

(No Model.)

J. E. PREST.
DRAWING FRAME.

No. 507,079.

Patented Oct. 17, 1893.

Fig. 1.

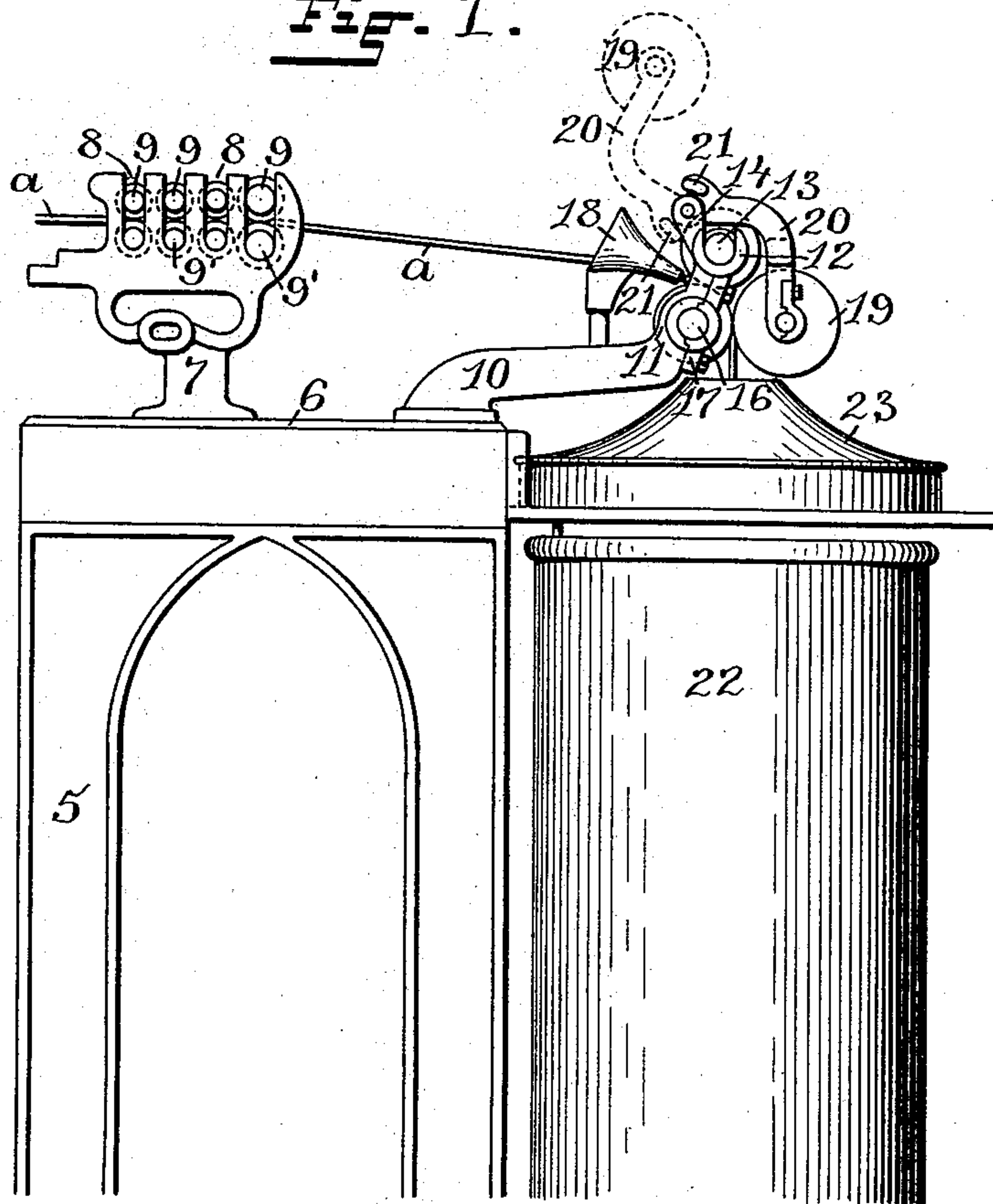
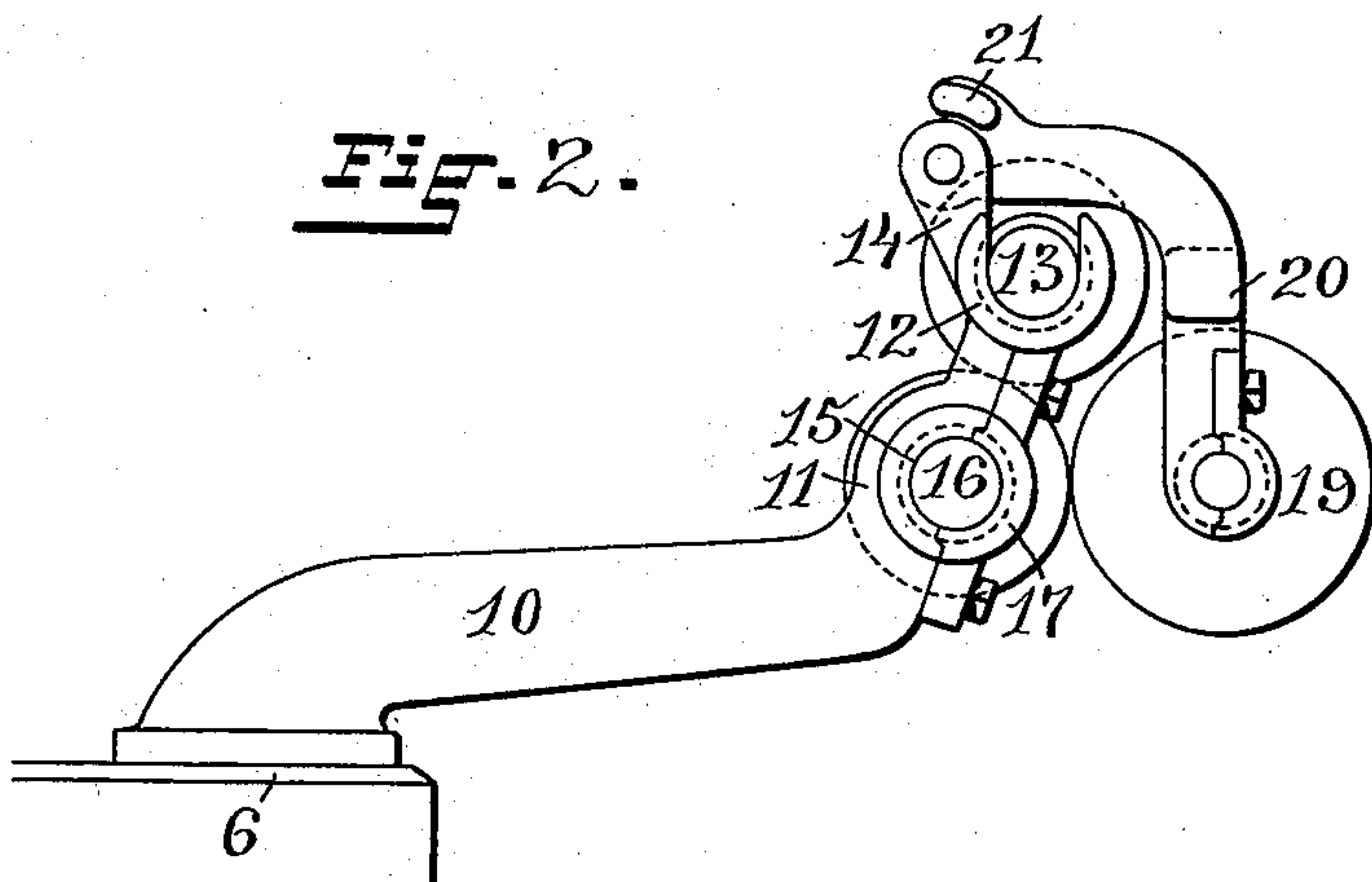


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN E. PREST, OF WHITINSVILLE, MASSACHUSETTS, ASSIGNOR TO THE
WHITIN MACHINE WORKS, OF SAME PLACE.

