

No. 747,353.

PATENTED DEC. 22, 1903.

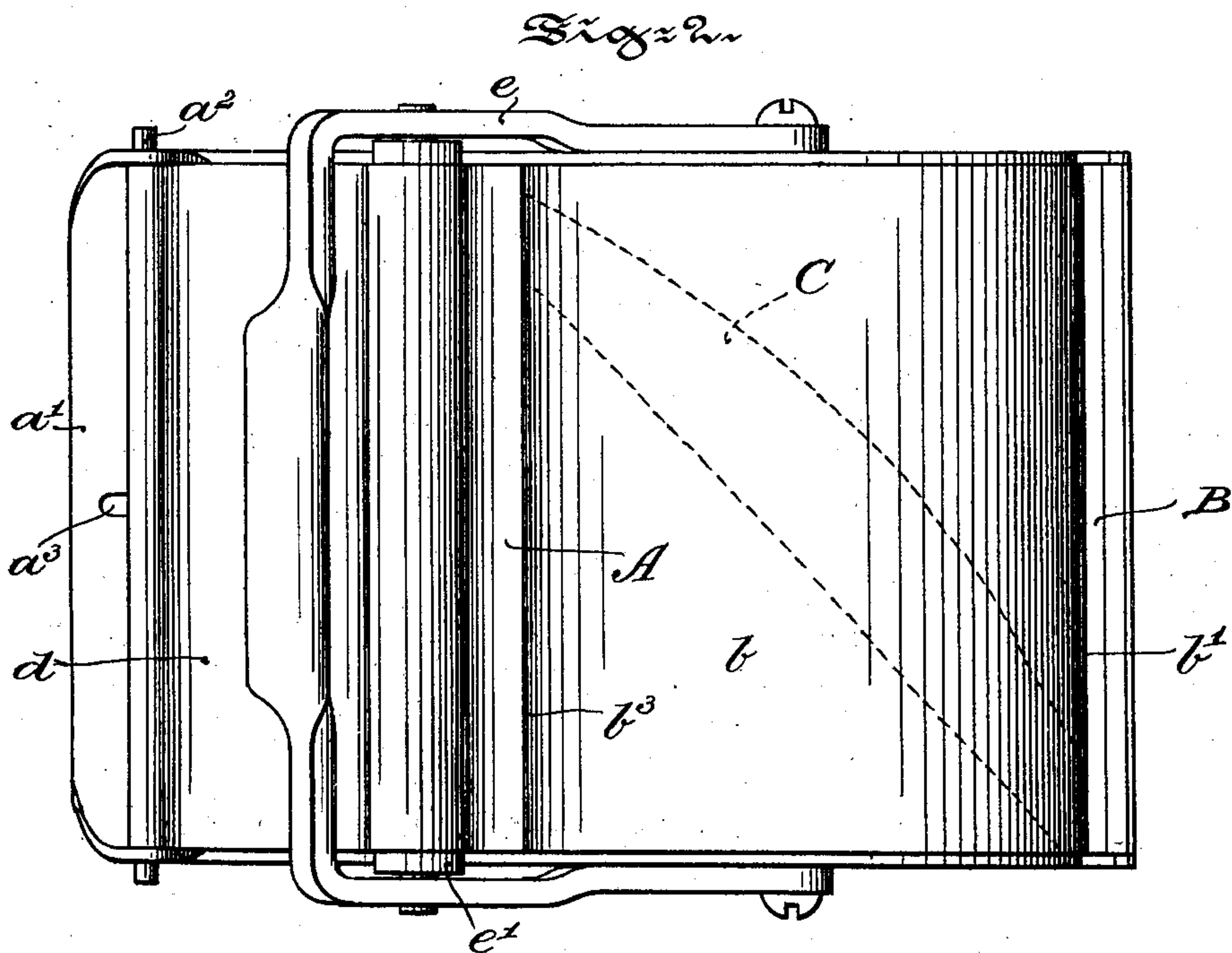
