divider when the reel is lowered.

My invention consists in the peculiar devices for supporting and adjusting the reel.

The invention is an improvement upon that set forth in my application for Letters Patent filed December 3, 1875, and is to be applied to "overhung" reels; and it further consists in pivoting the inner divider to the platform, and connecting it to the vibrating reel-frame, so that the raising and lowering of the reel will automatically effect a corresponding change in the position of the divider.

In the drawings, A represents the main frame of a harvester, and B the grain-platform. The reel-shaft C is supported in bearings *c* fitted loosely on the two end arms of a vibrating frame, D, which in turn is supported in bearings on the piece *a* of the main frame. A hand-lever, E, is rigidly attached to the side of the reel-frame, by means of which this frame may be vibrated in a vertical direction, and held in any desired position by a stop in the lever engaging with a notched segment, E′, on the main frame. The bearings *c* of the reel-shaft are connected by a stiff bar or rod, *c′*, to which is attached a sliding rod or bar, F, which extends backward through a guide-block, *d*, on the side pieces of the vibrating frame, and is brought within easy reach of the driver on his seat G, the rear end of the sliding bar being bent, or provided with a suitable handle, for convenience of grasp.

A bow-spring, S, is placed above the bar F, and held in position by a small set-screw, *g*, which enters a hole in the block *d*, on each side of which one end of the spring rests upon the bar F, and thus holds the latter from sliding unless force is applied by the driver. The bearing-force of the spring may be adjusted by means of the set-screw regulating its tension. If desired, the reel-shaft may be fixed in any position by forcing the set-screw down until it acts as a binding-screw upon the sliding rod.

The inner divider H is attached to the platform B by a pivotal connection, *b*, and is furnished with a rigid arm, *h*. Another arm, I, is rigidly attached to the side piece of the vibrating frame D, which rocks as the lever E is moved back and forth. A rod, *i*, is linked to both of the arms *h* and I. By means of this connection between the pivoted divider and the vibrating reel-frame, when the latter is raised, thereby elevating the reel, the former will be thrown up, as seen in Fig. 4, and when the frame is lowered the divider will be turned down, as shown in Fig. 4, and the reel-arms and divider are so constructed and arranged relatively to each other that the adjustment of the divider will conform very nearly to that of the reel, always preserving about the same distance between the divider and the inner ends of the reel-arms. This is quite an important result in changing the reel to suit grain of different heights, for it prevents tangling and choking between the reel-arms and divider.

From the description given above, it will be seen that, without leaving his seat, the driver can adjust the reel both vertically and horizontally, thus at all times having it under his complete control. I do not wish to limit myself to the specific device herein described for adjusting the reel on the vibrating frame, for it is evident that levers and other like well-known devices may be substituted therefor without departing from the principle of my invention.

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

1. The combination, substantially as described, of the vibrating frame, reel-shaft, movable bearings, and sliding bar, for the purposes set forth.

2. The combination, substantially as described, of the sliding bar, guide *d*, and spring S, for the purpose set forth.

3. The inner grain-guard or divider H, pivoted to the supporting-frame so as to be adjustable vertically, substantially as and for the purpose set forth.

4. The combination of a reel, adjustable vertically, and the pivoted divider H, substantially as and for the purpose described.

5. The combination, substantially as described, of the divider H, provided with an arm, *h*, connecting-rod *i*, and vibrating frame D, provided with an arm, I, for the purposes set forth.

HENRY A. ADAMS.

Witnesses:
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J. P. ADAMS.