

(No Model.)

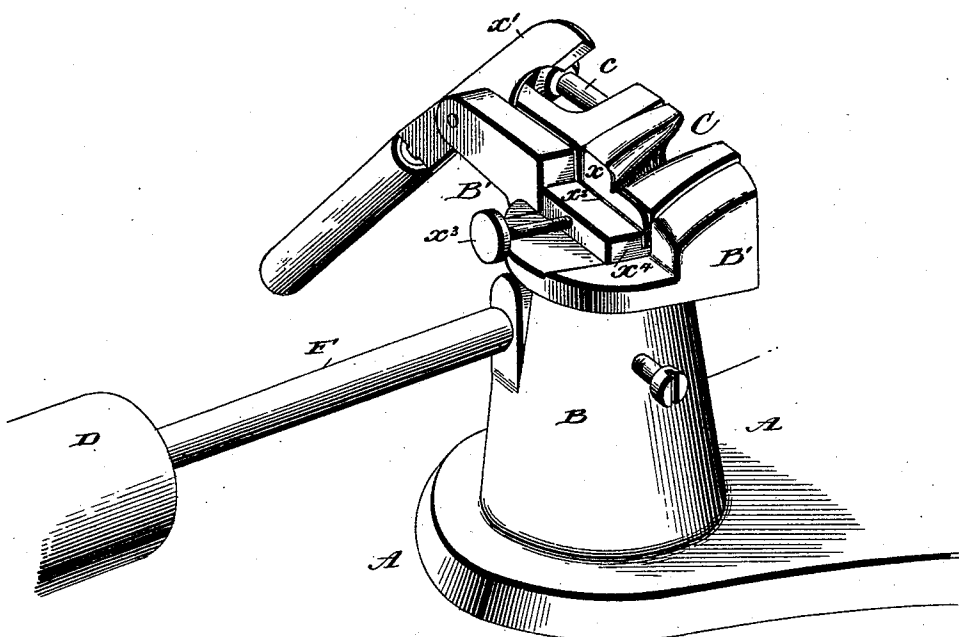
2 Sheets—Sheet 1.

C. W. BOMAN.
DEVICE FOR FORMING CIGAR HEADS.

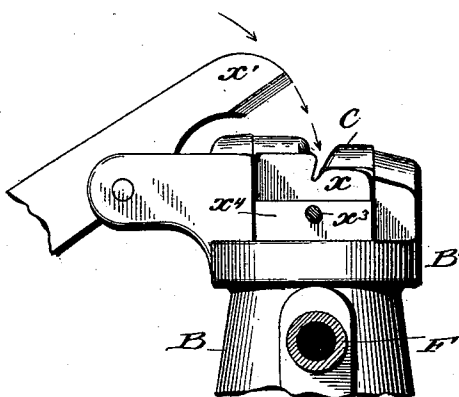
No. 498,738.

Patented May 30, 1893.

