

No. 855,390.

PATENTED MAY 28, 1907.

C. N. DETWILER.
SHARPENER FOR BAND CUTTERS,
APPLICATION FILED NOV. 28, 1905.

Fig. 1.

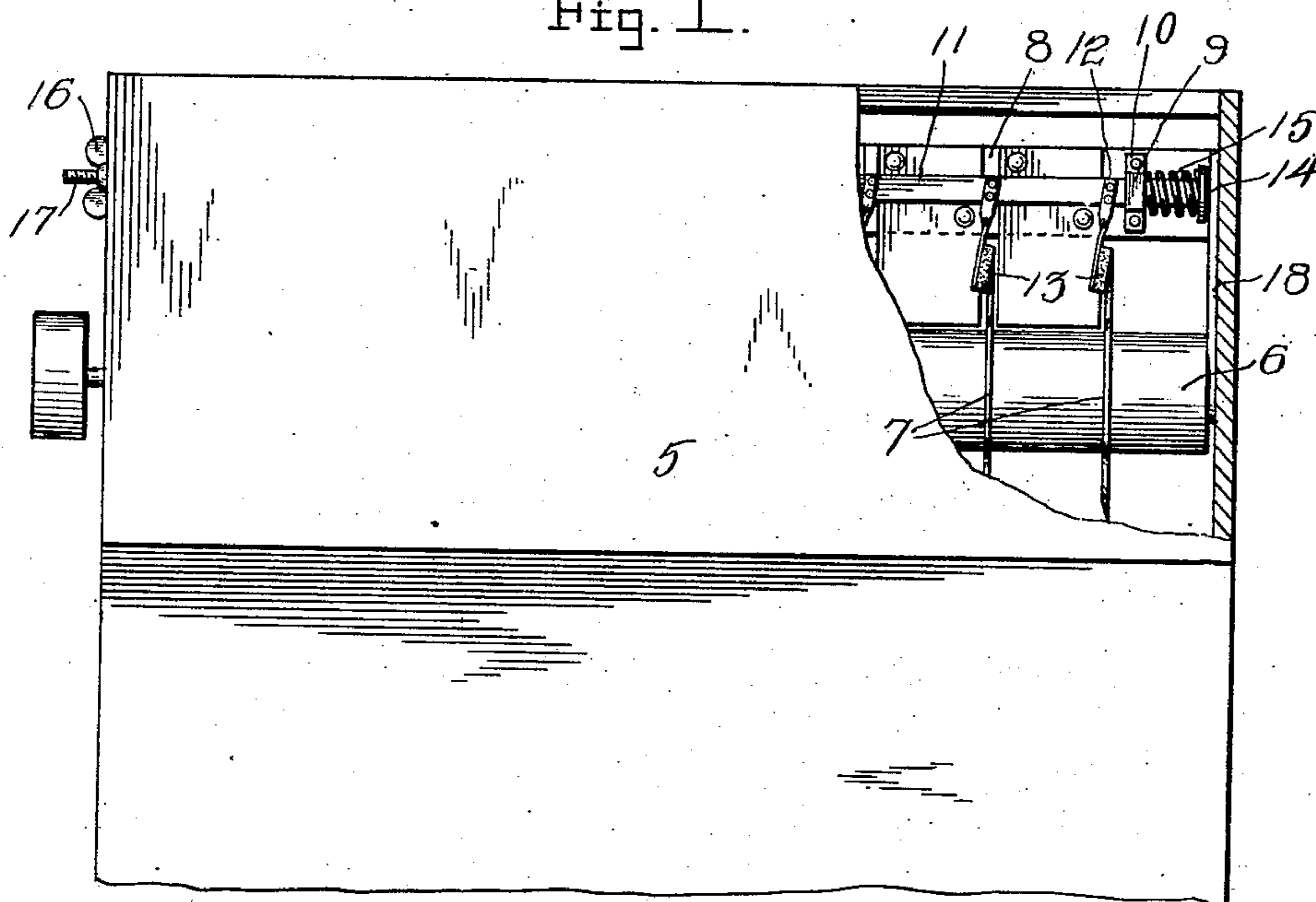
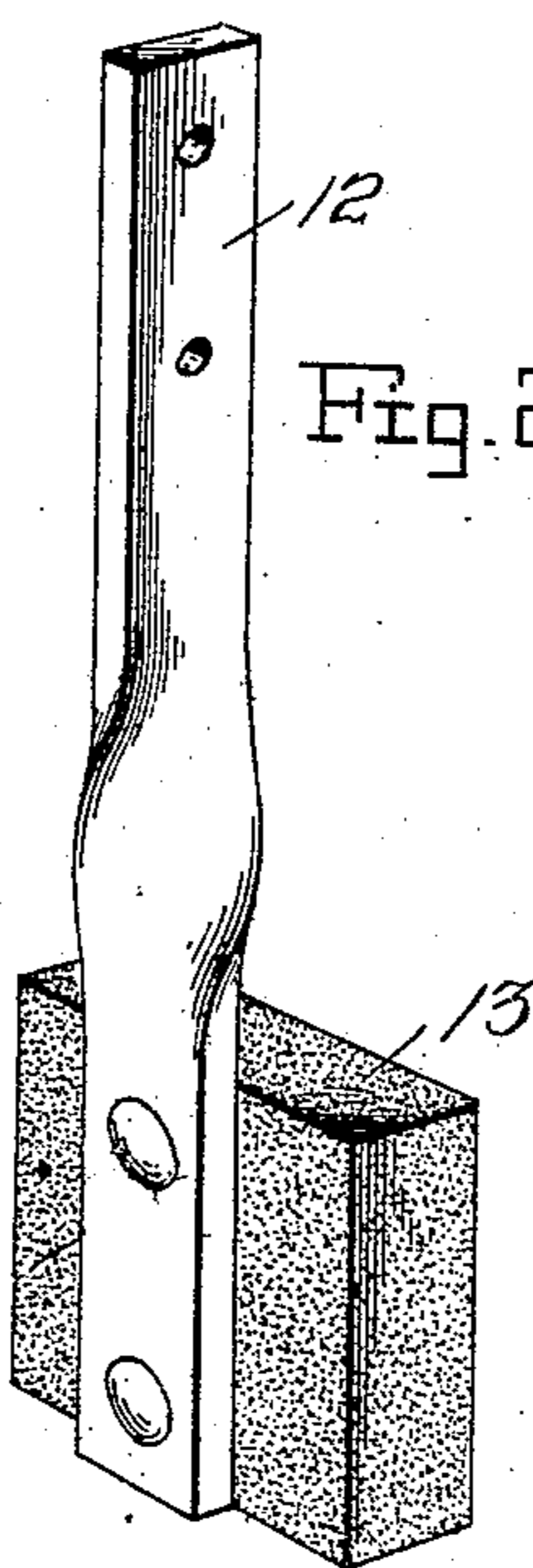


