

(No Model.)

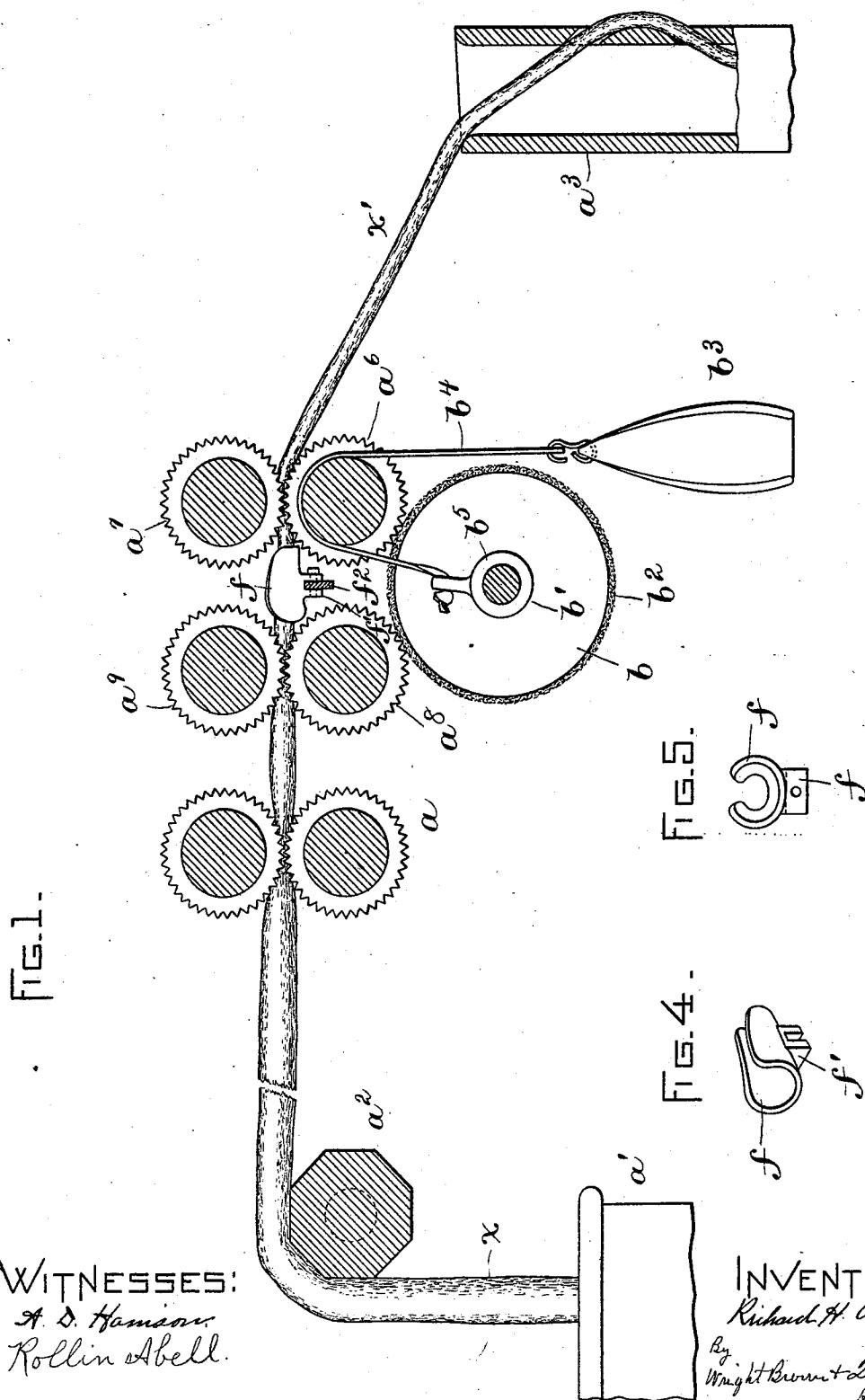
2 Sheets—Sheet 1.

R. H. COOK.

CONDENSING GUIDE FOR DRAWING OR SLUBBING MACHINES.

No. 552,276.

Patented Dec. 31, 1895.



(No Model.)

2 Sheets—Sheet 2.

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FIG. 2.

