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DEVICE FOR DISPENSING MATCHES

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FIG. 1.

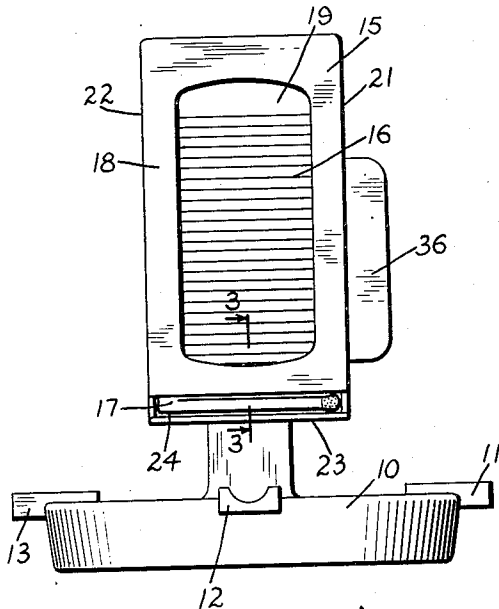
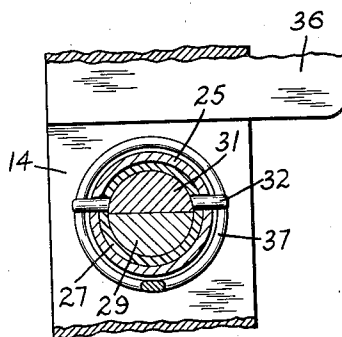


FIG. 4.

FIG. 2.

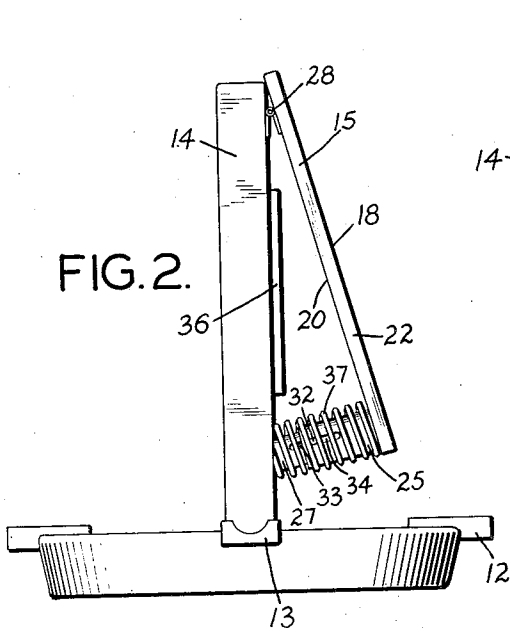
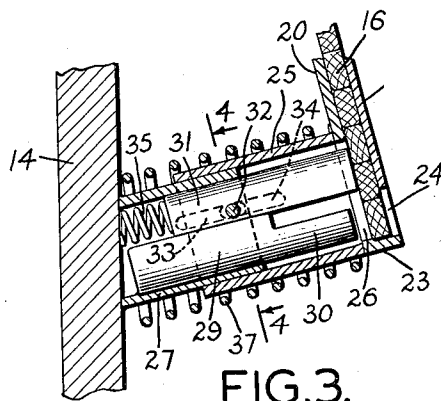


FIG. 3.

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DEVICE FOR DISPENSING MATCHES

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5 Claims. (Cl. 312-39)

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This invention relates to dispensing devices, and it relates particularly to devices for dispensing matches from match combs formed of a plurality of connected wooden match splints.

An object of the invention is to provide a device whereby wooden matches can be semi-automatically dispensed from combs of such matches.

Another object of the invention is to provide a dispensing device which will receive combs of matches having partially severed splints thereon and will dispense the matches one by one from such combs.

Other objects of the invention will become apparent from the following description of a typical form of match dispenser embodying the present invention.

In accordance with the present invention, I have provided a receptacle which is adapted to receive a comb of wooden matches, that is, a plurality of wooden match splints which are connected together at one end by means of a web integral therewith, the receptacle being suspended from a support in such a manner that the comb is fed by gravity toward the lower end of the receptacle. The receptacle is provided with an opening through which the lowermost match of the comb is exposed and through which the match may be projected and broken from the web of the comb by a member which enters the slot in response to relative movement between the receptacle and the member.

