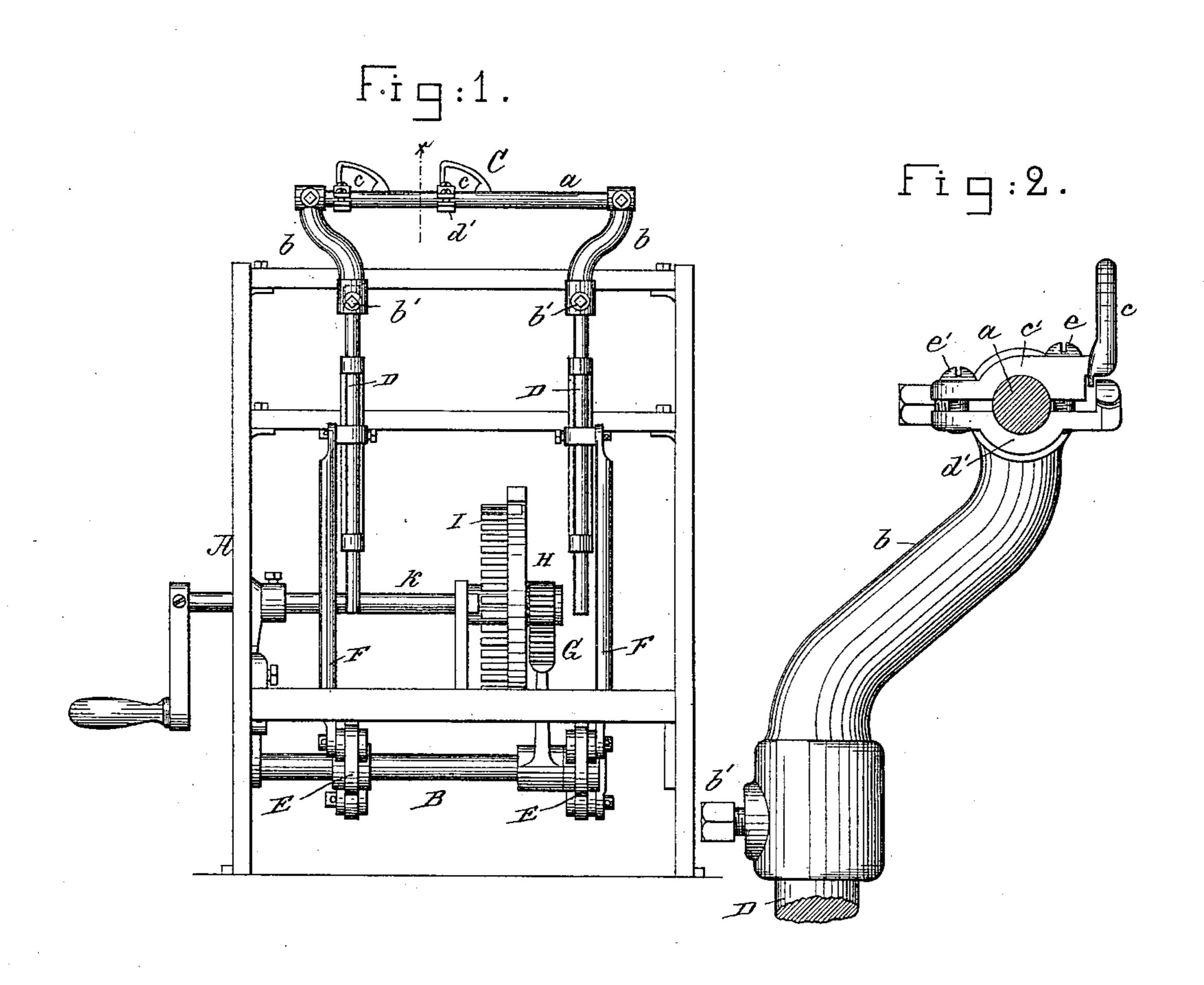
(No Model.)

