

J. WETTSTEIN.

Bunch-Mold Machines for Cigars.

No. 134,502.

Patented Dec. 31, 1872.

Fig. 1.

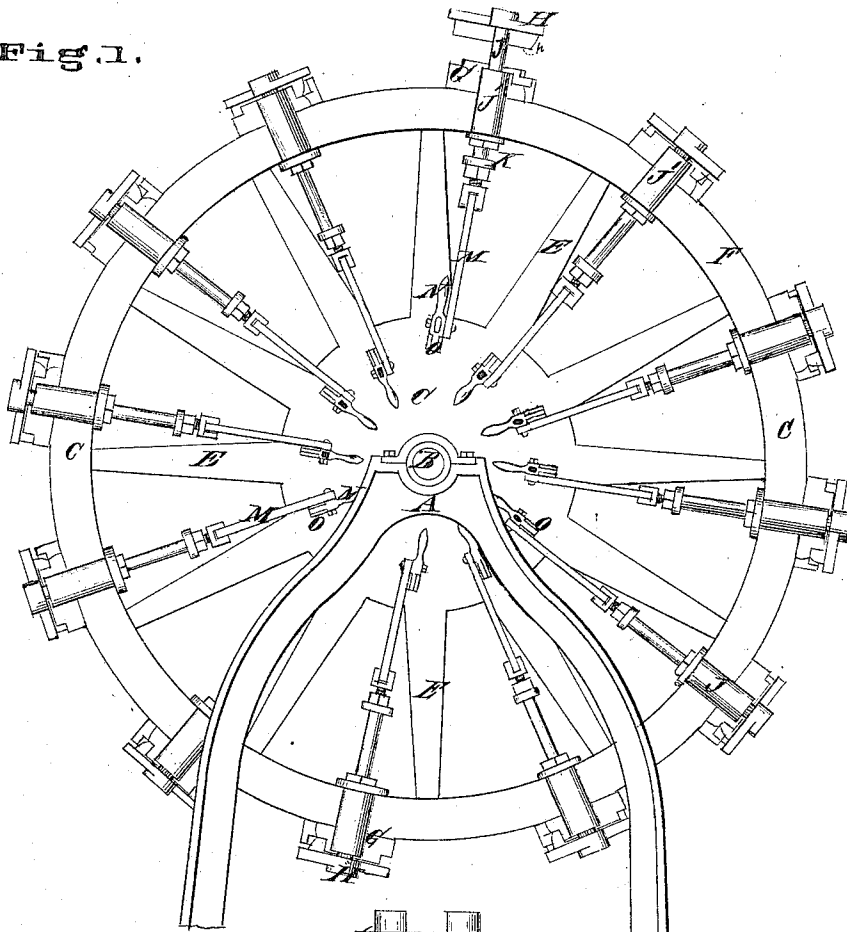
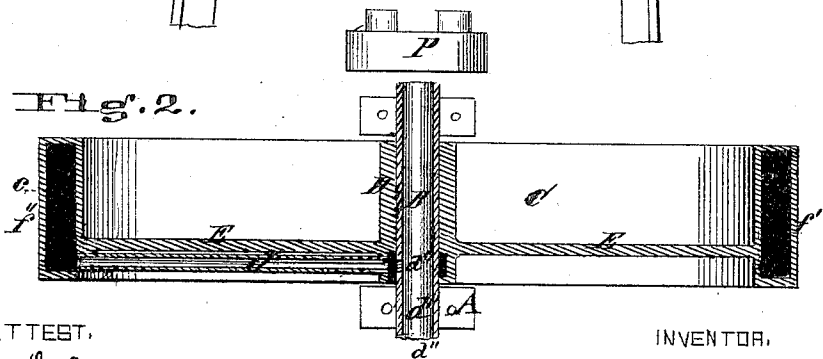


Fig. 2.



ATTEST,

Geo. L. Ewin
Walter Allen

INVENTOR,

John Wettstein
By Wright, Bro. & Attys.

