(No Model.) 2 Sheets—Sheet 1.

# F. H. APSEY & T. E. BELL.

## CIGAR BUNCHING MACHINE.

No. 544,650. Patented Aug. 20, 1895.

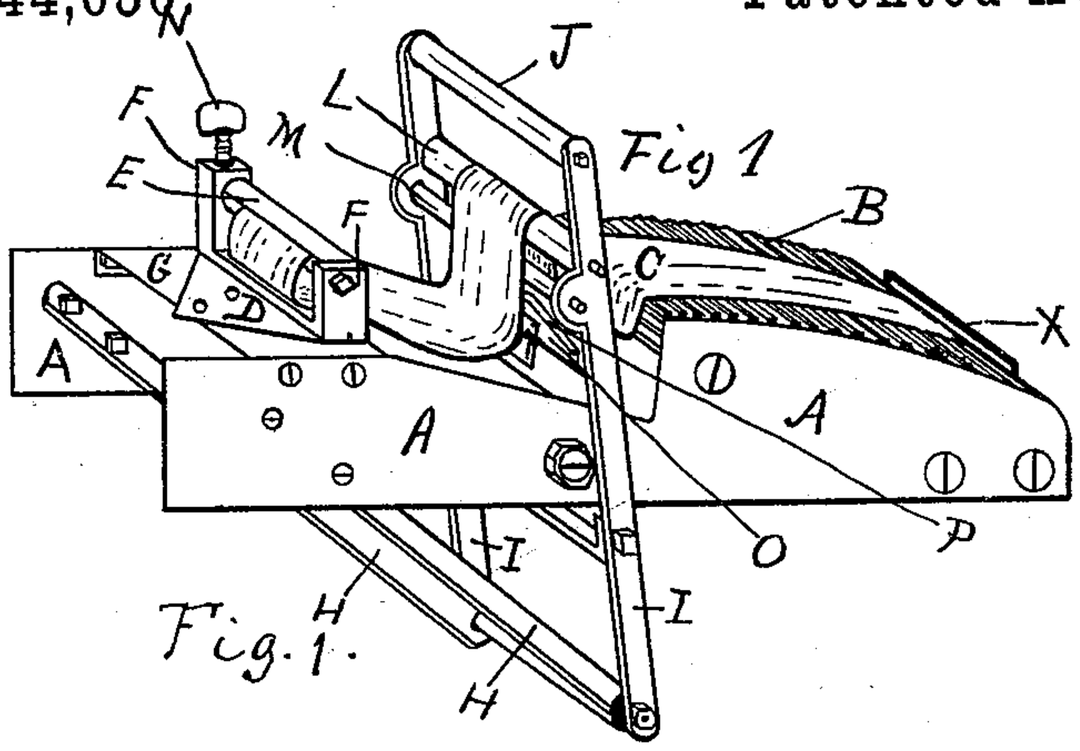



Fig. 1.

