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J. KING, Sr.

CIGAR BUNDLING MACHINE.

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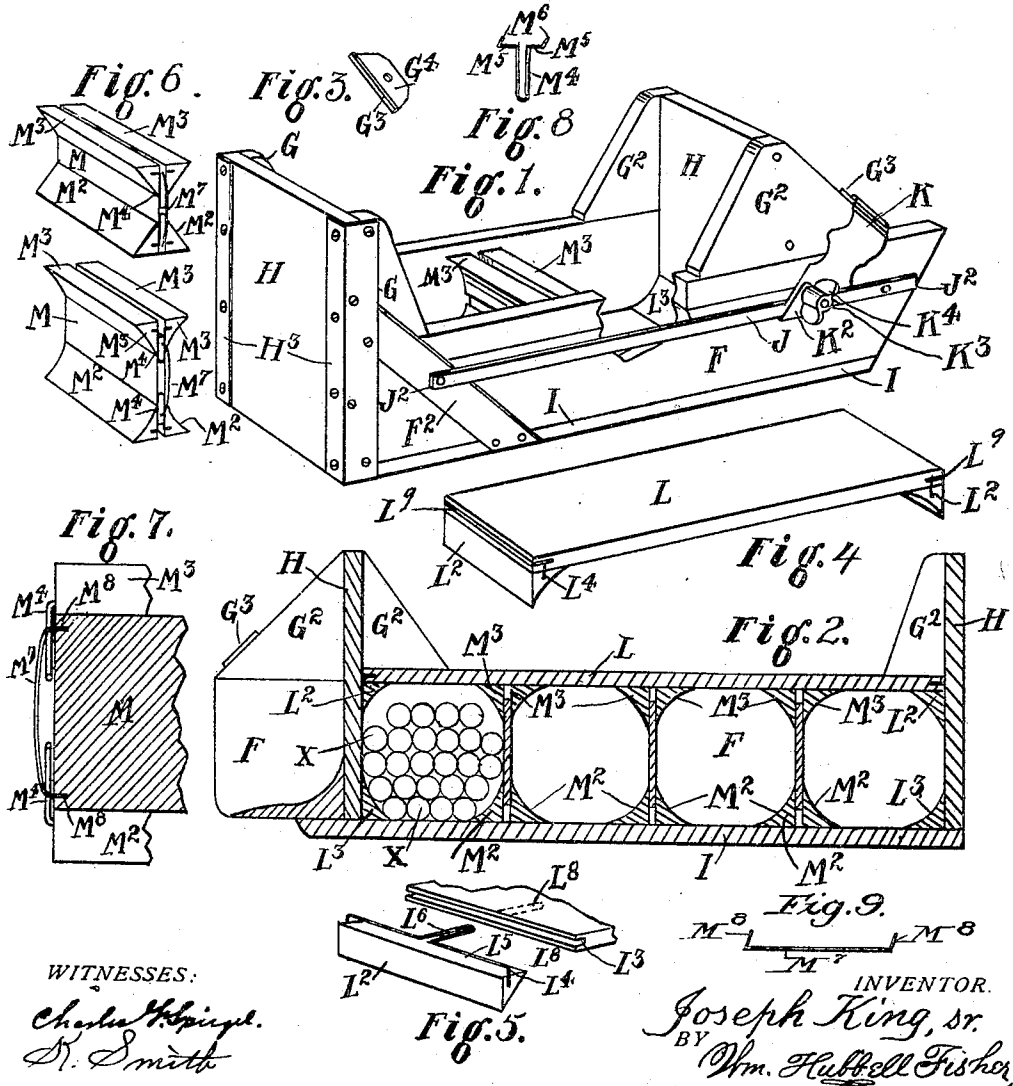

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CIGAR-BUNDLING MACHINE.

No. 838,624. Specification of Letters Patent. Patented Dec. 18, 1906.

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To all whom it may concern:

Be it known that I, JOSEPH KING, Sr., a citizen of the United States, and a resident of the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Cigar-Bundling Machines, of which the following is a specification.

The several features of my invention and the various advantages resulting from their use, conjointly or otherwise, will be apparent from the following description and claims.

In the accompanying drawings, making a part of this application, and in which similar letters of reference indicate corresponding parts, Figure 1 is a view of the mechanism for making a number of the cigar-bundles at the same time. Fig. 2 is a vertical central longitudinal section of the mechanism shown in Fig. 1. Fig. 3 is a view in perspective of an angle-piece for enabling the link of Fig. 1 to engage with one of the guides connected to the movable end of the machine of Fig. 1. Fig. 4 is a view of the platen that is placed upon the cigars that are located in the mechanism shown in Fig. 1. Fig. 5 is a view in perspective of the end of the platen, a fillet adapted to be connected thereto, and the preferred mechanism of such connection. Fig. 6 is a view of the preferred partitions for separating the bundles and for forming them in shape. In this figure there are two such partitions shown, one illustrating the position of the partitions when close together and the other illustrating the position of the parts when extended more or less, as desired. Fig. 7 is a vertical central section of either one of the partitions shown in Fig. 6. Fig. 8 is a view in perspective of the wire U-shaped device adapted for holding together the two fillets of a given pair of either one of the partitions of Fig. 6. Fig. 9 is a view in perspective of the rod employed in connection with the center piece and fillets of Fig. 6.

