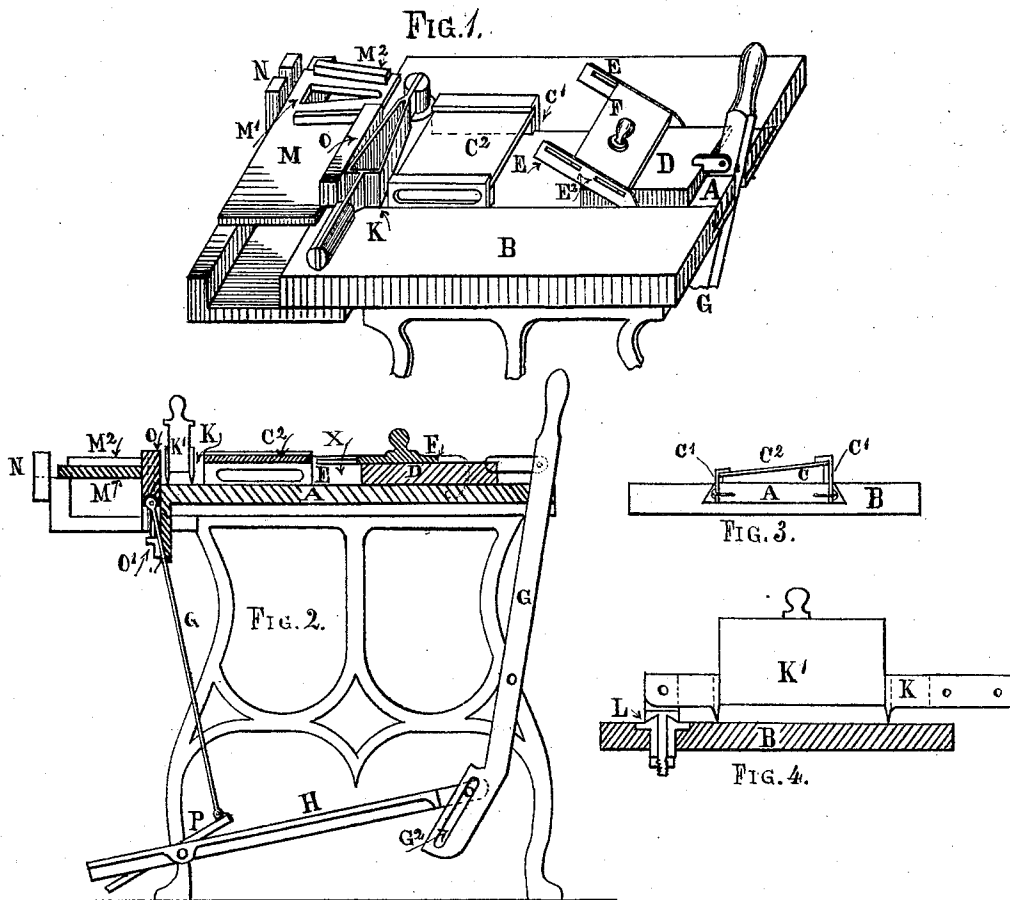


C. WINDRATH.
Cigar-Bunch Machines.

No. 152,446.

Patented June 23, 1874.



WITNESSES.

John C. Edmonds
Thomas Edmonds

INVENTOR.

Carl Windrath
per Michael J. Stark
attorney.

UNITED STATES PATENT OFFICE.

CARL WINDRATH, OF BUFFALO, NEW YORK.

IMPROVEMENT IN CIGAR-BUNCH MACHINES.

Specification forming part of Letters Patent No. **152,446**, dated June 23, 1874; application filed April 23, 1874.

To all whom it may concern:

Be it known that I, CARL WINDRATH, of Buffalo, Erie county, State of New York, have invented a Machine for Making Bunches for Cigars, of which the following is a specification:

The object of my invention is to produce bunches for cigars of even size and shape, having a quadrangular transverse section, and longitudinally the desired shape of the cigar to be produced; and consists in the arrangement of the receiver C, rammer D and its operating device, cutters E E, cutter K, gage O, and gage-board M.

In order to enable any one skilled in the art to which my invention pertains to make and use my machine, I shall proceed to describe the same, reference being had to the accompanying drawings and letters of reference marked thereon.

In the drawings, Figure 1 is a perspective view of the table of my invention. Fig. 2 is a longitudinal section of the complete machine. Fig. 3 is a transverse section of the receiver C. Fig. 4 is a longitudinal section of the cutter K and the swivel L.

