

(No Model.)

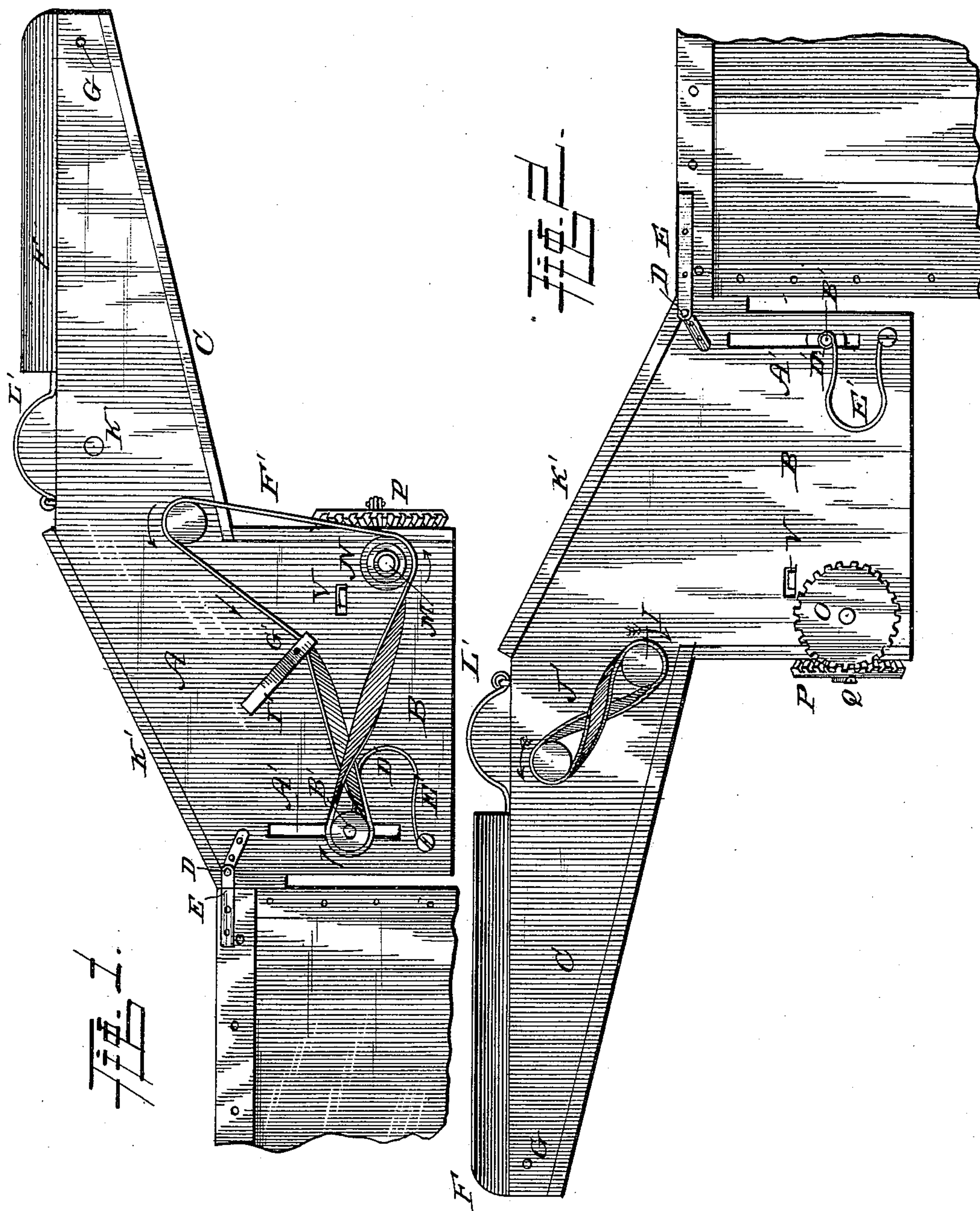
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C. B. SCHERER.

BAND CUTTING AND FEEDING ATTACHMENT FOR THRASHING MACHINES.

No. 300,645.

Patented June 17, 1884.



WITNESSES:

*Med. S. Dietrich*  
*Wm. J. Scher*

INVENTOR.

*Cass B. Scherer*  
*By Louis Bagger & Co.*  
ATTORNEYS.

(No Model.)

