

(Model.)

J. A. McCONNELL.
CIGAR BUNCHING MACHINE.

No. 330,604.

Patented Nov. 17, 1885.

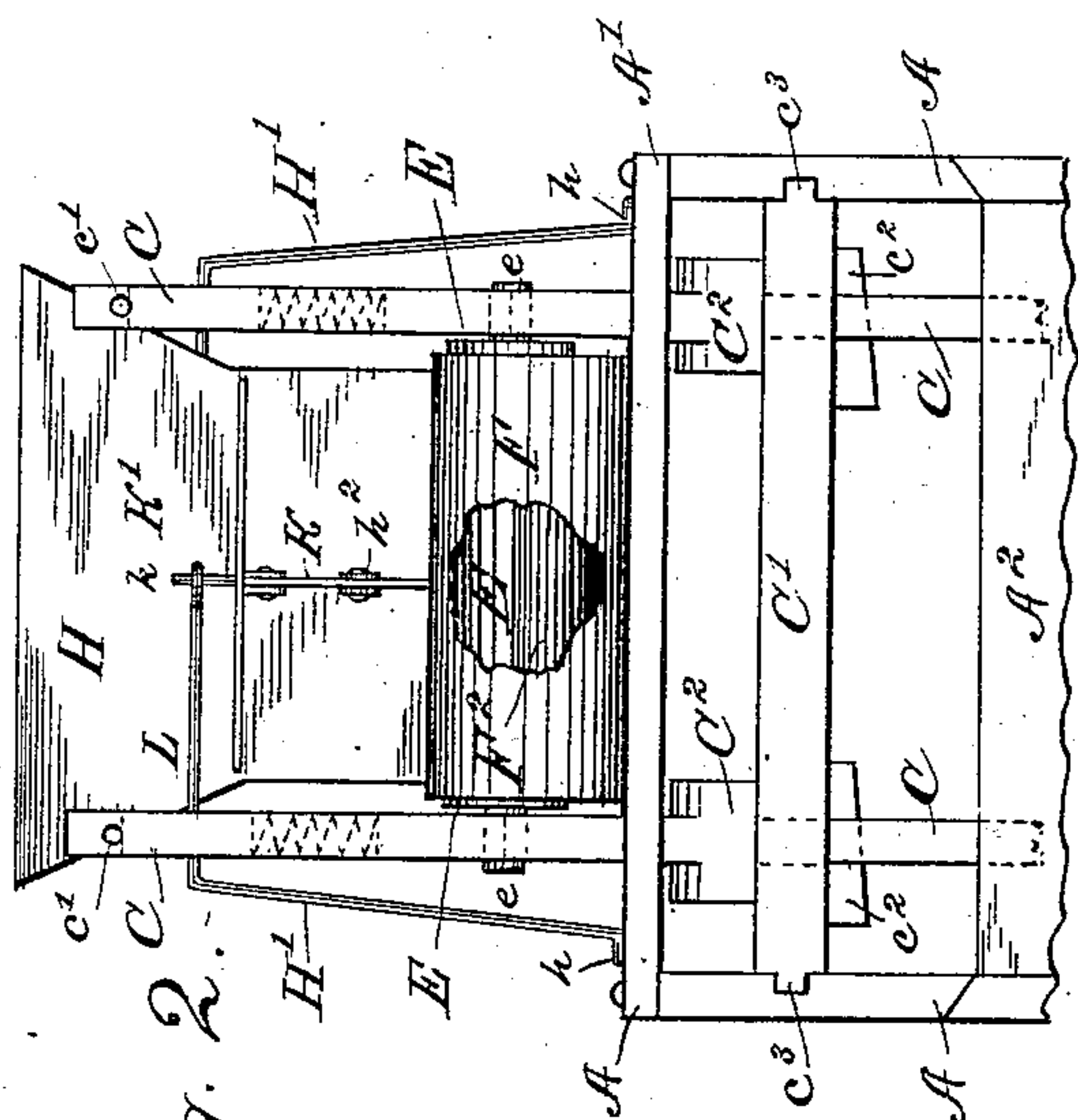


Fig. 2.