Fig. 2

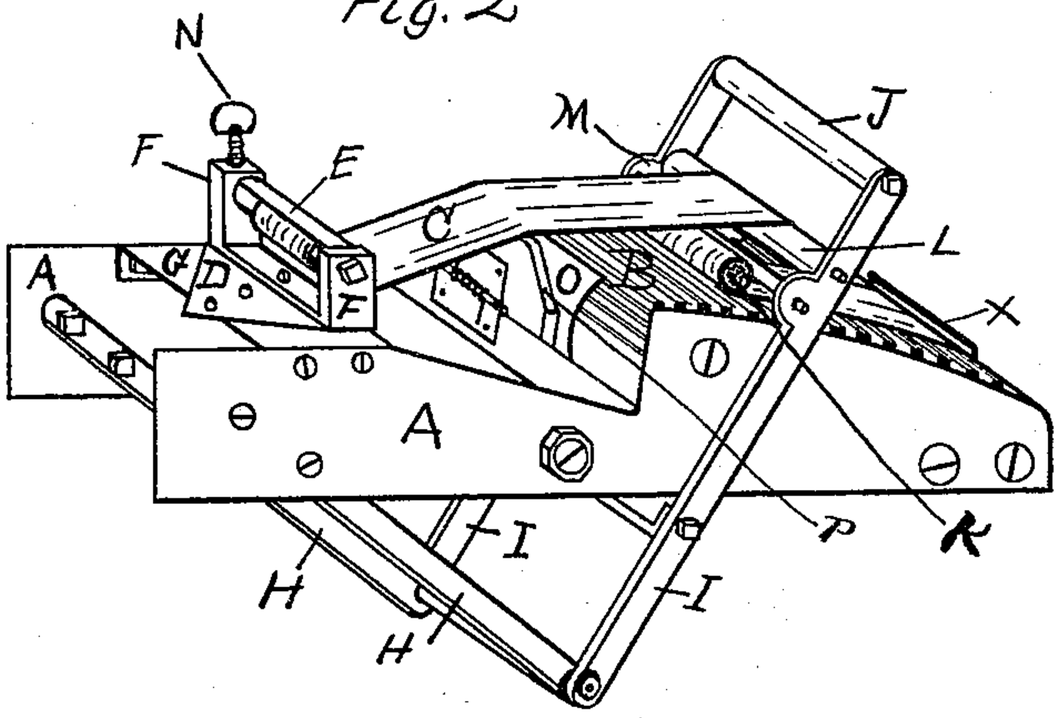



Fig. 4.

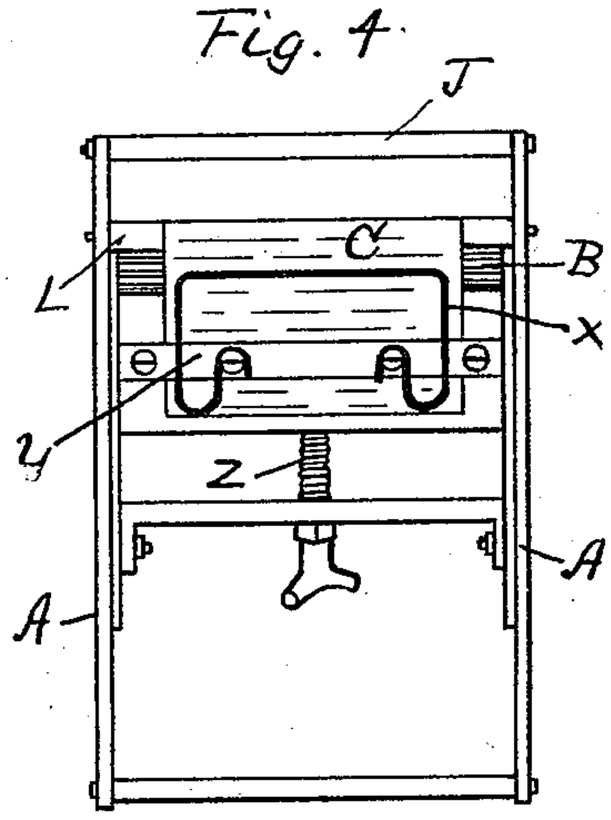
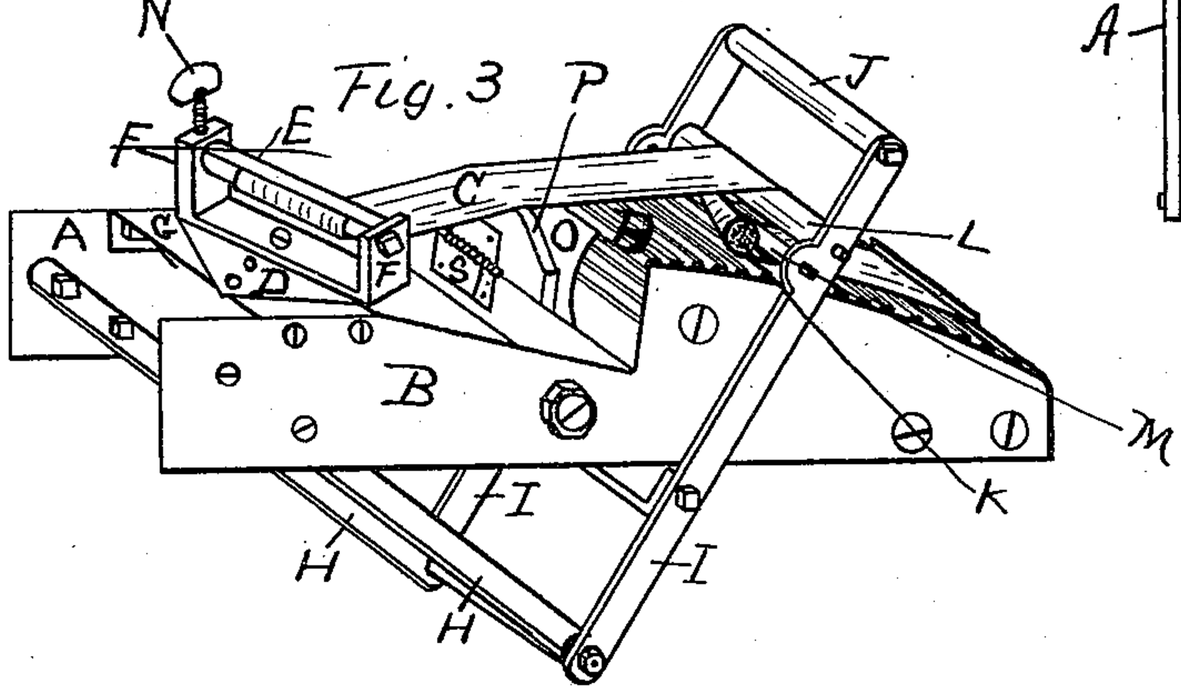



