

(No Model.)

G. H. CARVER.
 DEVICE FOR ADJUSTING THE TENSION OF CANVAS APRONS IN
 HARVESTERS.

No. 469,293.

Fig. 1. Patented Feb. 23, 1892.

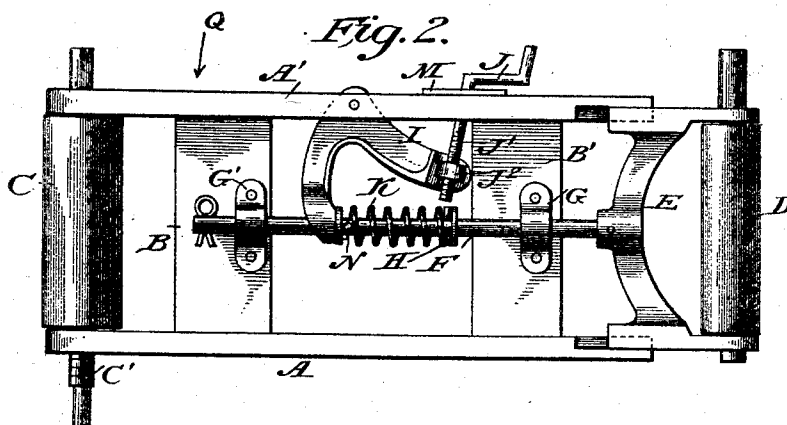
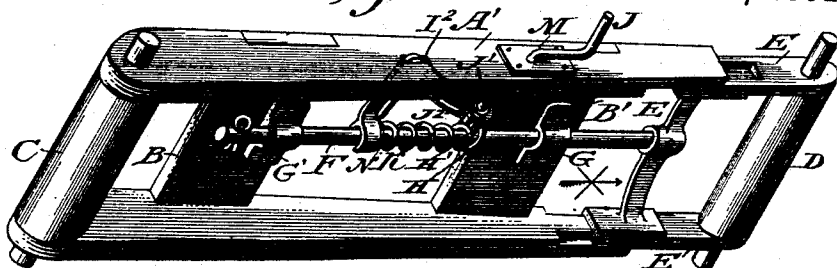


Fig. 5.

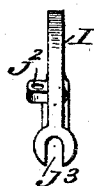


Fig. 3.

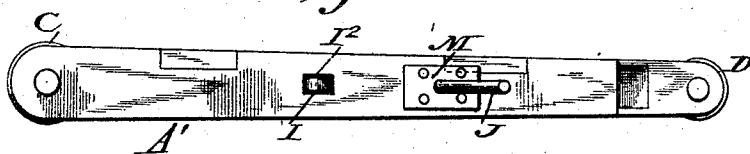


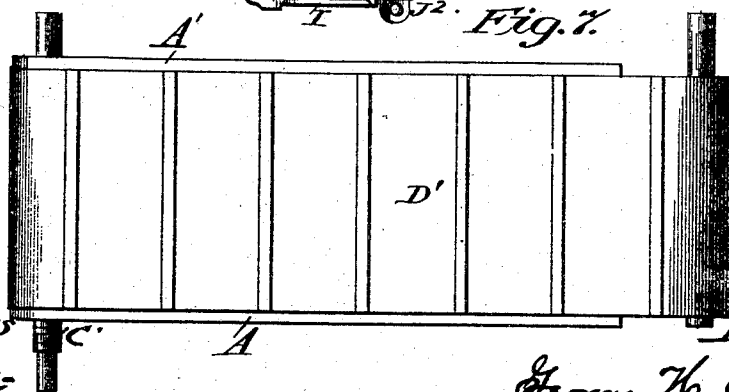
Fig. 4.



Fig. 6.



Fig. 7.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE H. CARVER, OF PLANO, ILLINOIS, ASSIGNOR TO THE PLANO
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DEVICE FOR ADJUSTING THE TENSION OF CANVAS APRONS IN HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 469,293, dated February 23, 1892.