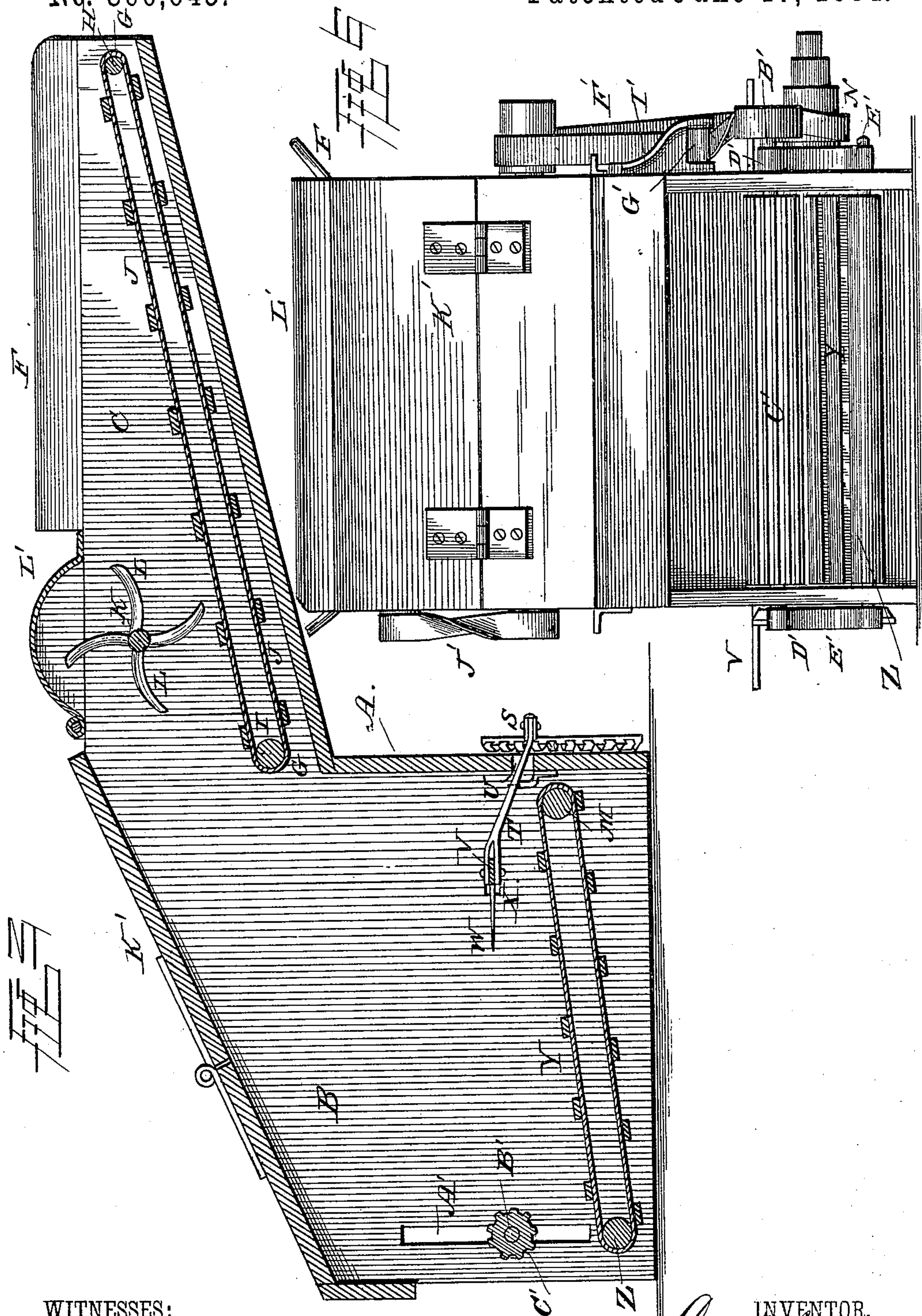
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WITNESSES:

*Fred. G. Dieterich*  
*Wm. J. Scherer*

INVENTOR.

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(No Model.)