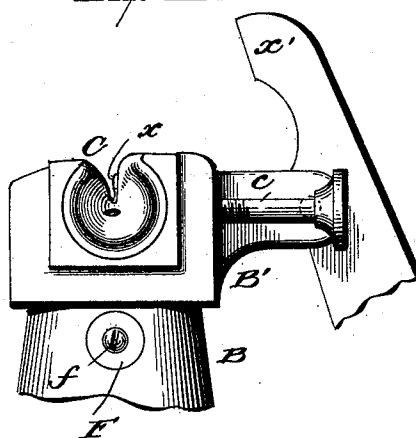
~~Fig. 1.~~ **Fig. 1.**



~~Fig. 2.~~ **Fig. 2.**



~~Fig. 3.~~ **Fig. 3.**



Witnesses:
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Ewen A. Rice

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Cas W. Boman
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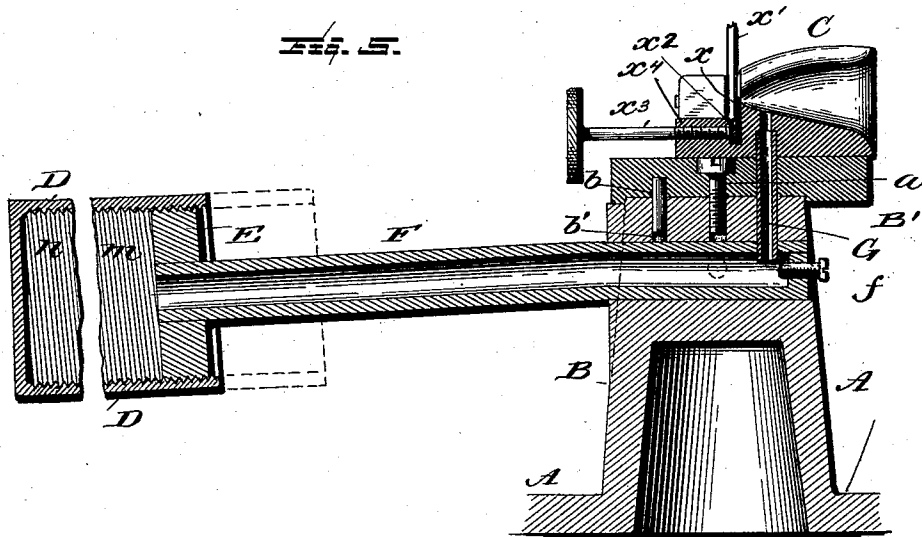
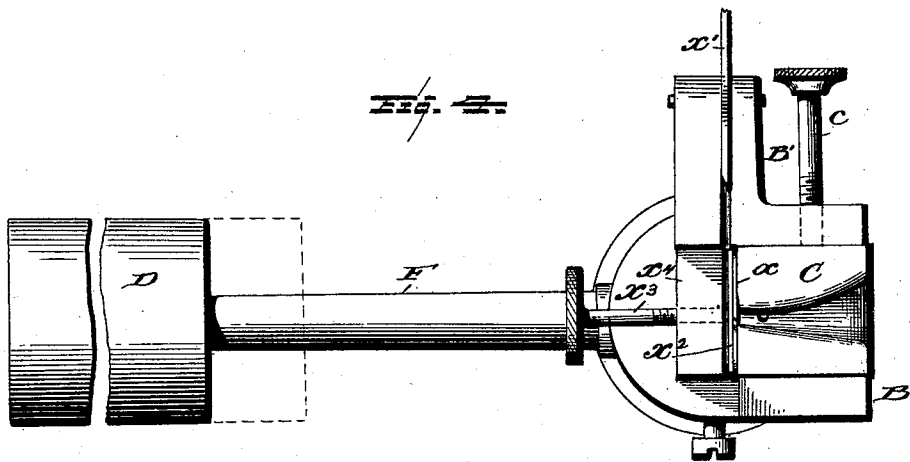
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UNITED STATES PATENT OFFICE.

CLAES W. BOMAN, OF NEW YORK, N. Y.

DEVICE FOR FORMING CIGAR-HEADS.

SPECIFICATION forming part of Letters Patent No. 498,738, dated May 30, 1893.

Application filed March 17, 1893. Serial No. 466,503. (No model.)

To all whom it may concern:

Be it known that I, CLAES W. BOMAN, of the city, county, and State of New York, have invented certain new and useful Improvements in Devices for Forming Cigar-Heads, of which the following is a specification.

My improvements have more particular reference to the mechanism for wrapping the tip of the cigar and for applying paste or gum to the wrapper at this point at the time the wrapping of the tip is being completed.

My objects are to provide a means whereby the wrapper can be folded or wrapped around the tip to make a smooth and complete finish without plait or crease, and without fins or projecting points or strings beyond the tip; and to provide means by which the workman during this operation can conveniently and readily supply the exact quantity of paste or gum needed to secure the extreme point of the wrapper in place upon the tip of the cigar.

I will first describe the machine or apparatus embodying my improvements and will then point out those features which I believe to be new and of my own invention.

In the accompanying drawings—Figure 1 is a perspective view of the apparatus. Fig. 2 is an outer end elevation of the thimble and the two members of the cutter co-operating therewith. Fig. 3 is an elevation of the same looking from the inner or larger end of the thimble. Fig. 4 is a plan, and Fig. 5 is a longitudinal vertical central section of the apparatus.

The apparatus or mechanism represented in the drawings has been designed by me to be used in connection with the rotatable spring jawed chuck or carrier of my Patent No. 442,945 of December 16, 1890, and in fact to take the place of the thimble stand and thimble of that patented machine. But inasmuch as it is susceptible of use with various other kinds of bunch holders and indeed can be used apart from any other mechanism as mechanism to wrap and finish the tip of a cigar bunch or filler the body of which has previously been wrapped by hand with or without the assistance of suitable mechanical devices for assisting the wrapping operation, I have represented it in the drawings as dissociated from other mechanism.

A is the frame.

B is the thimble stand, and C is the thimble. The thimble is seated in the head B' of the stand—said head in this instance being detachable from the stand and being held thereto by a screw *a*—a pin or stud *b* on the under side of the head entering a hole or socket *b'* in the top of the stand, so as to assure the parts in place. The thimble is held in its seat in the stand or rather in the head of the stand, by a set screw *c*. It carries the stationary member *x* of the cutter, so that the latter is removed with the thimble. The hinged blade or movable member *x'* of the cutter is mounted on the head B' of the stand. The stationary cutter member *x* either may be formed on or brazed to the thimble, or (and this I prefer) it may be separate from the thimble and held thereto by means which will permit it to be readily removed and replaced. To this end, it is made as a separate blade, which is held against the tip end of the thimble by a clamp plate *x²*, pressed by a screw *x³*, which screws through a boss or shoulder *x⁴*, carried by the thimble. I am also enabled in this way to use the same cutter *x* with various shapes of thimbles according to the shape and style of cigar to be made; the thimbles vary between themselves only in their internal shape, but so far as concerns their external configuration and particularly the shape and location of the seat for the stationary cutter member *x* they are alike.

