

April 27, 1943.

R. M. BOND

2,317,513

CIGARETTE ROLLING DEVICE

Filed March 27, 1941

2 Sheets-Sheet 1

Fig. 1.

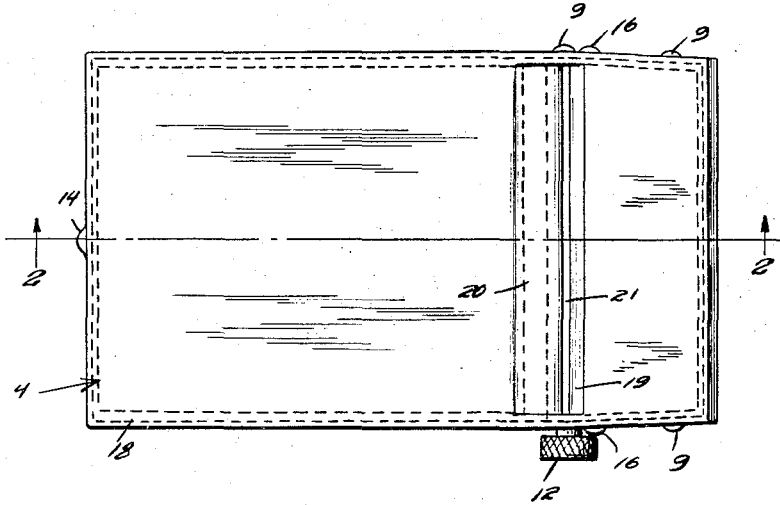


Fig. 2.

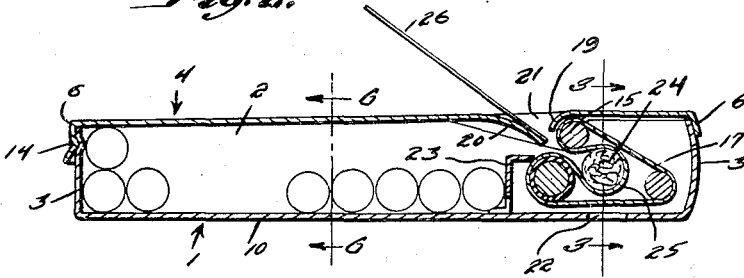


Fig. 3.

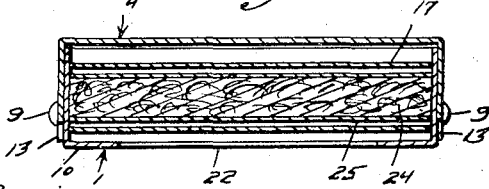


Fig. 4.

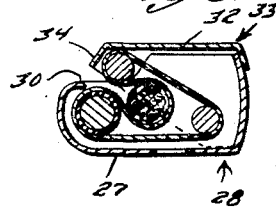
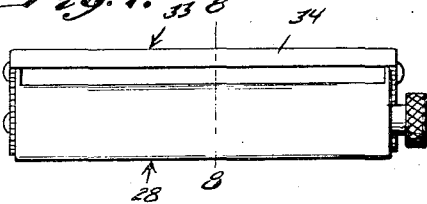


Fig. 5.



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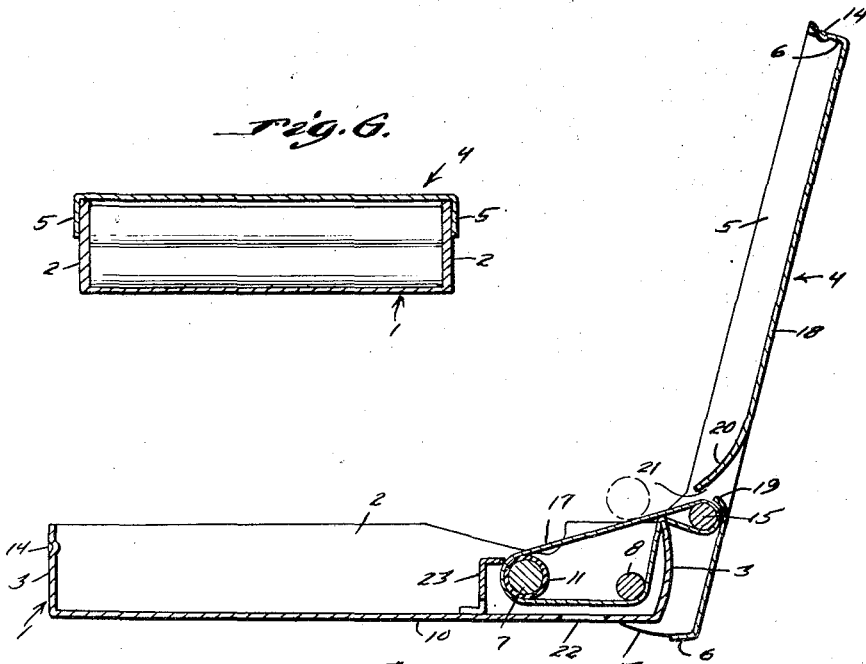
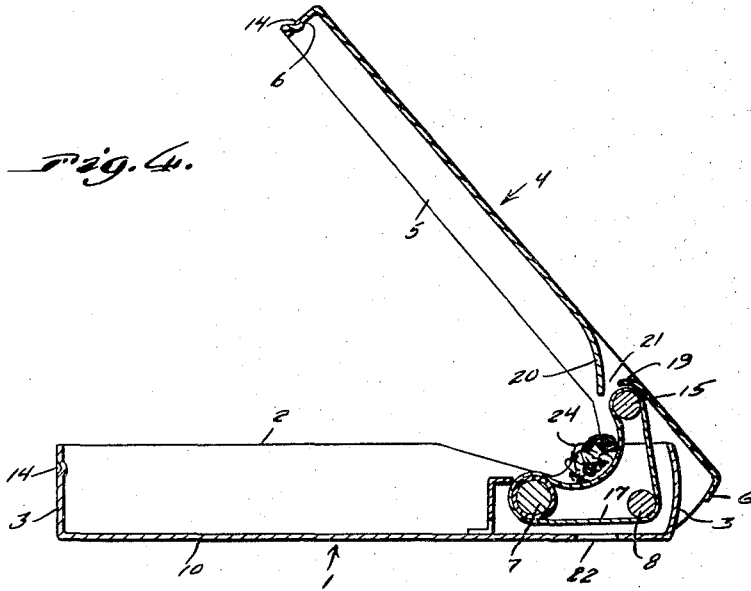
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CIGARETTE ROLLING DEVICE