Fig. 3

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(No Model.) 2 Sheets—Sheet 2.

# F. H. APSEY & T. E. BELL.

## CIGAR BUNCHING MACHINE.

No. 544,650. Patented Aug. 20, 1895.

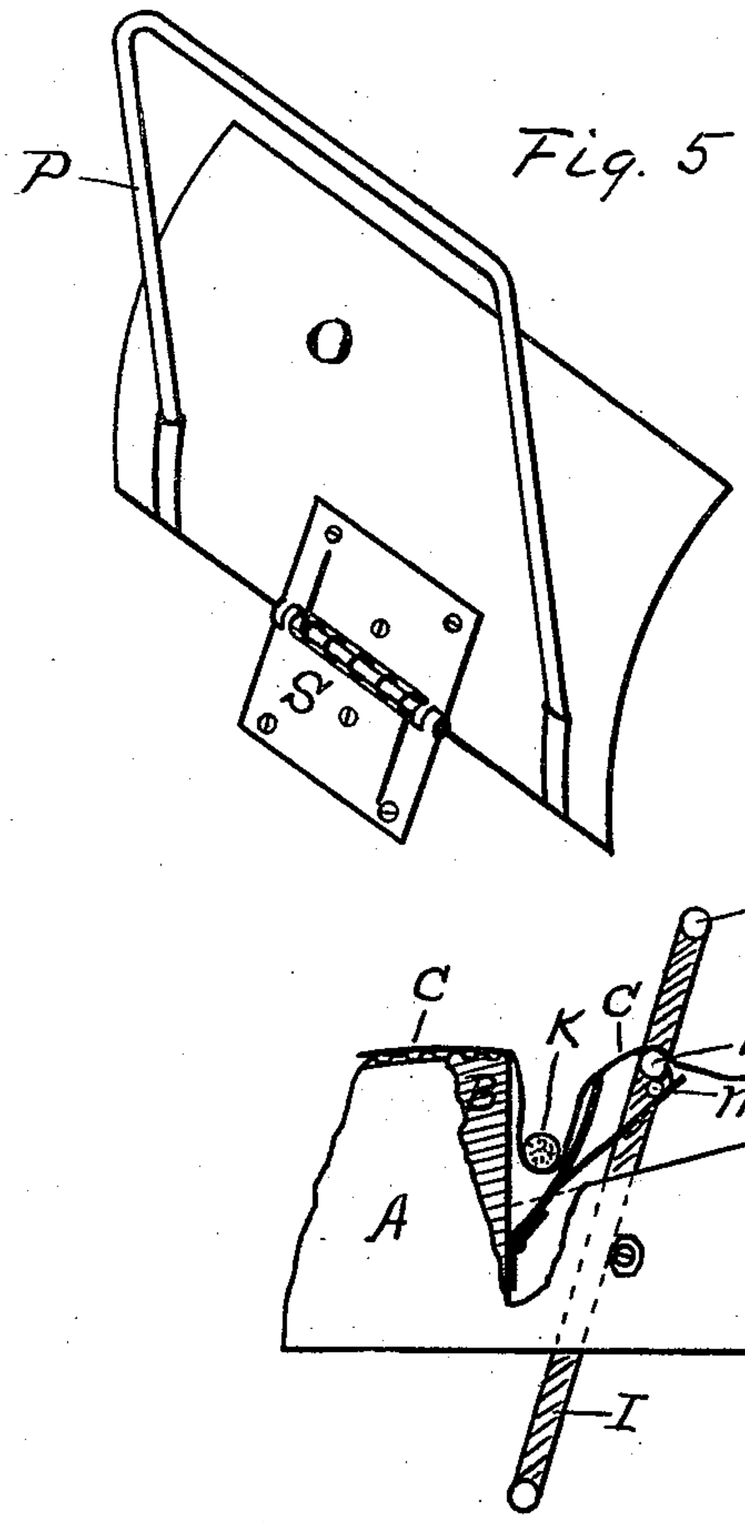


Fig. 5




Fig 6

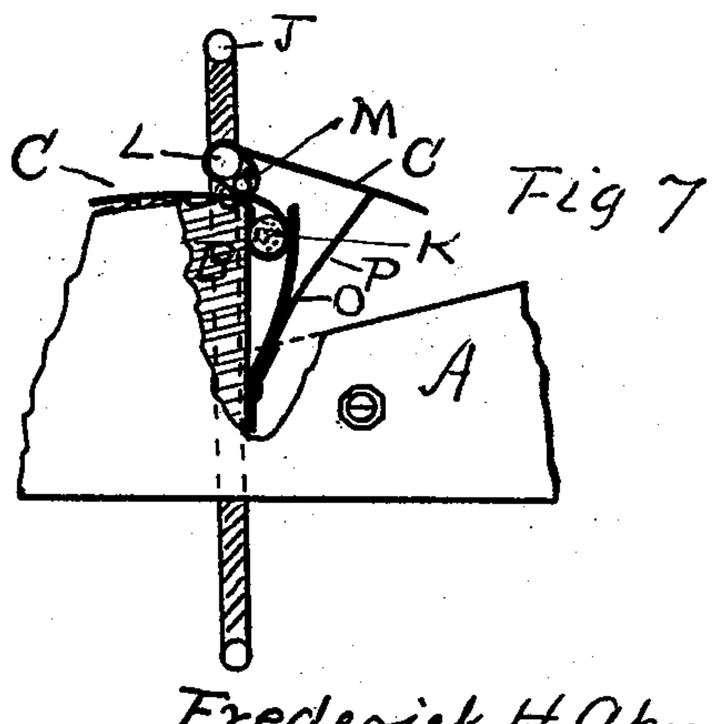


Fig 7

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# UNITED STATES PATENT OFFICE.

FREDERICK H. APSEY AND THOMAS E. BELL, OF BINGHAMTON, NEW YORK.

## CIGAR-BUNCHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 544,650, dated August 20, 1895.

Application filed September 14, 1894. Serial No. 523,059. (No model.)

*To all whom it may concern:*

Be it known that we, FREDERICK H. APSEY and THOMAS E. BELL, citizens of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Cigar-Bunching Machines; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part thereof.

Our invention relates to improvements in cigar-bunching machines; and the object of our invention is to provide such a machine as will enable an operator to do such work as is now done by hand and to do machine-work simpler and better. We attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of our machine, showing it while not in use. Fig. 2 is a perspective view of our machine, showing it in the act of rolling a bunch. Fig. 3 is a perspective view of our machine, showing it in the act of rolling an irregular bunch. Fig. 4 is a front elevation of our machine, showing the means of elevating and lowering the bed. Fig. 5 is a perspective view of our automatic bunch-cup. Fig. 6 is a sectional view of the automatic bunch-cup and a part of the machine. Fig. 7 is a sectional view of the same parts of the machine in a different position.