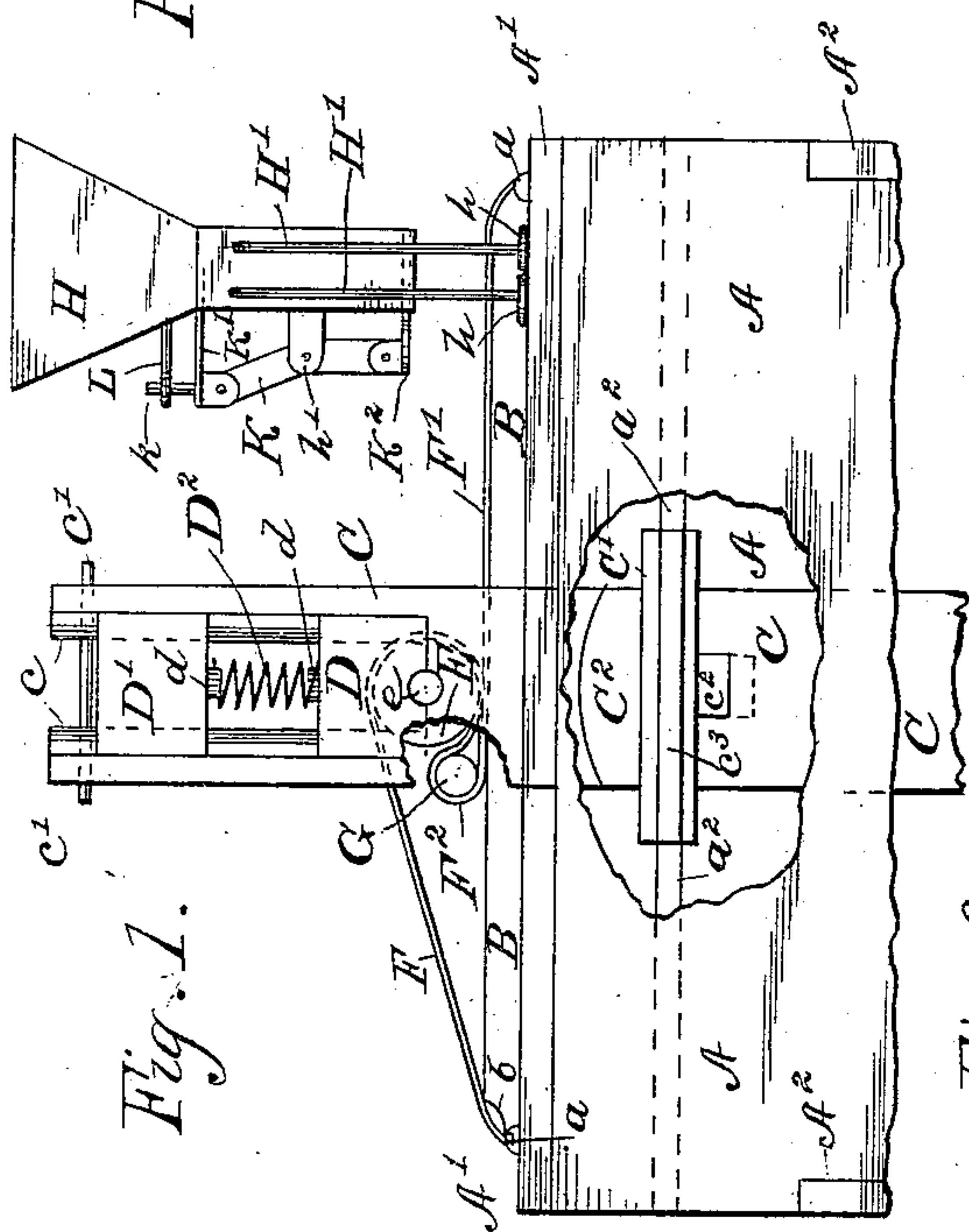


Fig. 1.

