(No Model.)

W. S. DOWNING.

STAND FOR BAND CUTTERS ON THRASHING MACHINES.

No. 545,060. Patented Aug. 27, 1895.

Fig. 5.

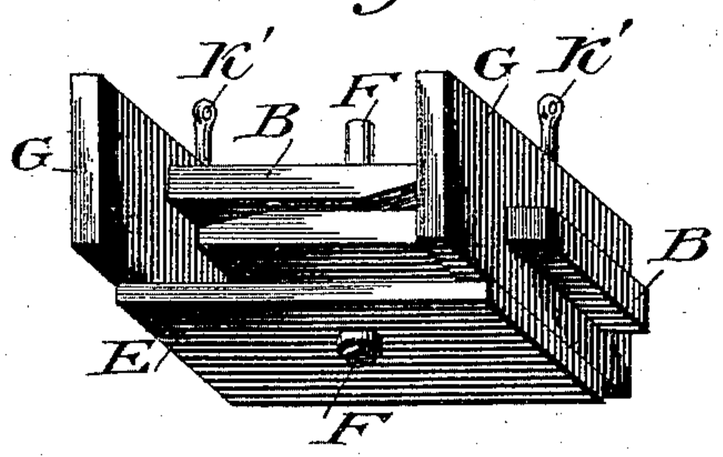


Fig. 1.

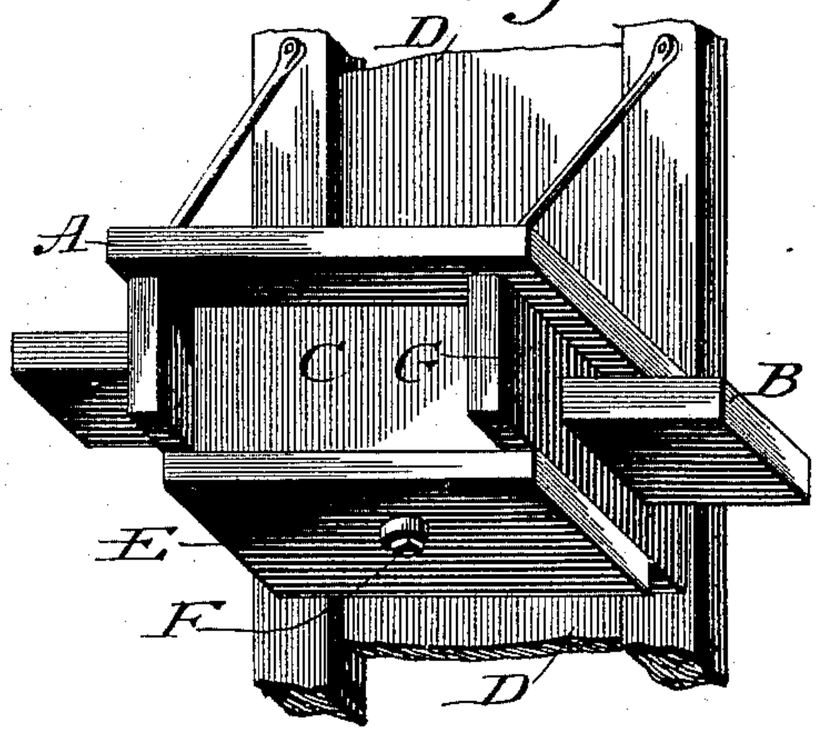


Fig. 2.

