

(No Model.)

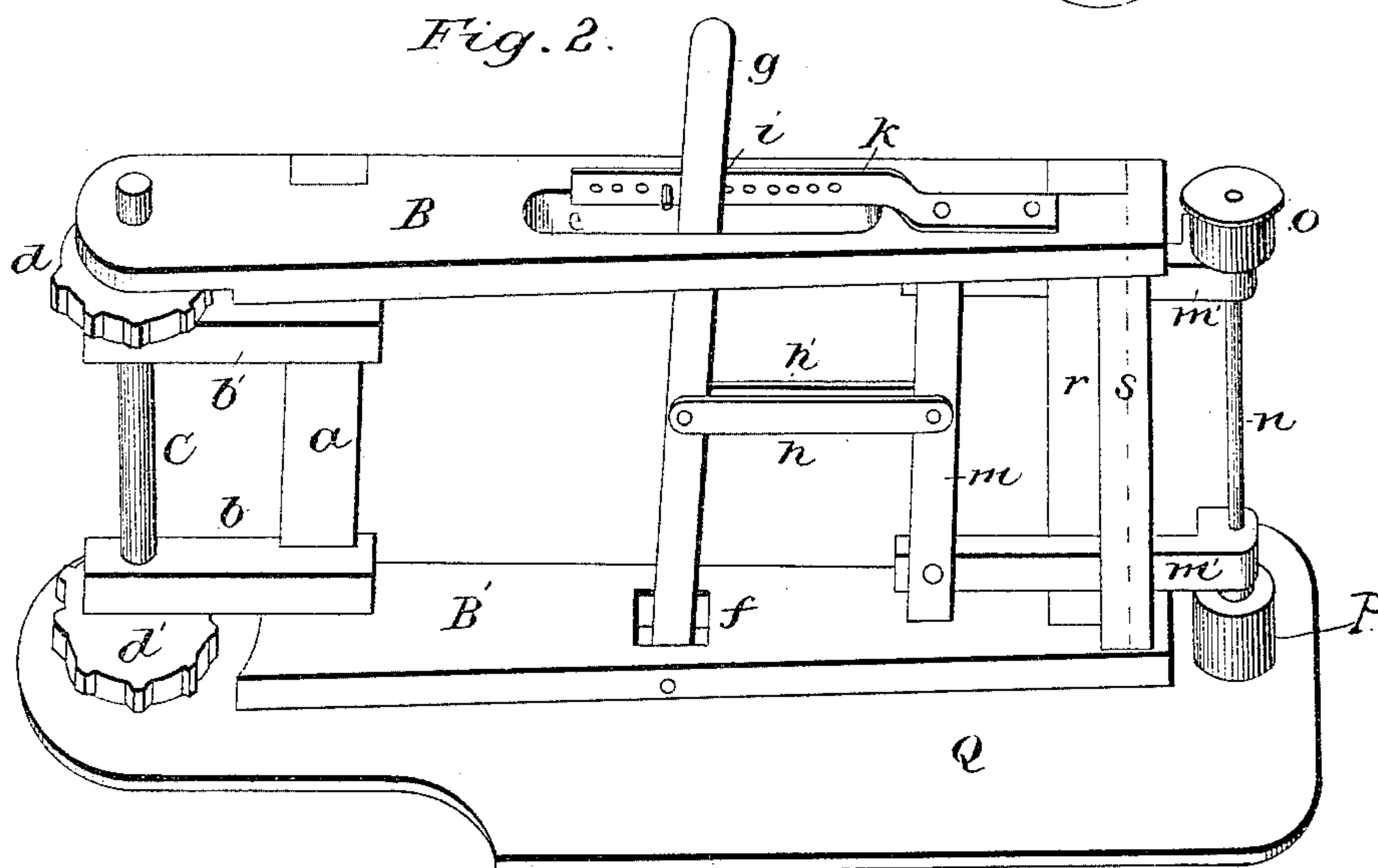
