

C. COLAHAN.
Grain-Binder Attachments.
No. 215,266. Patented May 13, 1879.

Fig 1.

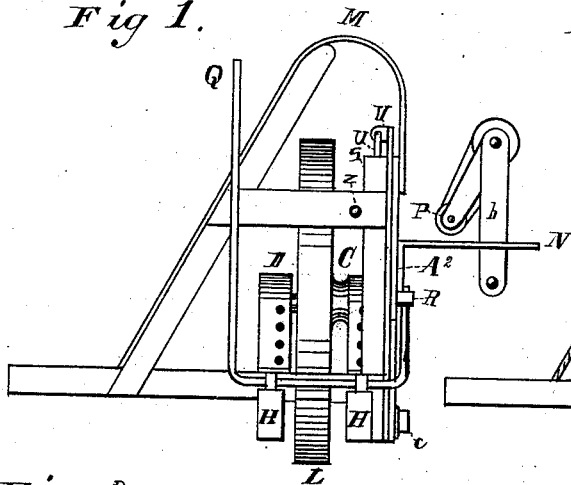


Fig 2.

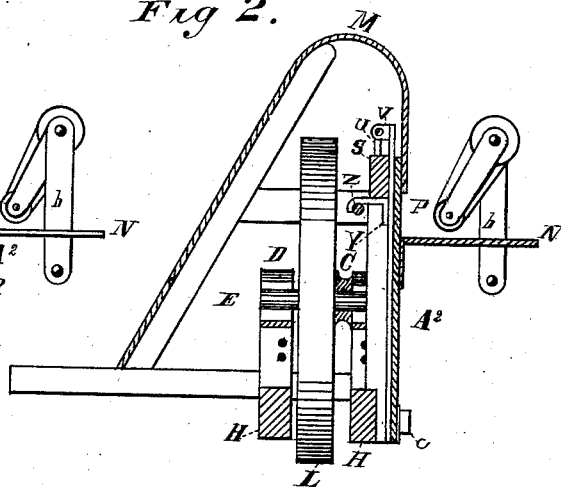


Fig. 3.

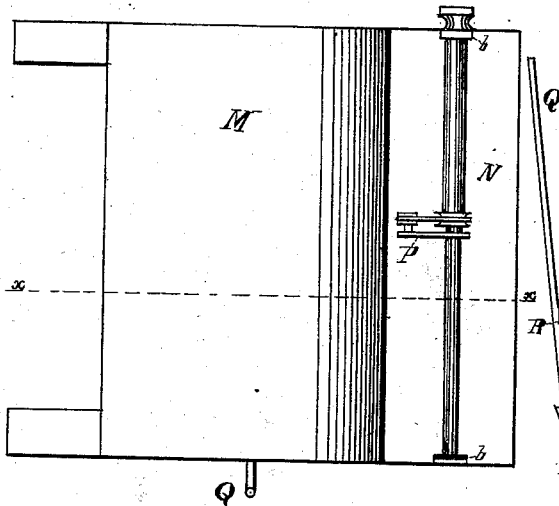


Fig 4.

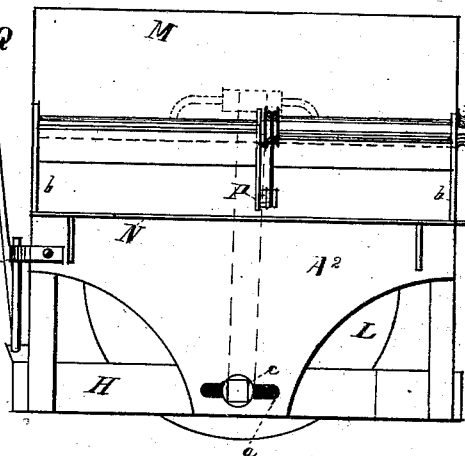


Fig 5.

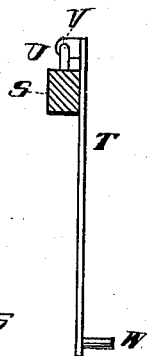
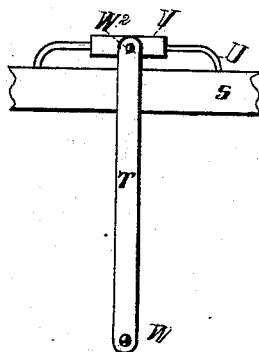


Fig 6.



WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

CHARLES COLAHAN, OF CLEVELAND, OHIO.

IMPROVEMENT IN GRAIN-BINDER ATTACHMENTS.

Specification forming part of Letters Patent No. **215,266**, dated May 13, 1879; application filed May 9, 1877.

To all whom it may concern:

Be it known that I, CHARLES COLAHAN, of Cleveland, county of Cuyahoga, and State of Ohio, have invented new and useful Improvements in Grain-Binding Attachments to Harvesters, the several drawings and accompanying specification fully illustrating said improvements.

The invention relates to harvesting-machines by which the grain is cut and elevated to the stubble side of the machine and delivered to a receiver or table, from which it is taken by hand or automatic gathering or gaveling arms and bound in sheaves.

My improvement consists in the manner of attaching or supporting and adjusting the said receiver or table and the frame on which the binders' stand or automatic binding-machine may be located.

The object of my invention is to secure a lateral adjustment of the frame, so that the automatic binder and its gaveling-arm may be adjusted readily forward or backward from the front of the elevator, and the arm may gather the grain and bind the same at any desired distance from the butt, thereby adjusting said receiver suitably to long or short grain as delivered.

When the automatic binder is removed and the riding-support for hand-binding attached, with a longer hook or stay-rod above and the bar Z inverted in its curve, the receiver and stand are adjusted or retained horizontally while the cutting apparatus is tilted.

Figure 1 represents a rear elevation with lever attached to secure and retain adjustment. Fig. 2 represents a transverse sectional view. Fig. 3 represents a top or plan view. Fig. 4 represents a side elevation. Fig. 5 represents a transverse view of the arm and its manner of attachment to main frame above, and the point of attaching the binding-frame below to said arm. Fig. 6 is a side view of said arm and its point of attachment to the harvester-frame above.

The cut grain is elevated by the usual devices and delivered on the receiver or table N. Said receiver or table is attached to frame A², which may be of any suitable con-

struction, and of sufficient strength to sustain what may be required of it in the binding of grain automatically or by hand. Said frame A² is supported on projection W of arm T, and said frame also has an additional or steadying and sliding support above by means of hooks Y, said hooks being attached firmly to said frame, and sliding over a rod or bar, Z, which rod or bar is concave above, and supported at each end on the main harvester.

The arm T is supported on the sliding block V, and in my present form I have placed a rod through said sliding block or support, said rod U being supported by cross-piece S of the main harvester; but this rod and support may be modified in construction.

Q is a lever attached to frame A², and extended to the driver for the purpose of adjusting the frame A² to any desired point; and a pawl and ratchet may be attached to said lever to hold it in any desired position.

The frame A² may be made rigid at points above support W, and by vibrating on said lower support the binder may be rocked so that the gaveling-arm may gather the grain, as it may be delivered to the receiver in any desirable manner. In some cases the form of construction may be modified, and the lower point of support, W, may be deemed sufficient for the frame A² carrying the gaveling-arm; or the attachment may be made above, in order to secure the rocking adjustment of the gaveling-arm laterally, or to carry said gathering-arm to or from the butts of long or short grain; but I prefer my present form of construction, as being more free from liability of cramping, and also securing a horizontal position of the receiver, or nearly so, with the binding apparatus located thereon.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The swinging arm T, supporting the grain-receiver N, substantially as set forth and described.

2. The adjustable swinging arm T, supporting the grain-receiver N, substantially as set forth and described.

3. The combination of the frame A², carrying grain-receiver N, swinging arm T, sliding

blocks V, and rod U, substantially as set forth and described.

4. The combination of the frame A², carrying receiver N, the swinging arm T, rod Z, and hooks Y, substantially as set forth and described.

5. The combination of the frame A², carry-

ing the receiver N, the swinging arm T, and the lever Q, substantially as set forth and described.

CHAS. COLAHAN.

Witnesses:

FRANCIS TOUMEY,
LEVI T. SCOTFIELD.