C. H. SALZMAN.

Pitman-Box for Mowing and Reaping-Machines.

No. 167,025. Patented Aug. 24, 1875.

Fig. 3.

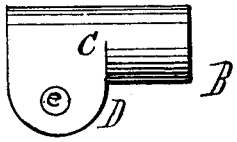


Fig. 1.

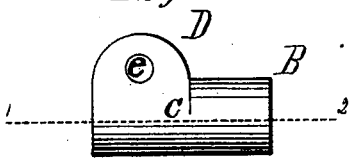


Fig. 2.

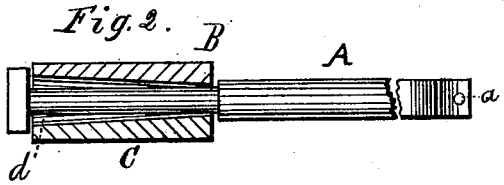
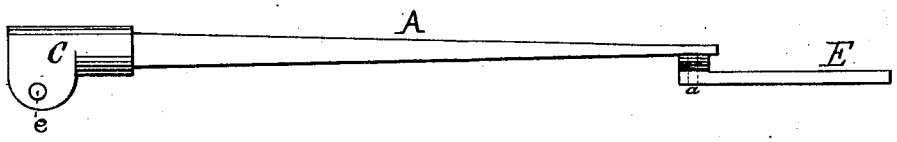


Fig. 4.



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by his Attys.
Cox & Cox

UNITED STATES PATENT OFFICE.

CHRISTIAN H. SALZMAN, OF QUINCY, ILLINOIS, ASSIGNOR TO HIMSELF, ANDREW WICKEY, AND REUBEN BERTNER, OF SAME PLACE.

IMPROVEMENT IN PITMAN-BOXES FOR MOWING AND REAPING MACHINES.

Specification forming part of Letters Patent No. **167,025**, dated August 24, 1875; application filed July 8, 1875.

To all whom it may concern:

Be it known that I, CHRISTIAN H. SALZMAN, of Quincy, Illinois, have invented certain new and useful Improvements in Pitman-Boxes for Reaping and Mowing Machines, of which the following is a specification, reference being had to the accompanying drawings.

In many machines it is at times desirable to change the elevation of a driving rod or shaft, but the difficulty heretofore has been in securing a proper corresponding elevation or depression of the devices attaching such shaft to the driving or operating mechanism. Thus, machines are built with reference to one elevation or position alone, and hence, when that is altered, an imperfect organization results.

The invention in hand relates to an improved reversible pitman-box, affording a means of accommodating the elevation of the end of the rod attached to the operating mechanism to the elevation of the other end, and at the same time permits a proper lateral play of the rod. In the present instance the device is described as applied in the operation of lessening or increasing the height of cut of a sickle on a reaping-machine.

Thus, reaping-machines are made with sickles, the height of which above the ground, or rather height of cut, can be varied; but these changes have always been attended with imperfect operation, since the elevation of the end of the driving-rod attached to the driving-eccentric could not be changed to accommodate its position to the changed elevation of the end of said rod attached to the sickle, to remedy which defect is the purpose of the present application of the invention.

Figure 1 is a side elevation of a device embodying the elements of the invention as placed with relation to the low-cut position of the driving-shaft. Fig. 2 is a view, partly in section, through the line 1 2, and showing a portion of the driving-rod A. Fig. 3 is the same as Fig. 1, but shows the device in the high-cut relation. Fig. 4 is a view showing the device attached to the driving-rod A, secured to the sickle E in the high-cut position.

In the present instance the invention is illustrated as applied to the driving-rod of a device for mowing or reaping.

The rod A is connected to the sickle E, as shown at Fig. 4, by the axle *a*, which enters a box on the end thereof. At the opposite extremity of the rod is placed a device illustrating the invention in hand, and consisting of an elongated box, B, provided with the aperture *d*, the formation of which is gradually converted from a circle at one end to a horizontal oval at the other; or, in other words, the aperture is circular at the point where the rod is intended to enter it, and oval at the point opposite this, for the purpose of allowing the rod a proper lateral play. To one end of the box B is attached the box D, having an aperture, *e*, of any desirable shape, preferably cylindrical with the axis of its bore at right angles to the corresponding axis of the aperture *d*. The aperture *e* is intended to receive the axle or other device connecting the rod with the motive mechanism.

The practical effect of the peculiar formation of the aperture in the box B has been already set out. In reaping grain, whenever a high cut is desired, the sickle-bar being appropriately elevated, the pitman-box is placed with the box B above, to receive the end of the driving-rod, and thus facilitate the operation. To adapt the device to mowing purposes, wherein a low cut is required, it is only necessary to reverse the above position, which lowers the driving-rod into proper relation to the sickle-bar, that part having been previously appropriately depressed.

It is obvious that if the aperture in the box B be cylindrical throughout, the device is still adapted to purposes last above expressed. In practice, it is preferable that the portion of the rod which enters the aperture *d* be reduced and the rod provided with a shoulder to prevent it slipping through the bar.

It is obvious that the position of the oval and circular parts of the aperture *d* may be reversed.

What I claim as my invention, and desire to secure by Letters Patent, is—

The pitman-box C, composed of the parts B and D, provided with the apertures *d* and *e*, as and for the purpose substantially as described.

In testimony that I claim the foregoing improvements in pitman-boxes for reaping and mowing machines, as above described, I have hereunto set my hand and seal this 17th day of June, 1875.

CHRISTIAN H. SALZMAN. [L. S.]

Witnesses:

THOS. T. WOODRUFF,

C. A. LEWIS.