DRAWING-FRAME.

SPECIFICATION forming part of Letters Patent No. 507,079, dated October 17, 1893.

Application filed May 18, 1893. Serial No. 474,657. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. PREST, of Whitinsville, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Drawing-Frames; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to improvements in machines for drawing out and evening the carded-sliver and delivering the same to the cans.

The object of this invention is to locate the bite of the rolls directly over and near the guide-tube of the can to deliver the sliver directly from the delivery-rolls into the guide-tube and at the same time to consolidate and calender the sliver at the nearest approach to the guide-tube.

Another object of the invention is to provide a drawing-frame with a gravity calendering and guide roll which is adapted to be turned back from before the delivery-rolls.

The invention consists in the peculiar construction of the frames supporting the delivery-rolls and the combination therewith of a gravity calendering and guide roll journaled in bracket-arms which are pivoted to the delivery-frame rolls, together with such other novel features of construction and combination of parts as may be hereinafter more fully described and pointed out in the claims.

Figure 1 represents an end view of a drawing-frame and the can for receiving the sliver passing from the delivery-rolls, showing the improved guiding and calendering device. Fig. 2 represents an enlarged end view of the delivery and calendering rolls to show more clearly the construction of the calendering-roll supports.

Similar letters and numbers of reference designate corresponding parts throughout.

In the drawings 5 indicates one of the standards on which the table top 6 is supported. The end-frame 7 is secured to this table top and is furnished with vertical-slots 8—8 in which the ends of the drawing-rolls 9—9 and 9'—9' are carried, a similar frame being used

to support the opposite ends of the rolls. From the forward portion of the top 6 extend brackets 10—10 having the inclined members 11—11, in the upper end of which are formed bearings 12—12, open at the tops, in which the ends of the upper delivery-roll 13 are journaled, and from these bearings extend the perforated-ears 14—14; in the lower main portion of the members 11—11 are formed the concave-bearings 15—15 in which the ends of the lower delivery-roll 16 are journaled, similar bearings being formed in the separable plates 17—17 secured to the members 11—11 by bolts to support the roll 16 in place, the trumpet 18 being supported, with its small end adjacent to the delivery rolls, in any ordinary manner.

The calendering and guide roll 19 is journaled at the ends in bearings of the curved-arms 20—20, these arms having the stops 21—21 at their upper ends and being pivoted at these ends to the perforated-ears 14, so that when swung upward to the position shown in dotted lines in Fig. 1, the stops 21 will come in contact with the back edges of the ears and sustain the roll 19 in the elevated position.

The sliver *a—*a** passes between the rolls 9—9 and 9'—9', then through the trumpet 18 between the delivery-rolls 13 and 16, being then directed downward by the calendering-roll 19 pressing the sliver against the roll 16 and consolidating the fiber so that it may be coiled in the can 22 by the coiler 23 in layers which will not intermix but can be readily withdrawn, or uncoiled, in the subsequent manipulation of the sliver.

The roll 19, journaled in the pivoted arms 20, serves to more perfectly calender and consolidate the sliver, while it also assists in directing the movement of the sliver toward the guide-tube of the coiler. This roll may be driven by any usual driving-mechanism.

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

1. In a drawing-frame, in combination, the delivery-rolls journaled in bracket-bearings, arms pivoted to the brackets for carrying the delivery-rolls and adapted to be turned back-

ward, and a gravity calendering-roll journaled in said arms, as described.

2. The combination, in a drawing-frame, with brackets 10 having the members 11—11
5 furnished with bearings, and the rolls 13 and 16 journaled in the bearings, of the curved-arms 20 having the stops 21 and pivoted to the upper portion of the members 11—11,

and the roll 19 journaled in bearings at the lower portions of said arms, as described. 10

In witness whereof I have hereunto set my hand.

JOHN E. PREST.

Witnesses:

HENRY J. MILLER,
M. F. BLIGH.