In the mechanism of Fig. 1 there is an inclosed framework consisting of ends H H, bottom I, and sides F F. One end H and the bottom and sides are secured permanently together. The stationary end H is preferably braced by the inclined brace-pieces F^2, extending one at each side and secured to the bottom I and extending therefrom upward in an inclined direction to the end H. This end is further braced above by the angle-pieces G, each extending from the upper edge of the side and secured at its edge to the end H. Corner-pieces H^3 further strengthen the connections between this end and the sides and the said braces. The other end H is adapted to move within the sides toward and from the other end H. For steadying it and enabling it to easily slide and yet retain its vertical position I provide the side guide-pieces G^2, each of which is connected to the adjacent vertical edge of this end H and rests upon the top edge of the adjacent side F. Thus as the end H is moved forward or back the guides G^2 slide on the edges of the sides F F and not only keep the end H in vertical position, but brace it.

Suitable means for holding the piece H stationary in the desired position relative to the other end H are provided. The preferred kind of such means are the following: Guide-bars J J are respectively present, located outside of each side F and extending parallel to the latter and duly secured at J^2 J^2. On each of these bars slides its link piece K, one end part of which link engages the adjacent guide G^2. A set-nut K^4 and screw-bolt K^3 enable the link to be fastened on the bar J. When thus fastened, the movable end cannot move back and away from the opposite end. The preferred construction of this link is a valuable one and is thus: The link is made of sheet metal and its lower end is bent over, under, and up alongside of the bar J. Through the upper portion of this lap and through the back or main portion of this sheet the bolt K^3 extends, the nut being screwed onto its front end, as shown. The upper end of this link K is bent around in the form of a hook and engages a rib (detent) G^3 of the piece G^2. This rib G^3 is preferably made separate from the piece G^2. It is then made of sheet metal having the broad foundation part G^4 secured to the piece G^2 and the bent-up flange (detent) G^3. Obviously the link can be moved with the part G^2, which latter moves with the movable end H, and be set at the desired point on the bar so as to prevent retrocession of this end H.

As it is the purpose in the construction of this box to give it capacity for pressing one, two, or more bundles of cigars X at the same time, I provide partitions to be between the bundles. These partitions may be of any proper form; but a new and valuable kind of construction is shown in the partitions illustrated in the drawings. In these there is a center piece M. I provide two pairs of fillets, one pair M^2 M^2 and another pair M^3 M^3. Each

pair is connected together and also adapted to embrace and slide upon the center piece M. The preferred specialized means for accomplishing this connection and embrasure consists as follows: I bend a wire so as to assume the shape of a U and mark this part M^4. The horizontal arms of it I mark M^5, and the angulated free ends of these arms I mark M^6. One of these ends M^6 is inserted in the end of one of a pair of fillets and the other in the end of the other of this pair of fillets. These U-shaped pieces, being present at each end of each pair of fillets, prevent them slipping endwise on the center piece.

A rod M^7 is fixed in the end of the center piece, its respective ends being within the respective U-shaped pieces. This rod is preferably secured by having its ends M^8 M^8 bent and inserted in the end of the center piece. The rod M^7 M^8 is thus a guide and a stop. Where the rod M^7 is dispensed with, the ends M^8 M^8 will remain and constitute guiding-pin stops.

It is to be noted that the center pieces and their fillets are desirably made of wood. These partitions are located within the box aforesaid, and the bundles of cigars are put in between, substantially as indicated in Fig. 6.

Where four chambers are present, each end bundle will be between the end wall and its adjacent partition and the middle bundles will be between adjacent partitions. Of course the pairs of fillets on the partitions are separated so far as to properly partially inclose the bundles, as shown.

Each end piece is provided with a lower fillet L^3. After the bundles of cigars are in place within the press the platen L is set down upon the cigars, as shown in Fig. 6. Pressure upon the platen L crowds the cigars into the proper shape. As the platen descends the fillets of the partitions slip on their center pieces, and thus the bundles are each uniformly shaped. The platen L is of the proper length to fit over the bundles and down snugly between the ends H H. The platen carries at each end a fillet L^2. These are preferably removable. The platen at each end has a channel L^9. To each fillet is attached a wire loop L^4, whose respective bent ends enter the respective ends of the fillet. This loop L^4 is slipped into the slot L^9 of the platen. This loop is preferably made with a tongue L^6, and the latter is inserted into a recess L^8, shown partly in solid and partly in dotted lines in Fig. 9. The loop and tongue and ends are made integral. I am thus enabled to use the same fillets L^2 L^2 for platens of different lengths. Each platen has slots L^9, one in each end. A fillet L^2 is connected thereto by means of the loop L^4 being located in the adjacent slot.