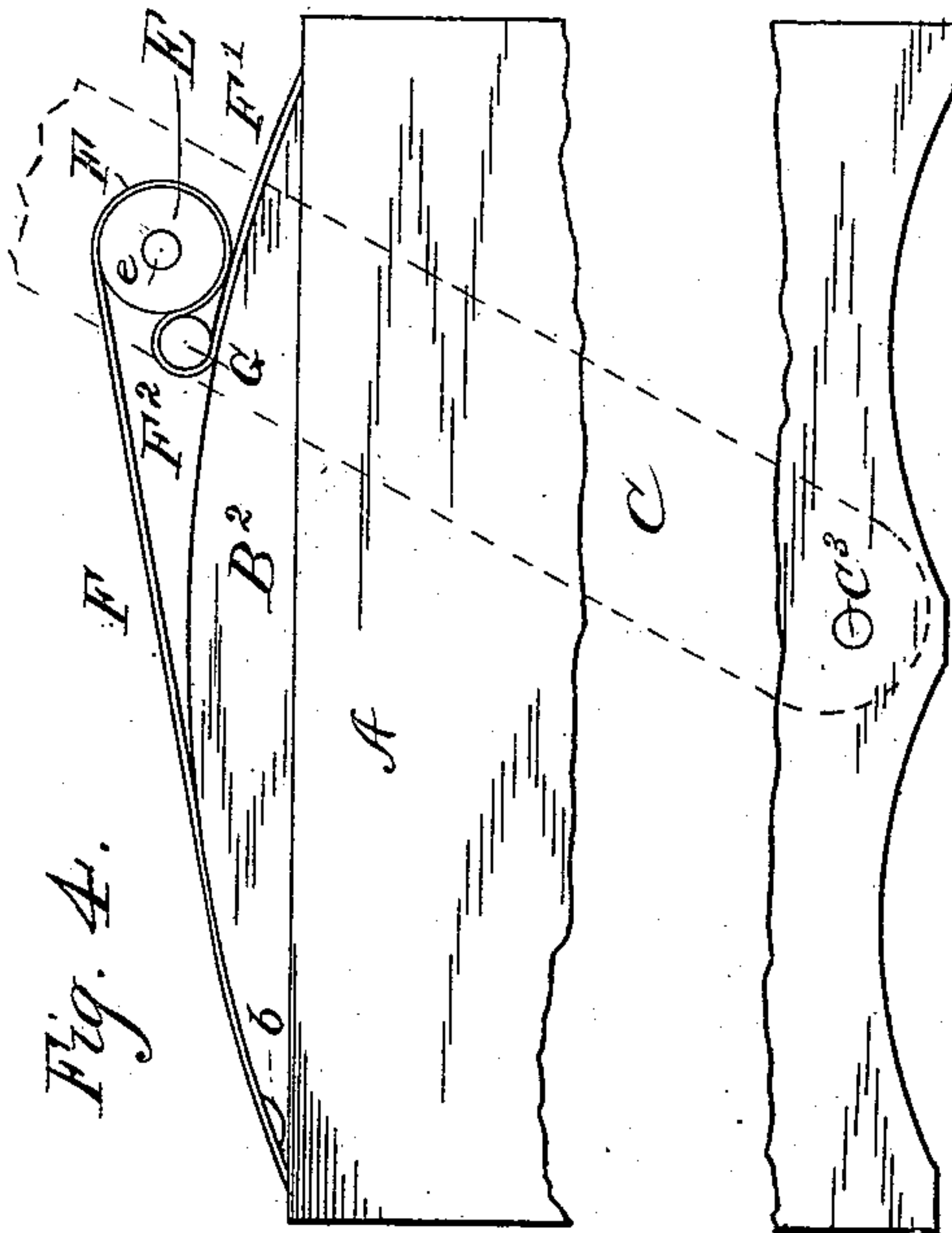


Fig. 4.