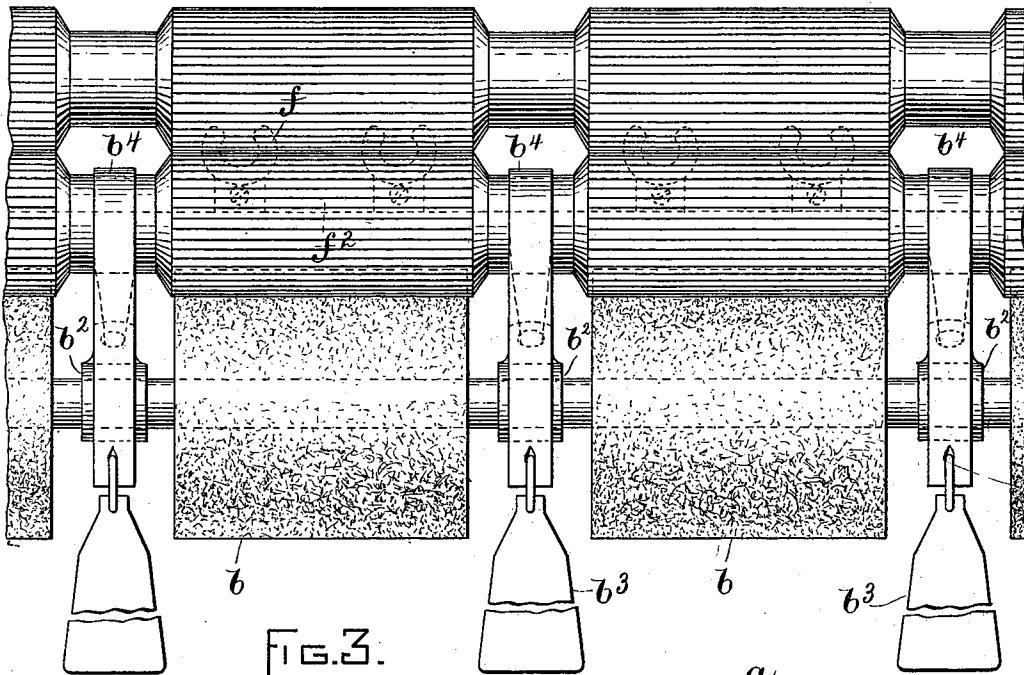
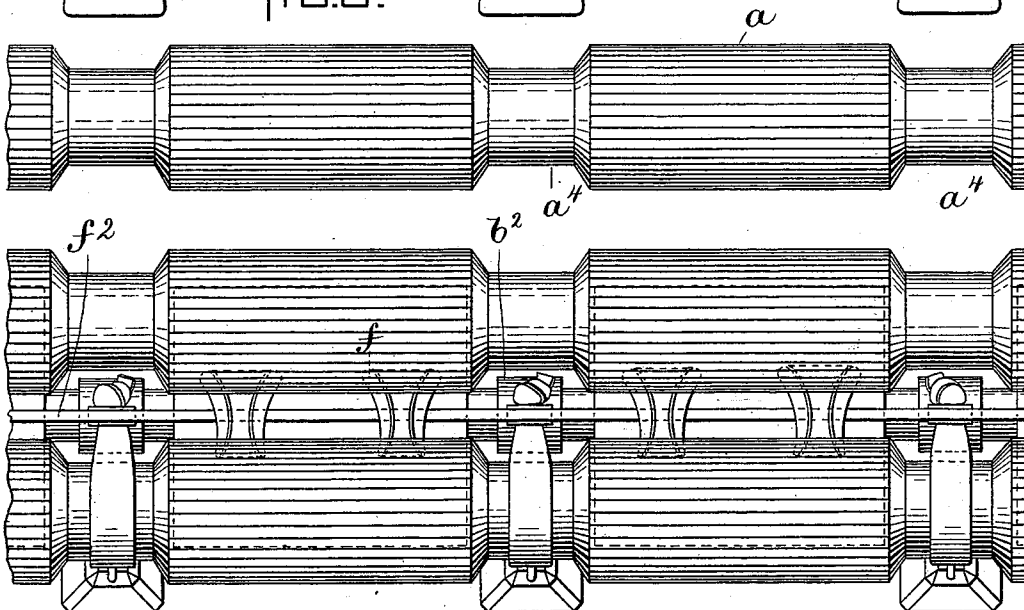


FIG. 3.



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UNITED STATES PATENT OFFICE.

RICHARD HARTLEY COOK, OF FALL RIVER, MASSACHUSETTS.