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

2,317,513

CIGARETTE ROLLING DEVICE

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Application March 27, 1941, Serial No. 385,542

1 Claim. (Cl. 131-47)

My invention relates to improvements in cigarette rolling devices, the primary object of the invention being to provide a simply constructed, inexpensive, device for carrying in the pocket, and which is equipped for easy, quick operation to roll cigarettes with long, medium cut, or granulated tobacco filler, and with the cigarette paper of commerce as a wrapper, without waste of tobacco or waste or mutilation of the papers.

Other and subordinate objects are also comprehended by my invention, all of which, together with the precise nature of my improvements, will be readily understood when the succeeding description and claims are read with reference to the drawings accompanying and forming part of this specification.

In said drawings:

Figure 1 is a view in top plan illustrating a preferred embodiment of my invention,

Figure 2 is a view in longitudinal section taken on the line 2-2 of Figure 1,

Figure 3 is a view in transverse section taken on the line 3-3 of Figure 2,

Figure 4 is a view similar to Figure 2 showing the lid section partly opened,

Figure 5 is a view similar to Figure 4 with the lid section fully opened,

Figure 6 is a view in transverse section taken on the line 6-6 of Figure 2,

Figure 7 is a view in end elevation of a modified embodiment of the invention, and

Figure 8 is a view in section taken on the line 8-8 of Figure 7.

Reference being had to the drawings by numerals, and first to Figures 1 to 6, in the preferred embodiment thereof my improved cigarette rolling device comprises a shallow, flat-type, packet case of rectangular form and any suitable light, strong material, and which embodies a bottom section 1 having side and end walls 2, 3, and a top lid section 4 having side and end edge flanges 5, 6, snugly fitting against the side and end walls 2, 3, when said lid section is closed. Adjacent what constitutes the rear end wall 3 of section 1, a pair of laterally spaced, front and rear rollers 7, 8, are fitted endwise between the side walls 2 to extend parallel across said section, the ends of said rollers being provided with suitable trunnions 9 journaled in the side walls 2. The rollers 7, 8, are arranged close to the bottom 10 of said section 1 and the front roller is rubber covered, as at 11, larger than the rear roller 8 and provided with a knurled hand grip knob 12 on one trunnion, not shown, all for a purpose presently seen.

The lid section 4 is hinged by edge extensions

13 of its flanges 5 and adjacent what constitutes the rear end flange 6 thereof, on the trunnions 9 of the rear roller 8 so as to be swung open around the rear end wall 3 of the bottom section 1. The front end flange 6 of the lid section 4 and the front end wall 3 of the bottom section 1 are crimped, as at 14, for snap action interlocking when the lid section 4 is closed to latch the latter in closed position. A single roller 15, similar to rear roller 8, is mounted in the lid section 4 to extend transversely of said section and for rotation on trunnions 16 similar to trunnions 9, said roller 15 being spaced from the axis of movement of the lid section 4 so that when said lid section is closed and the section 1 held in substantially horizontal position, said roller 15 will overlie the front roller 7 in slightly spaced relation thereto, and when said lid section 4 is opened, said roller 15 will be swung upwardly and rearwardly over the rear end wall 3 of section 1. An endless apron 17 of any suitable flexible material surrounds the rollers 7, 8, 15, said apron being of a width to fit between the side walls 2 of section 1 and sufficiently longer than the distance around the rollers 7, 8, 15 to form a slack therein when the lid section 4 is closed and also sufficiently long to limit opening of the lid section 4 when said roller 15 is swung slightly in the rear of the rear end wall 3 of said section 1.

