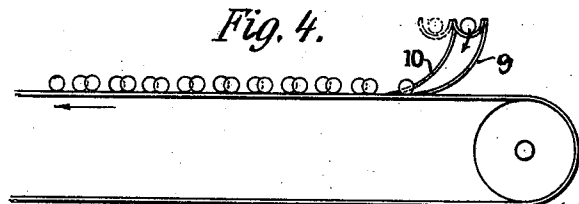
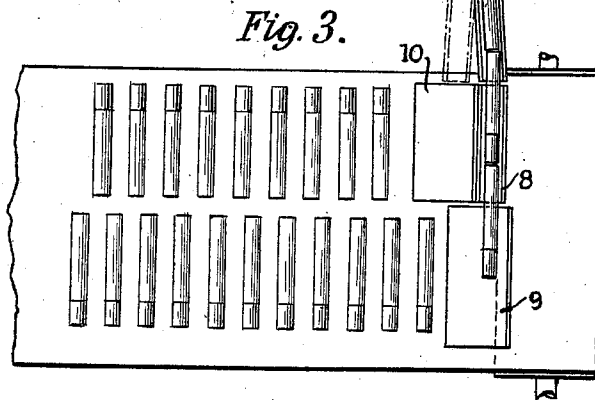
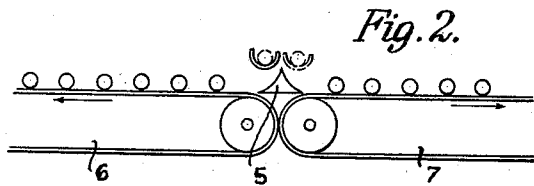
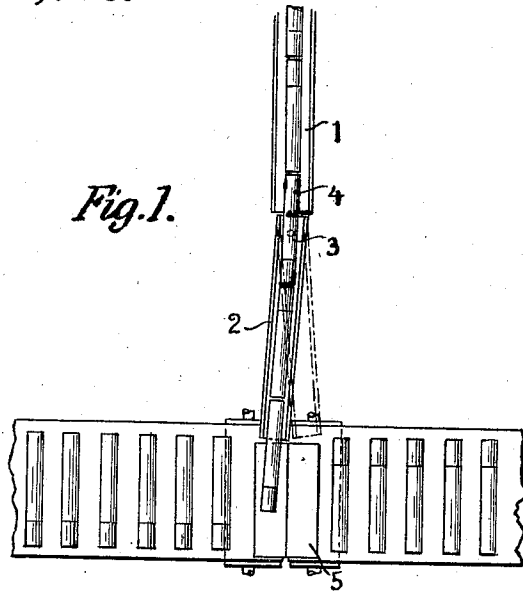


E. KOERNER,
CIGARETTE MACHINE.
APPLICATION FILED AUG. 16, 1910.

1,000,736.

Patented Aug. 15, 1911.



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UNITED STATES PATENT OFFICE.

EWALD KOERNER, OF DRESDEN, GERMANY.

CIGARETTE-MACHINE.

1,000,736.

Specification of Letters Patent. Patented Aug. 15, 1911.

Application filed August 16, 1910. Serial No. 577,529.

To all whom it may concern:

Be it known that I, EWALD KOERNER, a subject of the Emperor of Germany, and resident of Dresden, in the Kingdom of Saxony, Germany, have invented certain new and useful Improvements in Cigarette-Machines, of which the following is a full, clear, and exact specification.

The present invention relates to improvements in cigarette machines especially to that class in which cigarettes with paper, cork, gold, straw or other tips are made.

It is the primary object of my invention to provide suitable and efficient means to assort the tipped cigarettes delivered from the machine after having been cut from the cigarette-rod.

It is a well known fact that tipped cigarettes after being cut from the cigarette-rod are delivered by the machine with their tipped ends abutting and that much time and labor is wasted in assorting the same.

It is the object of the present invention to provide a device adapted to automatically assort the cigarettes so that the same are delivered into a suitable receptacle or box with their tipped ends all pointing in one direction.

In the accompanying drawing forming part of this specification: Figure 1 is a top view of the preferred form of my device attached to the delivery chute of a cigarette machine. Fig. 2 is a side view of endless delivery aprons used in connection with the device according to Fig. 1. Fig. 3 is a top plan view of a modified form of my device, and Fig. 4 is a side view of the endless delivery aprons used in connection therewith.

According to the preferred form of my device in front of the delivery chute 1 of a cigarette machine a channel tube 2 is arranged adapted to be laterally swung around a pivot 3 by any well known means into which the cigarettes are guided from the delivery chute. Guide plates 5 slanting in opposite directions in front of the free end of the tube 2 alternately receive the cigarettes delivered from said tube and guide the same upon endless aprons 6, 7 moving in opposite directions below said guiding plates. It is clear that in consequence of the swinging of the channel tube 2 which changes its direction of motion after the delivery of each cigarette, all the cigarettes having their tips pointing in one direction will be transferred to one of the

guiding plates 5, while the others having their tips in the opposite direction will be transferred to the other guiding plate 5. All cigarettes having their tips pointing toward one side will then slide down the corresponding slanting guide plate 5 and fall upon the delivery apron which carries the cigarettes into their respective suitable receptacles, not shown.

According to the modified form of my device as shown in Fig. 3 a stationary channel 8 is provided in front of the swinging channel tube 2. One of the guiding plates of this preferred form of my device marked 10 is laterally disposed to the channel 8, while the other guiding plate 9 is in alignment with the channel 8. Only one endless apron is provided. It is clear that all the cigarettes having tips pointing to one side will be delivered through channel 8 to the guide plate 9, while all the cigarettes having their tipped ends pointing in the opposite directions in consequence of the lateral oscillation of the channel tube 2 will be delivered upon plate 10. Thus the cigarettes falling from both plates will have their tips pointing in opposite directions but all cigarettes having their tips pointing in the same direction will be assorted in one row upon the delivery apron and will be carried by the same into suitable receptacles.

Having thus described my invention what I claim is—

1. The combination with a machine for making cigarettes or other like articles having a chute delivering the articles endwise therefrom, of a laterally oscillating guiding tube in front of said chute receiving the cigarettes one by one, a pair of guide plates in front of said guiding tube adapted to alternately receive the cigarettes delivered from said oscillating tube, and means below said guide plates to carry the cigarettes coming assorted from the guiding means side-wise into suitable receptacles.

2. The combination with a mechanism for making cigarettes or other like articles having a chute delivering the articles endwise therefrom, of a laterally oscillating guiding tube swinging around a pivot in front of said chute receiving the cigarettes one by one with their tipped ends in opposite directions, a stationary channel in front of said oscillating tube, a slanting guide plate in front of said channel adapted to receive the cigarettes delivered from the

oscillating tube having their tips in one
direction, and a second slanting guide plate
in front of said oscillating tube carrying
said stationary channel and adapted to re-
5 ceive the cigarettes delivered from said os-
cillating tube having their tips in the op-
posite direction accordant with the swing-
ing of said oscillating tube, an endless apron
underneath of said plates to which the as-
10 sorted cigarettes are delivered sidewise, and

means to move said apron in one direction
to deliver the rows of assorted cigarettes
into suitable receptacles.

In testimony whereof I affix my signa-
ture in presence of two witnesses.

EWALD KOERNER.

Witnesses:

MARGARETE WOLF,
EBERHARD LORENZ.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
