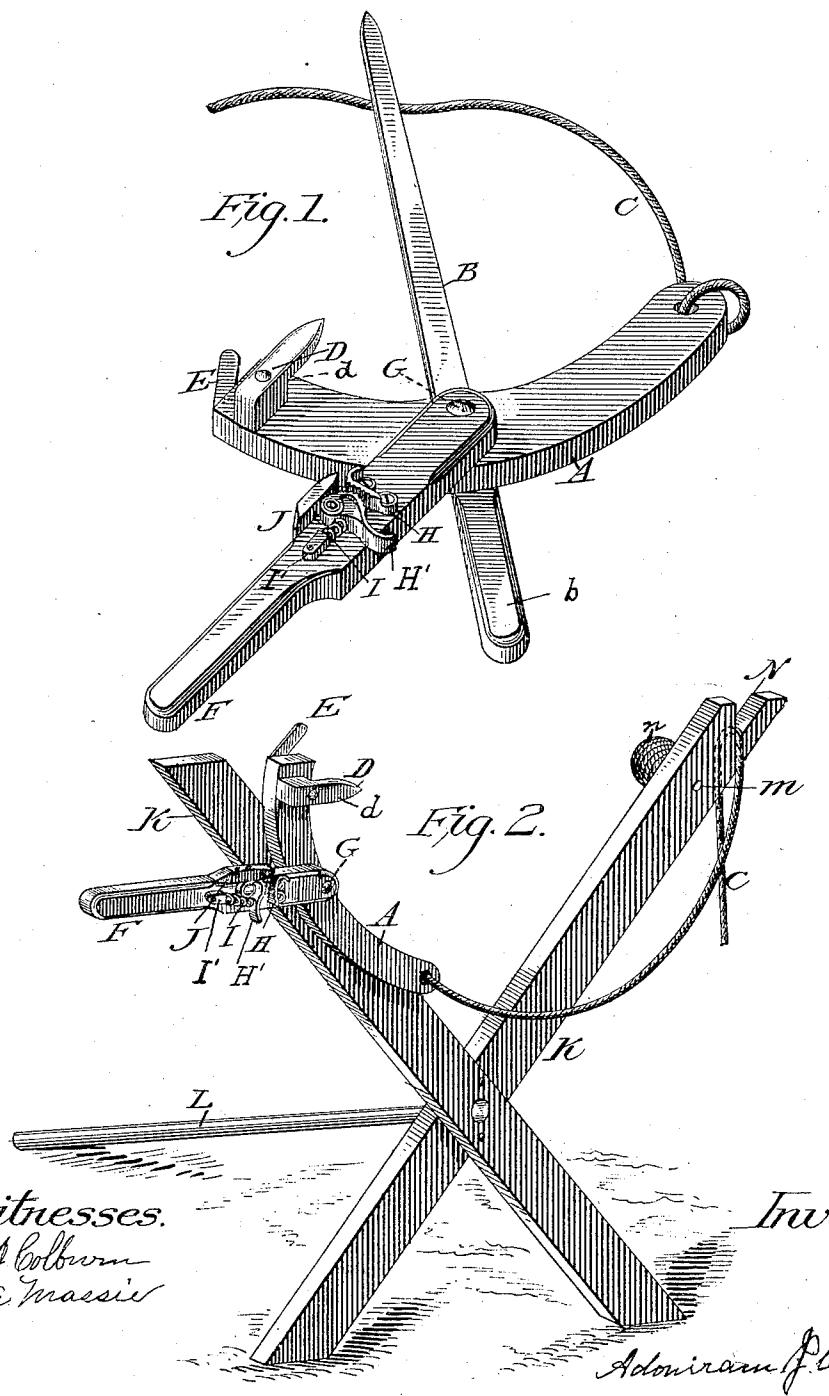


(No Model.)

A. J. COLBURN.  
CORN SHOCK AND BUNDLE BINDER.

No. 453,038.

Patented May 26, 1891.



Witnesses.

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# UNITED STATES PATENT OFFICE.

ADONIRAM J. COLBURN, OF GREENVILLE, MICHIGAN.

## CORN SHOCK AND BUNDLE BINDER.

SPECIFICATION forming part of Letters Patent No. 453,038, dated May 26, 1891.

Application filed January 16, 1889. Serial No. 296,563. (No model.)

To all whom it may concern:

Be it known that I, ADONIRAM J. COLBURN, of the city of Greenville, in the county of Montcalm and State of Michigan, have invented new and useful Improvements in a Combined Corn Shock and Bundle Binder; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

This invention has relation to means for compressing corn shocks or stalks into bundles; and it consists in certain peculiarities in the construction, arrangement, and combination of the several parts, substantially as hereinafter described, and particularly pointed out in the subjoined claims.

In the accompanying drawings, illustrating the invention, Figure 1 is a perspective view of that form of my invention used for compressing corn-shocks, and Fig. 2 is a perspective view of that form employed for compressing stalks into bundles.

