

(No Model.)

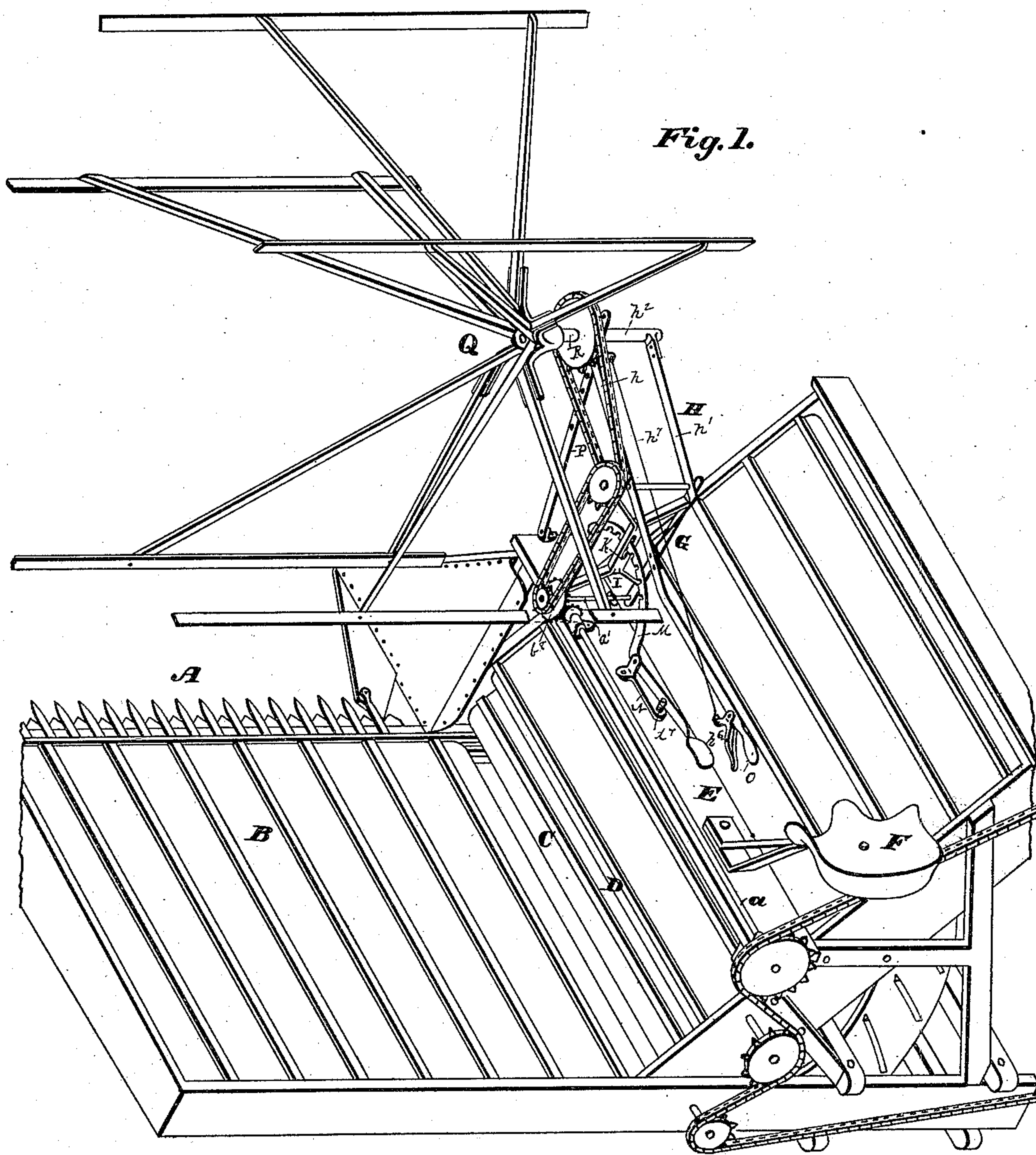
2 Sheets—Sheet 1.

A. O. SLENTZ.

REEL SUPPORT FOR HARVESTERS.

No. 365,642.

Patented June 28, 1887.



WITNESSES:

Harry Freese
Chas. V. Miller

Albert O. Slentz INVENTOR

BY

W. H. Miller

ATTORNEY

2 Sheets—Sheet 2.

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Fig. 3.

WITNESSES:

Harry Freese
Chas. R. Miller

Albertine O. Slentz INVENTOR

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UNITED STATES PATENT OFFICE.

ALBURTICE O. SLENTZ, OF CANTON, OHIO, ASSIGNOR TO THE PEERLESS REAPER COMPANY, OF SAME PLACE.

REEL-SUPPORT FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 365,642, dated June 28, 1887.

Application filed July 3, 1886. Serial No. 207,126. (No model.)

