C. F. MANN.

MATCH BOX.

APPLICATION FILED MAR. 14, 1916.

1,223,189.

Patented Apr. 17, 1917.

2 SHEETS—SHEET 1.

Fig. 1.

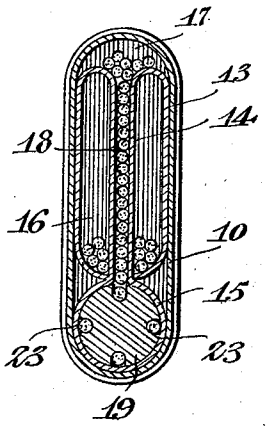


Fig. 2.

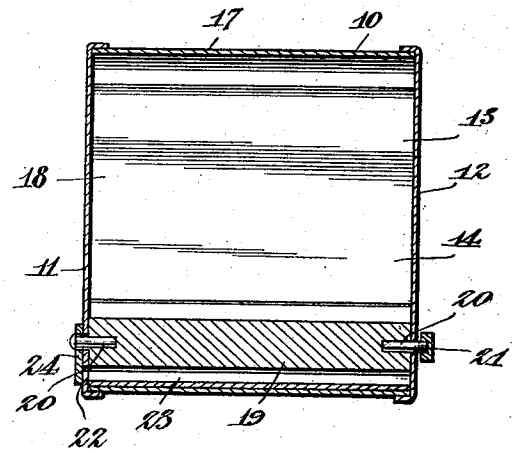


Fig. 3.

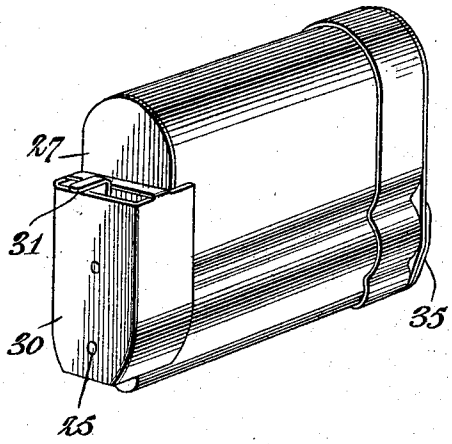
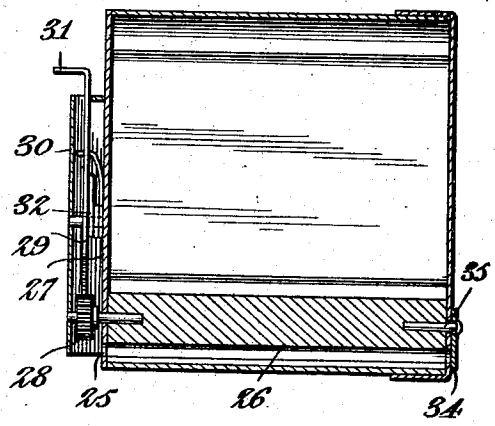


Fig. 4.



Witnesses

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2 SHEETS—SHEET 2.

Fig. 6.

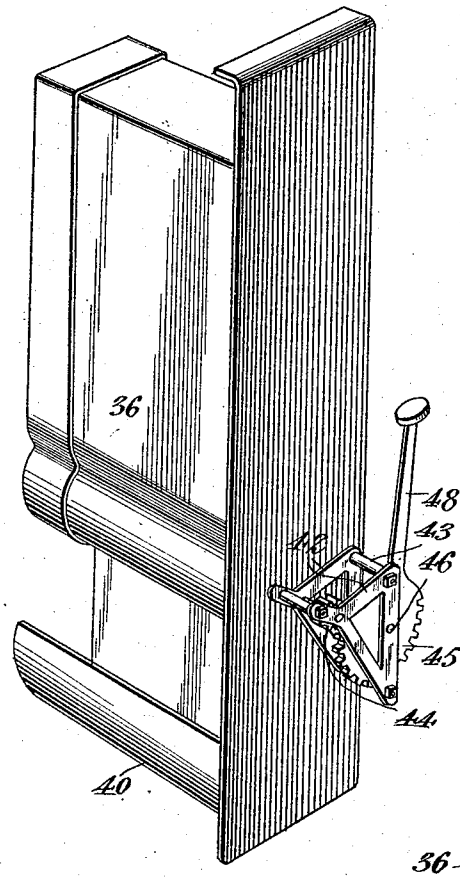
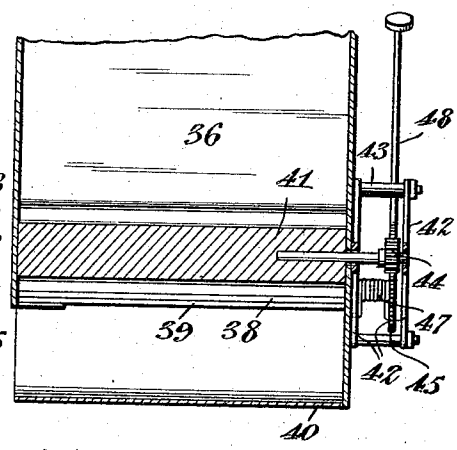


Fig. 7.



