

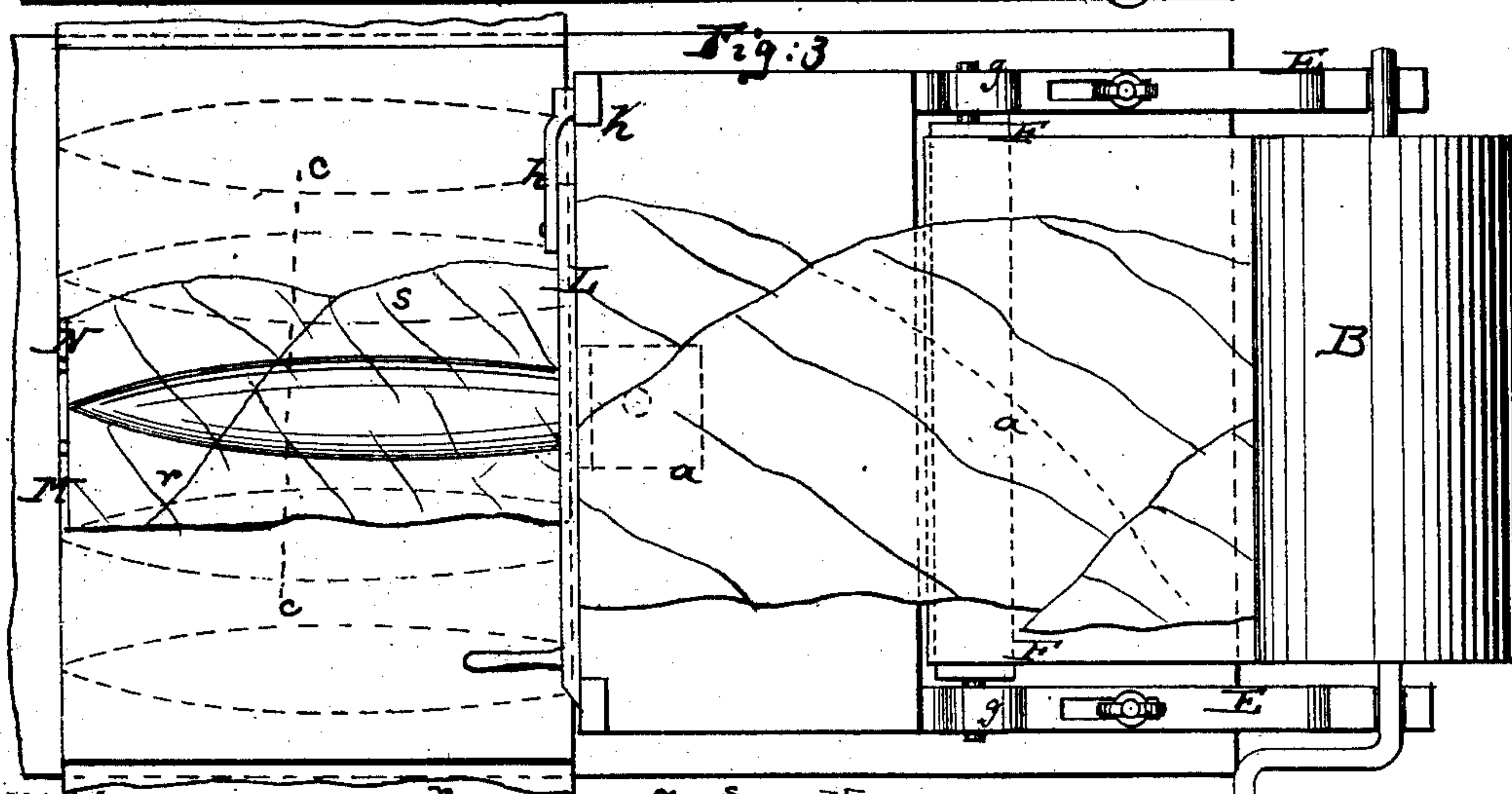
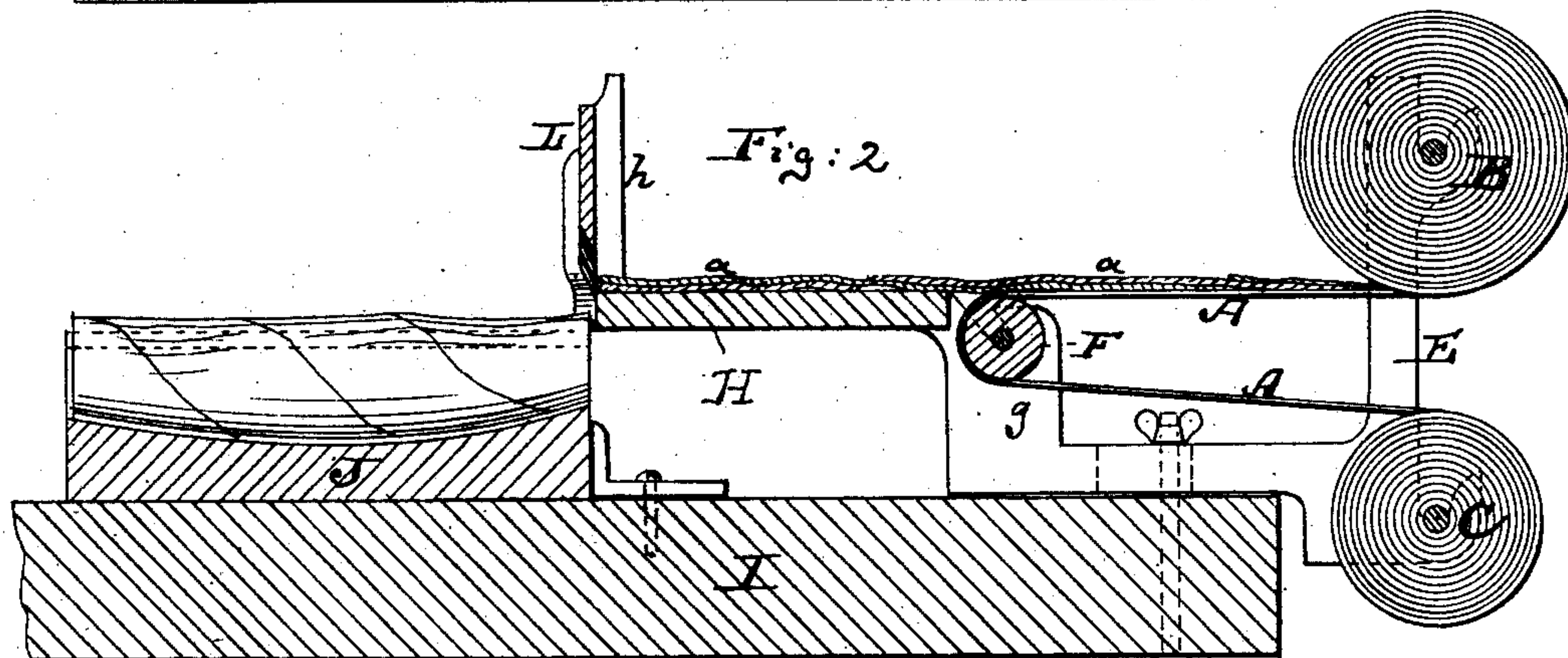
