

No. 709,769.

Patented Sept. 23, 1902.

A. O. HOEPNER.  
HARROW DRAW BAR.

(Application filed May 1, 1902.)

(No Model.)

Fig. 1.

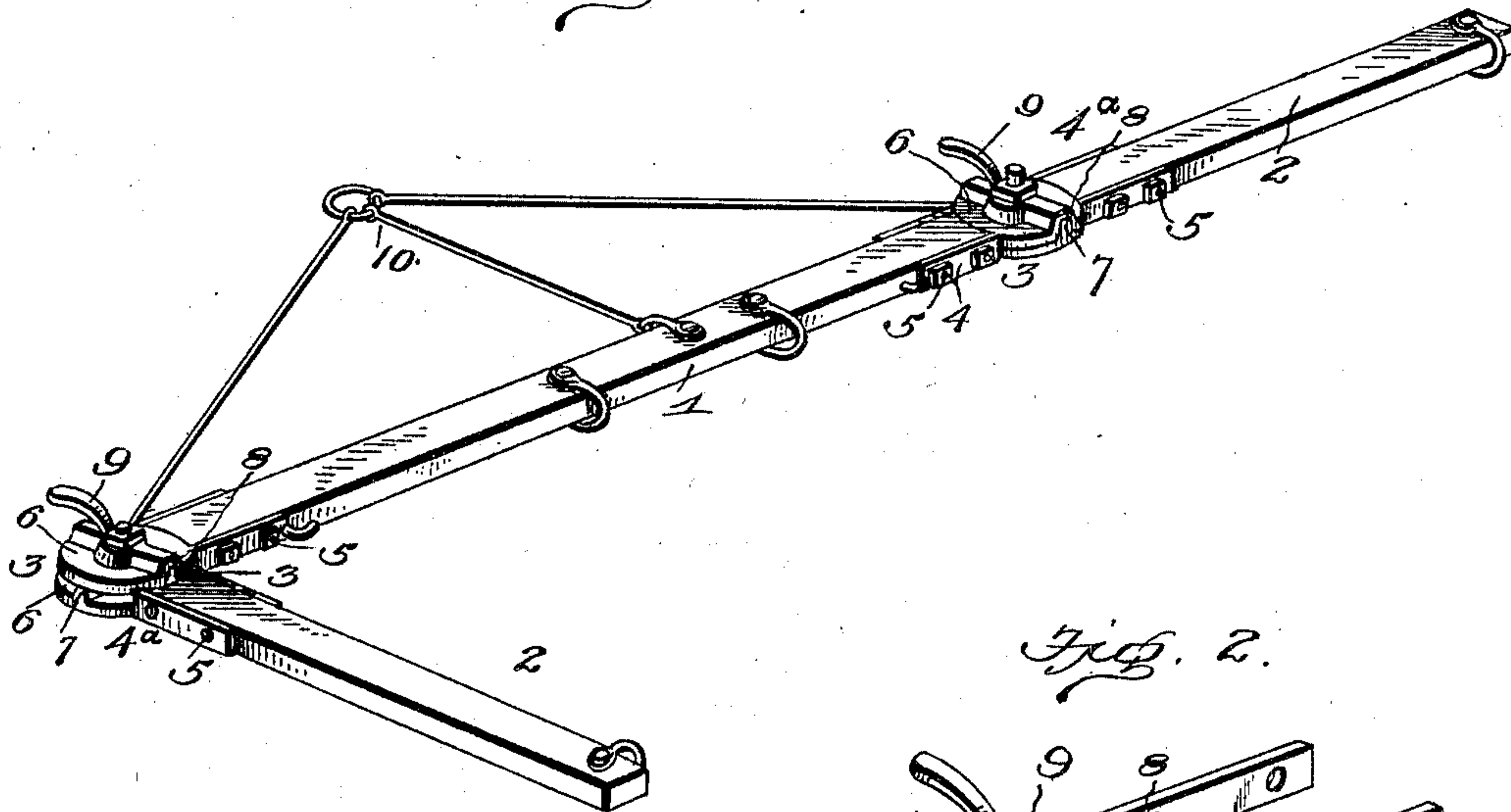


Fig. 2.

