

UNITED STATES PATENT OFFICE.

JASPER WHITE, OF PENN, MICHIGAN.

HARVESTER.

SPECIFICATION forming part of Letters Patent No. 328,266, dated October 13, 1885.

Application filed June 21, 1884. Serial No. 135,666. (No model.)

To all whom it may concern:

Be it known that I, JASPER WHITE, of Penn, in the county of Cass and State of Michigan, have invented certain new and useful Improvements in Harvesters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in harvesters, the object of the same being to provide in a machine of this character devices whereby the fall of the grain, when it is cut, will be directed upon the harvester-platform.

A further object is to provide means whereby the grain-guide may be simultaneously raised and lowered with the harvester-reel.

A further object is to provide means whereby the above results may be accomplished by locating the operating devices in the rear of the platform instead of the forward part thereof, as has heretofore been customary.

A further object is to provide a device of this character which may be readily constructed and applied to reapers and harvesters of various sizes and construction.

A further object is to provide a device of this character which shall be simple and economical in construction and durable and efficient in use; and with these ends in view my invention consists in certain details of construction and combinations of parts, as will be more fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improvement applied to a reaper. Fig. 2 is a transverse sectional view of the grain-guide, and Fig. 3 is a detached view of the guide-elevating bar.

A represents a harvester-frame, to one side of which is attached a drive-wheel. (Not shown.)

B is a platform, to the grain side of which is suitably secured the caster-wheel C. To the forward part of the platform is suitably secured the cutter-bar D, which is constructed and operated in the usual manner.

The grain-divider E is of ordinary construction, and is provided at its end with the shoe or horn F, to which is hinged or pivotally secured the grain-guide G, which is preferably made in the shape shown, and is provided on its under side with the groove or guideway H.

I is a reel, the shaft of which is journaled in suitable bearings in the arms J and K, which said arms are secured to the frame by means of the shaft L, which is loosely mounted in the standards M and N. The arm K is of any convenient length and terminates in a handle, K', thus forming an operating-lever, by means of which the reel is adjusted in any desired elevated or lowered position.

The standard N is provided with a rack-bar, O, adapted to receive a tooth secured to the lever K, by means of which the reel is held in a fixed adjustment.

The arm J is provided with the perforation P, adapted to receive one of the bent ends of the rod Q, which is suitably secured therein. The opposite end of the rod Q is bent and passes through a perforation, R, in the bell-crank lever S. The said lever is pivotally secured to the platform T by means of the bolt U. The rear end of the lever S is also provided with a perforation in which is secured the connecting-rod W, the rear end of which is adjustably secured in one of a series of perforations, Y, formed along the central portion of the lever. The lever Y' is pivotally secured at its upper end to the brace T.

The lever *a* is pivotally mounted at the rear of the platform B by means of the pivot *b*, which passes through the said lever at about its center. The outer end of the lever *a*, or the end farthest from the grain, is pivotally secured to the lower end of the lever Y'. The inner end of the lever *a*, or the end nearest the grain, is adapted to receive the rear end of the connecting-rod *c*, the forward end of which is loosely secured to the upright oblique lever *d*, which is pivoted to the harvester-frame, as shown. The upper portion of the lever *d* is conveniently bifurcated, as shown, forming the arms *e*, between which is secured the anti-friction roller *f*, adapted to run in the groove or guide H and support the grain-guide G in any desired adjustment.

From this construction it will be readily seen that when the reel I is raised or lowered a similar action is imparted to the grain-guide G by means of the several parts shown, thus preventing the tangling of the cut grain, and causing the same to be laid upon the platform in proper position for a sheaf.

It is evident that slight changes in the con-

struction and relative arrangement of the several parts might be resorted to without departing from the spirit of my invention, and hence I would have it understood that I do not confine myself to the exact construction shown and described, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. In a harvester, the combination, with a reel and devices for elevating and lowering the same, of a grain-guide having its forward end pivoted to the divider and intermediate rods and levers, substantially as described, connecting the reel and grain-guide, whereby the guide is raised and lowered simultaneously with the reel, substantially as set forth.

2. In a harvester, the combination, with a reel and devices for elevating and lowering the same, of a grain-guide having its forward end pivoted to the divider, a lever provided with a roller engaging said grain-guide, and intermediate rods and levers connecting the first-named lever to the reel, whereby the guide is raised and lowered simultaneously with the reel, substantially as set forth.

3. In a harvester, the combination, with a reel and devices for raising and lowering the same, of a grain-guide pivoted to the divider, a lever pivoted to the outside of the platform and engaging the grain-guide, and intermediate devices whereby the lever is caused to elevate and lower the guide simultaneously with the reel, substantially as set forth.

4. In a harvester, the combination of the

standards, the rock-shaft mounted in said standards and provided with arms, the reel-shaft journaled in said arms, a lever for elevating and lowering the reel, a grain-guide having its forward end pivoted to a divider, and intermediate rods and levers connecting said grain-guide to the reel, whereby the guide is raised and lowered simultaneously with the reel, substantially as set forth.

5. In a harvester, the combination, with a reel and devices for elevating and lowering the same, of a grain-guide pivoted at its forward end to the divider, an oblique lever pivoted to the outside of the platform and engaging said guide, a longitudinal lever centrally pivoted to the rear of the platform, and intermediate devices connecting the reel and levers, whereby the guide is raised and lowered simultaneously with the reel, substantially as set forth.

6. In a harvester, the combination, with a reel and devices for elevating and lowering the same, of a grain-guide pivoted to the divider, an oblique lever pivoted to the frame and engaging said guide, a longitudinal lever and a vertical lever pivoted to the harvester-frame, and intermediate devices connecting the reel and levers, whereby the guide is raised and lowered simultaneously with the reel, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JASPER WHITE.

Witnesses:

C. E. CARRIER,
REASON S. PEMBERTON.