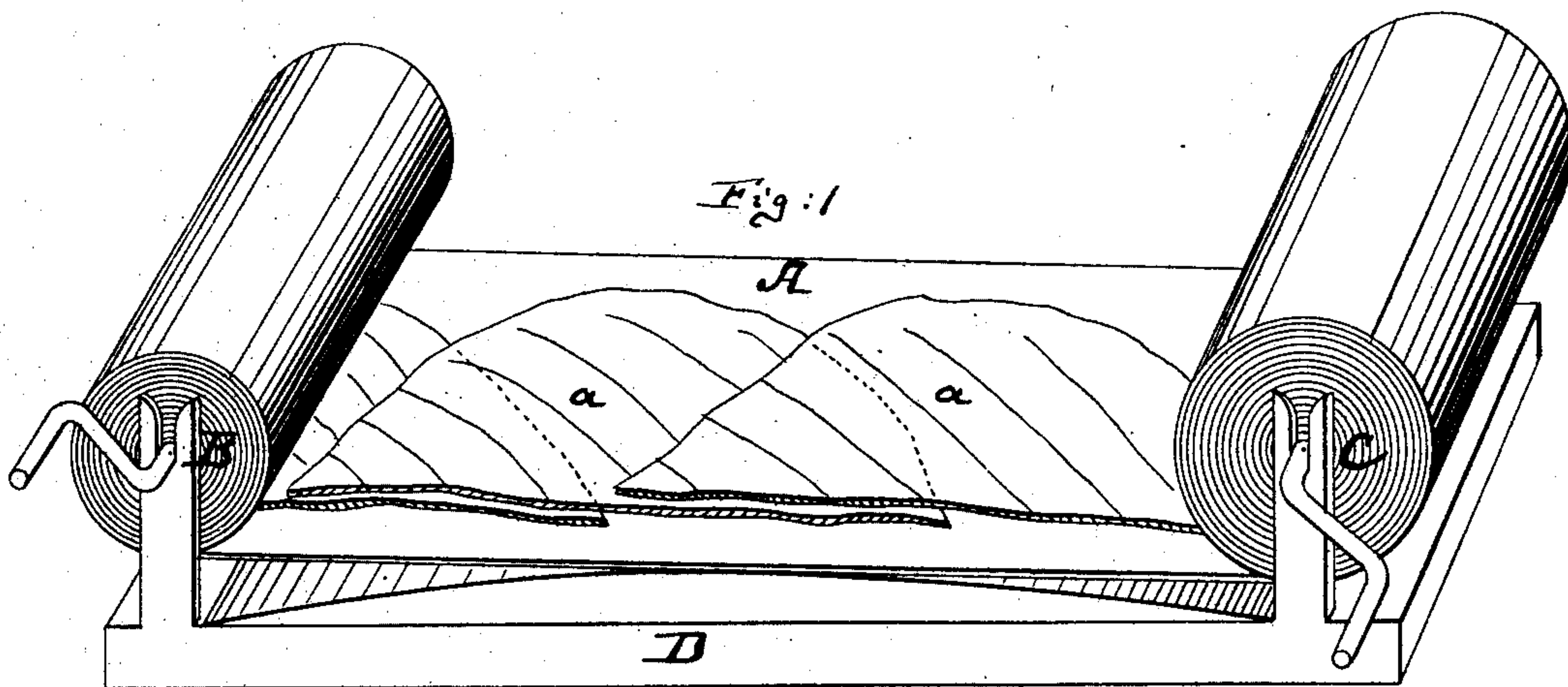
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