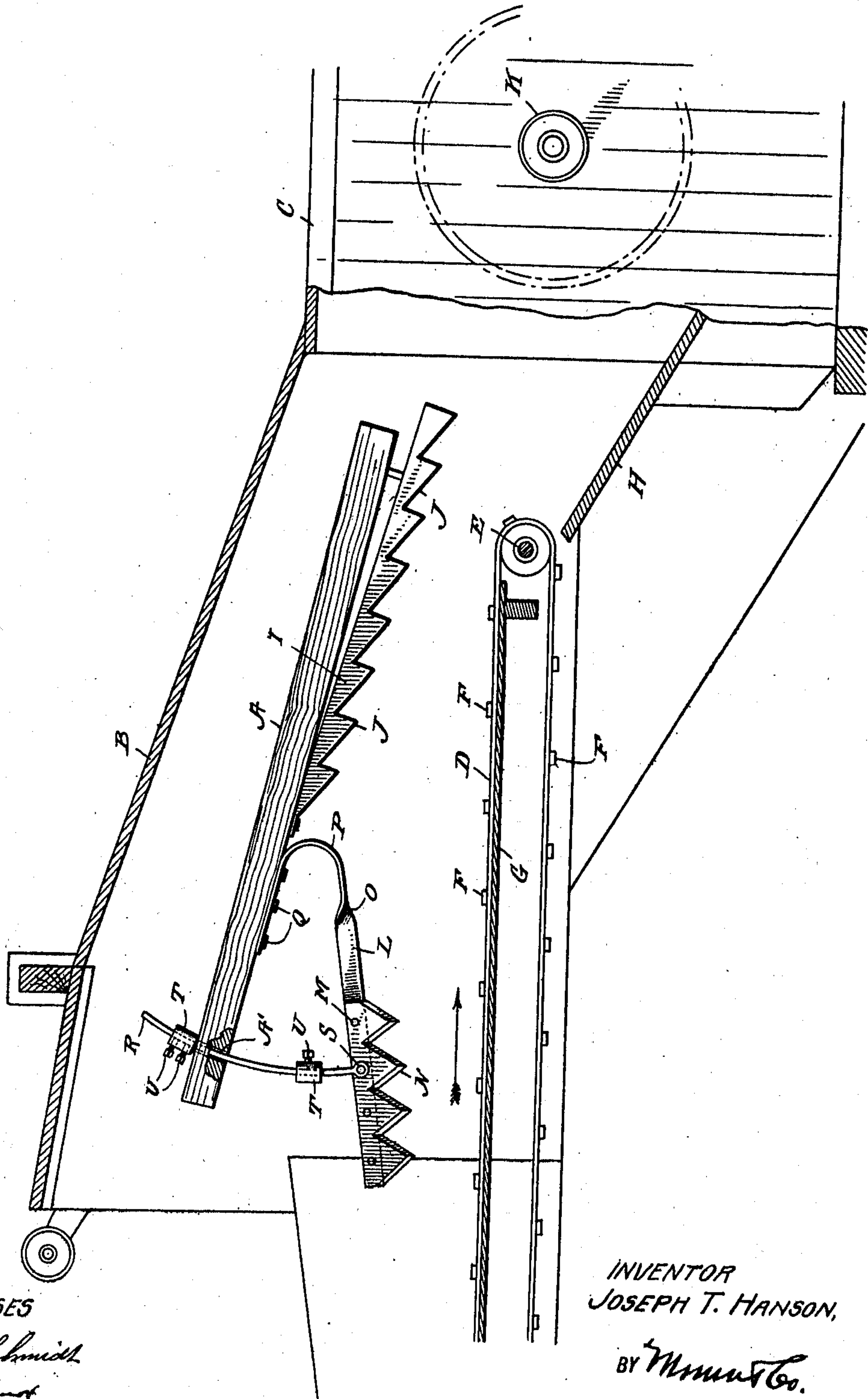


J. T. HANSON.
BAND CUTTER FOR THRESHING MACHINES.
APPLICATION FILED MAR. 16, 1910.

970,920.

Patented Sept. 20, 1910.



WITNESSES

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JOSEPH T. HANSON, OF SIOUX FALLS, SOUTH DAKOTA.

BAND-CUTTER FOR THRESHING-MACHINES.

970,920.

Specification of Letters Patent. Patented Sept. 20, 1910.

Application filed March 16, 1910. Serial No. 549,677.

To all whom it may concern:

Be it known that I, JOSEPH T. HANSON, a citizen of the United States, and a resident of Sioux Falls, in the county of Minnehaha and State of South Dakota, have made certain new and useful Improvements in Band-Cutters for Threshing-Machines, of which the following is a specification.

My invention is an improvement in band cutters for threshing machines, and consists in certain novel constructions, and combinations of parts, hereinafter described and claimed.

The object of the invention is to provide a cutter of the character specified for attachment to the feeding device, which will be of simple construction, and which will automatically adjust itself to bundles of various sizes.

