

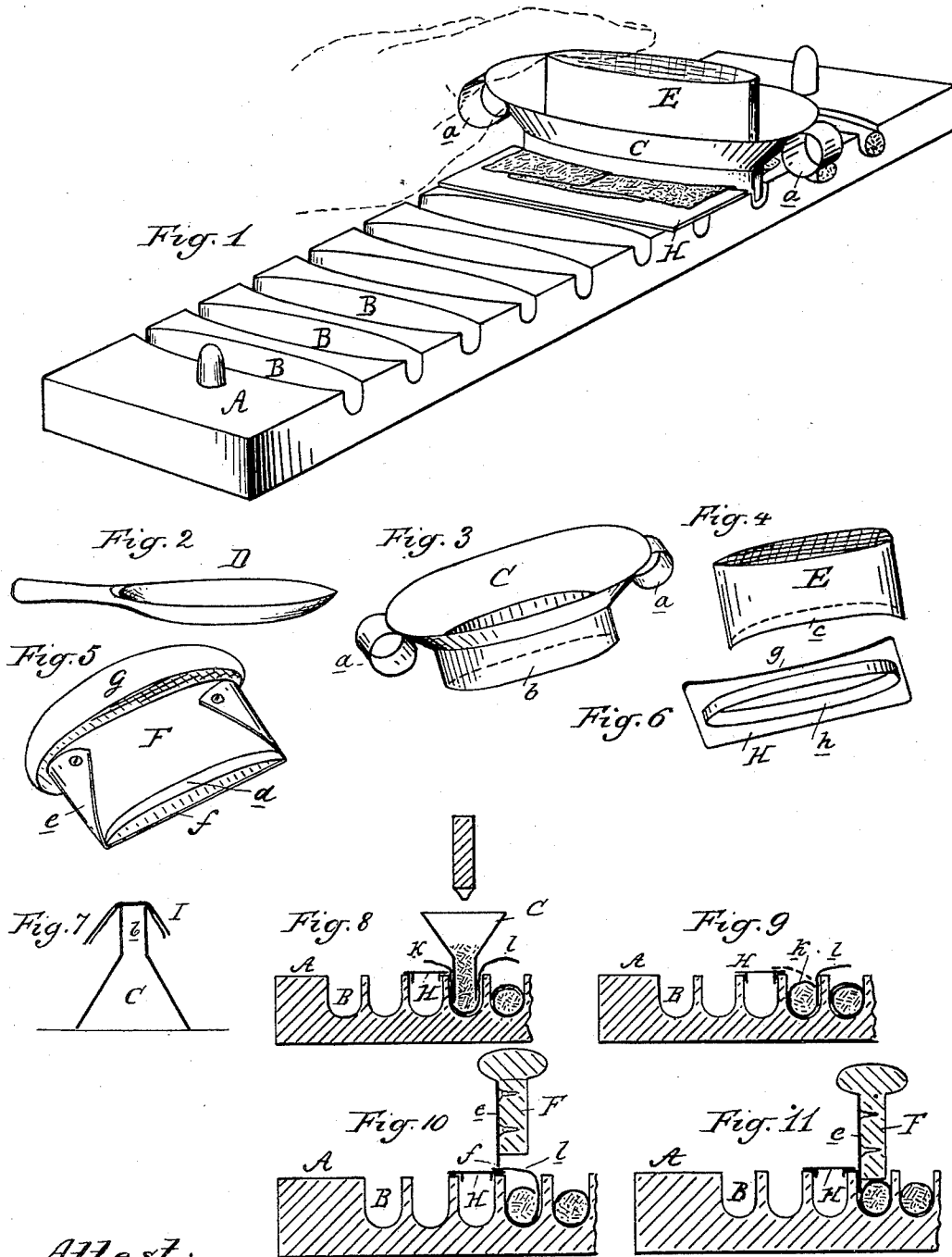
(No Model.)

N. DOETSCH.

METHOD OF MANUFACTURING CIGARS.

No. 325,062.

Patented Aug. 25, 1885.



Attest:

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UNITED STATES PATENT OFFICE.

NICOLAUS DOETSCH, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF TO
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METHOD OF MANUFACTURING CIGARS.

SPECIFICATION forming part of Letters Patent No. 325,062, dated August 25, 1885.

Application filed May 2, 1884. (No model.)

To all whom it may concern:

Be it known that I, NICOLAUS DOETSCH, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Methods of Making Hand-Made Cigar-Bunches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an improvement in the method of manufacturing hand-made cigar-bunches; and it consists in the improved method of manufacturing the bunches, all as hereinafter more fully described and claimed.

Figure 1 is a perspective illustrating a certain step in the bunching process. Figs. 2, 3, 4, 5, and 6 are perspectives of the different bunching-tools. Figs. 7, 8, 9, 10, and 11 are cross-sections illustrating the different steps taken to produce a bunch by the use of my tools.

In the accompanying drawings, A represents the lower part of an ordinary cigar mold-board provided with the series of molds B, in which the cigar-bunches are molded.

D, Fig. 2, is a scoop of elongated shape, and proper size to hold the required amount of filler material for one bunch.

C, Fig. 3, is an elongated funnel provided with the ears *a* and the discharge-spout *b*, which is of the same shape as the cigar-mold, but somewhat smaller, so as to be readily introduced therein, as shown in Figs. 1 and 8.

