

(No Model.)

2 Sheets—Sheet 1.

G. E. DEXTER & E. J. PATTERSON.

DEVICE FOR SUPPORTING THE DROP ROLLS OF WARPING MACHINES.

No. 336,301.

Patented Feb. 16, 1886.

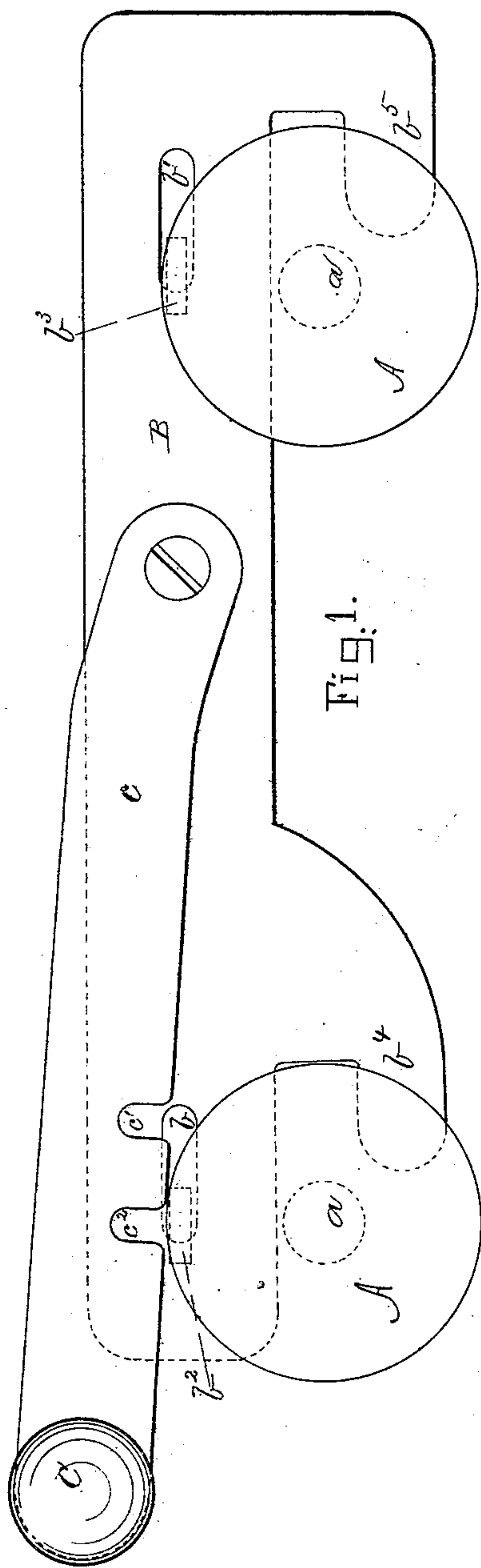


Fig. 1.

