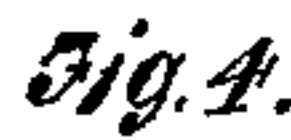


*A. Pearl,
Cigar Machine.*

No. 103236.

Patented May 17, 1870.



Witnesses
Fred. Hayner
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UNITED STATES PATENT OFFICE.

ADOLPH PEARL, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MANUFACTURE OF BUNCHES FOR CIGARS.

Specification forming part of Letters Patent No. 103,236, dated May 17, 1870.

To all whom it may concern:

Be it known that I, ADOLPH PEARL, of the city, county, and State of New York, have invented a new and useful Improvement in the Manufacture of Bunches for Cigars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification.

This invention relates to the manufacture of "bunches" for cigars by cutting them out from plug-tobacco and pressing them into shape, and it embraces a novel machine for that purpose, such machine, however, being also applicable to the pressing and trimming of bunches which are made separately from leaf-tobacco.

Referring to the accompanying drawing, Figure 1 is a plan view of the machine, showing it open; Fig. 2, a central vertical longitudinal section, showing it closed; Fig. 3, a front view, and Fig. 4 a transverse vertical section.

Similar letters of reference indicate corresponding parts in the several figures.

A is the bed-plate of the machine, made of cast-iron or other suitable material, having its upper surface inclined in a rearward direction, and having formed within it a longitudinal cavity, *a*, from which there is a longitudinal opening, *n*, extending through the upper part of said plate. This opening, in its section taken parallel with the top of the bed-plate, corresponds in form on each side with the longitudinal profile of a cigar.

G G are two cutters, each of a size and shape corresponding to the longitudinal profile of a cigar. One of these cutters is secured firmly to one side and the other to the other side of the opening *n*, and their cutting-edges project some distance above the upper face of the bed-plate A.

E is a block of metal or other material, of a form and size to fit loosely between the cutters G G. The upper face of this block is hollowed out to form a mold or die of the form of one-half of a cigar.

F is a wedge, which is arranged in the cavity *a* in the bed-plate, and upon the upper edge of which the block E bears. This wedge is kept in place by a screw, *h*, which is screwed

into the bed-plate, and projects into a longitudinal slot, *d*, in the bottom of said wedge, but does not prevent its operation.

B is a follower, which is hinged to the back part of the bed-plate A by means of lugs *e e* and pin *b*. In the under side of this follower is secured a steel die, I, the interior of which is of a concave form, to correspond with half of a cigar, and the edges of which are sharpened and made to project below the under face of the follower, to form cutters *g g*. This die and its cutting-edges are so arranged that when the follower is brought down toward the bed-plate the cutting-edges or cutters *g g* will act, one in connection with one of the cutters G G and the other in connection with the other of said cutters, to form two pairs of shears.

There may be several pairs of cutters, with interposed dies E on the bed-plate, and a corresponding number of dies and cutters on the follower, if desired.

To prepare the tobacco for the machine, the leaves are laid parallel with each other, and are damped and slightly pressed into the form of a slab, but not pressed so compactly as the plug-tobacco which is used for chewing and smoking. These slabs are cut transversely to the length of the leaves into strips, the width of which corresponds with the length of the cigars intended to be made. The strips of tobacco thus formed are placed, one at a time, upon the lower cutters, G G, while the follower is raised, and the follower is afterward brought down by a hand-lever or other means with suitable force, and the upper cutters, *g g*, then acting in connection with the lower cutters, G G, cut out from the strip a piece of the form to make a bunch, which piece is compressed between the die I and the die in the upper surface of the block E, into the rounded form necessary for the bunch. The follower is then raised, and the wedge F, on being pushed forward, forces up the block E, and expels the bunch from between the cutters G G, so that it can be removed by the fingers of the operator. The bunch is now ready for the wrapper or a retainer.

One advantage of this invention is that labor of a less skilled order is required to make the bunches, and another is that no binder is

needed when they are thus made, but the wrapper may be directly applied.

The machine may be used in the same manner as above described for the trimming and finishing of bunches which have been made separately from leaf-tobacco, such bunches being laid over the cutters G G and block E, and being trimmed and pressed by the bringing down of the die I.

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

1. The combination of the two fixed cutters

G G, the die I, and cutters *g g*, carried by a follower, and the movable die-block E, arranged between the fixed cutters, substantially as herein described.

2. The wedge F, in combination with the bed-plate, the die-block E, and the fixed cutters G G, substantially as and for the purpose herein described.

ADOLPH PEARL.

Witnesses:

FRED. HAYNES,
HENRY PALMER.