To insure a complete and perfect wrapping of the tip of the cigar, it is essential that both the thimble and the stationary cutter member *x* should have a definite ascertained shape, and that the member *x* should hold a particular relation to the thimble, such as represented in the drawings.

The thimble itself has an approximately conical interior of the shape required for the cigar tip. It is formed with a longitudinal slot on its top flaring outwardly toward the inner end of the thimble and with rounded edges to facilitate the passage and manipulation of the wrapper. The top of the thimble on the near side of the slot (that is to say the side of the slot next to the operator) is lower than it is on the far side of the slot. This also is the characteristic of the stationary cutter member *x*, which is cross-wise of the extreme outer end of the thim-

ble. The shoulder formed by the raised portion on the far side of the slot, facilitates the backward or reverse turning of that portion of the wrapper which inwraps the extreme point of the cigar. The cutter member x has as will be seen a V shaped cutting edge where it meets the slot in the thimble, and the apex of the V, it will also be noticed, is a little above, say one sixty-fourth of an inch above the level of the apex of the conical interior of the thimble next to which it comes—that is to say it is about that distance above the bottom of the vertical slot at the extreme outer end of the thimble. The shape of the cutting edge of x and its location with respect to the thimble as just described is essential to making a perfectly wrapped cigar tip, in which the whole of the wrapper is laid smoothly, closely and without plait, pucker or crease upon the tip end of the filler.

To enable the operator to conveniently and accurately supply just the amount of paste or gum needed to hold the tip of the wrapper in its wrapped position, I provide a paste supply device, consisting of a cylinder D closed at one end, and having inserted in it from the other end a piston E which is mounted on a stationary tubular stem F seated in the stand B, and communicating through a small duct G with the interior of the thimble C as shown more clearly in Fig. 5. The cylinder having first been filled with the paste or gum (usually liquid gum tragacanth) is fitted to the piston which closes its open end, and then by advancing or moving forward the cylinder on the piston the necessary quantity of gum can be forced whenever desired out from the cylinder through the hollow stem F and duct G into the thimble. Only a very small quantity of gum is needed to be supplied to the thimble at any one time, and to insure accurate delivery as well as to prevent over feed, I make use of a screw feed mechanism, by which the cylinder will be advanced very gradually and slowly. I might for this purpose encircle the cylinder by a rotary internally screw threaded feed sleeve, supported in fixed bearings and engaging an external thread on the cylinder. But as the simplest way of effecting the object I have in view I prefer to unite the cylinder and the piston themselves by a screw joint as shown, the piston having an external screw thread m and engaging an internal screw thread n with which the cylinder is provided. In this way the cylinder when rotated can be moved slowly lengthwise on the piston, and the gum can thus be readily supplied to the thimble without danger of over feed.

The stem F can enter the stand B at any convenient point, either from below or from the side. In the arrangement shown in the

drawings it passes nearly horizontally through the stand; and its inner end is closed by a removable stopper, such as the screw f . By unscrewing the cylinder from the piston, and removing the screw stopper f , the stem F can readily be swabbed out and cleaned if it should accidentally become clogged. So also the small tube or duct G is removable for a like purpose. The top of this tube projects above the thimble seat in the stand-head B', and the thimble has on its under side a socket in which the projecting end of the tube fits, as seen in Fig. 5.

Having described my improvements, what I claim herein as new, and desire to secure by Letters Patent, is—

1. In combination with the thimble stand, and the movable cutter member carried thereon, the thimble detachably connected to the stand and carrying the stationary cutter member, substantially as set forth.

2. The thimble stand and the movable cutter member carried thereon, in combination with the thimble detachably connected to the stand, and the stationary cutter member carried by and detachably connected to the thimble, substantially as set forth.

3. The thimble having the longitudinal vertical slot communicating with its conical interior, and flaring toward its inner end, and made higher on top on the far side than on the near side of the slot, with a stationary cutting member extending crosswise of its outer end and having a corresponding formation, substantially as set forth.

4. The thimble formed substantially as described, in combination with the stationary cutting member having a V cutting edge coinciding with the slot in the thimble, with the apex of the V located above the apex of the conical interior of the thimble, substantially as set forth.

5. The combination of the stand; the tubular stem, communicating with a duct in the stand; the piston mounted on said stem; the paste cylinder mounted and movable lengthwise on the piston; the head of the stand provided with a thimble seat; the tube communicating with the duct in the stand, and projecting through the said head above the thimble seat; and the thimble detachably connected to the head and provided with a socket for reception of the projecting end of the paste supplying tube, as and for the purposes herein before set forth.

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

CLAES W. BOMAN. [L. S.]

Witnesses:

SAMUEL KRAUS,

PERCY H. BUCKMASTER.