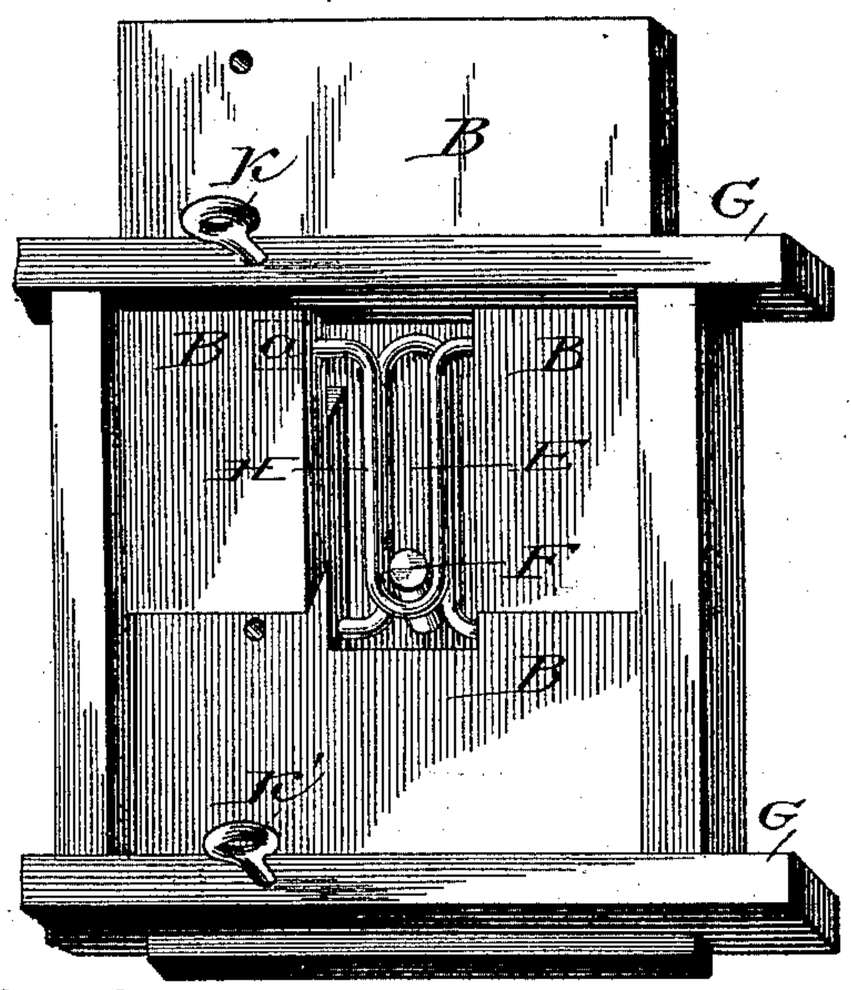


Fig. 3.

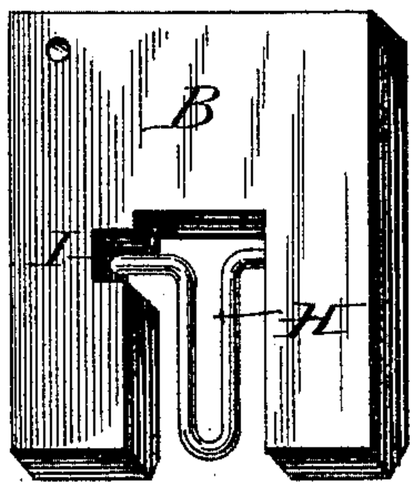
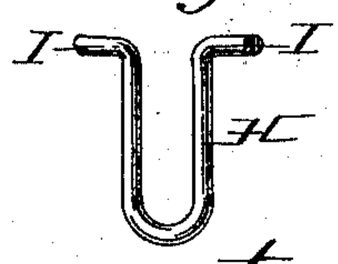


Fig. 4.



Witnesses.
J. M. Stevenson
A. J. West

Inventor.
William S. Downing
By Thos. D. Haslam
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM S. DOWNING, OF KELSO, KANSAS.

STAND FOR BAND-CUTTERS ON THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 545,060, dated August 27, 1895.

Application filed February 2, 1894. Serial No. 498,887. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. DOWNING, a citizen of the United States, residing at Kelso, in the county of Morris and State of Kansas, have invented a new and useful Improvement in Stands for Band-Cutters on Thrashing-Machines, of which the following is a specification.

My invention relates to improvements in combined feeder and band-cutter stands on thrashing-machines, wherein the band-cutter stands are so attached to the feeder-stand that they may remain connected therewith and may be instantly adjusted, as required when the machine is being transported from place to place, as well as when in operation in the act of thrashing; and the objects of my invention are, first, to provide a speedy means for securely closing up the band-cutter stands, as required when the thrashing-machine is in transit; second, to provide a speedy means of adjusting the band-cutter stands for use when the machine is operatively employed in thrashing; third, to provide against inconvenience, delay, or damage which would be caused by the loss or misplacement of any of the parts belonging to the band-cutter stands or to the combined stands while being conveyed from place to place or otherwise; and, fourth, to provide strong, safe, and convenient stands on thrashing-machines for the use of band-cutters. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a view in perspective of combined feeder and band-cutter stands adjusted for use by the band-cutter when the machine is in operation in the act of thrashing, in which D D is a section of front of thrashing-machine separator, to which they are attached; Fig. 2, a top view of combined feeder and band-cutter stands as they appear detached from separator and after the removal of floor of feeder-stand A, Fig. 1, and showing one cutter-stand B, Fig. 2, closed, as when machine is in transit, and one drawn out, B B B, as when adjusted for band-cutter to stand upon when machine is in operation in the act of thrashing; Fig. 3, one of the band-cutter stands removed from stand-box, showing section on lines marked at *a*, Fig. 2; Fig. 4, one of the looped metal slides H, (see Figs. 2 and 3;) and Fig. 5, a front view in perspective of stand-box after removal of floor and front (see Fig. 1, A and C) and showing both cutter-stands closed.

