

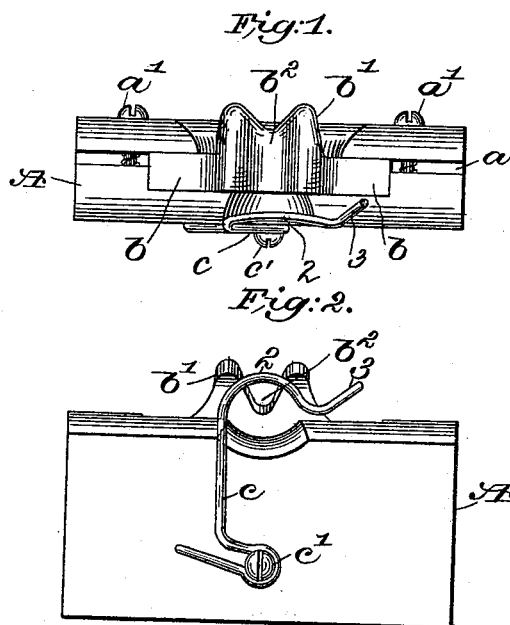
(No Model.)

A. E. RHOADES.

YARN GUIDE FOR DOUBLING AND TWISTING MACHINES.

No. 494,490.

Patented Mar. 28, 1893.



Witnesses.

*Geo. Washburn*  
*Louis N. Howell*

Inventor.

*Alonzo E. Rhoades.*  
*by Crosby Arroyo attys.*

# UNITED STATES PATENT OFFICE.

ALONZO E. RHOADES, OF HOPEDALE, MASSACHUSETTS, ASSIGNOR TO THE  
HOPEDALE MACHINE COMPANY, OF SAME PLACE.

## YARN-GUIDE FOR DOUBLING AND TWISTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 494,490, dated March 28, 1893.

Application filed August 4, 1892. Serial No. 442,115. (No model.)

*To all whom it may concern:*

Be it known that I, ALONZO E. RHOADES, of Hopedale, county of Worcester, State of Massachusetts, have invented an Improvement in Yarn-Guides for Doubling and Twisting Machines, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

This invention has for its object the production of a guide especially adapted for use in connection with machines of the class referred to that is to say, doubling and twisting machines wherein the yarns are wet, yet my invention is applicable for use with dry yarns. For wet yarns metallic guides are objectionable, and where it has been attempted to use vitreous guides, difficulty has been experienced in constructing the guide in such manner that while it is strong it may be readily adapted to be threaded.

My invention comprehends a guide including an open vitreous throat and a separate throat closer, the latter crossing and closing the throat and having an end between which the yarn or yarns may be caught when drawing them laterally into the throat.

Figure 1, is a front view of a guide embodying my invention; and Fig. 2, an under side view thereof.

The block A composed of wood is like the block ordinarily used to hold the wire guide eye used in spinning, said block being in practice hinged to the usual guide board, not shown. The block A, as herein represented, is cut out at its front edge as at *a*, as best shown in Fig. 1, for the reception of the

flanges *b* of the vitreous or glass throat *b'* having a deep thread receiving space *b<sup>2</sup>*, screws *a'* clamping, as shown, the wood onto the throat to hold it firmly in place. The board A is provided at its under side with a throat closer *c* secured in place as shown by a screw *c'*, said throat closer being bent, as at 2, to form the outer wall of the space in which the yarns travel, the free end 3 of the throat closer being extended far enough beyond the outer side of the throat to enable yarns to be put into the throat to be readily caught behind the throat closer and be drawn laterally into the open space *b<sup>2</sup>* between the throat and eye closer. This throat closer prevents the yarns from being thrown out of the throat during the spinning operation.

I do not broadly claim a vitreous eye, or a slotted self-threading eye.

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

The within described yarn guide composed of the vitreous throat having the deep thread-receiving space, combined with the throat closer rigidly secured before the throat and having a bend in line with the throat and a free end projecting laterally beyond the throat, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALONZO E. RHOADES.

Witnesses:

C. E. LONGFELLOW,  
R. A. COOKE.