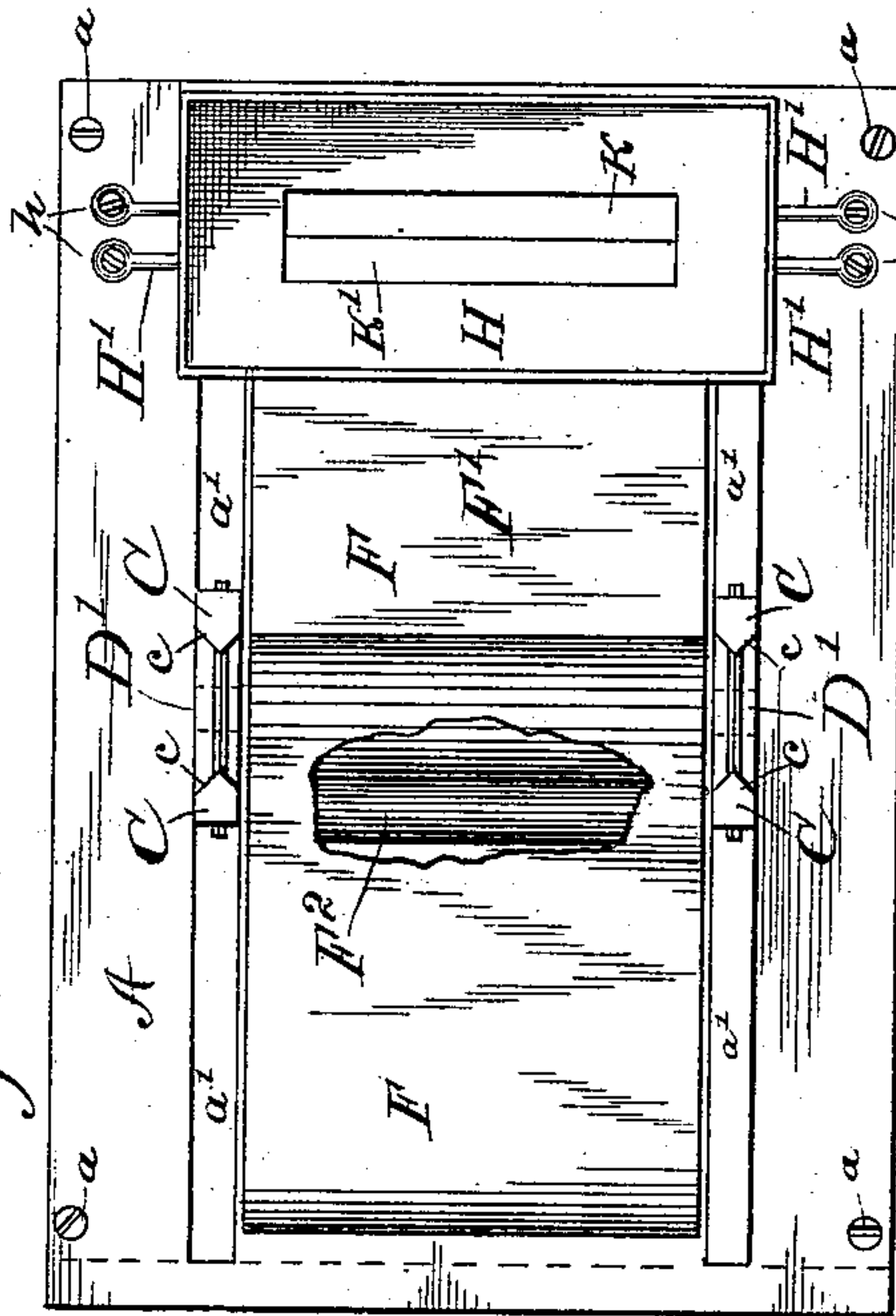


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

JOSEPH A. McCONNELL, OF PITTSBURG, PENNSYLVANIA.

CIGAR-BUNCHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 330,604, dated November 17, 1885.

Application filed June 13, 1885. Serial No. 168,566. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH A. McCONNELL, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Cigar-Bunching Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of this improvement is a machine of economical construction and simple reliable operation, for rapidly, smoothly, and uniformly bunching cigars. These results are attained by the mechanism illustrated in the drawings herewith filed as a part hereof, in which the same letters of reference denote the same parts in the different views.

Figure 1 is a side elevation, with parts broken away, representing a cigar-bunching machine embodying the features of my improvement. Fig. 2 is an end view. Fig. 3 is a plan view, and Fig. 4 is a modification.