To all whom it may concern:

Be it known that I, ALBURTICE O. SLENTZ, a citizen of the United States, and a resident of Canton, county of Stark, State of Ohio, have
5 invented a new and useful Improvement in Reel-Supports for Harvesters, of which the following is full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

10 My invention relates to improvements in the means of connecting a grain-harvester reel to a harvester; and it consists in providing a double hinged or jointed support, hereinafter explained.

15 My invention also relates to and consists in providing means for a speedy adjustment of the reel to the condition of the crop to be harvested.

20 A further object of my invention relates to and consists in simplifying the construction of parts and reducing the weight and initial cost.

25 My invention also relates to and consists in the detail and combination of parts, as described, and set forth in the claims.

Figure 1 is an isometrical view of my invention as applied to a grain-binding harvester. Fig. 2 is a similar view embracing the parts of a reel-support, detached and enlarged for
30 the purpose of elucidation. Fig. 3 is a sectional view of the locking mechanism, partly transverse and partly longitudinal. Fig. 4 is a view embracing the parts employed in locking the upper frame to supporting-rod.

35 Similar letters of reference indicate corresponding parts in all of the figures of the drawings.

40 As my improvement is applicable to any of the well-known and approved forms of grain-binding harvesters, I will describe my improvements referring only to the harvester parts as conjunctional.

45 A represents a cutting apparatus; B, a platform-canvas; C and D, the elevating-canvas; E, a foot-board supported by the frame of the harvester, and to which the reel-support has a pivotal connection. Said foot-board is also a common support for the driver's seat F and shaft *a*, by which the reel may be rotated.

50 The reel-support is composed of two frames, G and H, that have a hinged connection one

with the other and with the foot-board E. The frame H may be oscillated about the hinged connection of frame G with the foot-board. Said hinged or pivotal connection in this case
55 may be made about the foot-shaft *a'*, said shaft resting in bearings *a''* and secured to the board E by staples *a'''*. Frame G is composed of the hereinafter mentioned and described members. Side bars I may be made of light
60 metal—preferably of steel—of about three-eighths by two inches, cut into desired lengths, and in form having a middle vertical section, *a''* *a''*, oblique sections *a'''* *a'''*, and vertical end sections, *a''''* *a''''*, said end sections having perforations *a''''*, through which the shafts or pins *a'*
65 and *b''* may pass, forming the pivotal connection with the foot-board E at the bottom and with the frame H at the top. The bars I I are also provided with perforations *b''*, which
70 coincide with similar perforations, *b'''* and *b'''*, in center block, K, said block having longitudinal ribs *b''*, forming a longitudinal groove, *b'''*, so formed as to embrace the middle section of the bars I I, and to which they may be secured by
75 bolts or rivets through the perforations *b'''* and *b'''*, as hereinbefore mentioned, forming a rigid connection of the bars I I with the block K. Stay-bars L may be of metal, same as used in
80 bars I I, or a little lighter, having perforations *b''* through the ends corresponding with the perforations in the ends of the frame-bars I I, through which the shafts or pins *a'* and *b''*
85 may pass, said side bars L resting against frame-bars I I, and held in said position by the hub of sprocket-wheel *b''* and pin *b'''* on shaft *b''*, and by the hub of bevel-wheel *b''*
90 and a pin similar to *b'''* (not shown) in shaft *a'*. Block K is provided with a through longitudinal mortise, *d*, having in said mortise *d* a locking-rib or raised section, *d''*. (See Fig. 3.)
95 Through said mortise *d* is passed the curved end of locking-lever M, said lever having notches *d'''* cut into its lower edge, which may have a locking engagement with the rib *d''*.
100 The notched and curved end of lever M is so curved and adapted that when at rest on or about the rib *d''* it will conform to a circle described by said rib. When frame G is rotated about shaft *a'* or its hinged connection with the foot-board E, the notches *d'''* in said lever M may be cut on lines radiating from the hinged

connection or shaft a' and adapted for a close engagement with the rib d^2 , and by which the parts will be firmly held in position. The fulcrum of lever M is located in a lever-supporting piece, N, provided with perforated lugs d^4 , to which the lever M may be secured by a through-bolt, d^5 . The piece N may be secured to the foot-board by bolts or screws. Said piece is also provided with an arm extending back under the lever M and formed into a seat, d^6 , for spring d^7 , by which the lever M is held in a locking engagement with the frame G. The rear end of said lever is extended back to a point within easy reach of the driver's foot, and may be operated by the foot, as shown; or, if preferred, this frame may be made of cast metal, malleable iron, or steel, with all the hereinbefore described and lettered parts integral.