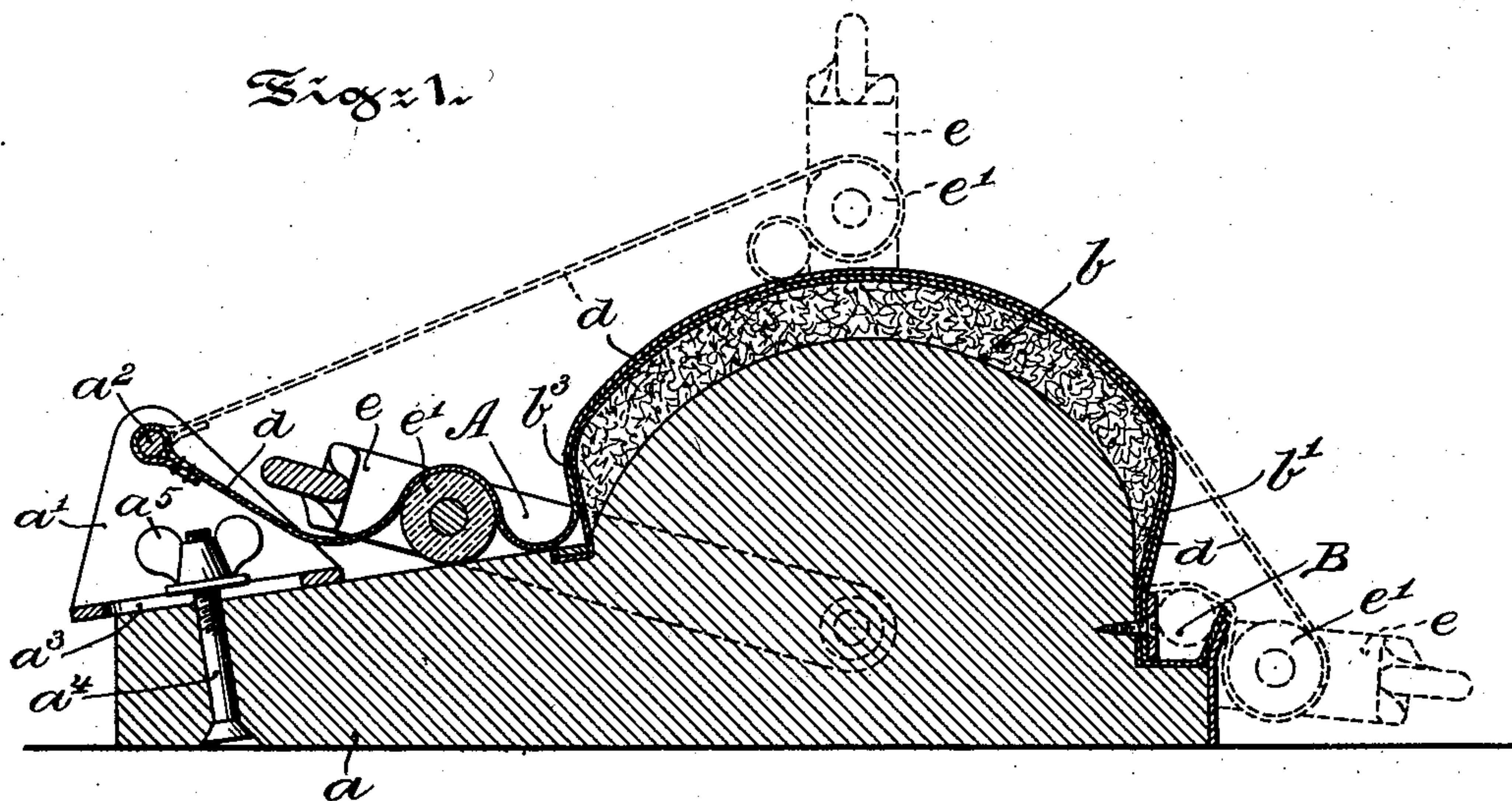
J. A. BACH.