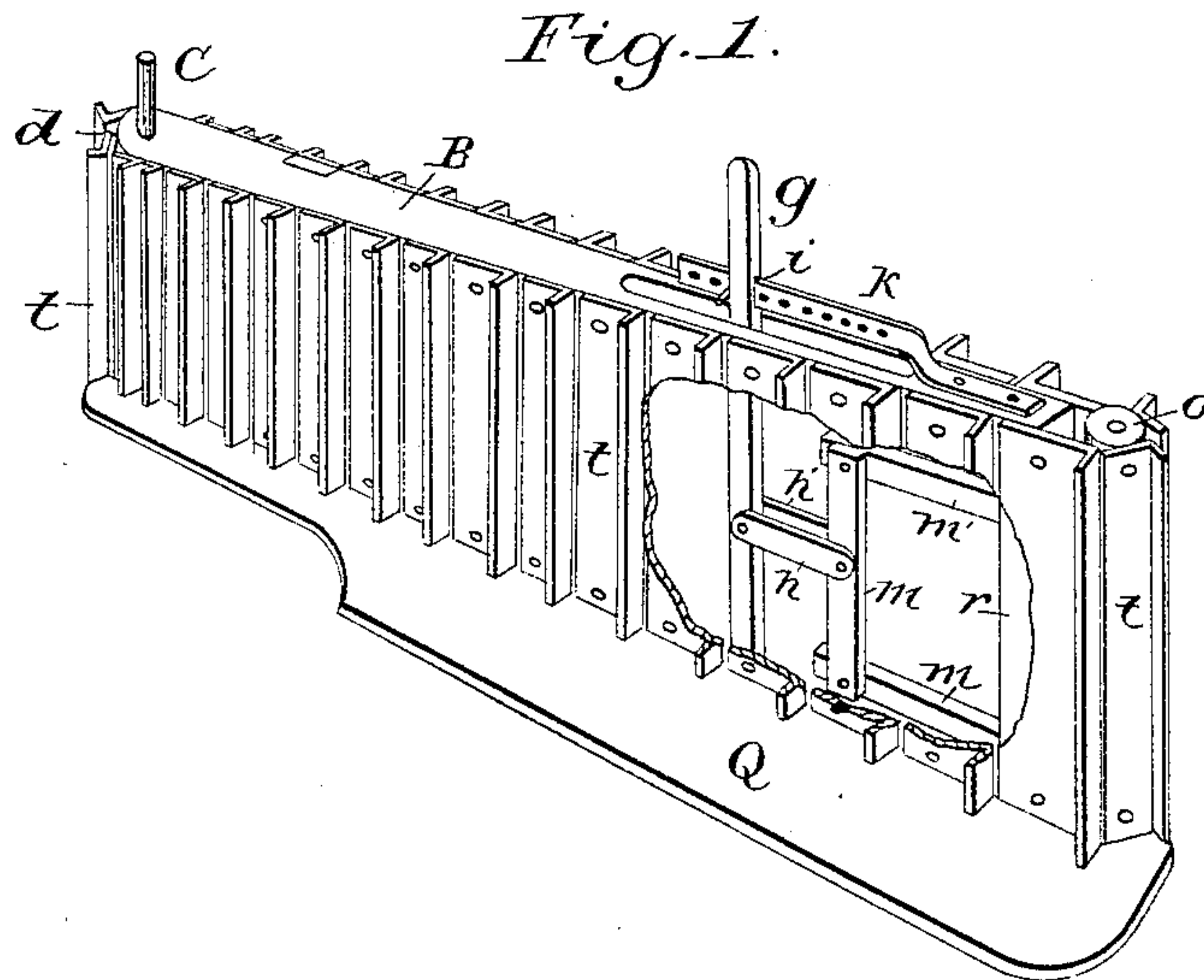
2 Sheets—Sheet 1.