In Fig. 1, A A represent a framework joined together in the ordinary way with iron or metal cleats. B represents the corrugated table; C, the apron upon which a cigar is rolled; D, the swiveled shaper; E, the apron-roller; F F, the standards in which the apron-roller operates; G, the cross-piece to which the swiveled shaper is secured; H H, the braces; I I, the handle-standards; J, the handle; L, the upper roller of the handle-standards; M, the bunching-roller; N, the thumb-screw controlling the apron-roller E, and O the automatic bunch-cup.

In Fig. 2 the same letters represent similar parts of the machine. The letter K represents the cigar-bunch in the roller-apron, and the letter P represents the automatic cup-spring, and the letter S represents the spring-hinge operating the bunch-cup.

In Fig. 3 the same letters represent similar parts.

In Fig. 4 the letter A represents the frame-work, the letter X the spring catch, the letter Y a rod to which the spring-catch is secured, as well as the apron, and the letter Z the thumb-screw by which the bed B is raised and lowered.

Fig. 5 is a perspective view of our automatic bunch-cup, showing the trip-frame and the spring-hinge.

Fig. 6 is a sectional view of a part of our machine, showing the automatic bunch-cup as held back by the bunching-roller while the bunch is placed in the bight of the apron.

Fig. 7 is a sectional view of a part of our machine, showing the automatic bunch-cup holding the bunch in the bight of the apron as the bunching-roller is pulled forward.