The top 18 of the lid section 4 is transversely slit and curved inwardly of said section to form a guard lip 19 over the roller 15, a rounded guide ledge 20 and a transverse slot 21 in said top immediately in front of the roller 15. An opening 22 is provided in the bottom 10 of the section 1 for the escape of dust or foreign matter out of the section. A right angled scraper blade 23 suitably secured to the bottom 10 of the section 1 in front of the front roller 7, and apron 17, provides for maintaining the apron clean. The space between the blade 23 and front wall 3 of the section 1 forms a storage compartment for rolled cigarettes.

Referring now to the operation and use of the described embodiment of the invention, when it is desired to roll a cigarette, the lid section 4 is opened, with the bottom section 1 held in the hand substantially horizontally, and until the apron 17 is stretched taut around the rollers 7, 8, 15. Said lid section 4 is then swung toward closed position sufficiently to form a trough-like slack in the top stretch of the apron 17 between the rollers 7 and 15, as shown in Figure 4, into which tobacco, represented at 24, may be poured, or otherwise introduced from a suitable recep-

tacle. The lid section 4 is then completely closed, whereby the trough-like slack, as shown in Figure 2, is folded partway around the tobacco 24 to form a pocket 25 closed with the exception of the space between the rollers 7 and 15, the ends of said pocket being closed by the side walls 2 of the section 1, and said pocket being located in the rear of the rollers 7 and 15. The roller 7 is next rotated by means of the knob 12, whereby the apron 17 is fed around the rollers 7, 8 and 15, in the direction indicated by the arrow in Figure 2, and the tobacco rolled in said pocket into said cigarette form. A cigarette paper 26 with the usual adhesive edge, not shown, and moistened, is then inserted through the slot 21, over the ledge 20, adhesive edge outermost, into the pocket 25 by way of the space between the rollers 7, 15, and pushed in between the rolled tobacco 24 and the bottom of the pocket 25. The apron 17 is then again fed, in the same direction, whereupon the leading edge of the paper 26 is gripped between the tobacco 24 and pocket 25, drawn into said pocket and rolled and sealed around the tobacco. The lid section 4 is next again opened until the apron 17 is drawn taut, whereupon the pocket 25 is straightened out to form a top stretch on said apron 17 and the cigarette is presented on said top stretch for removal. As best shown in Figure 5, when the lid section 4 is fully opened, the top stretch of the apron 17 thereby formed slants toward the front roller 7 so that a finished cigarette may be caused to roll down the same into the storage space in front of the scraper blade 23.

It is to be noted that the length of the pocket 25, when formed, is substantially that of the standard cigarette paper and the ends of said pocket engage against the side walls 2 of the section 1 so that the cigarette is rolled with its ends bearing against said flanges. By this means the cigarettes are formed just as if the end thereof had been trimmed as in the usual machine made article. The slot 21 is longer than said pocket, so that the ends of a cigarette paper may pass freely therethrough. Also the side walls 2 are spaced apart throughout the described storage space and tobacco prevented from escaping out of the ends thereof.

In the modified embodiment of the invention, shown in Figures 7 and 8, the bottom 27 of the casing 28 is curved around the front of the front roller 29 and provided with an internal lip 30 acting as a scraper on the apron 31, in lieu of the scraper blade 23 of the preferred embodiment of the invention. Also, the top 32 of the lid section 33 is formed into a lip 34 coacting with the lip 30 when said lid section is closed to define an opening for feeding the cigarette paper into the device.

The storage space of the preferred embodiment of the invention is eliminated in the modified embodiment to decrease the size of the device. Otherwise, the construction and operation is the same as described with reference to the preferred embodiment.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation.

Manifestly the invention is susceptible of modification in respects other than as disclosed herein without departing from the inventive concept, and right is herein reserved to such other modifications as fall within the scope of the subjoined claim.

What I claim is:

In a cigarette rolling device a shallow rectangular casing including an open-top bottom section having side walls, and a lid section having side flanges and hinged adjacent one end thereof to the side walls of the bottom section for swinging into open and closed positions, a pair of front and rear rollers, respectively, in said bottom section rotatably mounted in said side walls to extend therebetween in laterally spaced relation and parallel to the axis of swinging movement of said lid section, a single roller in said lid section rotatably mounted in said flanges parallel with said axis and movable toward and from said front roller under opening and closing of said lid section, an endless travelling apron surrounding said rollers and forming in an intermediate opening position of said lid section a shallow trough between said front and single rollers for receiving tobacco to be rolled, said apron under movement of said lid section into closed position and movement of said single roller toward said front roller forming said trough into a cylinder-like pocket around said tobacco in the rear of said front roller for rolling the tobacco therein under travel of the apron, said pocket opening between said front and single rollers, manipulative means on one roller for rotating the same to cause the apron to travel around said rollers, and a scraper blade in said bottom section frictionally engaging said apron to maintain the same clean, said blade being disposed in front of said front roller and dividing said bottom section to form a cigarette storage compartment therein, said lid section when closed covering said compartment and having a transverse slit therein adjacent said single roller for introducing a cigarette paper edgewise therethrough into said pocket by way of said opening in the latter to be rolled around the tobacco under travel of said apron whereby cigarettes may be rolled while the compartment and bottom section are closed.

ROBERT MURRAY BOND.