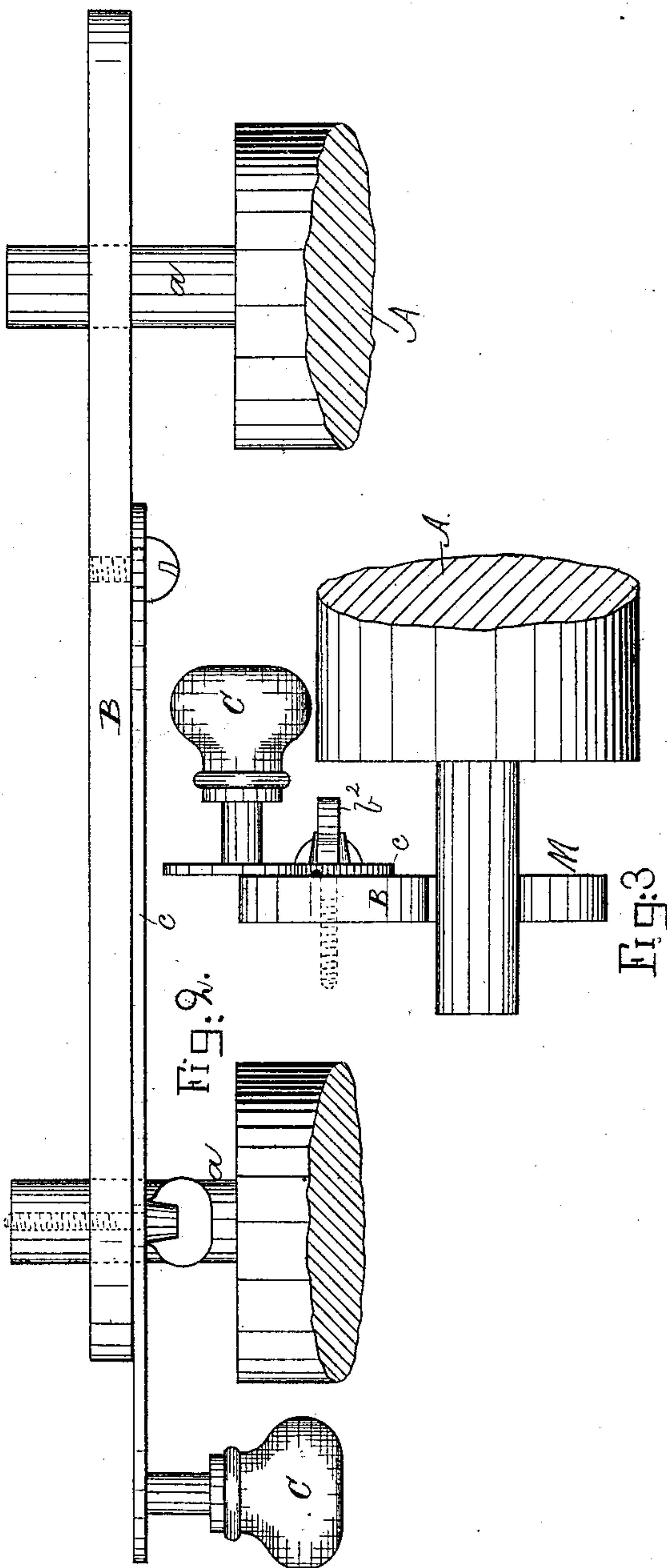


Fig. 2.

Fig. 3.

Witnesses.

*Lauritz H. Möller.*

*John R. Snow.*

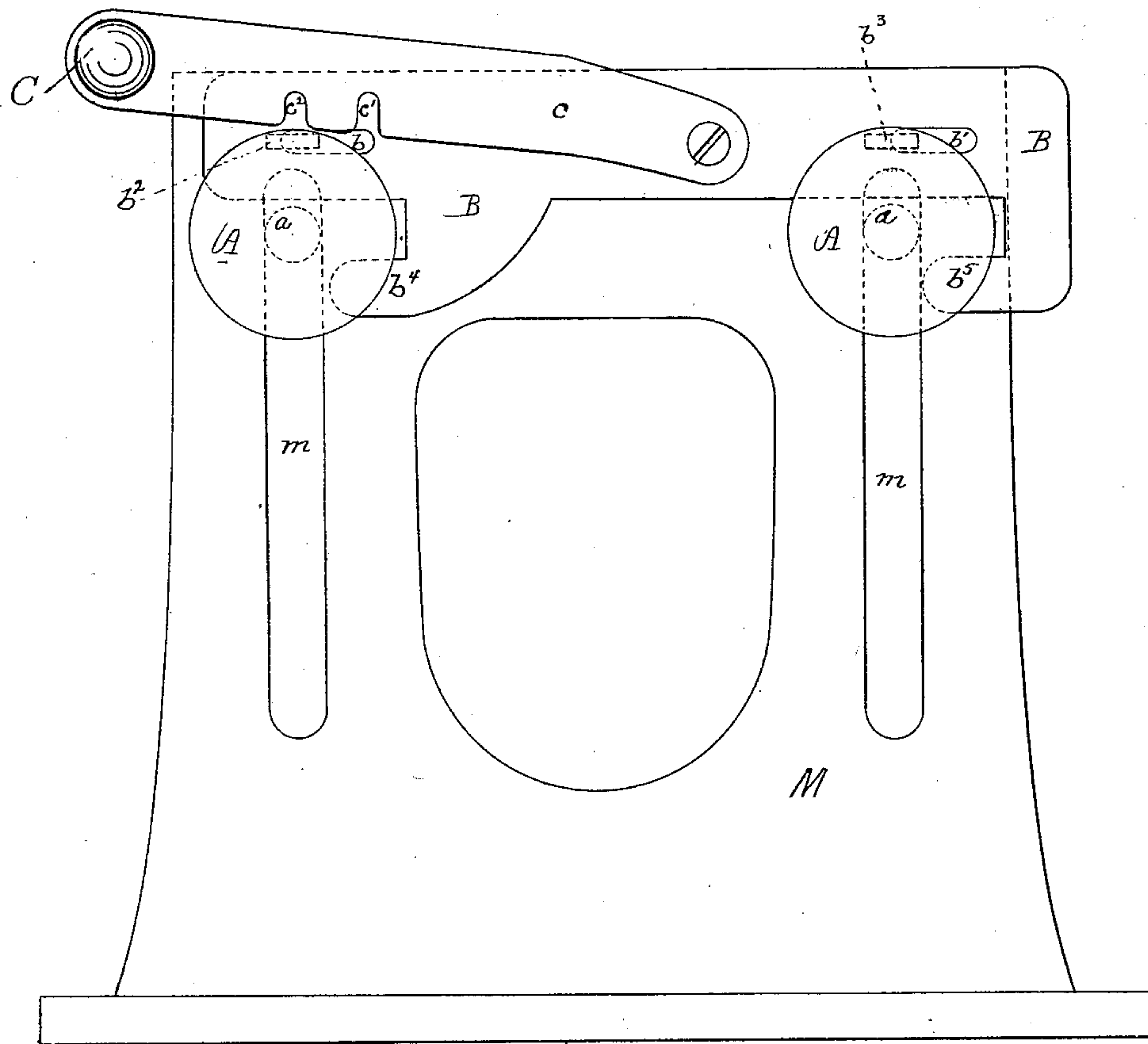
Inventor  
*George E. Dexter and*  
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*J. E. Haywood*  
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2 Sheets—Sheet 2.