Our machine is composed of the frame A A, secured together by suitable cross-pieces, of metal or wood, and to which is secured by bolts the handle-braces H H, which we make of iron. At the end of these braces is movably secured by bolt and nuts the handle-standards I I, at the top of which is the round handle J, secured between these standards. These standards pass up outside of the frame-work A A and work backward and forward over the corrugated table B, the face of which is convex. Between the standards I I, and working on top of the table B, are the two rollers L and M, the upper one being of wood and the lower one, the bunching-roller, of metal and smaller than the upper one, and placed just below and a little back of the upper roller L, so that in drawing the handle forward over the table B the rollers L and M will pass close to the table. The apron C is secured at one end to the cross-bar Y, and from thence runs over the table B and over the top of the roller L, and so onto the roller E of the swiveled shaper D, to which it is secured and around which it may be wound by loosening the thumb-screw N, so as to reduce and extend the length of the apron. The swiveled shaper D is composed of a base and the two standards F, in which revolves the roller E, and it is movably secured to a cross-

piece upon the frame A A by a swivel-bolt. The automatic bunch-cup O is secured to the back of the table B by the spring-hinge S, so that normally it rests against the table. It is bent in concave form, the concave surface toward the table, and secured to its back is the wire frame P working in a backward direction from the cup and being a little higher than the top of the cup. In front of the table is secured by screws or otherwise the wire spring-catch X, the top of which is a little above the surface of the table. Underneath the front part of the table and through the cross-bar of the frame A A is the thumb-screw Z, the end of which touches the lower part of the table and by which the table is raised or lowered. In use the handle J is pushed backward toward the swiveled shaper engaging the frame P, moving and holding the automatic bunch-cup backward from the table. The apron is then pushed down in front of the roller L into the bunch-cup O, and the cigar-filler is placed therein with one end of the binder in contact with it, the rest of the binder being spread upon the table B. The handle J is then pulled forward, the bunching-roller M releasing the bunch-cup O and allowing it to spring against the table, thus grasping the filler in a fold of the apron and holding it there till the roller has passed over it, when it draws the filler after it, still in a fold of the apron, until, after wrapping the binder around the filler, the bunch is caught by the spring X, where it is held as the handle is pushed back. If the cigar-bunch is intended to be shaped larger at one end, the filler of that shape is placed on the apron and into the bunch-cup, and as the roller is pulled over the table the swiveled shaper D is pulled either to one side or the other, thus allowing the apron to wrap tighter or looser either end of the bunch and form a bunch of unequal thickness. The rollers of this machine are all straight rollers, there being no concave, convex, or any other but straight surfaces to the rollers, the swiveled shaper taking the place of all irregular surfaces for shaping the cigar-bunch, and enabling the operator by its aid to make either a right or left handed bunch without changing any part of the machine.

By use of the automatic cup and the swiveled apron-roller the apron when formed in a bight will accommodate itself to the shape of a bunch when placed therein, whether right or left, and will roll the binder on it in the shape desired.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In a cigar bunching machine, the automatic swiveled shaper composed of the base (D) and having two vertical standards (F) (F), the apron roller (E) journaled in the standards, the roller adjusting screw (N), the base being swiveled to the cross bar of the frame (A) at the center of the base so as to be movable to the right or left laterally by the movement of the apron, in combination with the frame (A), the braces (H), the pivoted handle standards (I), the rollers (L) and (M), the handle (J), the rolling table (B), the apron (C), and the spring catch (X); as described and for the purpose specified.

2. In a cigar bunching machine, the automatic bunch cup (O) secured at its lower edge by the spring hinge (S) to the rolling table (B), and the frame (P) carried by the cup and made to engage the roller (M) as it is pressed backward, in combination with the frame (A), the braces (H), the handle standards (I), the rollers (L) and (M), the handle (J), the table (B), the apron (C), and the spring catch (X); as described and for the purpose specified.

3. In a cigar bunching machine, the automatic swiveled shaper secured movably by its base (D) to the frame of the machine, and whose roller (E) journaled in the standards (F) of said base, holds the rear end of the apron (C); in combination with the automatic bunch cup (O) secured by the spring catch (S) to the rear of the rolling table (B), and having the frame (P) engaging the roller (M); the frame (A), the braces (H), the handle standards (I), the rollers (L) and (M), the handle (J), the rolling table (B), the apron (C), the thumb screw (Z), and the spring catch (X); as described and for the purpose specified.

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