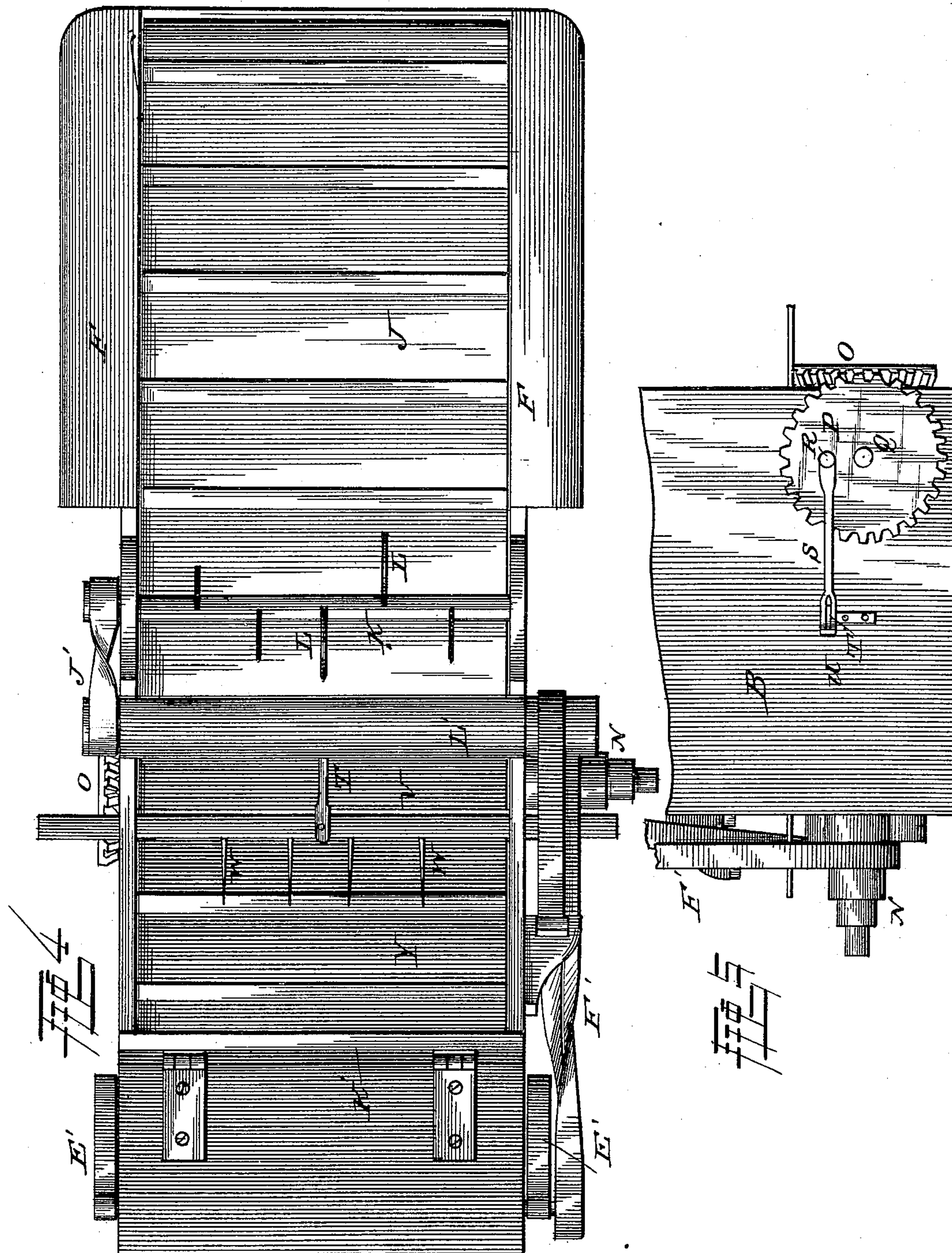
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C. B. SCHERER.

# BAND CUTTING AND FEEDING ATTACHMENT FOR THRASHING MACHINES.

No. 300,645.

Patented June 17, 1884.



**WITNESSES:**

Ad. S. Dieterich.  
J. F. Schöner

INVENTOR.

INVENTOR.  
Cass B. Sherer,  
By Louis Bagger & Co.  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

CASS B. SCHERER, OF CICERO, INDIANA.

BAND-CUTTING AND FEEDING ATTACHMENT FOR THRASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 300,645, dated June 17, 1884.

Application filed February 13, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CASS B. SCHERER, of Cicero, in the county of Hamilton and State of Indiana, have invented certain new and useful Improvements in Band-Cutting and Feeding Attachments for Thrashing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figures 1 and 2 are side views of my improved band-cutting and feeding attachment for thrashing-machines, showing a portion of the thrashing-machine frame. Fig. 3 is a longitudinal vertical section of the same. Fig. 4 is a top view with parts of the casing removed. Fig. 5 is a front view with the upper portion of the casing broken off, and Fig. 6 is a rear view.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to band-cutting and feeding attachments for thrashing-machines; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the casing A, in which the several parts of the attachment are contained and journaled, consists of a rectangular casing, B, the upper edges of the sides of which are cut off upon an incline, and at the front is provided with an inclined chute, C, and the rear end of the rectangular casing is open and provided at the upper corners with laterally-projecting bolts D, which are adapted to be inserted into eyed bolts or straps E upon the open forward or feeding end of the thrashing-machine, thus hinging the casing of the attachment to the upper forward edge of the thrashing-machine frame, so that the attachment may be raised at its forward free end and folded over the top of the thrashing-machine frame when not in use. The inclined chute is open at its top and provided at its sides with inclined flanges or boards F, adapting it to receive the sheaves fed upon it, and it forms transverse bearings G