# DEVICE FOR SUPPORTING THE DROP ROLLS OF WARPING MACHINES.

Patented Feb. 16, 1886.

Fig.4.



Witnesses.

Edward J. Beach.  
John R. Snow.

# Inventor.

George E. Dexter, and  
Elbridge J. Patterson,  
J. E. Maynard Atty



# UNITED STATES PATENT OFFICE.

GEORGE EZRA DEXTER AND ELBRIDGE JUDSON PATTERSON, OF WALTHAM,  
MASSACHUSETTS.

DEVICE FOR SUPPORTING THE DROP-ROLLS OF WARPING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 336,301, dated February 16, 1886.

Application filed May 9, 1884. Serial No. 130,860. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE E. DEXTER and ELBRIDGE J. PATTERSON, both of Waltham, in the county of Middlesex and State of Massachusetts, have invented a new and useful Device for Supporting the Drop-Rolls of Warping-Machines, of which the following is a specification.

The objects of our invention are to provide a secure support for sustaining the drop-rolls while tying in spools, to afford facilities for rendering the drop-rolls operative or inoperative in less time than by the old way of tying them up by strings, and to obviate all liability of any loose ends getting caught in the measuring mechanism.

Our invention consists in a bar adapted to receive the journals of the drop-rolls, in combination with means for connecting the bar with and disconnecting it from the journals of the drop-rolls, as hereinafter described, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of our device detached, and indicates the relation of the device with the drop-rolls. Fig. 2 is a plan of our device detached, and indicates the relation of the device with portions of the drop-rolls. Fig. 3 is a view of one end of our device detached, and indicates the relation of the device with a portion of a drop-roll; and Fig. 4 is a side view of part of the frame of a warping-machine with our device for supporting the drop-rolls attached.

The drop-rolls A have their journals a mounted in the usual manner in ways m in the frame M, (see Fig. 4,) so that they can be raised while tying in the spools and lowered to give tension to the threads by which the rollers are supported while winding the threads onto the beam.

Heretofore it has been customary to use strings for supporting the drop-rolls while tying over on a warping-machine. These strings were liable to break and let the rolls fall onto the threads, thereby causing them to break and snarl, which necessitates a rethreading of the drop-wires and comb. The strings were also liable to become caught in the clock-gear and cause inaccurate measurement. Considerable time was also consumed in tying up the drop-rolls with strings, and there

was no certainty of raising both ends alike. Frequently one end was left lower than the other end, thereby causing unequal strains on the threads. With our support all of these difficulties are obviated. The rolls can be instantly supported or released, thereby saving time over the old way. There is no possible liability of the supports breaking, and no loose ends to interfere with the measuring mechanism.

At each end of the drop-rolls A we provide a bar, B, adapted to slide by means of the slots  $b\ b'$ , which embrace screws  $b^2\ b^3$ , secured to the frame of the warper. A handle, C, connected to the bar B by means of the pivoted lever c, serves to enable the operator to reciprocate the bar B to the extent of the slots  $b\ b'$ . Notches  $c'\ c^2$  in the lever c engage with the screw  $b^2$  in the slot  $b$ , and thereby provide means for locking the bar B at either end of its stroke. Brackets  $b^4\ b^5$  are formed on the lower side of the bar B, and can be brought in position to engage with the journals a, and form strong and secure supports for the drop-rolls when desired by means of the handle C. The bar B can then be prevented from being displaced by one of the notches  $c'\ c^2$  in the lever c and the screw  $b^2$ .

The facility and rapidity with which the rolls may be rendered operative or inoperative by merely sliding and securing the bar B, and the secure support thereby provided, will be apparent without further description.

We claim as our invention—

1. The combination, with the drop-roll of a warping-machine, of supports for its journals, a slide-bar carrying these supports, and a handle for reciprocating the slide-bar, arranged and operating substantially as set forth.

2. The combination, with the supports for the journals of the drop-roll of a warping-machine, the slide-bar to which the supports are secured, and the handle for reciprocating the slide-bar, of the notches and screw for locking the bar at either end of its stroke, substantially as and for the purpose set forth.

GEORGE EZRA DEXTER.  
ELBRIDGE JUDSON PATTERSON.

Witnesses:

ENOS T. LUCE,  
THOS. B. EETON.