A is a slide, fitting a dovetail of the table B. It consists of a rectangular plate having beveled edges longitudinally, and attached to the same near its front end is a rectangular receiver, C, and at its rear end two parallel cutters, E E. The upper side of slide A is either a flat surface or curved transversely, according to the shape of the cigar to be produced. C is a rectangular receiver attached to slide A. It consists of two skeleton sides, C¹, lined with glass, and a cover, C². The glass cover C² is either a straight plate or curved transversely, according to the shape of cigars to be produced, so that the slide A and cover C² form together the longitudinal outline of the said cigar. D is a rammer, movably attached to, and operated by, a lever, G. It is placed between parallel cutters E E, being kept in proper position by the same, and of a transverse section corresponding to that of receiver C, and fitting the same snugly. E E are two cutters attached to slide A, one on each side of the same. They are provided with slot-holes E² on their upper edges, and connected to each other by means of the cover

F. Their purpose is to serve as a guide for the rammer D, and also for cutting the filler-tobacco to the proper length. F is a sliding cover, movable in the slot-holes E² of cutters E. Its lowest side is either a flat surface or a curved one, so as to correspond in all cases with the transverse section of receiver C; in fact, it is forming a continuation of the cover C² of receiver C. It is provided with a knob for handling. G is the operating-lever. It has its fulcrum within the frame of the machine, and is actuated by means of the treadle H and the inclined slot-hole G², as shown in Fig. 2. K is a movable cutter of a box-like shape, its cutting-edges being of the shape of the cigar to be produced. It is attached to a swivel, L, as shown in section in Fig. 4, and provided with a handle for operation. Its position upon the table B is such that it can be placed between the receiver C and gage O, and nearly fills up this space. K' is a gland, fitting the cutter K. M is a gage-plate attached to table B, and in front of gage O. It is provided with an opening, M¹, and with two guides, M². The object of the guides M² is to facilitate the placing of a binder for the cigar, previously cut to exact shape, in its proper position between the said gages M² and over the opening M¹. N is a guide, fitting the shank of cutter K. It is placed in the center line of the opening M¹, so as to bring the cutter K exactly over said opening. It is attached to gage-plate M or table B. O is a movable gage provided with two openings, into which are fitted the brackets O' O', secured to slide A. It is operated by means of a treadle, P, and a rod, Q.

To operate my device the machine is set in the position shown in Fig. 2. The loose tobacco to be worked into fillers is placed in the space X obtained by sliding the cover F backward. Should the tobacco be longer than required the cutters E E are raised, and the tobacco cut to its proper length by forcing the cutters E through the same. Now, the cover F is slid forward against the receiver C, thus closing the space X, and the tobacco forced into the receiver C by means of the rammer D against the cutter K, which prevents the exit of the tobacco. This operation is repeated until the receiver C is filled, when the cutter

K is raised and the tobacco contained in C pushed out of the same against the gage O, thus exposing a quantity of compressed tobacco, sufficient to make one bunch, through which the cutter K is forced, cutting off a portion of the exact longitudinal shape of the cigar, but, of course, of quadrangular cross-section. Now, the gage O is depressed by means of the treadle P, and the superfluous tobacco in front of cutter K removed and at once deposited at X to be worked into new fillers. This being done, the cutter K is raised and swung over into the guide N over the opening M¹, whereupon has previously been placed the binder for the bunch between the guides M², and the contents of the cutter K, together with the binder for the bunch, are forced through the opening M¹ into a cigar-mold placed below the gage-board M by means of the gland K' passing through the cutter K. After one or two bunches are made the filling of receiver C is repeated.

I claim—

1. The combination of the receiver C, slide A, rammer D, and cutter K, as set forth.
2. The combination of the receiver C, rammer D, cutter K, and gage O, as set forth.
3. The combination of the receiver C, rammer D, cutter K, gage O, and perforated table M², as and for the purpose set forth.
4. The pivoted cutter K, constructed as described, for the purpose set forth.
5. The pivoted cutters E, provided with slots E², in combination with the slide F, receiver C, and a suitable rammer.
6. The combination of the rammer D, cutters E, slide F, receiver C, knife K, gage O, perforated table M², and gland K', as set forth.

CARL WINDRATH.

Witnesses:

MICHAEL J. STARK,
JOHN B. EDMONDS.