## J. H. NORTHROP & R. C. FAY.

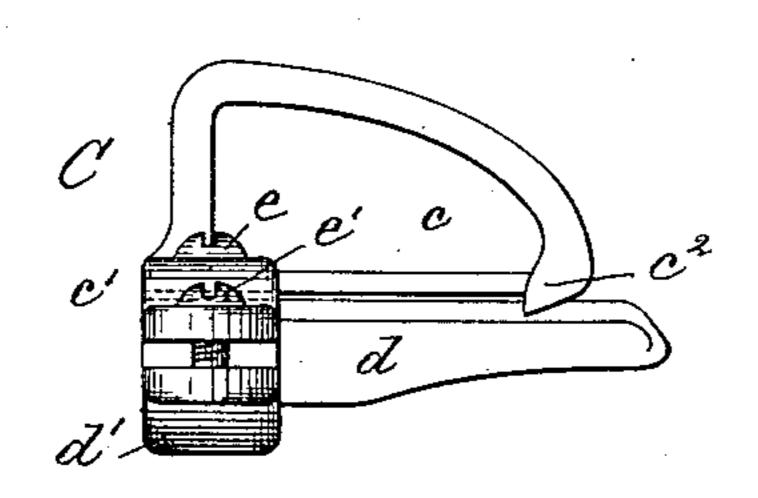
YARN GUIDE FOR SPOOLERS.

No. 330,042.

Patented Nov. 10, 1885.



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## United States Patent Office.

JAMES HENERY NORTHROP AND RIMMON C. FAY, OF HOPEDALE, MASS., ASSIGNORS TO THE HOPEDALE MACHINE COMPANY, OF SAME PLACE.

## YARN-GUIDE FOR SPOOLERS.

SPECIFICATION forming part of Letters Patent No. 330,042, dated November 10, 1885.

Application filed February 24, 1885. Serial No. 156,841. (No model.)

To all whom it may concern:

Be it known that we, James H. Northrop and Rimmon C. Fay, of Hopedale, county of Worcester, State of Massachusetts, have inspected an Improvement in Yarn-Guides for Spoolers, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to so construct and support a series of guides as to enable them to be readily adjusted in the direction of the length of the spooling-machine.

This invention is an improvement in that class of machine represented in United States Patent No. 193,106, dated July 17, 1877.

Our invention consists, essentially, in a spooler-guide or clearer made in two parts, as described, and adapted to be clamped to a rod, the clamp-screws enabling the acting faces or edges of the guides to be adjusted more or less apart, as will be described.

Figure 1, in front elevation, represents our improvements added to a spooling-machine such as represented in United States Patent No. 193,106, to which reference may be had; Fig. 2, an enlarged section in the dotted line x, Fig. 1, of only the parts added by us to the said machine; and Fig. 3 is an elevation of the spooler-guide or clearer detached from its holding-rod.

The frame-work A, the shaft k, the gearing H G I, rock-shaft B, links F F, levers E, and the lifting-rods D D and their guides are all

In accordance with our invention we provide a rod, a, which we support in brackets b b, erected upon or attached to the lifting-rods D by screws b' b'. The rod a, extended along the side of the frame parallel with the usual row of spindles, (not shown,) serves as a support for the spooler-guides or clearers C, each composed of an upper member or blade, c, and a lower member or blade, d, the two blades having their acting edges arranged more or

less remote from each other, according to the size of the thread to be passed between them. The upper member or blade, c, has a connected half box or hub, c', while the lower member or blade has a correspondingly-extended half 50 box or hub, d', one half box or hub being adapted to embrace the upper side of the rod a, while the other half box or hub, d', embraces the lower side of the said rod, the two boxes being kept upon the said rod and in adjusted 55 position by the two screws ee'—one at the front side and the other at the rear side of the said rod, as shown best in Fig. 2—the said screws, by turning them in more the one than the other, enabling the acting edges of the mem- 60 bers or blades to be placed and kept at the desired distance apart, according to the size of the thread being acted upon.

The upper blade or member, c, has the usual hook,  $c^2$ , to prevent the escape of the thread 65 laterally from between the ends of the blades most remote from their half boxes or hubs.

We claim—

- 1. The rod a of the spooling-machine and a spooler-guide or clearer composed of two 70 blades or members, each having a connected half box or hub, combined with two screws to adjust the said hubs on the said rod and place the acting edges of the blades or members at the desired distance apart, substantially as 75 described.
- 2. A spooler-guide or clearer composed of two blades, each provided with a half box or hub, combined with screws to keep the half boxes or hubs in place and the blades in op-80 erative position with relation each to the other, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

JAMES HENERY NORTHROP. RIMMON C. FAY.

Witnesses:

F. J. DUTCHER, WM. J. WOODS.