As a step preliminary to the use of the mechanism described the cigars are assembled in loose bundles and are secured in such bundles by a string, cord, or ribbon. One or more of these bundles, usually several, are placed in the machine illustrated in the drawings and the finishing compression is performed.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. In mechanism for bundling cigars, the inclosing frame, a movable adjustable end, upper side pieces adapted to slide with said end, the side horizontal guide, and the link adjustable along the guide and adapted to engage and hold the movable end, substantially as and for the purposes specified.

2. In mechanism for bundling cigars, the sides and ends between which the cigars are received, one of these ends being movable and adapted to slide forward and back relatively to the other end, said movable end having the upper side pieces adapted to slide respectively on the respective top edges of the sides, and having the rear edge inclined, a horizontal guide-bar, and a link adjustable along and on this guide-bar, and adapted to engage a projection on the rear part of said side of said movable end, substantially as and for the purposes specified.

3. In a machine for bundling cigars, the receptacle, having back, ends and front pieces, and adapted to receive two or more bundles of cigars, in combination with a vertical partition provided with means for rendering it adjustable in height, substantially as and for the purposes specified.

4. In a machine for bundling cigars, the receptacle, provided with back and front pieces, and ends, and adapted to receive two or more bundles of cigars, in combination with a vertical partition having the center board and outlying fillets adjustable thereon, on each side of said board, substantially as and for the purposes specified.

5. In a machine for bundling two or more bundles of cigars, the partition having the center board, and a pair of fillets at the upper half, and a pair of fillets at the lower half of the center board, the latter separating the fillets of each pair, each pair being connected together at the ends, substantially as and for the purposes specified.

6. In a machine for bundling two or more bundles of cigars, the partition having the center board, and a pair of fillets at the upper half, and a pair of fillets at the lower half of the center board, the latter separating the fillets of each pair, each pair being connected together at the ends, and a stop in the vicinity of such connection, substantially as and for the purposes specified.

7. In a machine for bundling two or more bundles of cigars, the partition having the center board, and a pair of fillets at the upper half, and a pair of fillets at the lower half of the center board, the latter separating the

fillets of each pair, each pair being connected together at the ends, and a rod which acts as a stop for each pair and which holds the cross connection frictionally at the place to which it is adjusted, substantially as and for the purposes specified.

8. In a machine for bundling two or more bundles of cigars, the partition having the center board M, and the upper fillets M^3, M^3, one on each side of said center board, and the lower fillets M^2, M^2, one on each side of said center board, each pair connected at the ends by a cross-looped piece M^4, M^5, M^5, M^6, M^6, stops in the center piece to respectively limit the movement of each cross-looped piece, substantially as and for the purposes specified.

9. In a machine for bundling two or more bundles of cigars, the partition having the center board M, and the upper fillets M^3, M^3, one on each side of said center board, and the lower fillets M^2, M^2, one on each side of said center board, each pair connected at the ends by a cross-looped piece M^4, M^5, M^5, M^6, M^6, and the rod M^7 connected to the center piece and serving as a stop and friction-rail, substantially as and for the purposes specified.

10. In a machine for bundling cigars, the templet or platen having the central plate, having at each end a cross-recess, and a longitudinal recess therefrom, and the separate end fillet provided with the cross-rod having a tongue, the cross-rod received into the cross-recess and the tongue into the tongued recess, substantially as and for the purposes specified.

11. In a machine for bundling cigars, the templet or platen having the central plate L, having the end cross-recess L^9, and the longitudinal recess L^8, and the adjacent fillet L^2 having a rod having angulated end portions L^4 whose terminals respectively connect with the respective ends of the fillet L^2, this wire being centrally bent upon itself and forming the loop-tongue L^6, adapted to enter the recess L^8, the rod adapted to enter the recess L^9, substantially as and for the purposes specified.

12. In mechanism for bundling cigars, the sides, the end pieces, slides connected to an end piece, and supported by said sides, the rail, and the clamp embracing the rail and adapted when clamped to hold the end piece, substantially as and for the purposes specified.

13. In a machine for bundling two or more bundles of cigars, the sides and ends between which the cigars are received, one of these ends being movable and adapted to slide back and forth relatively to the other end, this movable end having the upper side pieces, each side piece extending to the rear of the movable end piece and in front of the latter, these upper side pieces adapted to slide on the respective sides, and means for holding the movable end in position, substantially as and for the purposes specified.

14. In a machine for bundling two or more bundles of cigars, the sides and ends between which the cigars are received, one of these ends being movable and adapted to slide back and forth relatively to the other end, this movable end having the upper side pieces, the latter extending forward beyond the movable end and rearward beyond the movable end, the rear edge of the upper side piece being inclined, a link adjustable with the length of the machine, and adapted to engage at the rear part of the said side piece, substantially as and for the purposes specified.

JOSEPH KING, SR.

Attest:

NATHANIEL H. MAXWELL,

K. SMITH.