CIGAR BUNCHING AND WRAPPING MACHINE.

APPLICATION FILED FEB. 9, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 3.

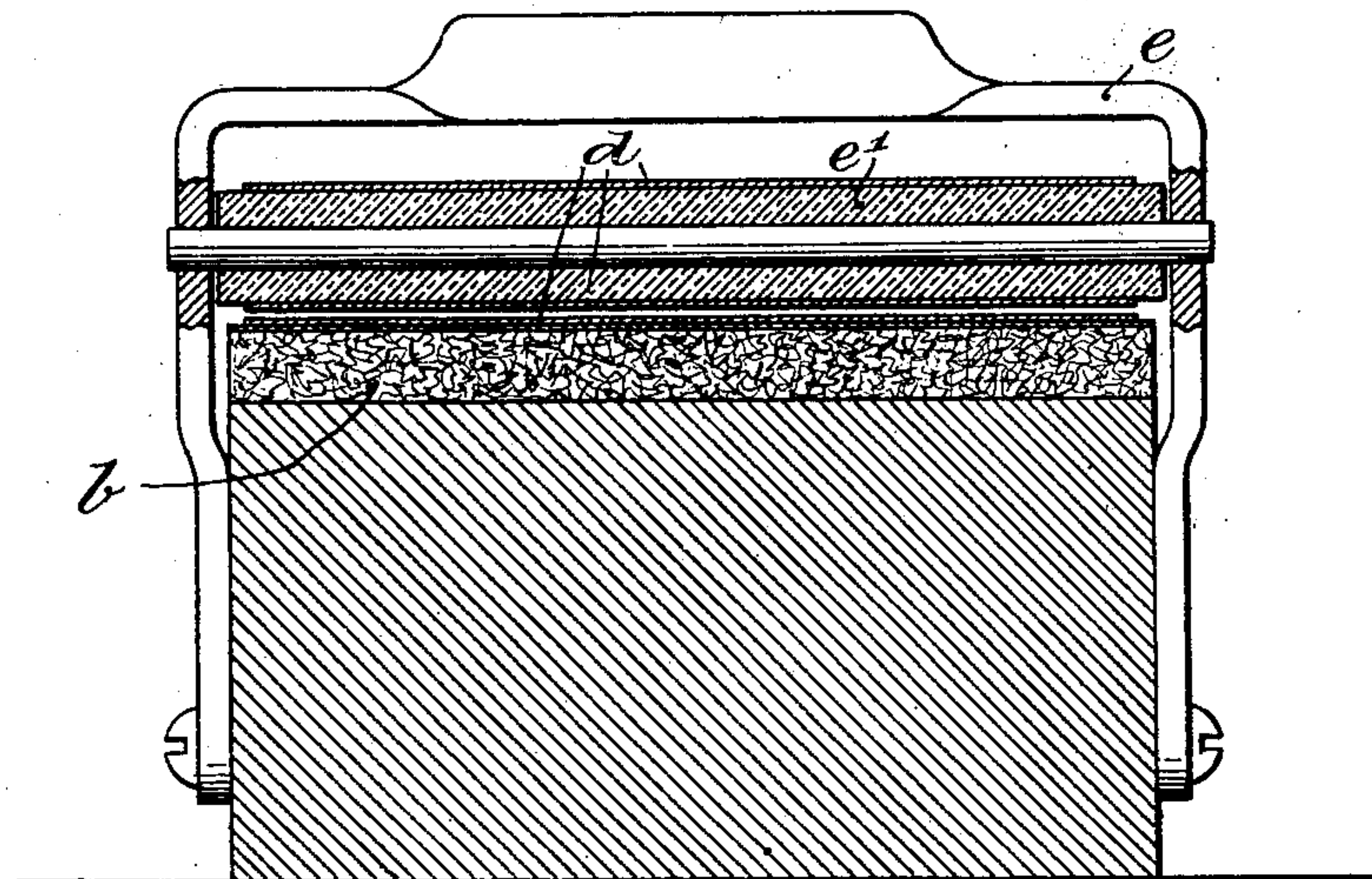


Fig. 4.

