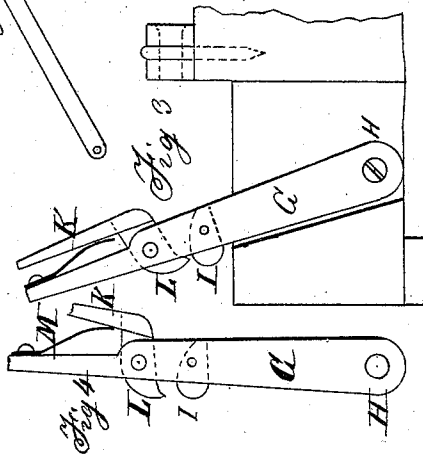
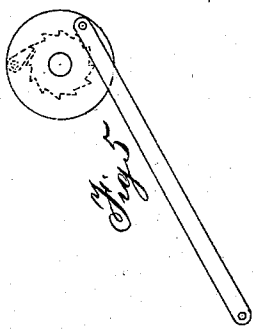
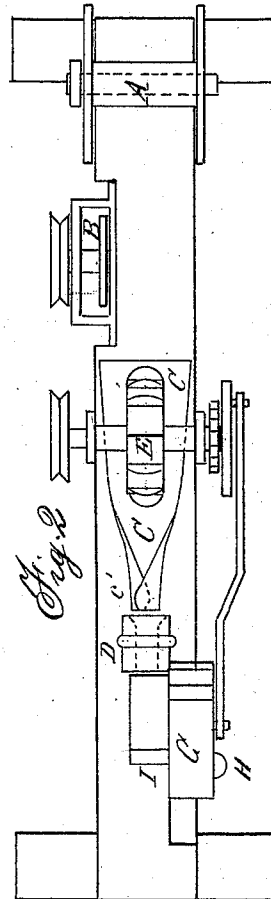
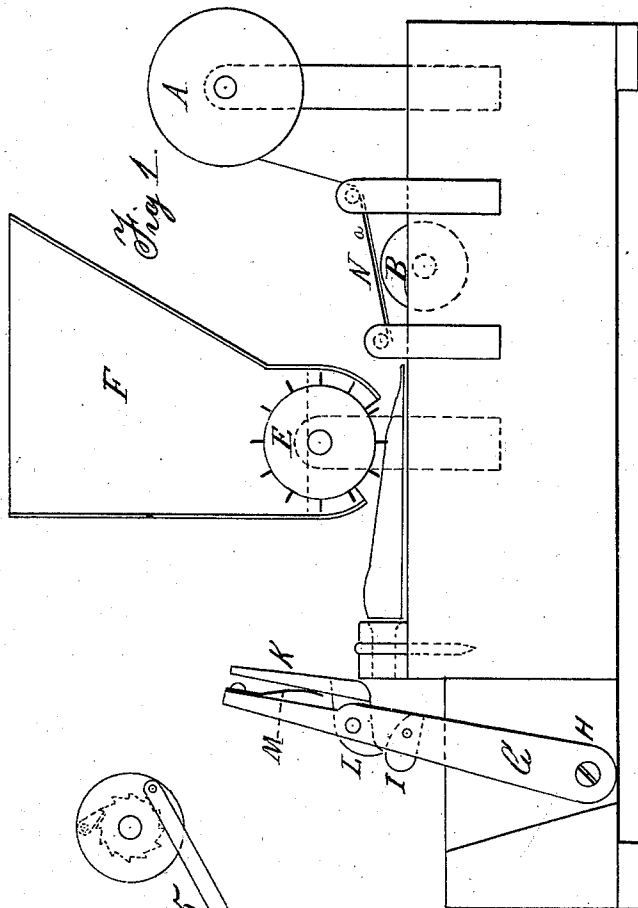


A. H. HOOK.
CIGARETTE MACHINE.

No. 184,207.

Patented Nov. 7, 1876.



Witnesses.
William A. Kerr
John M. D. Leating

Inventor
Albert H. Hook

UNITED STATES PATENT OFFICE.