at its upper and lower ends, in which bearings two shafts, H and I, are journaled, over which shafts an endless apron, J, passes, its upper side traveling downward. A shaft, K, is journaled in transverse bearings above the lower end of the traveling apron, and a number of curved knives, L, are secured upon this shaft, projecting radially from the shaft, having their curved edges sharpened and facing in the direction of their revolution, which is opposite to the revolution of the endless apron. In the lower forward corner of the rectangular casing is journaled a transverse shaft, M, upon one end of which a speed-pulley, N, is secured, to which pulley the motion from the thrashing-machine is carried by means of a belt. The other end of the shaft is provided with a beveled cog-wheel, O, which meshes with a similar wheel, P, journaled upon a stub-axle, Q, upon the forward side of the rectangular casing, and this cog-wheel has a wrist-pin, R, upon its face, upon which the end of a pitman, S, is pivoted. The other end of the pitman is pivoted or hinged to the forward end of a lever or arm, T, pivoted in a horizontal slot, U, in the forward side of the casing, and the inner end of the lever is hinged to the middle of a transversely-sliding bar, V, having a number of rearwardly-extending teeth, W, which bar slides in bearings X in the sides of the rectangular casing, near the forward side of the same. An endless apron, Y, passes over the transverse shaft M in the lower forward end of the casing, and over a transverse shaft, Z, in the lower rearward corner of the casing, traveling with its upper side toward the rear open side of the casing. The rear ends of the sides of the rectangular casing have vertical slots A', in which slide the ends of a shaft, B', provided with a fluted roller, C', and having its ends journaled in bearings D', formed in the ends of two curved springs, E', secured upon the sides of the casing. These springs are shown in the drawings as flat springs, bent forward and doubled back again, secured at the ends of the lower portions, and forming the bearings in the ends of the upper portions; but the ends of the shaft and their bearings may be cushioned by springs of any other construction which will allow the shaft a vertical motion. A belt, F', passes around the drive-



pulley and over pulleys upon the ends of the shaft at the lower end of the inclined chute and at the rear end of the rectangular casing, the pulleys and their shafts turning in the directions indicated by arrows in the drawings, and an idle-pulley, G', is pivoted in a bracket, I', upon the side of the casing, for the purpose of taking up slack in the belt. A belt, J', passes over the pulleys upon the end of the lower shaft in the inclined chute and upon the end of the knife-bearing shaft, and is twisted so as to cause the shafts to turn in opposite directions. The inclined top K' of the rectangular casing is hinged, so as to admit of its being opened for inspection or repairs, and the curved cap L' over the knife-bearing shaft is likewise hinged, so as to admit of the knives being removed or sharpened.

The operation of the attachment will readily be understood. The sheaves of grain are fed in the open top of the inclined chute, in which they are fed downward by the inclined belt or apron, which carries them under the knives which cut their bands, whereupon they drop down upon the lower feeding-apron, being spread upon the same by the reciprocating toothed spreader-bar, which spreads the grain upon the lower feeding-apron in an even layer. This lower feeding-apron feeds the grain toward the feed-opening of the thrashing-machine, the grain passing between the apron and

the fluted roller, which will yield to any great unevenness in the layer of grain, while it will tend to prevent too much grain from being fed into the thrashing-machine at the time.

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

The combination, in a band-cutting and feeding attachment for thrashing-machines, of a casing formed with a chute at its receiving end and a rectangular casing at the rear, a downwardly-inclined endless apron traveling in the chute, a roller journaled over the lower end of the inclined apron and provided with a number of curved knives, a feed-apron traveling in the bottom of the rectangular casing, a reciprocating spreader-bar sliding above the forward end of the apron, a fluted roller sliding with its ends in vertical slots in the rear end of the casing, and curved springs formed with bearings for the roller-shaft in their ends, and secured to the casing with their other ends, all constructed and combined as and for the purpose shown and set forth.

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

CASS. B. SCHERER.

Witnesses:

HARMAN ROQUEY,  
N. E. WROTEN.