C. N. COHN.

COMBINED CIGAR CUTTER AND LIGHTER.

APPLICATION FILED JUNE 9, 1917.

1,281,912.

Patented Oct. 15, 1918.

2 SHEETS—SHEET 1.

FIG. 1.

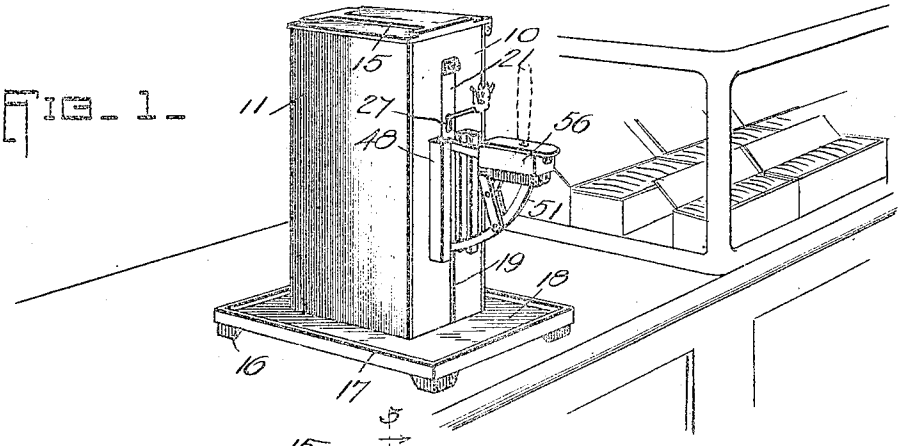
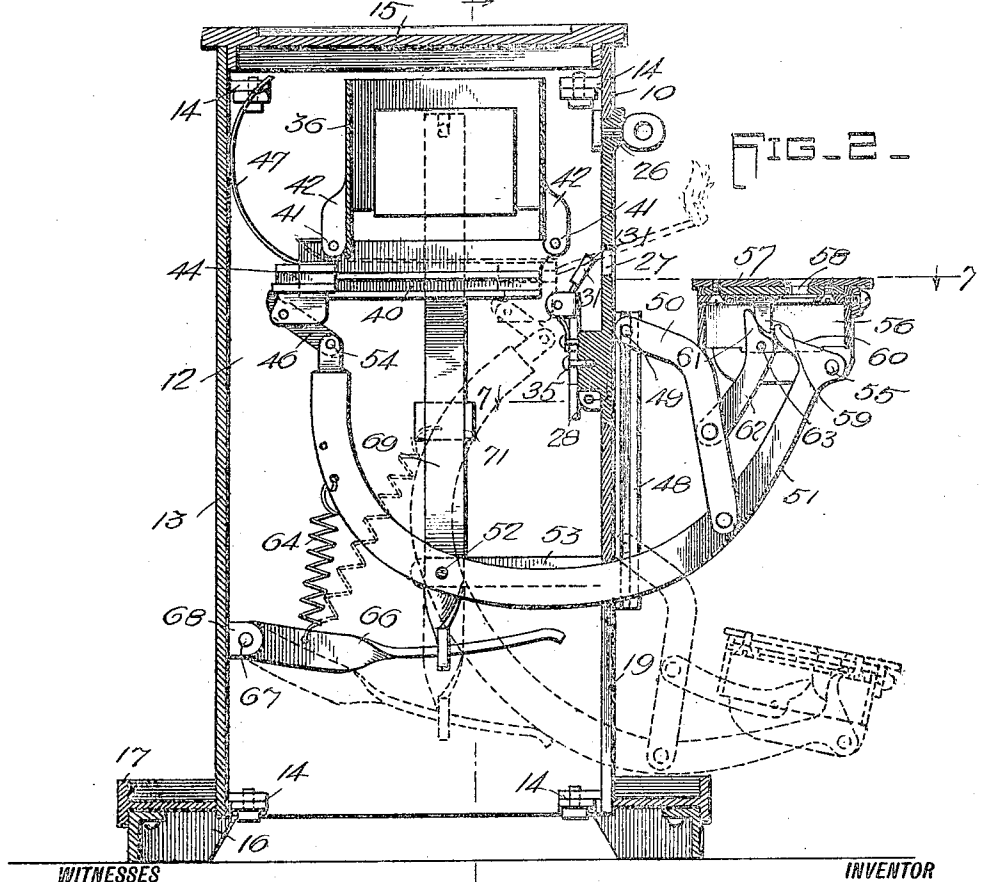


FIG. 2.



WITNESSES

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2 SHEETS—SHEET 2.