ALBERT H. HOOK, OF NEW YORK, N. Y., ASSIGNOR TO THOMAS JONES AND
J. H. DARLINGTON, OF SAME PLACE.

IMPROVEMENT IN CIGARETTE-MACHINES.

Specification forming part of Letters Patent No. 184,207, dated November 7, 1876; application filed April 3, 1876.

To all whom it may concern:

Be it known that I, ALBERT H. HOOK, of the city, county, and State of New York, have invented an Improved Machine for Making Cigarette-Cylinders, which invention is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of the machine, partially shown in section. Fig. 2 is a plan view of the machine, the hopper F and the plate P being removed. Figs. 3 and 4 represent the drawing apparatus in positions different from that shown in Fig. 1. Fig. 5 is a front view of the device for propelling the tobacco-feed wheel. Fig. 6 is an end view of the front end of the trough C, where the paper strip is formed into a tube.

The object of the invention is to construct a machine which will make cigarette-cylinders by forming an endless ribbon, *a*, of paper into a tube by drawing it through a former and filling it with tobacco prior to closing the paper tube.

The construction of the machine is as follows: A ribbon of paper of the required width comes from a spool, A, passes over a gum-wheel, B, which puts a narrow streak of gum onto the lower side of the paper ribbon, parallel and very close to one edge thereof. Thence the paper passes into a trough, C, which, starting from a flat, gradually curves more and more upward, until it finally terminates at *c'* in a tube-former. Thus the paper, as it passes along this trough C, is gradually formed into a tube, but so that the gummed edge of the paper ribbon is turned up and lapped over by the opposite edge. Thence the so-formed paper tube passes into a hollow cylinder, D, and, passing through this cylinder, the two edges of the paper strips are caused to adhere together. Over the forming-trough C there is a bucket-wheel, E, which, by some mechanism, receives an intermittent revolving motion. Its upper portion travels in a hopper, F, which contains granulated or otherwise prepared tobacco. The buckets will deliver the tobacco

below upon the paper ribbon before the said ribbon is formed into a tube.

The mechanism to draw the tube or paper through the tube-forming apparatus, as shown in the drawings, consists of the following parts: a lever, G, vibrating on a fulcrum, H; a projection, I, fastened to the side of the lever G; a nipping-lever, K, jointed at L to the side of lever G; and a spring, M, which serves to keep the lever K away from lever G.

To draw the paper tube by this device, the operator moves the lever G to the position as shown in Fig. 1, while the nipper is left open. Then he closes the nipping-lever, thereby clamping the cigarette cylinder or tube between the lower end of the nipping-lever and the upper surface of the projection I. Then he moves the lever G and its appendages forward to a position as shown in Fig. 3, thereby drawing out the length of a cigarette-cylinder.

By repeating this operation, an endless tube filled with tobacco can be drawn, which tube may be afterward cut up into cigarette-cylinders in the flattened places that have been in the nippers, either by hand or by an automatic cutting apparatus attached to the machine; or the drawing device may consist of a series of pairs of grooved rollers, to take hold of the cigarette-cylinder and pull it along continuously.

The device for feeding the tobacco down upon the paper ribbon may be varied according to the character of the tobacco of which the cigarette-cylinder is to be made.

To keep the paper ribbon in close contact with the periphery of the gum-wheel B, there is a stationary plate, N, between which and the gum-wheel the paper ribbon passes.

What I claim as my invention is—

1. The method herein described of forming cigarette-cylinders, consisting in drawing a ribbon through a tube-forming die, and simultaneously feeding the tobacco upon the ribbon, the same being previously gummed and finally pasted, as herein described.

2. The combination of spool A, gumming-

wheel B, trough C, cylinder D, with a mechanism for charging with tobacco and drawing the ribbon *a* through the trough and cylinder, as set forth.

3. The combination of the hopper F, wheel E, trough C, cylinder D, and a mechanism for drawing the ribbon *a* through the trough and cylinder, as described.

4. The combination of the wheel E, trough and cylinder C and D, and the drawing mechanism, as herein described.

ALBERT H. HOOK.

Witnesses:

WILLIAM A. KERR,
JOHN M. D. KEATING.