July 16, 1929. E. KOERNER 1.720,907

DEVICE FOR PLACING CIGARETTES OF FLAT OR OVAL CROSS SECTION SIDE BY SIDE IN AN OBLIQUE POSITION

Filed Aug. 20, 1927

Fig. 1.

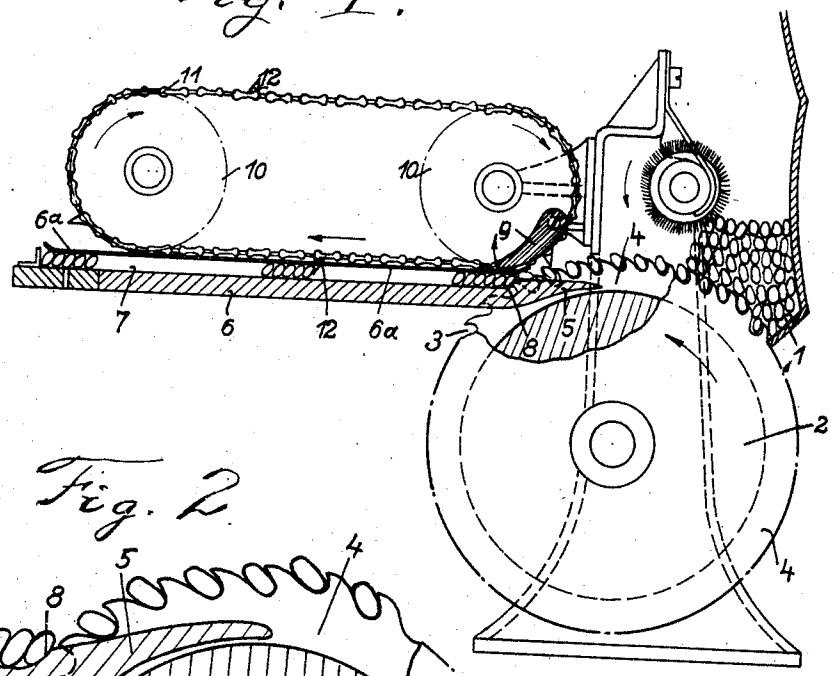
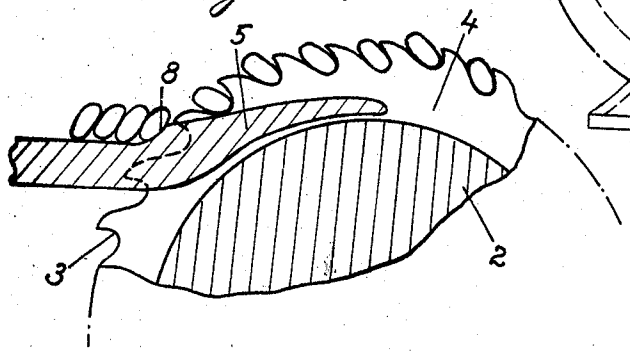


Fig. 2.



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Patented July 16, 1929. 1,720,907

UNITED STATES PATENT OFFICE.

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DEVICE FOR PLACING CIGARETTES OF FLAT OR OVAL CROSS SECTION SIDE BY SIDE IN AN OBLIQUE POSITION.

Application filed August 20, 1927, Serial No. 214,332, and in Germany April 13, 1926.

This invention relates to a device intended for arranging cigarettes of flat or oval cross-section side by side in an oblique position. The cigarettes having already the cross-section stated are taken singly from a supply receptacle in which they are stored by means of a grooved drum or an equivalent member and are then conveyed to stripping-off members by which they are removed from the grooves of the drum or the like and are conveyed into a passage in which they form groups which then are conveyed further in order to be assembled in packages. Now, while the just-mentioned arrangement and combination of parts is known, the new feature characterizing the present invention resides therein that an oblique step is provided at the commencement of said passage, that is to say, between said stripping-off members and the ground plate which forms the bottom of said passage, every cigarette passing over said oblique step being adjusted obliquely by said step, and the cigarettes intended to form a group for one package are placed side by side in oblique position, as more fully explained hereinafter.

The invention is illustrated diagrammatically and by way of example on the accompanying drawing on which Figure 1 is a longitudinal vertical section through the part concerned of the machine which comprises the store and supply receptacle, the grooved drum, the stripping-off members, and the ground plate with the passage for the obliquely arranged cigarettes.

Figure 2 is a part of Figure 1 drawn in a larger scale.

1 denotes the store or supply receptacle which is open at its lower end, its bottom opening being, however, closed by the grooved drum 2, the grooves 3 of which receive the cigarettes singly and convey them singly to the passage 7 formed by and between the ground plate 6 and the top plate 6^a. The drum 2 is provided in known manner with circumferential grooves 4 into which extend the stripping-off members 5 which form elongations of the bottom plate 6. The top faces of the stripping-off members 5 lie higher than the upper surface of the ground plate 6 and there is formed just behind said members 5 an oblique step 8, the oblique face of which is directed towards the passage 7.

Just over said oblique step 8 a finger-like member 9 is pivoted to a stationary member of the machine and bears with its free end upon the cigarettes just being conducted, and having been conducted, over the said oblique step. There is provided, furthermore, an endless chain 11 provided with catch members 12 which are remote from each other in certain intervals and extend into the passage 7 through slots provided in the top plate 6^a. The chain 11 is carried by chain wheels 10 rotated continuously by suitable means.

The oblique step 8 and the finger-like member 9 co-operate in that the latter, by bearing upon the cigarettes just gliding down over the oblique step, causes them to assume a position parallel to the said step, that is to say, an oblique position, and they are maintained in this position while being conveyed further through the passage 7. Every following cigarette supports that just in front of it which leans against it. When a certain number of cigarettes, say five, as in the figure, have been assembled, the group they form is grasped by one of the catch-members 12 and shoved along in the passage 7, in order to be conveyed in known manner into a package. This need not be described, in that it does not form a part of the present invention.

I claim:

A device for placing cigarettes of flat or oval cross-section side by side in an oblique position, comprising, in combination with a store and supply receptacle, means for taking the cigarettes singly from said receptacle and conveying them to a passage, stripping-off members guiding the cigarettes from said means into said passage, an oblique step provided between said stripping-off members and the said passage, and a finger-like member arranged over said step and bearing upon the cigarettes passing, and having passed, over the said oblique step.

In testimony whereof I have affixed my signature.

EWALD KOERNER.