The drawings show a longitudinal section of a portion of a threshing machine provided with the improvement.

The present embodiment of the invention is shown connected with the self-feeder of a machine, which may be of any desired construction, as may also the feeding attachment.

It will be understood that the feeder consists of a plurality of beams A which reciprocate longitudinally of the throat B of the machine C, and the improvement is connected with the beams.

Below the beams A is arranged an endless carrier consisting of an apron D, supported by rollers E, the apron having spaced transverse slots F, and a floor or platform G is arranged beneath the upper run of the apron which moves in the direction of the arrow. The apron delivers to an inclined plate 18.

Each of the beams A is provided with a feeding arm I, which is attached to the inner end of the beam, and is provided in its lower edge with a plurality of notches I, each notch having a face perpendicular to the beam and a face inclined with respect thereto, and the perpendicular faces face toward the cylinder K of the machine.

It will be evident that when the beams are reciprocated toward the cylinder with a rising and falling movement, moving closer to the apron on the inner movement than on the outer, the grain will be moved toward the cylinder, and will also be torn apart and loosened to prevent choking of the cylinder.

The band cutter consists of a flat bar or strip, having secured to one end by rivets or

bolts M a plurality of sickle blades N, the said blades being secured to the side of the bar, which is arranged at this point with its widest dimension vertical. The blades N may be continuous or separate blades, and a short distance from the inner end of the blades, the bar is given a quarter turn, as at O, then bent backward upon itself in a wide curve as at P, and the extremity of the bar is secured to the under face of the beam by bolts Q. An arc shaped rod R is provided at one end with an eye S, through which passes one of the rivets M, to pivot the rod to the bar, and the rod extends through an opening A' in the bar, the said opening being shaped longitudinally to correspond with the curve of the rod. Above and below the bar A, the rod is encircled by sleeves T, which are slidable on the rod, and are secured in place by set screws U, the upper sleeve having two screws, and the lower one. By loosening the set screws, the sleeves may be adjusted longitudinally of the rod. The bar L is resilient to some extent, and the curved portion P acts as a spring, to normally retain the free end of the bar as far from the beam as the upper sleeve will permit. By adjusting the upper sleeve, the cutting portion of the device may be moved toward or from the apron in accordance with the size of the bundles. The lower sleeve is spaced apart from the lower face of the beam, so that the bar A may move upwardly to permit the passage of larger bundles or foreign substances to prevent injury or breakage. The upward movement is however limited by the lower sleeve, and the downward movement is limited by the upper sleeve.

The cutting portion of the device is arranged above the apron and is movable toward and from the same, being normally spring pressed downwardly toward the apron. The movement toward and from the apron is limited however, by the sleeves and the extent of movement may be varied by adjusting the sleeves on the rod.

It will be understood that as many cutters may be arranged in the throat as may be desired, and that a greater or less number of blades may be used. The entire cutting mechanism may be removed from the machine, by removing the bolts Q, and the upper sleeve T, which may slip over the end of the rod.

The arc shape of the rod, and its pivoted

connection with the bar permits the said bar to move freely without any resistance from the rod, while at the same time the rod acts on a guide to prevent lateral movement, and
5 to limit the vertical movement.

I claim:

1. In combination with the beams and the apron of a self-feeder for threshing machines, of a resilient bar secured by one end
10 to the lower face of a beam, of the feeder, said bar being bent backwardly beneath the beam toward the front end thereof, and being given a quarter turn at approximately the center thereof, a plurality of sickle blades
15 secured to the free end of the bar and extending toward the apron, an arc shaped rod pivoted to the bar near its free end, the beam having an opening through which the rod extends, sleeves on the rod, one above and
20 one below the beam, and a set screw threaded through each sleeve and engaging the rod.

2. In combination with the beams and the apron of a self-feeder for threshing machines, of a resilient bar secured by one end
25 to the lower face of a beam, of the feeder, said bar being bent backwardly beneath the beam toward the front end thereof, and being given a quarter turn at approximately the center thereof, a plurality of sickle blades
30 secured to the free end of the bar and extending toward the apron, a rod pivoted to

the bar and extending through the beam, and a sleeve adjustable on the rod above and below the beam.

3. In combination with the beams and the
35 apron of a self feeder for threshing machines, of a resilient bar secured by one end to the lower face of a beam of the feeder, the bar being bent backward on itself beneath the beam toward the front end thereof, cut-
40 ting blades on the free end of the bar extending toward the apron, an arc-shaped rod pivoted by one end to the bar near the free end thereof, the beam having an opening through which the rod passes, and sleeves adjustable
45 on the rod above and below the beam.

4. In combination with the beams and apron of a self feeder for threshing machines, of a resilient bar secured by one end
50 to a beam of the feeder, said bar being bent backwardly upon itself beneath the beam toward the front end thereof, cutting blades on the free end of the bar extending toward the apron, means for limiting the movement
55 of the bar toward and from the beam and means for adjusting said limiting means to vary the extent of movement of the bar.

JOSEPH T. HANSON.

Witnesses:

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