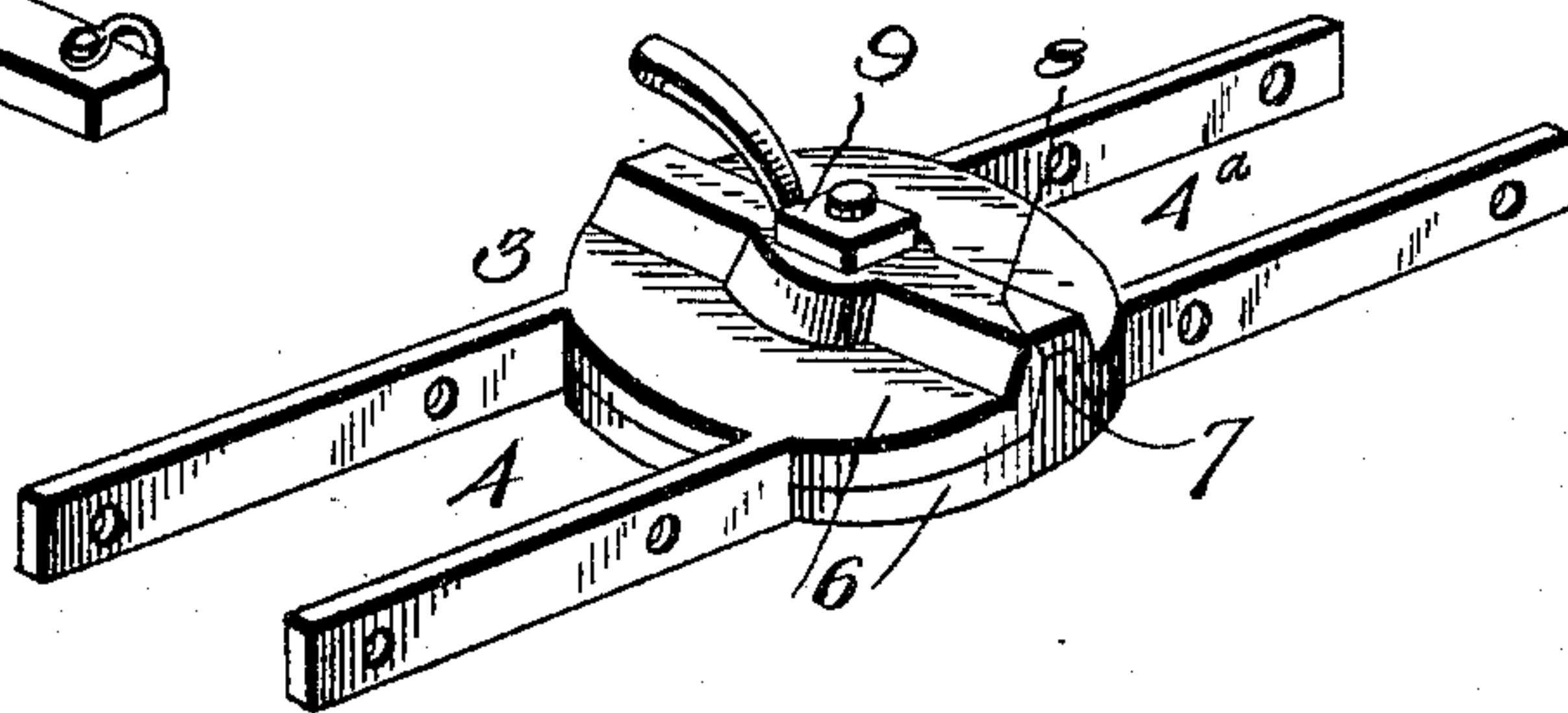
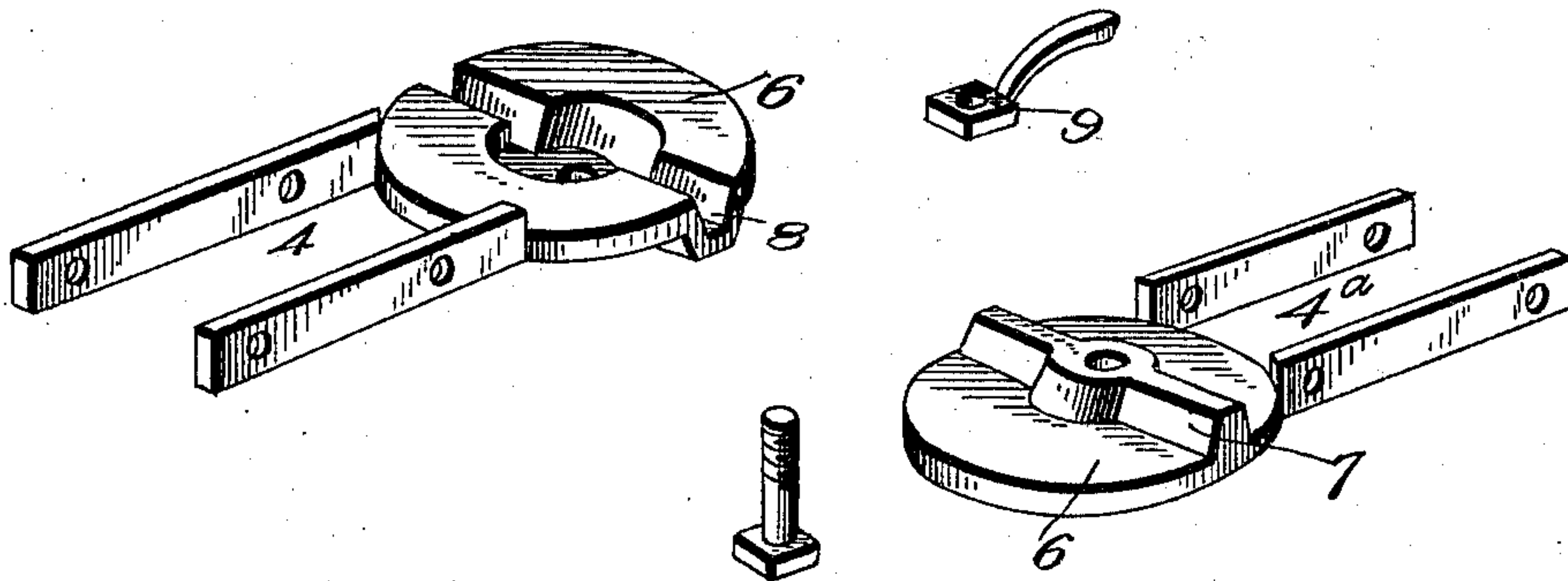