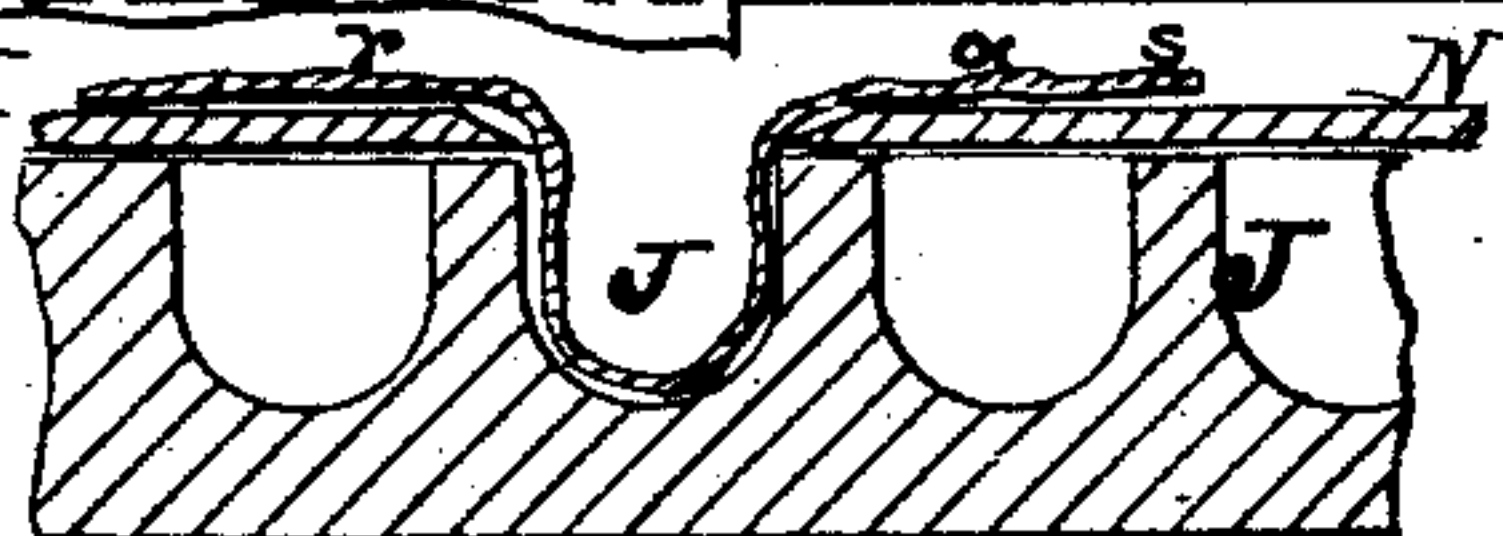
O. HAMMERSTEIN.
CIGAR MACHINE.