More particularly, the match dispenser may be hingedly supported at its upper end on a standard or support which is provided with a severing member that can be projected through the lower end of the receptacle to break the match cleanly from the comb and through the web thereof.

In order to prevent jamming of the match comb during the severing operation, a clamping element may be provided which is brought into engagement with the match comb above the match to be severed upon relative movement between the receptacle and the support so that the comb cannot drop down into the bottom of the receptacle until after the lowermost match has been broken and ejected from the slot.

The device is so arranged that it is readily refillable by merely sliding the comb of matches into the top of the receptacle and, because of the

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severing action, no waste elements are left in the receptacle to prevent its ready refilling.

For a better understanding of the present invention, reference may be had to the accompanying drawings in which:

Figure 1 is a view in front elevation of a typical form of match dispensing device embodying the present invention;

Figure 2 is a view in side elevation of the device disclosed in Figure 1;

Figure 3 is a view in section taken on line 3-3 of Figure 1 shown on a larger scale and with the match receptacle pressed inwardly sufficiently to bring the clamping member into engagement with the match comb; and

Figure 4 is a view in section taken on line 4-4 of Figure 3.

The device chosen for purposes of illustration is susceptible to considerable modification in its details and in the manner in which it is supported and arranged. As illustrated in Figures 1 and 2, the device may include a base member 10 in the form of a circular ash tray having a plurality of cigarette rests 11, 12, 13 disposed around its periphery. In the center of the ash tray is a standard or support 14 of suitable height and which may have any desired ornamental shape. Connected to the upper end portion of the support or standard 14 is a hollow flat receptacle 15 of sufficient thickness to receive a comb 16 of wood splint matches which are connected at their left hand ends by means of a web 17 integral therewith. Such match combs may be produced by slotting a blank of veneer partially across the width of the blank to leave the connecting web 17, slightly separating the free ends of the splints and then dipping the ends of the splints in a suitable igniting material.

The receptacle 15 is provided with an open top, a front panel 18 which may be provided with a central opening 19 through which the match comb may be viewed, a back panel 20, side panels 21 and 22 and an end wall 23. The internal dimensions of the receptacle should be such that the match comb 16 will slide by gravity downwardly into engagement with the end wall 23.

At the lower edge of the front panel 18 is a transverse slot 24 through which the lowermost match of the match comb 16 is exposed when this match is in engagement with the end wall 23.

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The back wall 20 of the receptacle is provided with a rearwardly extending cylindrical sleeve 25 which communicates with the interior of the receptacle through a circular opening 26 of such dimensions as to overlap a portion of the slot 24 and also a portion of the front wall 18 above the slot 24. The sleeve 25 receives loosely and telescopically a second sleeve member 27 which may be fixed to the standard 14 so that the sleeves 25 and 27 move relatively upon rocking movement of the receptacle 15 about the hinge 28 which connects the receptacle to the standard 14. If desired, the sleeve 27 may be pivotally supported on the standard to permit rocking movement of the receptacle 15.

Within the sleeve 27 and fixed thereto is a match severing and ejecting member 29 which, as shown in Figure 4, is semi-cylindrical in shape and has a narrower end portion 30 of about the same thickness as the lowermost match splint. Resting on top of the severing and ejecting member 29 is another semi-cylindrical member 31 which clamps the match comb 16 against the front wall 18 during ejection of a match splint through the slot 24. The clamping member 31 is provided with a cross pin 32 which extends through suitable aligned slots 33 and 34 in the sleeves 27 and 25, respectively, to prevent the sleeves from separating and also for limiting the forward movement of the member 31. A spring 35 is interposed between the standard 14 and the inner end of the member 31 is normally urging the member 31 toward the receptacle 15 and toward the outer end of the slot 33.