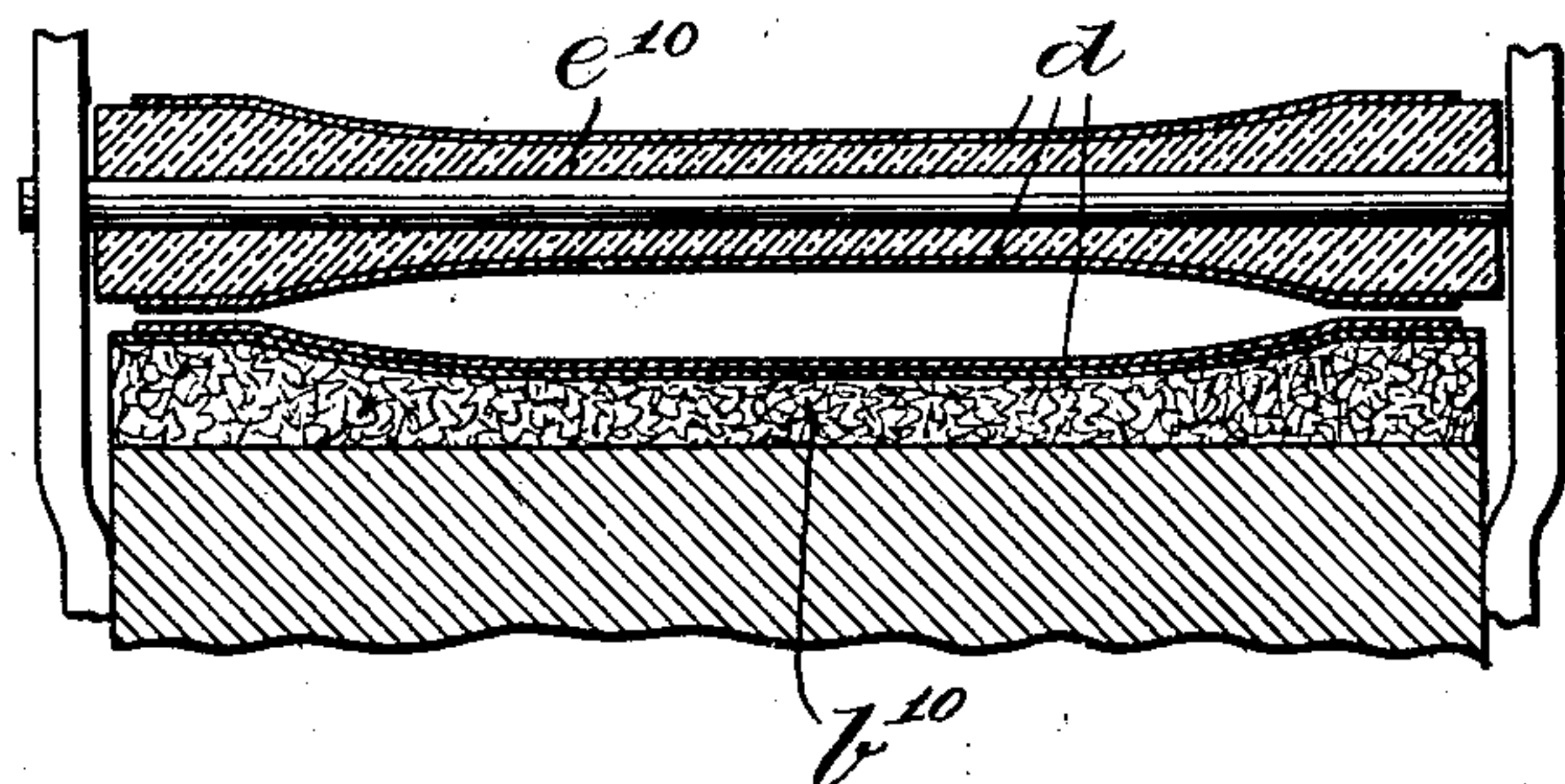