No. 244,748.

Patented July 26, 1881.



Witnesses: M
John E. Tunbridge
John M. Speer,



Inventor.

Oscar Hammerstein
by his attorney
A. B. Briesen

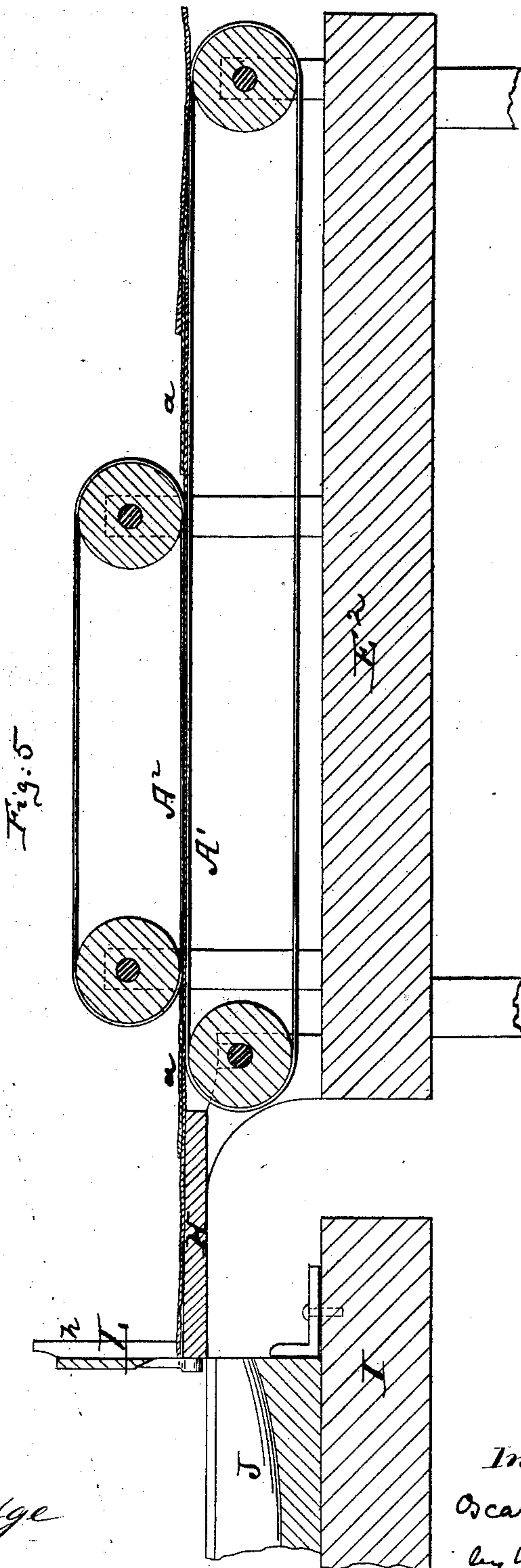
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UNITED STATES PATENT OFFICE.