Fig. 3.



Inventor

Albert O. Hoepner

By

A. B. Wilson & Co.

Attorneys

Witnesses  
E. A. Smith  
J. E. Bullen

# UNITED STATES PATENT OFFICE.

ALBERT O. HOEPNER, OF SANDWICH, ILLINOIS.

## HARROW DRAW-BAR.

SPECIFICATION forming part of Letters Patent No. 709,769, dated September 23, 1902.

Application filed May 1, 1902. Serial No. 105,474. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT O. HOEPNER, a citizen of the United States, residing at Sandwich, in the county of Dekalb and State of Illinois, have invented certain new and useful Improvements in Harrow Draw-Bars; and I do 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.

The invention relates to a harrow draw-bar.

The object of the invention is to provide a device of this character which may be folded to permit of its being drawn through narrow passage-ways without the necessity of raising or tilting one side from the ground.

With the above and other objects in view, which will readily appear as the nature of the invention is better understood, said invention consists in certain novel features of construction and combination and arrangement of parts, as will be hereinafter fully described, defined in the appended claim, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved draw-bar, showing one end folded or swung rearwardly to lessen the length of the bar, and thereby permit it to be moved through a small passage-way or gateway, it of course being understood that the other end is capable of the same adjustment. Fig. 2 is an enlarged detail perspective view of the hinge-joint for connecting the end extension to the body portion of the draw-bar. Fig. 3 is a similar view of the parts of the joints separated and one of the parts turned to expose its inner or working face, the pivotal bolt and tail-nut being also shown.

In the drawings, 1 denotes the body of the draw-bar, which consists of a beam or timber, and 2 denotes the end pieces connected to the ends of the body portion. The connection of these pieces is effected in a novel manner by the hinges 3, each of which consists of the sections 4 and 4<sup>a</sup>, secured to the beam and its end piece by bolts 5 and provided with heads 6, one of which is provided with radial ribs 7

to fit into the radial grooves 8, formed in the other head. A bolt extends through both heads, and engaged with the threaded end of this bolt is a tail-nut 9 for clamping the parts in their adjusted position. When the extensions are parallel with the body portion of the bar, the ribs of one set of heads fit the grooves of the other set of heads, and by turning the tail-nut the parts are held in secure adjustment. To permit of the end pieces being swung back for the purpose of reducing the length of the draw-bar, and thereby enabling it to be drawn through a narrow passage or gateway, the tail-nuts are loosened and the end pieces are swung rearwardly.

10 denotes the draw-rod or hitching device connected to the body portion 1.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of my improved harrow draw-bar will, it is thought, be readily apparent without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A harrow draw-bar having heads at its ends, extensions having heads at their ends, bolts for connecting the heads, one set of heads being provided with ribs and the other set with receiving-grooves to form an interlocking joint, and nuts engaging said bolts for clamping the parts in locked position, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT O. HOEPNER.

Witnesses:

HERMAN HOEPNER,  
T. W. SLY.