CONDENSING-GUIDE FOR DRAWING OR SLUBBING MACHINES.

SPECIFICATION forming part of Letters Patent No. 552,276, dated December 31, 1895.

Application filed May 6, 1895. Serial No. 548,299. (No model.)

To all whom it may concern:

Be it known that I, RICHARD HARTLEY COOK, of Fall River, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Condensing-Guides for Drawing or Slubbing Machines, of which the following is a specification.

This invention relates to a new and improved condensing-guide for drawing and slubbing machines; and it consists in the novel features of construction and relative arrangement of parts hereinafter fully described in the specification, clearly illustrated in the drawings, and particularly pointed out in the claims.

Reference is to be had to the accompanying sheet of drawings, forming a part of this application, in which like characters indicate like parts wherever they occur.

In the drawings, Figure 1 shows a vertical longitudinal section of a portion of a drawing or slubbing machine with my invention applied thereto. Fig. 2 represents a top plan view of the central part of Fig. 1. Fig. 3 represents an end view of Fig. 1, looking from the coiler. Figs. 4 and 5 are detailed views of one of the condensing-guides.

The coiler a^3 , the drawing-rolls represented generally by the symbol a , the can a' , guide-roll a^2 , and the slubbing x are all of the usual construction and arrangement. Much difficulty is experienced in actual practice between the last two sets of rolls a^3 a^4 , a^6 a^7 , the fiber and loose waste having a tendency to drop down at this point between the rolls. Some means are necessary to prevent this and also to keep the bottom rolls a^6 and a^8 clear. By my invention I am able to accomplish this end, and, further, to so guide and condense the drawings or slubbings at this point that after they have passed out of the roller—namely, at the part indicated by x' —they will twist more readily than drawings or slubbings passed through a machine not provided with my invention. The ordinary slubbing that leaves the rolls a^6 a^7 is so large and clumsy that it does not twist readily.

By my invention I am enabled not only to keep the rolls clear, but to so condense the fiber at this stage of the process that a much finer and more even yarn can be spun.

f^2 represents a bar extending lengthwise of the machine in front of the last set of rolls a^6 a^7 . This bar may be connected to any suitable part of the machine. Upon this bar are slidingly mounted the condensing-guides f by means of companion lugs f' , integral with said guides and projecting from the bottom part thereof, as shown. The edges of these lugs are preferably rounded, so that the guides can slide freely upon the bar and adjust themselves to the varying sidewise movement of the slubbing or drawing. These guides are of a general frusto-conical shape with a base arranged toward the can and the opening having the smaller diameter arranged toward the coiler. The top part of the guide is preferably cut away in order to readily insert the slubbings into the guides. As the slubbings are drawn through these guides they are condensed to quite an appreciable extent. The fibers are kept together and prevented from falling down or hanging, thus enabling the drawing or slubbing to be more readily twisted by the coiler or spindle.

b represents a clearing-wheel provided upon its periphery with a cover b^2 of felt or any similar material. This wheel is mounted to turn upon a shaft b' . Collars b^5 are secured to this shaft at points corresponding to the depressions a^4 of the drawing-rolls. A strap b^4 is connected with these collars and passes over and around one of the depressions in the lower roll a^6 and is connected at its other end with a weight b^8 . By this means the clearing-wheel is kept in contact with the rolls a^8 a^6 in order to clear them from any fiber that may have passed the guides.

The clearing-wheel above described is clearly disclosed and claimed in another application filed by me May 6, 1895, Serial No. 548,298.

Having thus explained the nature of my invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim, and desire to secure by Letters Patent, is—

1. In a slubbing or drawing machine in combination, a bar f^2 , mounted upon the machine, across and in the vicinity of the line of travel of the slubbings or drawings, and a

series of condensing guides, each provided with companion lugs, adapted to straddle said bar, and maintain said guides in sliding engagement with said bar, substantially as
5 and for the purpose set forth.

2. In a slubbing or drawing machine in combination, a bar f^2 , mounted upon the machine, across and in the vicinity of the line of travel of the slubbings or drawings, a series of condensing guides each provided with
10 means for loosely engaging said bar whereby

said guides may have a sliding engagement with said bar, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 26th day of April, A. D. 1895.

RICHARD HARTLEY COOK.

Witnesses:

N. HATHEWAY,
PETER HARDMAN.