Frame H is oblong, as shown in Fig. 2, and may be made of light metal bars, same as described for use in frame G, as shown by side bars h and h' . A light metal pipe-box, h^2 , in which the reel-shaft may be rotated, forms the front end of said frame, as shown, said box being provided with projecting lugs h^3 and h^4 , having flanges h^5 , that embrace the front ends of side bars h and h' , and the parts secured in position, as shown, by bolts and rivets. The rear end of bar h' is bent over and adapted to the side of bar h , and to which it may be secured by bolts or rivets, the end of bar h extending rearward to a point within easy reach of the driver, at which point it may be formed into a handle, O, and be provided with a spring handle-lever, h^6 , having a link-connection, h^7 , by which it may be connected with locking-pawl h^8 , supported by bracket h^9 , situated near the front end of bar h . Perforations k are adapted to receive shaft b^5 , about which the frame H may be vibrated. For the purpose of adjustment there is provided a loop, k^2 , having trunnions k^3 projected from each side, one of which rests in a counterbore or perforation in the side bar h , the other in a perforation, k^7 , in the bracket h^9 . The trunnions k^3 are perforated to receive a locking-pin, k^4 , projected from the end of pawl h^8 , said pin passing through the perforations k^5 in the supporting-bar P, said bar having a pivotal connection at its lower end with the foot-board or some convenient point. Bracket h^9 is provided with lugs k^6 for the support of pawl h^8 , a front section, k^6 , having a perforation, k^7 , for the reception and support of trunnion k^3 on loop k^2 . The said hereinbefore-mentioned trunnions and perforations are so adapted one to the other for the purpose of providing means by which the loop k^2 may be oscillated to adapt itself to the angles described by the supporting-bar P and the frame H as the latter is raised or lowered thereon. The locking or angular lever h^8 has a pivotal connection with the bracket h^9 , and is provided with a front projection, k^8 , having a locking-pin, k^4 , a rear projection adapted to a spring by which the locking-pin k^4 may be held in engagement with the sup-

porting-bar P, and an outwardly-projected arm, p , adapted for engagement with link h^7 , connecting it with hand-lever h^6 , by which the lever h^8 may be oscillated about its pivotal connection with the bracket h^9 for the purpose of withdrawing the locking-pin from the supporting-bar P, that the frame H may be oscillated about its pivotal connection with the frame G for the purpose of raising or lowering the reel. The reel Q is mounted on shaft R, and is supported in reel-shaft box h^2 , and may be rotated by any of the well-known plans for driving similar reels.

By the herein-described construction and combination of parts the driver may, by the use of one hand and foot, have complete control of all of the movements of the reel, moving it upward and forward, downward and forward, or downward and backward, or backward and upward, or forward and backward on any plane within the limits of its rise and fall, thus adapting the reel to any and all forms or condition of crop to be harvested.

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

1. The frame G, composed of side pieces having central vertical sections, a^4 , diverging sections a^5 , vertical sections a^6 , provided with perforations a^7 , center block, K, having ribs b^2 , mortise d , locking-rib d^2 , and stay-rods L outside the frame-pieces, combined substantially as described and set forth, and for the purpose specified.

2. The combination of frame G, consisting, essentially, of the two straight side bars, the inner angular bars, I, and center block, the said frame having one of its ends pivotally connected to the foot-board or some stationary part of the harvester-frame, the other end adapted for the support of a reel-box frame, H, and a foot-lever, M, pivotally connected to said foot-board or harvester-frame, said lever having one of its ends adapted for engagement with said frame G, for the purpose of holding it in the desired adjustment, substantially as described and set forth.

3. The combination of the frame G, consisting of the straight bars L, inner angular bars, I, and the center block, the latter having a locking-rib, d^2 , said frame being pivotally connected to a harvester, and a foot-lever having one of its ends curved and notched, as described, the other end adapted to be operated by the foot of the driver, substantially as described, and for the purpose set forth.

4. The combination, with the frame G, consisting, essentially, of the straight side bars, the inner angular bars, and the center piece secured to said angular bars and provided with a locking-rib, the said frame having a hinged connection with a harvester-frame, of a foot-lever, a section of which is curved concentrically with the axis of said frame and notched to engage the rib of said center piece, and a reel-support secured to said frame, substantially as set forth.

5. The combination, in a reel-support for

harvesters, of the frame G, as described, having
a pivotal or hinged connection to a harvester-
frame, H, having side bars, h h' , sleeve-bear-
ing h^2 , having lugs h^3 h^4 , flanges h^5 , to embrace
5 bars h and h' , bracket h^9 , having front projec-
tion and perforation, as described, loop k^2 ,
having trunnions, as described, supporting-
bar P, and a locking-lever, h^8 , said lever hav-
ing a front projection, k^3 , supporting a lock-
10 ing-pin, k^4 , rear projection adapted to be forced
in one direction by a spring, and an outwardly-

projecting arm, p , adapted for a link engage-
ment with a hand spring-lever, h^6 , on bar h , sub-
stantially as described, and for the purpose set
forth.

In testimony whereof I have hereunto set
my hand this 25th day of June, A. D. 1886.

ALBURTICE O. SLENTZ.

Witnesses:

CHAS. R. MILLER,
W. K. MILLER.