E, Fig. 4, is a follower of corresponding shape in cross-section with the cigar-mold, but smaller in size, so as to loosely fit into the discharge-spout *b* of the funnel. The face *c* of this follower is curved or arched, as shown.

F in Fig. 5 is another follower like the one in Fig. 4, with its lower face, *d*, similarly curved. This follower is, in addition, provided with the plate *e*, secured to one side thereof and forming a straight edge, *f*, instead of following the outline of the lower face, *d*, of the follower.

G is a handle.

H is a plate, provided on the under side with the flange *h*, the shape of which allows the plate to be put, as a cover, over any one

of the cigar molds. One side, *g*, of this plate is curved, as shown, so as to fit close onto the discharge *b* of the funnel.

The binders for making the bunches are prepared the same as for bunching by hand, with the addition that they must all be cut before using into short pieces of equal length, which makes them about square-shaped instead of the natural elongated leaf-shape. The proper length into which the leaves have to be cut will appear from the further description.

The process of bunching is now carried on as follows: First, the operator places the funnel in an inverted position on the table and places a sufficient number of binders, I, over the discharge end *b*, Fig. 7, taking care to make them overlap a little more on one side than on the other and cover over the whole of the discharge-opening, from two to four of the prepared binders being sufficient. The operator then seizes the funnel with both hands, using his fingers to keep the binders in the position in which they were placed, and inverting the funnel inserts its discharge end into one of the cigar-molds, as shown in Figs. 1 and 8. It will be seen that the binders are now partly concealed within the cigar-mold, with the flaps *k l* projecting outside, the latter a little more than the former. Previously to putting the funnel into the mold that mold which is next to it on the side where the short flap *k* of the binder projects must be covered over with the plate H, as shown, its curved edge *g* lying against the funnel. After the binders are placed in the mold, and with the funnel still in position, the operator deposits in the funnel a scoop full of the filler material, using the scoop D for the purpose. Then after distributing it and lightly pressing it down, if found necessary to make it enter the discharge-spout of the funnel, the operator places the follower E in the funnel on top of the filler. The next step for the operator is to withdraw the funnel. This he does by using both hands, placing the thumb of each into the ears *a*, and putting the index-finger of each on top of the follower, as shown for one hand in Fig. 1. Now, by lifting with the thumbs and pressing down with the index-fingers, the

funnel is withdrawn and the filler is at the same time pressed into the mold. The shape of the under side of the follower E, aided by the judicious distribution of the filler before applying the follower E, will force the filler into the mold in the proper way to give the bunch the desired form. The next step for the operator is now to fold the projecting ends of the binder over the filler. This is first done with the short flap *k* and then with the long flap *l*. The short flap *k* has to be just of a length to cover the exposed top of the filler, while the longer flap *l*, when folded over, has to project slightly onto the plate H, as shown in Fig. 9. The last step is now to take the follower F and place it in the position shown in Fig. 10, where the edge *f* of the plate *e* is placed upon that edge of the binder-flap which projects outside the mold. Then by a slight push and downward pressure he carries the follower F into the position shown in Fig. 11, bringing at the same time the binder-flap *l* over and around the top of the bunch, which is now completed.

The shape of the under side of the follower F allows the operator to press the binder-flaps closely down upon the filler, so as to give the bunch the proper shape.

The function of the plate H as a cover of the mold next the one in which the bunch is formed is now apparent, as otherwise the follower F could not be properly used unless the cigar-molds are constructed with a greater interval between them than in the common mold, which I prefer to use. The most practical way for the operator is to place the mold-board on the table so that the ends are parallel with that side of the table at which he sits, and, beginning at the mold farthest from him, uses one after another, the one next to him being the last.

The operation herein described of bunching cigars may of course be slightly varied to suit the individual convenience of the operator; but the order or function of the tools is necessarily always the same.

To use more or less filler material, according to its condition of compactness, or to produce bunches more or less firm, the operator has to be supplied with scoops of different sizes.

With the use of the tools above described I have found that an unskilled operator can after a few trials produce very good bunches, and with practice can produce superior bunches much faster than by the all-hand process.

I am aware of the Patents No. 150,549, 238,500, and 244,453, and make no claim to anything shown therein as forming part of my invention.

I am also aware of the Patent No. 243,726, in which one of the sides of the binder is shown as projecting more than the other; but said side is not of sufficient length to admit of its being tucked in between the cigar and the side of the mold.

No claim is made in this application to the construction of the tools herein shown and described, as they are shown and described merely for the purpose of illustrating the manner of forming bunches by my improved method, and form the subject-matter of separate applications filed by me December 10, 1884, as divisions of this application, and bearing the Serial Nos. 149,983 and 149,984.

What I claim as my invention is—

The method herein described of forming the bunch in manufacturing cigars, consisting of the following steps: first, charging a cigar-mold with a binder and a measured amount of filler, the ends of the binder projecting unequally; secondly, lapping the projecting ends of the binder over the filler, with the longer end on the outside; and, thirdly, completing the lap while the bunch is still in said mold by forcing the outer end of the binder between the cigar and the side of the mold, whereby the bunch is completely wrapped in a single mold, substantially as described.

NICOLAUS DOETSCH.

Witnesses:

H. S. SPRAGUE,
E. J. SCULLY.