W. J. BELINA.

CONVEYER APRON FOR HARVESTERS.

No. 318,442.

Patented May 26, 1885.



Witnesses:
H. Webb
E. W. Richter

Inventor:
Wm. J. Belina
by
Haupt Brothers
ATTORNEY.

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Fig. 3.

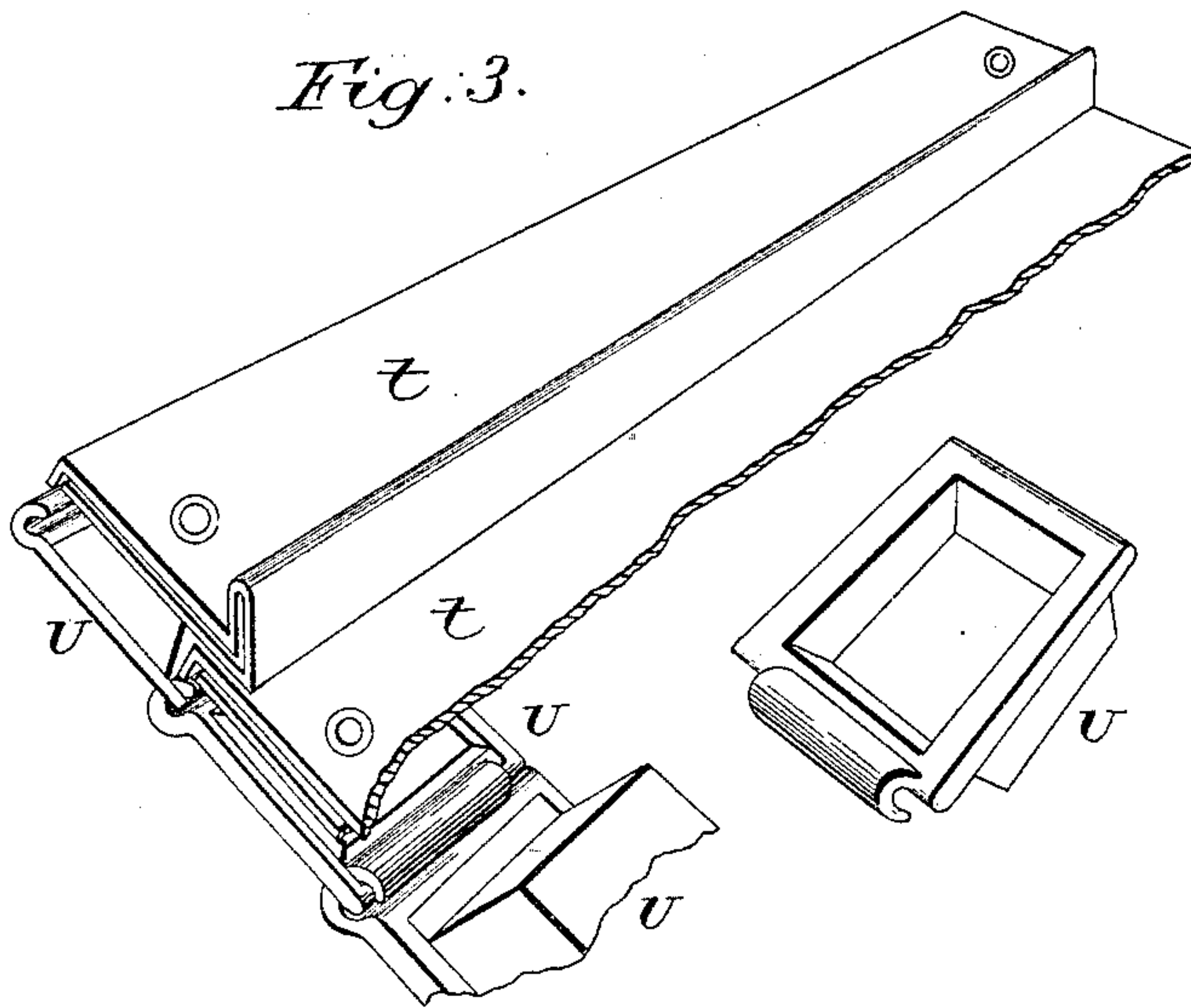
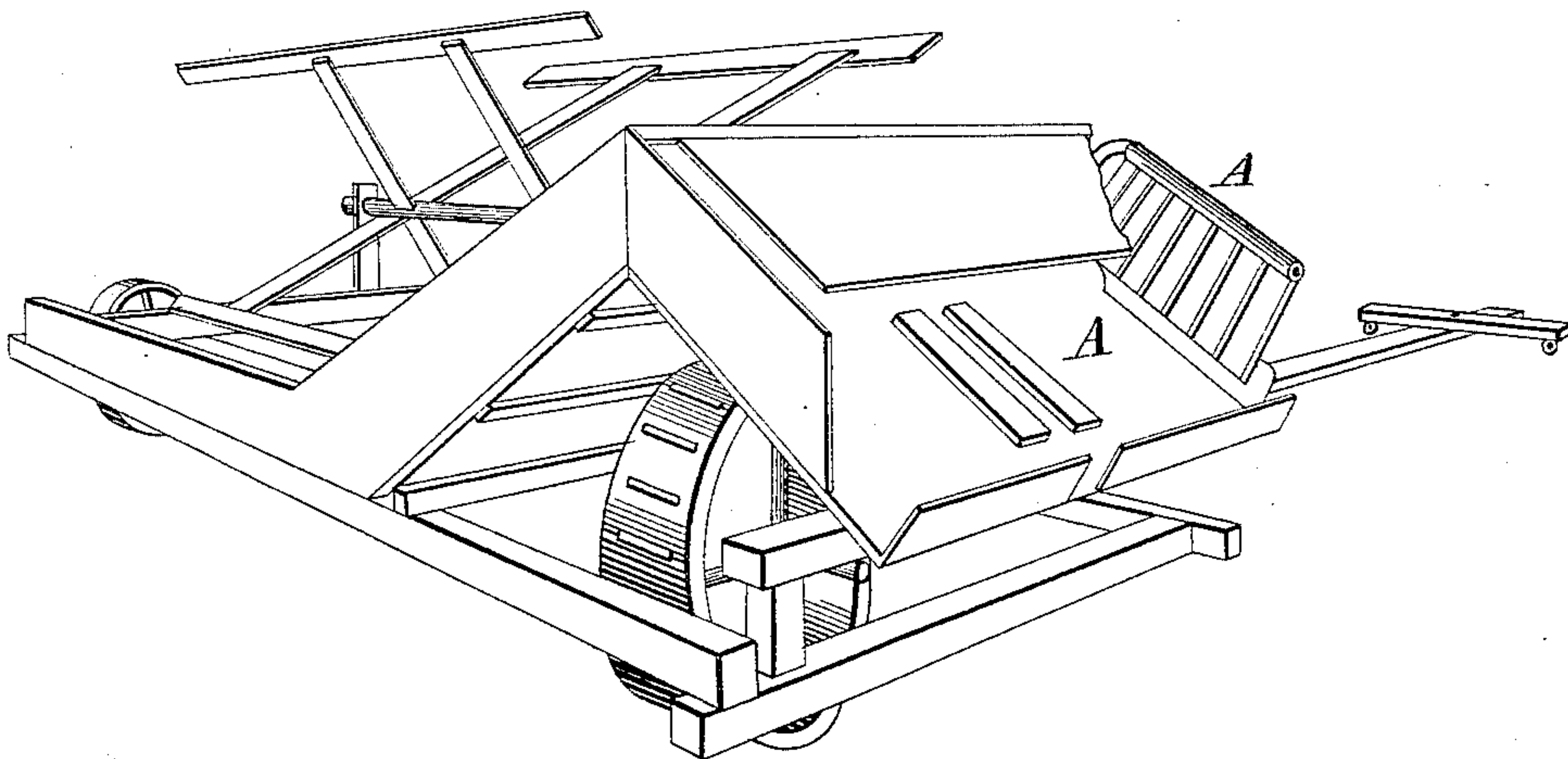