Referring to Fig. 1, the letter A designates a flat main piece, which is preferably made in the form of an arc of a circle to conform somewhat to the shape of the shock. Bolted to the under side of this main piece A and crossing the same at about its center is a bar B, one end b of which serves as a handle for the device, and the opposite end is pointed and designed to be thrust into the shock to hold the compressor in place when in use.

A compressive rope C, which encircles the shock being compressed, is secured at one of its ends to one end of the main piece A, and its opposite end passes beneath the forwardly-projecting point d of a cleat D, which is secured to said main piece, and the end of which projects over the inner edge of the same, said point being formed by recessing or cutting out the under side of the forward end of the cleat, as shown.

A knife-blade E for cutting the twine which binds the shock is fastened to the end of main piece A, adjacent to the cleat D.

F designates a lever, which I will hereinafter term a "compression-lever," as when moved in a certain direction it compresses the stalks through the compressive rope C.

This compression-lever is pivoted at its forward end to the main piece A, and its rear end is left free to move back and forth.

A pair of clamping-jaws H H' are secured to the upper surface of this lever F, one, as H, rigidly and the other eccentrically pivoted. These jaws have teeth h formed on their adjacent surfaces, and they are designed to grasp and hold in the operation of the device the compressive rope C, which obviously passes between them, and a lug J is located adjacent to the jaws H H', said lug having its end nearest the pivoted end of the lever formed rounding, as shown, and located substantially in alignment with the inner or toothed surface of the jaw H.

The eccentric-jaw H' is normally held in its foremost position by means of a coil-spring I, which has its rear abutment against a block I', secured to the upper side of the lever F.

In the operation of this device the shock to be compressed is placed against the inner edge of the main piece A, the compression-lever turned to the left against the cleat D, and the pointed end of the bar B thrust into the shock. The compressive rope C is then passed around the shock, beneath the forwardly-projecting point d of the cleat D, to and around the rounded end of the lug J, and thence between the jaws H H', and drawn tight by hand, and the lever F is turned to the right until the rope has passed the pivot of the lever or the latter rests against the shock. The shock will now be sufficiently compressed, and is bound by hand with twine or other material, after which the lever is again turned to the left against cleat D, and the clamping-jaws caused to release their grasp on the compressive rope, which is removed or loosened sufficiently to permit the binder to be removed from the shock. It is important that during the tightening or loosening by hand of the compressive rope, previous to or after the compression of the shock, said rope shall not draw against the teeth of the clamping-jaws. I have therefore provided the lug J, above referred to. On reference to the drawings it will be seen that said lug projects above the edge of the lever, and that its rounding end is so positioned

with respect to the clamping-jaws that the rope during the tightening or loosening referred to will clear the teeth of the clamping-jaws and draw against said end of the lug, it being, of course, understood that immediately previous to this operation the eccentric-jaw is caused by pressure applied to its free end to move away from the rigid jaw, and is so held during the operation to leave a sufficient space between said jaws for the passage of the rope.

In Fig. 2 my invention is shown modified to adapt it to bind stalks in bundles. In this modified construction the bar B is dispensed with and the balance of the device secured to an arm of an X-shaped frame K, which is held in an upright position by a bar L and carries a pin m, around which is wound the twine or other binding material. A slot or recess N for the passage of the compressive rope C is formed in the top of one of the arms of the frame K. In this construction the stalks to be bound in bundles are placed between the bars of the frame K and compressed and bound by the mechanism and in the manner above described.

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

30 1. The combination, with a main piece, a compressive rope secured at one end to one end of said main piece, a cleat secured to the opposite end of said main piece and constructed to permit the passage through it of said compressive rope, and a knife adjacent to said cleat, of a compression-lever pivotally secured at its forward end to said main piece, toothed clamping-jaws on said lever, one of said jaws being rigid, the other eccentrically 35 pivoted, and both having their adjacent surfaces formed with teeth, a coiled spring acting

on said eccentrically-pivoted jaw, and a lug secured to said compression-lever adjacent to said jaws, said lug having a rounded end located substantially in alignment with the toothed surface of said rigid jaw.

2. The combination, with a main piece, a compressive rope secured at one end to one end of said main piece, a cleat secured to the other end of said main piece and having at its upper end a forwardly-extending point projecting over the inner edge of said main piece, and a knife adjacent to said cleat, of a compression-lever pivotally secured to said main piece and carrying toothed clamping-jaws, and a lug secured to and projecting above the edge of said lever, said lug having a rounded end so located with respect to said clamping-jaws that the rope while being tightened by hand will draw against it instead of against said clamping-jaws.

3. The combination, with the frame K, having an opening in the top of one of its members, and the supporting-bar L, of the compression device secured to and supported by said frame and comprising the bar A, cleat D, secured to one end thereof, compressive rope secured at one of its ends to the other end of said bar, lever F, pivotally secured at its forward end to said bar, toothed clamping-jaws on said lever, and lug J, also secured to said lever and having one end substantially in alignment with the toothed surface of one of said jaws, all substantially as described, and for the purposes specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ADONIRAM J. COLBURN.

Witnesses:

JOHN LEWIS,  
H. N. ANDERSON.