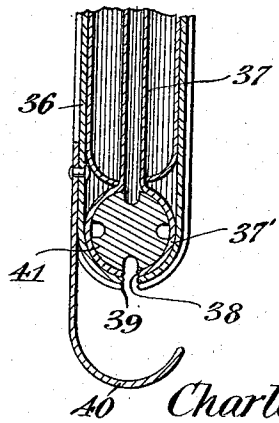


Fig. 5.

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UNITED STATES PATENT OFFICE.

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MATCH-BOX.

1,223,189. Specification of Letters Patent. Patented Apr. 17, 1917.

Application filed March 14, 1916. Serial No. 84,135.

To all whom it may concern:

Be it known that I, CHARLES F. MANN, a citizen of the United States, residing at Washougal, in the county of Clarke and State of Washington, have invented new and useful Improvements in Match-Boxes, of which the following is a specification.

This invention comprehends the provision of a match box having a compartment for matches adapted to be singly delivered, and auxiliary compartments for a reserve supply of matches.

The invention aims to provide a device of this character for household use, or formed to be carried about the person of the user, the device in either instance being simple in construction and cheaply manufactured.

The nature and advantages of the invention will be better understood from the following description when read in connection with the accompanying drawings, the invention residing in the construction, combination and arrangement of parts as claimed.

In the drawings forming part of this application like numerals of reference indicate similar parts in the several views and in which:—

Figure 1 is a vertical sectional view through the pocket match box constructed in accordance with my invention.

Fig. 2 is a transverse vertical sectional view therethrough.

Fig. 3 is a perspective view of a modified form.

Fig. 4 is a sectional view therethrough showing the operating means.

Fig. 5 is a vertical detail sectional view of a modified form.

Fig. 6 is a view of a still further modified form.

Fig. 7 is a detail view showing the operating mechanism.

Referring more particularly to the drawings, especially Figs. 1 and 2, the box proper is indicated at 10, and may be constructed from any suitable material and of any suitable configuration. The box has a continuous body portion, a fixed end wall 11 and a removable end wall 12. Arranged within the box is a casing 13 constructed from a single piece of material, the casing being substantially of an elongated nature and having inwardly extending spaced parallel walls 14 coextensive in length with the length of the casing and terminating in a cylindrical portion 15 occupying the space between the lower end of the casing and the bottom of the box 10. The inwardly extending portions 14 define with the side walls of the casing auxiliary compartments 16 adapted to contain a reserve supply of matches, the casing 13 terminating an appreciable distance below the top of the box and defining by the intervening space therebetween a main compartment 17 communicating with the cylindrical portion 14 through a restricted passage 18 defined by the space between the inwardly extending portions 14.

Revolubly mounted in the cylindrical portion 15 is a grooved roller 19 from the opposite ends of which project trunnions 20 adapted to be journaled in suitable openings in the opposite end walls of the box 10. Both of the trunnions extend a slight distance beyond the end walls, one of said trunnions having associated therewith a nut 21 functionating in the two-fold capacity of a means for rotating the roller 19, and retaining the detachable end wall 12 in position upon the box. The end wall 10 is provided with a suitable opening 22 adapted to register with each of the grooves 23 in the roller, as each groove is moved to its lowermost position, whereby the match carried within said groove can be easily discharged through the opening 22 by simply tilting the box as will be readily understood. The opening 22 is normally closed by means of a plate 24 pivotally mounted upon the adjacent trunnion 21.

In use a supply of matches is positioned within the auxiliary compartments 16, while an additional quantity of matches are arranged within the main compartment 17, these latter mentioned matches finding their way into the passage 18 in single file, to be received within the grooves 23 of the roller as each groove is brought into registration with the discharge end of said passage. When a match is desired the roller is rotated to bring one of said grooves with a match

therein into alinement with the opening 22, subsequent to which the plate 24 is swung upon its pivot in a proper direction to permit the match to be discharged from the box by simply tilting the latter. When all the matches in the main compartment 17 and passage 18 have been used, the end wall 12 may be quickly detached from the box by first removing the nut 21, thereby permitting access to be had to either one or the other of the auxiliary compartments 16 for the purpose of taking the matches from these compartments and arranging them in the main compartment 17 for use when desired.