Fig. 2.



Witnesses

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CHARLES N. DETWILER, OF DELTA, OHIO.

SHARPENER FOR BAND-CUTTERS.

No. 855,390.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES N. DETWILER, a citizen of the United States, residing at Delta, in the county of Fulton, State of Ohio, have invented certain new and useful Improvements in Sharpeners for Band-Cutters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to sharpeners and more particularly to those designed for sharpening the band cutters of threshing machines and has for its object to provide a sharpener of this kind which will be extremely simple and inexpensive and which will include means for holding it yieldably in operative position and means for holding it positively out of operative position.

Other objects and advantages will be apparent from the following description.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an end view of a portion of the threshing machine provided with the present invention, a part of the thresher being broken away to illustrate the mounting of the supporting arm. Fig. 2 is a perspective view of a sharpener removed from the thresher.

Referring now to the drawings, there is shown a threshing machine 5 having in its feed chute a horizontally extending band cutter including a revoluble drum 6 provided with knife plates, which lie in spaced relation and which extend beyond the periphery of the drum.

A board 8 is located above the band cutter in horizontal position and has secured thereupon a plurality of U-shaped guides 9 having wings 10 at the ends of their legs through which fastening devices are passed and engaged in the boards. The guides lie in horizontal alinement with each other and have slidably engaged therein, a supporting arm 11, from which there depend a plurality of spaced laterally inclined plates 12 fixed at their upper ends against the forward face of the arm and having each a quarter turn between their ends to bring their major transverse

dimensions longitudinally of the thresher at their lower portions.

The plates 12 extend downwardly between the knife plates 7, one depending plate lying adjacent to each of the knife plates and the depending plates have removably attached thereto, sharpening devices 13 which are movable into and out of engagement with the knife plates when the arm 11 is slid in the guide. A head 14 is carried by one end of the arm 11 and engaged between this head and the outermost bracket 9 at one end of the board 8, there is a helical spring 15 which encircles the arm and which is arranged to hold the arm with the sharpening devices 13 yieldably in engagement with the knife plates 7.

The opposite end portion of the arm 11 is rounded and threaded and extends outwardly through the side of the thresher 5, and engaged with this threaded portion which is indicated at 17, there is a wing nut 16 which is operable to bear against the side of the thresher, to hold the arm against movement under the action of the spring 15, and to hold the sharpening devices out of engagement with the knife plates.

As shown, the drum 6 is supported by hangers 18 secured to the board 8.

What is claimed is:

The combination with a band cutter for threshers having disk-knives of a supporting board, U-shaped guides fixed to said board in registering alinement with one another, said guides having straight faces, an arm slidably mounted in the guides, and having straight faces, plates fixed at their upper ends to said arm and depending therefrom, sharpening devices carried upon the lower ends of said plates for engagement with said respective disk-knives, a spring for forcing said arm to the limit of its inward movement whereby said sharpening devices will engage said knives, and means for moving said arm and the knives suspended therefrom outwardly against the tension of said spring.

In testimony whereof, I affix my signature, in presence of two witnesses.

CHARLES N. DETWILER.

Witnesses:

H. C. CANFIELD,
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