

A. GORDON.
 DEVICE FOR SHAPING AND HOLDING CIGAR BUNCHES.
 APPLICATION FILED SEPT. 28, 1910.

996,078.

Patented June 27, 1911.

2 SHEETS-SHEET 1.

Fig. 1

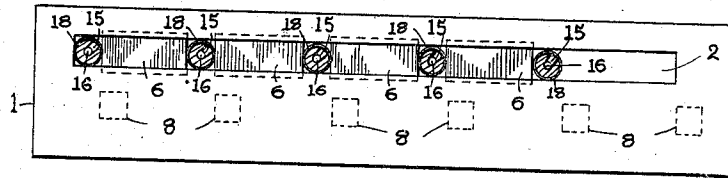


Fig. 2

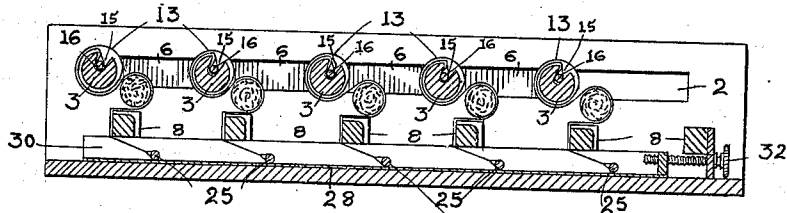


Fig. 3

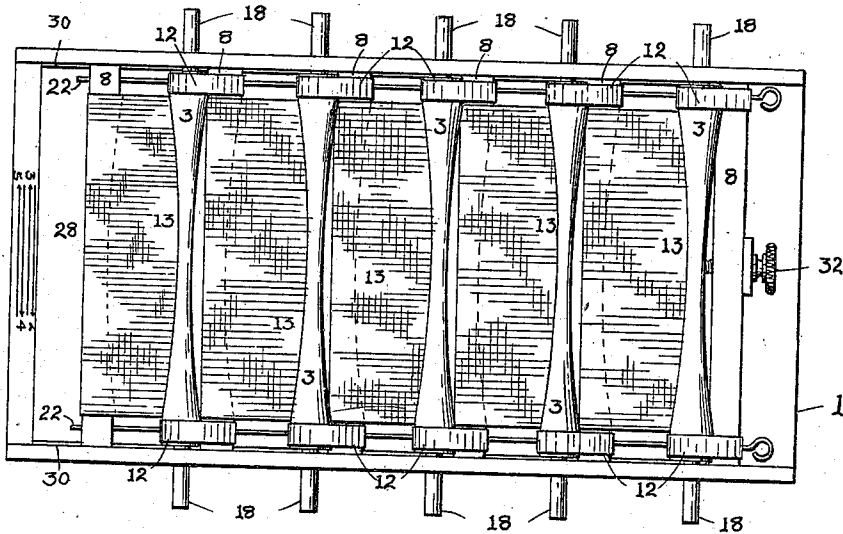
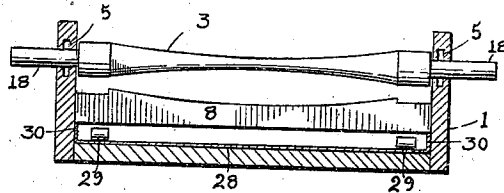


Fig. 4

Witnesses
 A. Frank Dwyer
 A. M. Dorr.

Inventor
 ALEXANDER GORDON

By *[Signature]*
 Attorneys

A. GORDON.
 DEVICE FOR SHAPING AND HOLDING CIGAR BUNCHES.
 APPLICATION FILED SEPT. 26, 1910.

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2 SHEETS-SHEET 2.