In the modified form of the invention disclosed in Figs. 3 and 4, the trunnion 25 for the grooved roller 26 projects an appreciable distance beyond the fixed end wall 27 of the box proper, and has fixed thereon a pinion 28 which latter is actuated by an arcuate shaped rack 29 pivoted upon a stud projecting from said fixed end wall. This mechanism is inclosed by means of a suitable casing 30 secured to the end wall 27, the top wall of which is provided with a slot through which projects the manipulating portion 31 of the rack 29. Encircling the pivot of the rack is a coil spring 32 having one terminal bearing against the adjacent wall of the casing 30 and its opposite end 31 to hold the parts normally fixed in one position. The opposite end wall of the box is provided with a discharge opening 34 adapted to register with the grooves in the roller when said grooves successively reach their lowermost position, the opening being normally closed by means of a pivoted plate 35. When use of the match is desired, the rack 30 is operated against the tension of the spring through the medium of the manipulating portion 31, thereby rotating the roller to bring one of the grooves with a match into registration with the opening 34. It is of course to be understood that the box is provided with a casing similar in construction to that hereinabove described in connection with the preferred form of the invention, for the reception of matches to be delivered one at a time, and formed with suitable compartments for a reserve supply of matches.

The invention disclosed in Fig. 5 is identical in construction with the form of the invention shown in Fig. 1, excepting that the box 36 may be sufficiently large for domestic use, for attachment upon a wall or the like. The casing 37 arranged within the box which is similar in construction to the casing hereinabove described has its cylindrical portion 37 provided with an elongated opening 38 registering with a similar opening 39 in the bottom of the box, so that as the match carrying grooves are brought into alinement with said openings the match is discharged from the box into a suitable trough 40 spaced from the bottom of the box as shown. In this instance the grooved roller 41 is to be operated in the same manner as that described in connection with Figs. 1 and 2.

In the modified form of the invention disclosed in Figs. 6 and 7, I provide a mechanism for operating the grooved roller, otherwise this form of the invention is constructed in the same manner as the device disclosed in Fig. 5. This mechanism includes a frame of spaced parallel members 42 mounted on the box, the members 42 being held in proper spaced relation by means of the brace bolt 43. The trunnion of the grooved roller projects beyond the box proper and is journaled between the members 42, and has fixed thereon a pinion 44 meshing with a toothed wheel 45 fixed upon a shaft 46 arranged between the members 42. Encircling the said shaft is a coil spring 47 having one end fixed to the frame and its opposite end fixed to the toothed wheel 45 to maintain the parts fixed in one position. Projecting from the wheel 45 is a manipulating member 48 adapted to be depressed to actuate the wheel against the tension of said spring, thereby imparting a radial movement to the grooved roller for the purpose of discharging a match in the manner hereinabove described. Upon release of the manipulating member 48 the spring operates to return the parts to normal position.

It is believed that from the foregoing description the nature and advantages of the invention will be readily apparent, however I desire to have it understood that I do not limit myself to the precise construction and arrangement of parts herein illustrated, and that various changes in this respect may be resorted to when desired as fall within the scope of what is claimed.

What is claimed is:—

1. A match box comprising a receptacle, a casing arranged within said receptacle and defining therewith a main match receiving compartment, said casing having forwardly extending spaced walls terminating to provide compartments arranged beneath said main compartment, said walls defining auxiliary match compartments and a restricted passage establishing communication between the first mentioned compartments whereby the matches are fed singly from one to the other of said compartments, a grooved roller rotatably mounted in the second mentioned compartment, and means for operating said roller to bring the matches in alinement with a discharge opening.

2. A device of the character described comprising a receptacle, defining a main match receiving compartment being formed with spaced parallel walls arranged within said casing centrally thereof, and spaced

from the opposite sides of said casing to define auxiliary match receiving compartments, said walls terminating to provide a sleeve-like member disposed beneath the casing and communicating with the space between said walls, and a grooved roller journaled within the sleeve-like portion for the purpose specified.

In testimony whereof I affix my signature in presence of witnesses.

CHARLES F. MANN.

Witnesses:
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J. A. RUNDLE.

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