The standard 14 may be provided with a finger plate 36 which may be engaged by the fingers in order to afford an anchor whereby the lower end of the receptacle 15 may be forced inwardly to eject a match from the receptacle. When the receptacle 15 is forced inwardly, the clamping member 31 first engages the matches above the slot 24 and forces them against the front wall 18, thereby clamping the comb against downward movement. As the lower end of the receptacle 15 is moved inwardly, the reduced end 30 of the member 29 engages the mid-portion of the lowermost match of the comb and forces it outwardly thereby subjecting the web 17 to a bending stress and splitting the match completely through the web and ejecting it from the slot 24. When pressure on the receptacle 15 is relieved, it is forced outwardly by means of the spring 37 which encircles the sleeves 25 and 27, thereby retracting the member 30 from the slot 24 and disengaging the member 31 from the comb 16. The comb 16 then drops by gravity into engagement with the end wall 23 ready for ejection of another match from the comb through the slot 24.

The device described above assures complete severance of the match splints through the web 17 so that the comb is not prevented from dropping by a projecting end portion on the web 17. Therefore, when the last match has been dispensed from the comb, the receptacle is completely empty and can be refilled by introducing another match comb through its upper end.

The device described above is susceptible to considerable modification. Thus, two receptacles may be supported on opposite sides of the same standard if desired. Moreover, instead of moving the receptacle 15 relatively to the standard, the receptacle may be fixed in position and a member corresponding to the standard may be arranged for movement relatively to the receptacle. Inasmuch as such variations are within the con-

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templation of the present invention, it will be understood that the above described form of the invention is illustrative only and should not be considered as limiting the scope of the following claims.

I claim:

1. A device for dispensing matches, comprising a receptacle for a comb of matches, said receptacle having an opening adjacent one end for exposing a match at one end of said comb, a member adjacent to said opening and adapted to move through said opening, means for moving said member and said receptacle relatively to move said member through said opening and sever said exposed match from said comb, and means movable relative to said receptacle and said member for engaging and clamping said comb in said receptacle while said match is being severed from said comb.

2. A match-dispensing device, comprising a receptacle having front, back and side panels for receiving a comb of matches, said receptacle having a slot extending transversely of said front panel adjacent to one end thereof for exposing a match at one end of said comb and an opening in said back panel in alignment with said slot, a support for receptacle, a member on said support in alignment with said opening, means for moving said member and said receptacle relatively to project said member through said opening to sever said exposed match from said comb, and means responsive to relative movement of said member and said receptacle for clamping said comb against a panel of said receptacle.

3. A match-dispensing device, comprising a substantially vertical support, a receptacle for a comb of matches hinged to said support and inclined downwardly with respect to said support to permit gravity feed of said comb along said receptacle, a transverse slot in said receptacle adjacent to its lower end for exposing the lowermost match in said comb, a member fixed to said support in alignment with a portion of said slot and movable through said slot upon movement of said receptacle toward said support to engage and sever said exposed match from said comb, and a clamping element on said support engageable with said comb above said exposed match to retain said comb against gravity feed when said member is in engagement with said exposed match.

4. A match-dispensing device, comprising a substantially vertical standard, a flat, hollow receptacle for receiving a comb of matches hingedly connected at one end to the upper end of said support and extending downwardly adjacent to said support, said receptacle having a front wall and a back wall, a transverse opening adjacent to the lower end of said front wall for exposing the lowermost match in said comb, and another opening in said back wall behind said transverse opening, a first member fixed to said support in alignment with said openings and movable there-through to engage said exposed match, a second member in alignment with said another opening for engagement with said comb above said exposed match and means normally urging said second member toward said another opening.

5. A match-dispensing device, comprising a flat, hollow receptacle having a front wall, a back wall, side walls and an end wall, said receptacle having a slot in said front wall adjacent to said end wall, and an opening in said back wall having a portion adjacent to said slot, a support, means hingedly connecting said receptacle to said

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support in inclined position with said end wall at the bottom whereby a comb of matches in said receptacle will move by gravity into engagement with said end wall, a pair of telescopically related sleeves, one sleeve being connected to said support and the other sleeve being fixed to said back wall substantially coaxially of said opening therein, means urging said sleeves apart, a match severing member fixed in said one sleeve, a comb clamping member in and movable relatively to said sleeves, means urging said clamping member toward said receptacle, and means for moving said receptacle toward said support to engage said clamping member with said comb and project

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said severing member through said opening and slot to sever the lowermost match from said comb.

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