OSCAR HAMMERSTEIN, OF NEW YORK, N. Y., ASSIGNOR TO MALVINE HAMMERSTEIN, OF SAME PLACE.

CIGAR-MACHINE.

SPECIFICATION forming part of Letters Patent No. 244,748, dated July 26, 1881.

Application filed November 11, 1880 (No model.)

To all whom it may concern:

Be it known that I, OSCAR HAMMERSTEIN, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Cigar-Machines, of which the following is a specification.

Figure 1 represents a perspective view of the apparatus for laying the leaves of tobacco before they are introduced into the cigar-machine proper. Fig. 2 is a vertical cross-section of the machine; Fig. 3, a top view thereof; Fig. 4, a detail longitudinal section on the line *c c*, Fig. 3. Fig. 5 is a vertical sectional view of a modification thereof.

This invention relates to certain improvements on the cigar-machine for which I filed an application for Letters Patent on the 30th day of June, 1880, which application was allowed on the 16th day of September, 1880.

The principal object of the present invention is to provide an attachment to the aforementioned machine for feeding the binders to the mold into which the fillers are pressed; and to this end the invention consists in mechanism for holding the binders between two surfaces of suitable fabric—such as an apron or aprons—and in then conveying them to their proper place above the mold, and in providing means for cutting a sufficient length of tobacco for a binder, all of which mechanism and means will be hereinafter more fully described.

In the drawings, the letter J represents the ordinary cigar-mold, into which the tobacco constituting the filler is pressed either by the reciprocating jointed mold described in said former application or by any other means. This mold J has a suitable connection with means for imparting rectilinear motion to it, so that one cavity after the other can be brought in line with the filling mechanism.

M and N are the two plates which overlap the mold J on opposite sides of the cavity to be filled, and upon which the binder is placed, so that it partly rests in the cavity of the mold which is to be filled, all as indicated in Fig. 4, and fully described in the above-mentioned application. One of the plates, M, is movable, and the other, N, is stationary, and after the filler has been put into the binder in the

cavity of the mold the plate M is moved horizontally over the filled cavity, so as to fold the end *r* of the binder upon the filler within said cavity. After the plate M has thus lapped the end *r* of the binder over the filler the mold J is moved in the same direction sufficiently far to bring its filled cavity under the plate N, and by this motion the end *s* of the binder is lapped over the filled cavity and over the filler to complete the inclosure of the filler by means of the binder.

As far as described, the invention is fully disclosed in my above-mentioned application.

My present improvement relates to mechanism for supplying the binder to the mold J whenever a cavity of said mold is in position to be filled.

