

H. L. STROCK.
HARVESTERS.

No. 180,805.

Patented Aug. 8, 1876.

Fig. 1.

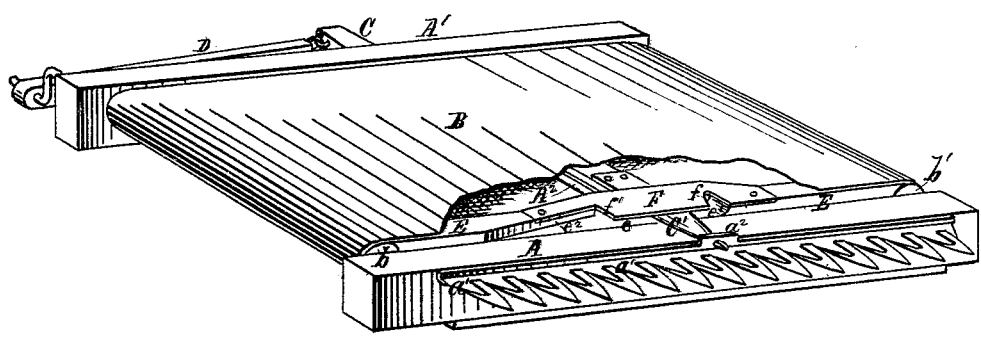
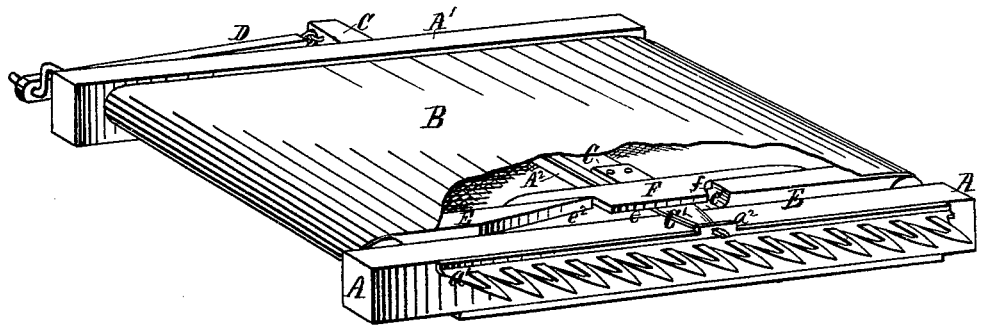


Fig. 2.



Witnesses:
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HENRY L. STROCK, OF POLO, ILLINOIS.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. **180,805**, dated August 8, 1876; application filed December 16, 1875.

To all whom it may concern:

Be it known that I, HENRY L. STROCK, of Polo, county of Ogle, State of Illinois, have invented certain new and useful Improvements in Harvesters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a harvester-platform and cutting apparatus, or as much thereof as is necessary to show my improvements. Fig. 2 is a similar view, showing a slight modification in the construction of the sickle-lever bridge.

Similar letters of reference denote corresponding parts in both figures.

My invention relates to that class of harvesters employing a "sway-bar" or sickle-lever passing through the platform-apron, and having its forward end connected with the sickle-bar at or midway of its length, and its rear end connected by a pitman with the driving-crank; and consists in a novel construction of the forward platform or apron bar, and of the bridge covering the slot or recess in said bar, through which the forward arm of the vibrating sickle-lever passes, for facilitating the escape of short straws or other matter, such as would tend to clog the sickle-lever or interfere with the action of the platform-apron; and, in connection with the above, it further consists in a novel construction of the sickle-lever point or iron, whereby it is made to assist in the action of repelling and removing clogging matter, as hereinafter set forth.

In the accompanying drawings, A A¹ represent the front and rear platform-bars, the bar A, in the present instance, representing also the bar to which the fingers *a* are attached, and B is the endless platform-apron or carrier, passing around rollers *b b'*, mounted in suitable bearings near the ends of the bars A A¹, the above parts being constructed in any usual or preferred manner. C represents the sickle-lever, passing through the apron, and pivoted at or midway of its length to a central frame-bar, A², the rear end of this lever passing through a slot in the bar A¹, and is connected by a pitman, D, with the actuating crank-shaft. The forward end of the lever C has an iron, C', rig-

idly connected with it, which crosses the upper face of the bar A, resting snugly thereon, and is connected at its forward end to a point with the sickle-bar *a*¹ by passing through an eye or into a socket formed in a lug or ear, *a*², at the back of said bar, and about midway of its length, as shown; or the connection with said bar may be made in any usual manner. The iron or sickle-lever point C', from its point of attachment to the lever C, is made to taper forward to the bar *a*¹, and has its upper face made convex, or with a double incline or bevel, for bringing its sides, resting on the bar A, or in close proximity therewith, each to a cutting-edge, the point, by this form and construction, being adapted to cut under any obstructing matter with which it may come in contact, and to keep the surface of the bar A, over which it moves, free therefrom, while the forwardly tapering and beveled sides, as the lever is vibrated, serve to give a forward thrust to such obstructing matter, thereby tending to prevent its working back to the apron. To the rear face of the bar A is secured a bar, E, the upper edge of which is raised above the bar A, (or it may be in the form of a rabbet in said bar,) to the plane of the upper faces of the rollers *b b'*, the function of said bar being to prevent sagging of the forward edge of the platform-apron, which overhangs and rests upon it, and also to serve as a stop or guard for preventing blades of grain, straw, grass, &c., from getting inside the apron and upon the lower returning portion thereof, where, by its accumulation, it might seriously interfere with or entirely stop the action of said apron. The bar E, where the sickle lever or point C' crosses it, is recessed or cut away to the plane of the bar A to accommodate said lever, and the recess *e*, thus formed, terminates at its outer end in an inclined plane at *e*¹, and at its inner end the forward face of the bar E is cut away or recessed beyond what is required to accommodate the motion of the sickle-lever in the form of an inclined plane, *e*², extending from the rear to the forward face of the bar, as shown. The recess *e* is bridged above the sickle-lever by a strip or plate of wood or metal, F, let into or otherwise so connected at its ends with the bar E as to have its upper face flush therewith, thus making the guard

to the apron continuous, and protecting said apron from the lever. The plate F is notched or cut away on its forward edge at f and f' , the former notch f being over the incline e^1 , and serving to permit the escape of such clogging matter as may be forced up said incline by the action of the sickle-lever. At f' the plate is cut away at the inner end of the recess e , and obstructing matter passed out at the notch f is carried forward over the plate F by the action of the apron, and drops at the notch f' , in front of the incline e^2 , where, by the action of the sickle-lever and apron, it is carried inward and away from the recess e , in front of the bar E, together with such obstructing matter as may be thrown out by the opposite side of the lever, until finally it escapes from the machine at the inner end of the platform-bar A.

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

1. The recessed apron guard or bar, through which the forward end of the sickle-lever passes, provided with the inclines $e^1 e^2$, in combination with the notched bridge or plate F, constructed and operating substantially as described.

2. The combination, with the sickle-lever, of the tapering double-beveled or convex cutting-point C' , connecting said lever with the sickle-bar, and operating substantially as and for the purpose specified.

3. The combination, with the sickle-lever C , of the recessed guard-bar E, provided with the inclines $e^1 e^2$, the notched bridge F, and the tapering cutting-point C' , all arranged and operating substantially as described.

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Witnesses:

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