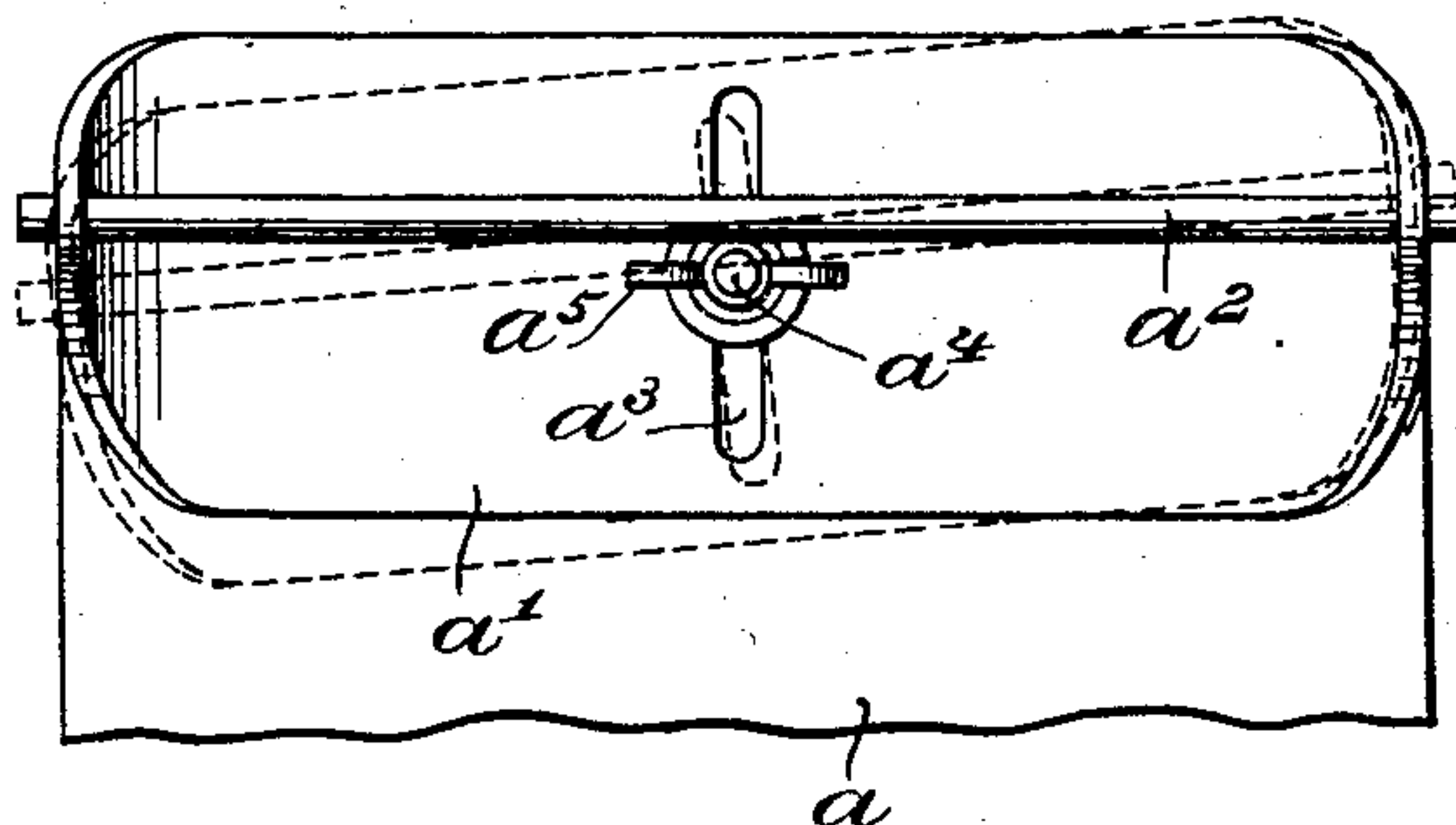


Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN ALBERT BACH, OF PHILADELPHIA, PENNSYLVANIA.

CIGAR BUNCHING AND WRAPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 747,353, dated December 22, 1903.

Application filed February 9, 1903. Serial No. 142,436. (No model.)

To all whom it may concern:

Be it known that I, JOHN ALBERT BACH, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Cigar Bunching and Wrapping Machines, of which the following is a specification.

My invention has relation to a machine which is not alone capable of bunching and rolling the tobacco forming the body of the cigar, but is also capable of inclosing the bunch in an outside or finishing wrapper, applied in an unwrinkled condition to the bunch during the rolling operation to successfully imitate Cuban hand-made goods, and in such connection it relates to the construction and arrangement of such a machine.

Heretofore in cigar bunching and rolling machines the bunch was formed in a pocket of an apron or band by a roller which closed down the apron upon the bunch and thereby rolled the bunch in passing over a bed or table. On the apron above the bed or table was placed the binder or inside wrapper, so that the same was applied to the bunch at about the time the pocket was formed in the apron, whereby the formed bunch when delivered from the apron was held together sufficiently to receive by hand the outside or finishing wrapper.

The principal object of my present invention is to so rearrange and reconstruct a machine of this type that the bunching-pocket of the apron is formed before the roller travels over the bed proper and the completed bunch delivered to the bed, which is of segmental shape or outline. Upon the apron on the bed is spread the outside wrapper, so that in the rolling of the bunch between the roller and the bed and within the apron the wrapper is at once applied evenly and in unwrinkled condition.

The nature and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, in which—

Figure 1 is a longitudinal sectional view of a cigar bunching and wrapping machine embodying main features of my invention. Fig. 2 is a top or plan view thereof. Fig. 3 is a ver-

tical sectional view of the machine with the roller in its raised position upon the bed. Fig. 4 is a view similar to Fig. 3, but illustrating a modified construction of roller and bed; and Fig. 5 is a top or plan view of means for turning the apron or band into angular relationship with the bed and for increasing or decreasing the tension on said apron.

Referring to the drawings, *a* represents the forward end or table of a bed *b*, upon which the bunch is to be rolled and wrapped. At the front portion of this table *a* is supported a bracket *a'*, carrying or supporting the shaft or rod *a²*, to which one end of an apron or band *d* is secured. The bracket *a'* is slotted, as at *a³*, and adjustably fastened to the table *a* by the bolt *a⁴* and thumb-nut *a⁵*. This adjustable connection between the bracket *a'* and table *a* permits the bracket *a'* and rod *a²* to be turned on the bolt *a⁴* as an axis to vary the position of the apron *d* as it approaches the bed *b*, and it also permits the bracket *a'* to be shifted toward or away from the bed *b* to decrease or increase the tension on the apron *d*. The other end of the apron *d* is secured to the discharge end *b'* of the bed *b*, which, as illustrated, is substantially vertical to form a breast for a purpose to be hereinafter described. Axially of the bed *b* is secured a bail *e*, carrying in its upper portion a roller *e'*. This roller *e'* is formed of elastic or yielding material, and in the normal position of the bail *e* it rests upon the table *a* some distance from the front breast of the bed *b* and below the curved surface of said bed, as illustrated in full lines in Fig. 1. The apron *d* after passing from the rod *a²* rests upon the roller *e'* and upon the segmental bed *b*, the upper surface of which bed is provided with, preferably, a yielding or elastic material or substance, as rubber, felt, or the like. The front end of the bed *b* terminates in a vertical or substantially vertical wall *b³*, forming a breast adjacent to the roller *e'* when said roller *e'* is in its normal position. The apron *d* is of sufficient length to rest loosely upon the roller *e'* and to fall therefrom to the table *a* at the space between said roller *e'* and the wall *b³* of the bed and form a pocket *A* of predetermined size or capacity for the reception of the bunch of tobacco. Adjacent to the vertical breast or