Similar letters refer to similar parts throughout the several views.

The floor of feeder-stand A, Fig. 1, serves as cover of stand-box, which, together with band-cutter stand-planks B B, front of stand-box C, bottom plank E, center bolt F, on which metal slides work side rails of stand-box G G, looped metal slides, which work on center bolt H, and I I their outturned ends, which work in sockets in slot in stand-plank, (see Fig. 3,) and keys to secure stand-planks B B in desired position in stand-box K K′, constitute combined feeder and band-cutter stands.

The band-cutter stand-planks B B work through mortises in side rails G G of stand-box. The mortises are so situated with respect to the top of the stand-box and to each other that when the stand-planks are pushed into the stand-box one plank passes below the other and bears up against it, the upper plank bearing against the top of stand-box, as shown in Fig. 5.

The end of each band-cutter stand-plank which enters the stand-box has a slot in which to receive the center bolt F as the plank is pushed into the box. (See Figs. 2 and 3.) In this slot are sockets which receive the outturned ends of the looped metal slide H. (See Figs. 3 and 4.)

The looped metal slides H H, held by their outturned ends in the sockets inside the slots in the stand-planks, are passed over the center bolt F, on which they slide. (See Fig. 2.) They allow a portion of the stand-planks to be withdrawn from the stand-box sufficient to furnish room for band-cutters to stand on, at the same time retaining enough of each plank in the stand-box to cause the inner end of one plank to overlap the inner end of the other. The manner in which the center bolt F and metal slide H retain the required portion of the plank in the stand-box, so as to securely bear up the weight of the band-cutter, is shown by the upper stand-plank B B B, Fig. 2, and its connections. In this position (or when in any case either of the planks is drawn out to its operative position) the weight of the band-cutter (who stands upon the part of the plank

withdrawn from the stand-box) falls upon the side rail through which the plank passes, which side rail is supported by the cover and bottom plank of the stand-box, and the upward bearing of the inner end of the plank is received by the upper plank at or near the center bolt F, when the lower plank only is in use, and if either or both are in use the part of the upper plank within the box is caused to bear against the cover of the stand-box or floor of feeder-stand A, thus firmly holding the planks in a level position.

The ends of the planks which enter the stand-box are beveled, the bevels facing each other, so that if it should be necessary to entirely remove one or both of the planks from the stand-box they may be easily replaced through the mortises in the side rails, the bevels aiding the overlapping ends to pass one another. As a further support to the stand-planks when bearing the weight of the band-cutters and to hold them firmly in position a "key" or other suitable fastening may be inserted, as shown at K, and to hold the plank snugly in the position required when the machine is moved from place to place, as shown at K'.

The center bolt F passes through proper openings in floor A and bottom plank E, and is held in place by nuts which it receives above and below the stand-box, as shown, or by other suitable fastenings. To detach the planks from the stand-box in case of necessity the center bolt F is unfastened and removed from the box, when the planks, or either of them, may be withdrawn from the mortises through which they pass. To attach the planks, or either of them, to the stand-box the end of the plank in which is the slot containing the looped slide is pushed into the proper mortise in the side rail. If only one plank is inserted it should be put through the side rail having the higher mortise. The center bolt is then inserted in its proper place, passing through the looped slide of each plank to be replaced in the stand-box, and receives its proper fastenings. Under these conditions the stand-planks cannot be entirely removed from the stand-box, but are to remain securely attached during the operation of the machine in thrashing and its removal from place to place.

The floor A, bottom plank E, and front C are attached to each other and to the side rails G G by the center bolt F, as described, and by such further screws, bolts, and couplings as may be required.

The combined feeder and band-cutter stand may be attached to the separator of a thrashing-machine by any suitable contrivance, either in a stationary position or folding or sliding on its attachments, that shown in Fig. 1 forming no part of my present invention.

I am aware that prior to my invention band-cutter stands have been attached to feeder-stands on thrashing-machines by devices more or less temporary or incomplete. I therefore do not claim such a combination broadly; but

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

In combined feeder and band-cutter stands on thrashing machines, the combination of sliding planks for band-cutter stands and looped metal slides with a center bolt secured to the feeder stand and bottom plank, all substantially as set forth.

WILLIAM S. DOWNING.

Witnesses:

WILLIAM O. FLEMING,

EDWIN E. ROBLYER.