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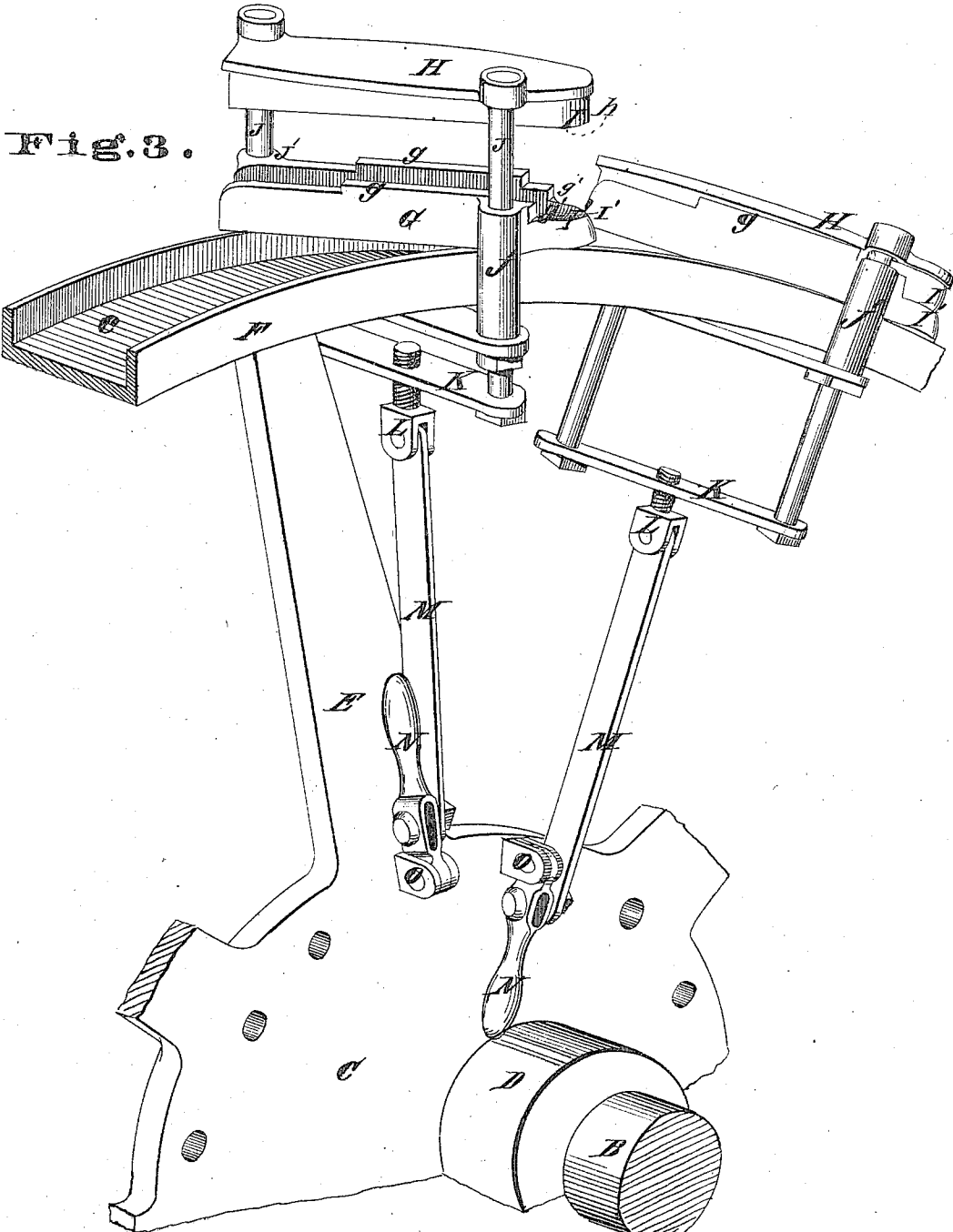


Fig. 3.

ATTEST,
Geo. L. Ewin
Walter Allen

INVENTOR,
John Wettstein
By Wm. H. Bright, Jr. Atty.

UNITED STATES PATENT OFFICE.

JOHN WETTSTEIN, OF HIGHLAND, ILLINOIS.

IMPROVEMENT IN BUNCH-MOLD MACHINES FOR CIGARS.

Specification forming part of Letters Patent No. 134,502, dated December 31, 1872.