discharge end b' of the segmental bed b is arranged a trough or pocket B, into which the cigar is arranged to fall after it has been bunched, rolled, and wrapped by the apron d .

- 5 In the operation of the machine the roller e' rests upon the table a in front of the vertical wall b^3 and below the curved surface of the bed b , and this apron d forms a pocket A, into which the operator places the loose tobacco to form the bunch. The bail e is now raised, and the roller e' causes the apron d to inclose the loose tobacco and to bunch or compress the same on the vertical wall b^3 of the bed. The wrapper C is placed diagonally 15 upon the apron d across the segmental face of the bed b , and as the roller e' is still further elevated the bunch is wound with the wrapper C, which extends spirally around said bunch. When the roller e' has been moved to its extreme rearward position, the bunch will have been completely wrapped and is discharged by the apron d into the trough B, from which it can be readily removed by the operator.
- 25 By first bunching the loose tobacco in a pocket A, formed by the apron d at a point before the apron d begins to travel over the curved face of the bed b , it is possible to wrap said bunch with an outside or finished wrapper C instead of, as heretofore, simply inclosing the bunch with an inside wrapper or binder. The elastic or yielding roller e' and elastic or yielding bed b permit the wrapper C to be wound evenly upon the bunch. By 35 wrapping the bunch with an outside wrapper directly on the bed b instead of by hand after the bunch is inclosed in a binder much time is saved and the use of skilled labor is unnecessary. Again, by so wrapping the bunch a wrapper C, consisting of half a leaf of tobacco, may be used instead of a predetermined form cut by hand or machinery prior to the hand application of the wrapper to the bunch.
- 45 In using the machine it is preferable where cigars are to be made to let one end of the wrapper C extend into the discharge-trough B, so that an end will project when the wrapped bunch is lifted out of said trough. This pro-

jecting end may then be pasted and manipulated by hand to finish off the cigar, if desired. 50

In Fig. 4 a modified form of the bed b^{10} and roller e^{10} is illustrated for use in not only bunching, rolling, and wrapping the tobacco, but also shaping the wrapped bunch. In 55 this instance the curved face of the bed b^{10} is hollowed out to the shape required and the surface of the roller e^{10} is correspondingly cut away or concaved. By permitting the roller e' or e^{10} to rest normally upon the table a and by regulating the tension and direction of the apron d the size of the pocket A for the bunching of the tobacco when once determined cannot vary, since the fall of the roller e' upon the table will accurately form 65 with the apron the pocket A of required size or capacity.

Having thus described the nature and object of my invention, what I claim as new, and desire to secure by Letters Patent, is— 70

In a cigar bunching, rolling and wrapping machine, a bed having a curved wrapping-surface, and a substantially vertical wall at its front end; a table from which said bed projects and extending in front of the vertical wall of the bed, a roller supported in a 75 bail arranged to travel over the curved face of said bed, said roller normally resting on the table some distance in front of the vertical wall of said bed and below the curved surface of said bed, said table forming a stop to limit the movement of the roller away from and below the curved surface of the table, and an apron arranged to cover the roller in its normal position to form a pocket of predetermined size, for the reception of tobacco 85 before bunching, the base of said pocket being supported by the table and its sides being supported respectively by the roller and the vertical wall of the bed. 90

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

JOHN ALBERT BACH.

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