Fig. 4.



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UNITED STATES PATENT OFFICE.

WENEL J. BELINA, OF OWATONNA, MINNESOTA, ASSIGNOR OF ONE-HALF
TO JOSEPH W. KAPLAW, OF SAME PLACE.

CONVEYER-APRON FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 318,442, dated May 26, 1885.

Application filed May 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, WENEL JOSEPH BELINA, of Owatonna, county of Steele, and State of Minnesota, a citizen of the United States, have invented a new and useful Improvement in Conveyer-Aprons for Harvesting-Machines, of which the following is a specification.

My invention relates to improvements in aprons for harvesting-machines where a sheaf of grain is brought in contact with a conveyer-apron in a horizontal position, and where the butts of the sheaves are adjusted by the apron for the binder.

The object of my invention is to provide an apron that, while it will be flexible, shall be non-destructible and easily adjustable or replaced in any one or all of its parts. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an isometrical view of the apron detached from the harvesting-machine. Fig. 2 is a view of the adjustable frame-work with the apron removed. Fig. 3 is a detail view of the plates of the apron with the mode of fastening and the support exposed, showing the upper and lower faces of the link. Fig. 4 is a view of a harvesting-machine with the apron in place thereon.

Similar letters refer to similar parts throughout the several views.

Upon the end of the inclined side or table A of the harvesting-machine where the grain slides down to the fingers of the binder I erect a frame, B and B', composed of strips of wood secured together to form a firm rectangular frame. At convenient points on the cross-brace a, I attach two horizontal arms, b and b', carrying a shaft, c, at their extreme ends. The said shaft c carries at each end a spurred wheel, d and d'. In the upper arm, B, of the said frame I cut, near the middle line, a long slot, e. In the lower arm of the frame B' I also cut an opening in the center, as f. Passing through the slots or mortises e and f, I secure a lever or handle, g, which is slotted at its upper part, and through this slot i passes the bar k. The said bar is perforated, and the lever g is held in place by a pin or wire placed in one or

more of the perforations. At a convenient point on the lever g, I attach a link, h, connecting the lever g with the traveling frame m'. The standards of the frame, as r and s, I mortise at the ends to allow the passage and serve as a guide for the arms m'. The ends of the arms m' are perforated and support the shaft n, which rests below upon the metal flange Q. The lower part of the shaft n carries a pulley, P, while the upper end carries a flanged pulley, O, the body of said pulley being of the diameter of the pulley P.

Extending around the frame B B', revolving about the pulleys O and P and the spur-wheels d and d', I make an apron composed of plates of metal, t, secured to endless chains U. The separate metal plates t of this apron I make by folding a sheet of metal in half and hammering the two plates thus formed together, or by making the plates of a single thickness of metal without folding the same together. At the folded edge I turn a ridge upward at an angle, and at the other or extreme edge I turn a ridge or flange downward. The ledge of the plate I secure to the link of an endless chain by a rivet at each end. The links of the chain U are constructed with a central part or ledge raised above the general rim or link, upon which body I rivet the metal plate. Each link or opposite pair of links carries a metal plate of the apron, and the apron has as many plates as there are pairs of links in the chains. The apron is so made that the preceding plates overlap the succeeding one, as shingles on a roof, thus preventing foreign matter getting into the framework of the machine.

Having thus described the parts of my machine, I now proceed to explain the method of working the same. The apron or band being completely joined together, I bring the pulleys O and P as near as possible to the frame B and B' by depressing the lever g. I then slip the apron over the frame B and B', fitting the teeth of the sprocket-wheels d and d' into the links of the chain belts U, and by forcing the lever g' forward the frame m and m' is extended, the pulleys O and P pressing against the apron and extending it, making it tense. Through

the shaft *c* motion is imparted to the sprocket-wheels *d* and *d'*, and the apron is revolved or drawn over the metal flange *Q*.

Being aware that conveyer-aprons are not a new feature, I do not claim such, broadly; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. In a harvester or other machine, the jointed metallic apron composed of plates of metal sliding upon the flange *Q*, in combination with the frames *B B'*, spur-wheels *d* and *d'*, frame *m* and *m'*, pulleys *O* and *P*, and lever *g*, all substantially as and for the purpose set forth and described.

2. In a conveyer-belt for harvesters or other machines, the metal plates formed with flanges at their opposite sides bent in opposite directions, whereby each plate is adapted to overlap the succeeding plate, in combination with an endless chain or chains having links with raised bodies, all substantially as and for the purpose set forth and described.

WENEL J. BELINA.

In presence of—

E. W. RICHTER,
F. C. WEBB.