To all whom it may concern:

Be it known that I, JOHN WETTSTEIN, of Highland, in the county of Madison and State of Illinois, have invented a certain Bunch-Mold for Cigar-Filling, of which the following is a specification:

My invention relates to an apparatus by which the filling-bunches of cigars are pressed and set into the proper form to receive the wrapper. The first part of my invention consists in the formation of the mold, which is made in two parts, having counterpart cavities each the size and form of half the molded filling for a cigar. At the point end the parts terminate in moderately sharp or angular edges, which, although they are not intended to cut off the superfluous tobacco, yet so nearly divide or closely press it that the point is neatly formed, and the surplusage readily clipped off with scissors. The second part of my invention consists in combining a number of such molds with a rotary frame or wheel, so that the molds may be brought in succession to the hand of the operator. The third part of my invention consists in providing a heater, by which the filled molds are heated so as to set the filling in form.

Figure 1 is a side view of my apparatus. Fig. 2 is a section through the wheel, showing a modification in which steam is used to heat the molds. Fig. 3 is an enlarged perspective view of a portion of my apparatus.

A is the frame, supporting an arbor, B, (that may be hollow and connected with a steam-pipe, to convey steam to the hollow rim *c* of the wheel C, as shown in Fig. 2, *d* being a pipe, communicating from the hollow in the arbor to that in the rim.) The hub D of the wheel turns on the arbor B, and is connected by spokes E to the rim F. This rim has side flanges, forming between them a peripheral groove or channel, *c*, to convey to the molds the heated currents from a lamp beneath. G is the fixed part of the mold, which is attached to the rim F. *g* are upwardly-extending flanges, which act as guides to the moving parts H of the mold. The recess *g'* of the part G, and that *h* in the under part of the part H, (not shown,) are similar in form to one-half of a cigar divided longitudinally, and together form a matrix for forming the bunch or filling. The mold when closed is open at one end, and at the other end has jaws I I', which

pinch the point of the bunch and give it the proper tapering form. These jaws, although having an edge, are not intended to cut off the surplusage, but to deeply indent the line between the surplusage and the point, so that the latter may hold its form, and the surplusage may be readily removed by scissors. Near each end of the moving part H are guide-rods J, sliding in sockets J' of the fixed part G. The lower ends of the rods J are connected together by a cross-bar, K, into which screws a screw-head, L. M is a bar, pivoted to the head L, and to the lever N, whose end is fulcrumed in the lug O. The fulcrum *o* of the lever is at such distance from the wheel that the lever N moves through somewhat more than a semicircle, so that its end falls past the line of direction in which the molds act, by weight and pressure, of the bunch, to move the lever, so that the action of the mold is to hold the end of the lever against the wheel when in either of its fixed positions. The distance between the mold and the lever is regulated by the screw-head L, which, after the bar M is disconnected from the lever, may be screwed into the bar K. Beneath the wheel is a lamp P, to heat the molds after they are filled. The heated currents from the lamp P pass up the peripheral channel and communicate heat to the molds both before and after they have reached the lamp in their rotation.

The operation of my apparatus is as follows: The operator stands before the wheel and inserts the bunch of filling into the mold; he then turns down the lever N, which closes the mold and compresses the bunch into form. The jaws I I' tightly pinch the tobacco at the point, so as to leave a very thin line to be subsequently cut through to remove the surplusage from the point. When the mold is filled, another mold is brought to the top by the partial rotation of the wheel. The lever N is then raised to open the mold, and the molded bunch removed; and so, as the wheel is turned, the molds are filled and turned down over the lamp to set the bunch.

In Fig. 2 is shown a modification in which the arbor B is hollow, and the inside of the hub has a circular groove, *d'*, to conduct the steam from a hole, *d''*, in the arbor to the pipe *d*, leading to the annular chamber *c*, formed by surrounding the rim by the plate *f''*. The

water of condensation may be discharged from the steam-chamber *c* by a cock.

I am aware that bunch-molds have before been used, but made of wood, having two straight pieces with counterpart recesses to contain the filling-bunches. These molds have no jaws similar to *II'*, so that the surplus tobacco laid between the faces of the boards, and the point was not well defined or the surplusage easily removed, so as to leave a neat point, as with my mold.

I claim—

1. The molds *G g H h* provided with jaws

I I', uprights *J*, and sockets *J'*, as and for the purpose set forth.

2. The molds *G H I I'* supported on a wheel or rotary frame, and operated substantially as set forth.

3. The combination of bunch-filling molds, supporting-wheel, and the heating-lamp *P*, or described equivalent, for the purpose set forth.

JOHN WETTSTEIN.

Witnesses:

SAML. KNIGHT,
R. T. BRADLEY.