The supporting-frame is composed of sides A A, the top A', secured thereto by screws *a*, or otherwise, and transverse pieces A² A², dovetailed into the sides A, as shown in Figs. 1 and 2.

B is a bearing-board secured to the top A', between slots *a'* of the same, provided therein for the reception of uprights C C, which are transversely connected below the top A' by a bar, C', having rabbeted ends C³, which fit in grooves *a*², which extend from end to end of the sides A A. The transverse piece C' is provided with slots for the reception of uprights C C, having lateral extensions or shoulders C², which operate as bearings for bringing the uprights C C true with each other, when the connection of the bar C' thereto is completed, by means of the wedges *c*² *c*² being driven in suitably-formed slots in the uprights C C. The body of the upper parts of the uprights C C is cut out and made V-shaped on the inner edges for the reception of correspondingly-formed blocks D D', having projections *d*, which enter the end coils of and

thereby secure spiral springs D² in the intermediate positions shown.

E is a roller having suitable bearings for its journals *e e* in the uprights C C and blocks D D. The uprights C C are provided at their top ends with perforations for the insertion of rods *c'* *c'*, which secure the positions of the blocks D' D' against the tension of the spiral springs D² D², which, by means of the blocks D D, cause the roller E to bear against the board B.

F is a band of sufficient length to pass over and under the roller E, around the body of a cigar-bunch, G, as is fully shown in Fig. 1, and be connected at its ends to the ends of the bearing-board B.

H is a hopper, supported at an elevation above the board B by standards H', affixed to the top A' by eyes and screws *h*, or other suitable means.

K is a lever, pivoted centrally to a projection, *h'*, of the hopper H, and at its ends to plates K' K², which are arranged to slide in the hopper H, for a purpose hereinafter set forth.

L is a wire spring fixed to the hopper H, and connected by means of a pin, *k*, with the sliding-plate mechanism described, the lower plate, K², of which, when in the position shown, closes the lower end or exit of the hopper H, and the plate K' will leave the upper end of the hopper open, as is fully shown in Fig. 3.

The material for cigar-filling is put into the hopper, and when the plates K' K² are in the position shown a suitable quantity of the same will lodge on the plate K² to form the filling of one cigar, and when the plate K' is pressed inward the filling will drop on the cigar-binder, which is laid diagonally on the part F' of the band F. The roller E is then raised, the springs between the blocks permitting it, sufficiently to pass the filling and one end of the binder under it and between the folds of the band, as shown at F², Fig. 1, when, by moving the sliding frame C C C' to the curved end *b* of the board B, the binder will be completely and smoothly wound or wrapped around the cigar-filling, and when the sliding frame reaches the curved end or recess *b* of the board B with the roller E the body of the cigar will be automatically disengaged from its posi-

tion between the folds of the band F in condition ready for the wrapper. The same result may be produced by arranging the frame C C C' to oscillate on a pivot and hold the roller E to a convexed bearing-board, as indicated in Fig. 4, in which C³ is the frame-pivot and B² is the bearing-board.

Having explained the features of my improvement, what I claim as new, and desire to secure by Letters Patent, is—

1. In a cigar-bunching machine, the combination, with the sliding uprights C C, of the blocks D D', the roller E, journaled in the uprights under the blocks D, the coiled spring D², intermediate of and bearing upon blocks D D', the bearing-board B, and the band F, secured at each end to the bearing-board and passing around roller E, substantially as described.

2. In a cigar-bunching machine, the combination of the frame composed of the sides A, top A', and transverse pieces A², the bearing-board B, secured to top A', and having the slots a' a', the uprights C C, passing through said slots and carrying roller E, journaled in the uprights under the blocks D D, the belt F, secured at each end to the bearing-board, and the transverse bar C', having rabbeted ends C³, fitting and working in grooves a² a² in the sides A A, substantially as and for the purpose described.

In testimony whereof I have affixed my signature in presence of two witnesses.

JOSEPH A. McCONNELL.

Witnesses:

JOHN McCORMICK,
ADAM HOW.