To this end I take the stripped leaves *a a* of tobacco and place them either lengthwise or crosswise, as may be required for different kinds of cigars, upon an apron, A, Fig. 1, the ends of which apron are attached to two rollers, B and C. These rollers are hung in a suitable frame, D. The leaves of tobacco are placed upon the flat part of the apron A, which is between the two rollers B C, so that one leaf overlaps the other, as shown, and the apron is then wound upon one of said two rollers—say the roller B—winding the leaves of tobacco around said rollers, together with the apron. When the apron carrying the tobacco has been fully wound as far as the frame D will permit around one of the rollers, B, the rollers are taken away from the frame D and hung onto a bracket, E, which projects from the table I of the tobacco-machine, which is the table upon which the mold J is placed, as clearly shown in Fig. 2. The filled roller B is hung on the upper part and the empty roller C in the lower part of the said bracket, as shown. Part of the apron is now drawn forward and around a roller, F, which is placed in posts *g* that project from the bracket E, as shown. The operator now, whenever a new cavity of the mold J is brought in position to be filled, turns the roller C by means of a suitable crank and winds the apron A gradually from the roller B upon the roller C. In so doing the tobacco-leaves *a a* will be gradually fed in a horizontal direc-

tion upon an adjustable plate, H, that is attached to the adjustable bracket E, and thence upon the mold J, so as to cover the cavity thereof, as indicated in Fig. 3. The filler is now pressed into the mold-cavity, either by means of an upper jointed mold, such as is shown in my above-mentioned application, or by other means. A knife, L, pivoted or held in posts *h* that project from the plate H, is swung or moved down and cuts along the edge of the plate H, detaching that portion of the binder *a* which lies on the mold J from that portion which still lies on the plate H. The knife L is either moved down by hand, or may be moved down by a projection of the jointed mold that carries the filler into the mold J. Thus the operation continues, and a binder is supplied to each mold-cavity. If the leaves *a a* are originally placed upon the apron A, so that one laps over half of the other, there will be a double thickness of binder supplied to the mold J.

By this mechanism I utilize good tobacco for binders without requiring special attention to be given to the length of each particular leaf of tobacco since by placing the leaves *a* onto the apron and overlapping them it will be immaterial as to where the binders are cut off from the general supply by means of the knife L, the proper length being invariably supplied to each mold-cavity.

When a mold, J, having a shorter or longer set of cavities is substituted for that to which the machine has once been adjusted, it is only necessary to shift the adjustable bracket E, and with it the plate H and knife L accordingly, so that the edge of plate H will reach or nearly extend to the ends of the mold-cavity.

The modification shown in Fig. 5 may be employed with advantage, and consists in substituting for the removable apron A, which is shown in the remaining figures, two continuous

aprons, A' A², the lower of which, A', is longer than the other, so that the operator can place the leaves *a* of tobacco upon the outer projecting portion of the apron A', whereupon the tobacco will, between the two said aprons which are set close together and parallel to each other, be fed forward upon the plate H with the same effect as is done by the mechanism shown in Figs. 1, 2, and 3. In this case the plate H carrying the knife L is attached to the adjustable frame E², in which the rollers of the aprons have their bearings.

I claim—

1. In a cigar-machine, the combination of the receiving-mold J with an apron or aprons holding the leaves of tobacco for the binders under pressure between two flexible surfaces, and with mechanism for conveying said binders directly to said mold in a direction parallel with the length of the mold-cavities, substantially as described.

2. The combination of the binder-carrying apron or aprons holding the leaves of tobacco under pressure between flexible surfaces with the mold J and with the detaching-knife L, all arranged so that the apron will push the binder over the mold and the knife detach as much of the binder as is on the mold from the remainder, substantially as described.

3. The combination of the adjustable bracket E, carrying plate H, with the binder-carrying apron and with the knife L and mold J, substantially as specified.

4. The combination of the apron A and its carrying-rollers B C, with the loose roller F, plate H, mold J, and knife L, substantially as described.

OSCAR HAMMERSTEIN.

Witnesses:

WILLY G. E. SCHULTZ,
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