Application filed April 16, 1891. Serial No. 389,235. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. CARVER, a citizen of the United States, residing at Plano, in the county of Kendall and State of Illinois, have invented a new and useful Device for Adjusting the Tension of Canvas Aprons in Harvesters, of which the following is a specification.

My invention relates to that class of harvester-aprons which are provided with independent means for adjusting the tension of the aprons; and the objects sought are, first, a cheap and convenient mode of construction, and, second, a device which will tend to preserve a uniform and sufficient tension of the apron to enable it to perform its proper function, and at the same time to yield within limits to undue pressure resulting from dampness or other causes. I attain these objects by the construction illustrated in the drawings, in which—

Figure 1 is a perspective view of the framework for an adjuster-canvas which embodies my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a top view of the same. Fig. 4 is a top view of an elbow-lever. Fig. 5 is a view of the same, looking in the direction indicated by the arrow Q. Fig. 6 is a view, looking in the direction indicated by the crossed arrow, of a part which may be called a "cross-head." Fig. 7 is a side view of the adjuster with the canvas apron in place.

Similar letters indicate similar parts in the several figures.

The frame of the adjuster consists of a part A, preferably of wood, and its counterpart A', united by cross-pieces B B'. These cross-pieces are "gained" in at one edge of the parts A A', so as to be flush with said edge, as shown, and may be fastened in any well-known manner. A driving-drum C is mounted in one end of the frame, and a smaller roller D is mounted in the cross-head at the opposite end. Upon these rollers a canvas apron D' is mounted and driven from some operative part of the harvester by means of a gear or other wheel screwed upon the shaft C'. A rod F is fastened rigidly in the central boss of the cross-head, as shown in Fig. 1. This rod slides in guides G G', attached to the cross-pieces B B'. An elbow-lever I is pivoted in a mortise

I² in the part A', as shown. One arm of this lever has an enlarged end containing a slot J³, Fig. 5. This slot embraces the rod F, as shown in Fig. 1. The opposite end of the elbow-lever is provided with a swiveling lug J². This lug is tapped to receive a screw J', cut upon the crank-rod J. This crank-rod passes through a slotted opening in the part A and is held in position by a thin metallic plate M, attached to the part A, as shown. A pin H (or collar) is fastened in or upon the rod F in the proper position, as shown, to receive the end of a coiled spring K, which embraces the rod. The other end of this spring abuts against the slotted end of the elbow-lever I, as shown. To move the cross-head in or out, the crank J is turned, and as the screw moves within the swiveled lug the end of the elbow-lever is moved up or down, as the case may be, which causes a corresponding movement of the opposite end of the elbow-lever in the direction of the length of the rod F. A coiled spring K of a suitable strength for the purpose desired is interposed between the pin H and the slotted end of the elbow-lever I upon the rod F, which gives a yielding pressure to the cross-head E, so that when the apron is mounted upon the rollers C D the canvas may be adjusted to operate as desired, and yet may yield whenever it shrinks from dampness. A pin-hole N is made in the guide-rod F. Should the spring K from any cause become inoperative, the pin H can be removed from its normal position and placed in the hole N. The guide-rod and cross-head can be then moved positively by the elbow-lever.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a new device for adjusting the tension of canvas aprons in harvesters, the combination of a driving-roller frame composed of the parts specified, a driving-roller c, mounted thereon, a longitudinally-adjustable roller-bearing cross-head carrying a tightening-roller D, as shown, a guide and thrust rod F, guides G G', a tension-spring K, a spring stop or pin H, attached to the guide-rod, an elbow-lever I, pivoted as described, an internally-threaded swiveling lug J², mounted as specified, a crank-operated screw J, and a canvas apron D', all substantially as described.

2. A driving-roller frame composed of the parts specified, a driving-roller C, mounted thereon, a longitudinally-adjustable roller-bearing cross-head carrying a tightening-roller D, as shown, a guide and thrust rod F, guides G G', a pin H, attached to the guide-rod, an elbow-lever I, pivoted as described, an internally-threaded swiveling lug J², mounted

as specified, a crank-operated screw J, and a canvas apron D', all substantially as described.

GEORGE H. CARVER.

Witnesses:

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