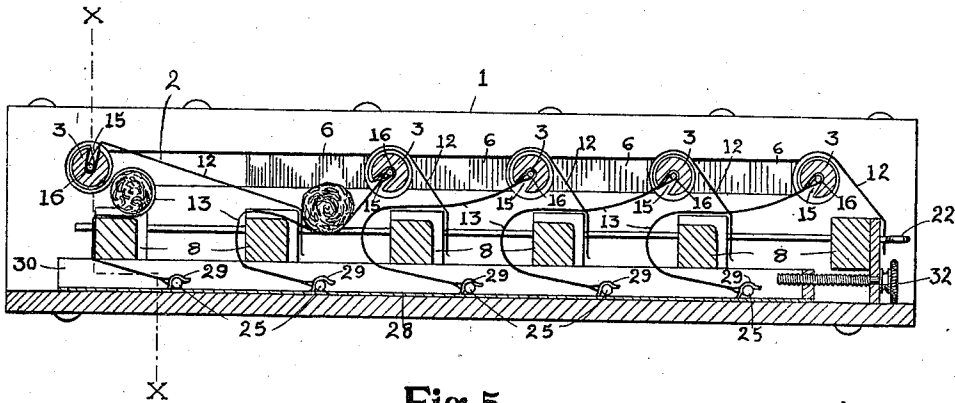


Fig. 5

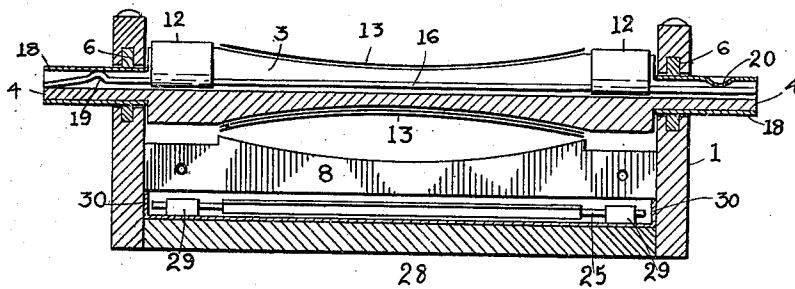


Fig. 6

Witnesses
 A. Frank Dwyer.
 A. M. Dorr.

Inventor
 ALEXANDER GORDON

By *[Signature]*

Attorneys

UNITED STATES PATENT OFFICE.

ALEXANDER GORDON, OF DETROIT, MICHIGAN.

DEVICE FOR SHAPING AND HOLDING CIGAR-BUNCHES.

996,078.

Specification of Letters Patent. Patented June 27, 1911.

Application filed September 26, 1910. Serial No. 583,737.

To all whom it may concern:

Be it known that I, ALEXANDER GORDON, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Devices for Shaping and Holding Cigar-Bunches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a device for shaping and holding cigar bunches and is primarily designed to take the place of the molds usually employed by the bunch maker to place the bunches in as each bunch is completed.

The object of the invention is to produce a device of this character which is as easily handled as the ordinary molds designed for holding a prescribed number of bunches with the additional advantage of imparting a more perfect shape to the bunches than it can be done by using molds of rigid material.

To this end my invention consists in a device provided with means for enrolling each bunch separately in a flexible envelop all as more fully hereinafter described and shown in the annexed drawings, in which—

Figure 1 is a side elevation of a bunch shaper and holder embodying my invention; Fig. 2 is a longitudinal, central vertical section thereof showing the device as in use for holding cigar bunches. Fig. 3 is a cross section from which certain parts are omitted. Fig. 4 is a plan view. Fig. 5 is an enlarged longitudinal central vertical section similar to Fig. 5 showing the various parts more fully and in detail and also illustrating different stages in the operation of the device. Fig. 6 is a cross section substantially on line $x-x$ of Fig. 5.

Referring to the drawings 1 represents the supporting frame which may be an open ended box composed of a bottom and two sides provided with horizontal guide slots 2. A series of rollers 3 which have cylindrical end portions and are taper shaped between are provided with shaft bearings 4 at the ends and are supported by said shaft bearings in the guide slots 2, the shaft bearings being extended outwardly beyond the sides of the frame and serve as hand holds. Between the shaft bearings are slidingly secured in grooves 5 of the walls of the guide slots, the spacing plates 6 and below the rollers are stationarily secured between the

sides of the frame, the series of cross bars 8 there being one more than the number of rollers which extra bar does not cooperate with the rollers as shown in Fig. 2. The cross bars 8 are parallel with the rollers and the top and rear face of these bars lie in curved horizontal and vertical planes respectively and correspond to the taper of the rolls. Each roller carries upon its cylindrical end portions two belts 12 adapted to wind and unwind thereon and upon its tapering middle portion the enrolling apron 13, both the belts and apron being of oil cloth or other suitable flexible material.

The belts and apron are secured with one of their ends into a longitudinal slot 15 in the roller by means of a rod which passes through loops formed in the ends of said belts and apron and firmly held against accidental displacement by means of ferrules 18 which close the slot in the shaft portions of the rollers, and which press the rod firmly against the bottom of the slot by means of a bend 19 in one end of the rod and a depression 20 formed in the ferrule at the opposite end. The belts being thus detachably connected at one end to the rollers their other ends are detachably connected to the corresponding transverse bars 8 by means of two locking pins 22 which pass through suitable eyelets in the ends of the belts and through holes in the ends of the transverse bars.

The enrolling aprons being fastened at one end to the rollers are fastened at the other end to transverse rods 25 which pass through loops in the ends of the aprons and are detachably held in engagement with a plate 28 by means of tongues 29 secured to or raised from the plate itself. The plate 28 is supported upon the bottom of the frame and is held longitudinally adjustable in position thereon by its side flanges which impinge against the under side of the transverse bars 8, and by means of the screw 32 at the rear end the plate can be adjusted in the longitudinal direction.

The parts being constructed and arranged as shown and described they are intended to operate as follows:—In the normal position of the parts (shown in Fig. 4) that is when the device is not in use for holding bunches, the belts 12 are wound upon the ends of the rollers as far as the arrangement of the parts permits and correspondingly the aprons carried by the rollers (which wind and unwind the belts and aprons in opposite

direction) are unwound from the rollers, there being four of the rollers shown in this normal position in Fig. 5 while the fifth rollers (the front roller) is shown drawn forward out of its normal position, the distance required to infold a bunch with the apron. Thus, all the operator is required to do is to place the bunch upon the unwound apron, as shown in Fig. 5 in connection with the apron of the second roller, and thence by grasping the outwardly projecting ends of the second roller draw it forward toward him as near as the spacing plates between the first and second roller permit. In thus drawing the roller forward the apron first forms a pocket which carries the bunch against the curved rear face of the cross bar in front and by this time the belts 12 on the roller having become tightened cause the roller to revolve during the rest of the travel and take up the slack in the apron due to the forward movement of the roller. The bunch is thus rolled in the apron while being carried over the top of the cross bar and when the roller has arrived at the end of its travel it is tightly held in the fold of the apron. As each roller is drawn into its proper position it remains there owing to the position of the bunch behind it and to release the bunches again the rollers have to be pushed back by hand. In doing so the unwinding of the apron causes the roller to revolve and the consequent winding of the belts. The spacing plates between the rollers aid the operator in drawing each roller into proper position and at the same time they cause an equalization of the pressure on all the bunches. By adjusting the plate 28 backward or forward by means of the screw 32 the pressure of the apron upon the bunch can be increased or reduced as required and to make a quick adjustment for bunches of a different size suitable indication marks 34 are placed upon the bottom of the casing to indicate the required position of the plate. Since the rearmost one of the cross bars 8 does not cooperate with the rollers in enrolling a bunch it is obviously not necessary to give it the particular shape described for the other cross-bars.

What I claim as my invention is:—

1. A holder for cigar bunches comprising a casing having sides each provided with a guide slot, a series of cross bars secured in the casing below the guide slots at intervals apart, a series of aprons secured at one end in the casing and overlying the cross bars, a series of rollers movably supported in the guide slots and carrying the aprons to fold the same above the cross bars and unfold the same in the intervals between the same, said rollers being adapted to be manually actuated one by one from and toward the cross bars, and means to impart a rotary

movement to the rollers in actuating them toward the cross bars.

2. A holder for cigar bunches comprising a casing having sides each provided with a longitudinal guide slot, a series of cross bars secured between the sides below the guide slots at intervals apart, a series of aprons secured at one end in the casing and overlying the cross bars, a series of rollers movably supported in the guide slots and adapted to be manually actuated therein one by one from and toward the cross bars, said rollers carrying the other ends of the aprons to fold the same above the cross bars and unfold the same in the intervals between the same, and means at the ends of the rollers for imparting a rotary movement thereto in advancing them toward the cross bars.

3. A holder for cigar bunches comprising a casing provided with guide slots in the sides thereof, a series of cross bars secured between the sides of the casing below the guide slots at intervals apart, a series of aprons secured at one end in the casing and overlying the cross bars, a series of rollers movably supported in the guide slots and carrying the opposite ends of the aprons to fold the same above the cross bars and to unfold the same in the intervals between the cross bars, said rollers being adapted to be manually operated one by one from and toward the cross bars, and a pair of belts secured to the ends of the rollers and adapted to impart a rotary movement thereto in actuating them toward the cross-bars.

4. A holder for cigar bunches comprising a casing provided with longitudinal guide slots in the sides of the casing, a series of cross bars secured between the sides below the guide slots at intervals apart, a series of aprons secured at one end in the casing below the cross bars and overlying the same, and a series of rollers movably supported in the guide slots and carrying the other ends of the aprons to fold the same above the cross bars and unfold the same in the intervals between the cross bars, said rollers provided with hand holds at the ends for manually actuating them in the guide slots from and toward the cross bars and provided with means for imparting a rotary movement thereto in actuating them toward the cross bars.

5. A holder for cigar bunches comprising a casing provided with longitudinal guide slots in the sides of the casing, a series of cross bars secured in the casing below the guide slots at intervals apart, a series of aprons secured at one end in the casing and overlying the cross bars, a series of rollers provided with shaft bearings movably supporting them in the guide slots and forming hand holds for manually actuating them one by one from and toward the cross bars, said rollers carrying the opposite ends of the

aprons to fold the same above the cross bars and unfold the same in the intervals between, and belts secured to the rollers and adapted to impart a rotary movement thereto in actuating them toward the cross bars.

6. A holder for cigar bunches comprising a casing provided with longitudinal guide slots in the sides of the casing, a series of cross bars secured in the casing below the guide slots at intervals apart, a series of aprons secured at one end in the casing, longitudinally adjustably, and overlying the cross bars, a series of rollers movably supported in the guide slots and carrying the opposite ends of the aprons to fold the aprons above the cross bars and unfold them in the intervals between the same, said rollers being adapted to be manually actuated from and toward the cross bars, and belts secured to the ends of the rollers and adapted to wind upon and unwind therefrom in actuating the rollers.

7. A holder for cigar bunches comprising a casing provided with longitudinal guide slots in the sides of the casing, a series of cross bars secured in the casing below the guide slots at intervals apart and provided with plano-concave upper and rear faces, a series of aprons secured at one end in the casing and overlying the cross bars, a series of rollers movably supported in the guide slots and carrying the opposite ends of the apron to fold the aprons above the crossbars and unfold the same in the intervals between the same, the rollers being tapering toward the middle and adapted to be manually actuated from and toward the cross bars, and means to impart a rotary movement to the rollers in actuating them toward the cross bars.

8. A holder for cigar bunches comprising a casing provided with longitudinal guide slots in the sides thereof, a series of cross bars secured in the casing below the guide slots at intervals apart, a plate longitudinally adjustably secured in the casing below the cross bars, a series of aprons secured at one end to this plate and overlying the cross bars, a series of rollers movably supported in the guide slots and carrying the opposite ends of the aprons to fold the same above the cross bars and unfold the same in the intervals between the cross bars, the rollers being adapted to be manually actuated one by one from and toward the cross bars, and means to impart a rotary movement to the rollers in actuating them toward the cross bars.

9. A holder for cigar bunches comprising a casing provided with longitudinal guide slots in the sides thereof, a series of cross bars secured in the casing below the guide

slots at intervals apart, a series of aprons secured at one end in the casing and overlying the cross bars, a series of rollers carrying the opposite ends of the aprons to fold the same above the cross bars and unfold the same in the interstices between the cross bars, said rollers being provided with outwardly extended shaft bearings supporting the rollers in the guide slots manually movable from and toward the cross bars, spacing plates between the shaft bearings slidably supported in the guide slots, and means at the ends of the rollers to impart a combined rotary and sliding movement to the rollers in actuating them toward the cross bars.

10. A holder for cigar bunches comprising a casing, a series of cross bars secured therein at intervals apart, a series of aprons overlying the cross bars, a series of rollers manually slidably supported in longitudinal guide slots provided in the casing above the cross bars and carrying the aprons to form a fold therein upon the upper face of the cross bars and unfold the same in the intervals between the cross bars in actuating the rollers, belts secured at one end to the rollers, and locking pins passing removably through apertures in the opposite ends of the belts and through the cross bars and adjustably securing them in the casing.

11. A holder for cigar bunches, comprising a casing, a series of cross bars secured therein at intervals apart, a series of aprons secured at one end in the casing below the cross bars and overlying the same, a series of rollers manually movably supported in longitudinal guide slots above the cross bars and carrying the opposite ends of the aprons to fold the same upon the cross bars and unfold the same in the intervals between the cross bars and means at the ends of the rollers to impart a rotary movement to the rollers in actuating them toward the cross bars to wind a portion of the aprons upon the rollers.

12. In a cigar bunch shaper and holder, the combination with a supporting frame, of a cross-bar secured thereon, an apron secured at one end in the frame and overlying the cross-bar, a roller supported in guide bearings above the cross-bar movable toward and from the same and carrying the other end of the apron, and means to impart a rotary movement to the roller in actuating it toward the cross-bar.

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

ALEXANDER GORDON.

Witnesses:

C. R. STICKNEY,
A. M. DORR.