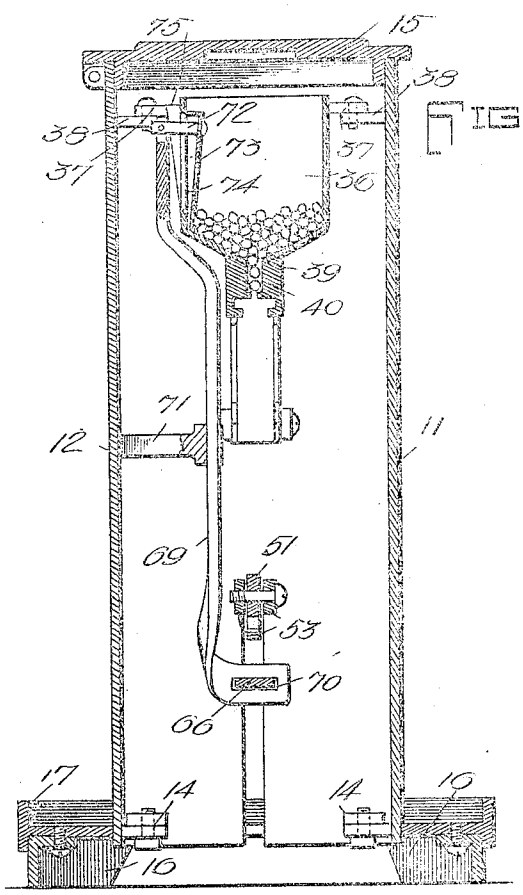


FIG. 3.

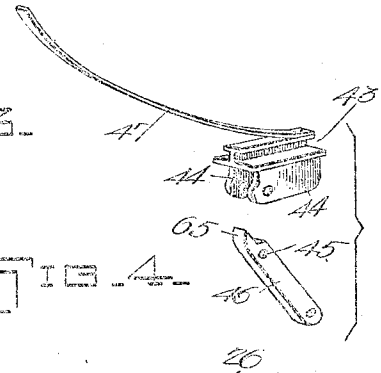


FIG. 4.

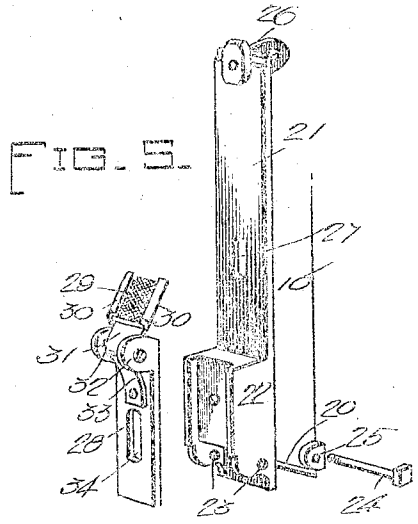
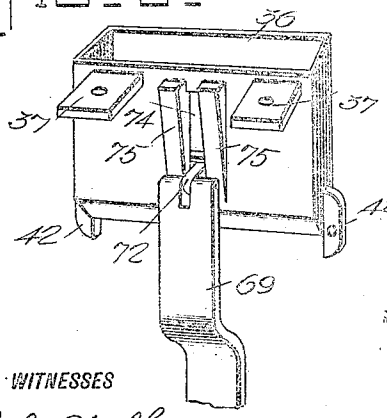


FIG. 5.

FIG. 6.



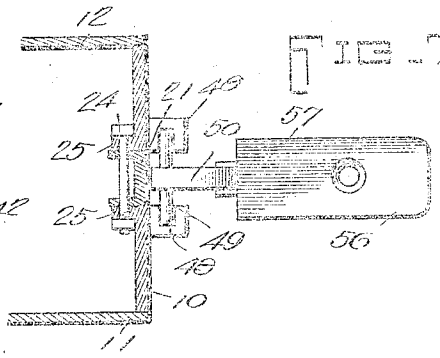


FIG. 7.

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COMBINED CIGAR CUTTER AND LIGHTER.

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To all whom it may concern:

Be it known that I, CHARLES H. COHN, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have made certain new and useful Improvements in Combined Cigar Cutters and Lighters, of which the following is a specification.

My present invention relates generally to combined cigar cutters and lighters, and more particularly to a mechanism including a cigar cutter, the actuation of which automatically ejects and presents a lighted match, my invention including generally a casing supporting an internal match receptacle or magazine, having a striking device between the discharge end of the magazine and a match opening of the casing, together with a pressure actuated cigar cutter having direct connection with a match ejector, whereby the act of cutting a cigar will operate the ejector to discharge a match from the magazine, first against the lighter, and subsequently in lighted condition, through the aperture of the casing.

Further, the mechanism provided by my invention has for its object the provision of a simple, readily accessible and easily repaired mechanism of the above general type, presenting the improvements and having the advantages to be hereinafter specifically referred to.

In the following description reference is made to the accompanying drawings, which form a part of this specification, and wherein:

Figure 1 is a perspective view of my invention illustrating the practical application thereof,

Fig. 2 is a vertical longitudinal section taken through my improved apparatus at substantially a central point,

Fig. 3 is a vertical transverse section taken substantially on line 3—3 of Fig. 2,

Fig. 4 is a detail perspective view of the ejector and its link removed and in detached relation,

Fig. 5 is a detail perspective view of the hinged door of the lighter with the lighter and its bracket removed and in detached relation.

Fig. 6 is a detail perspective view of the match magazine removed and looking from one side thereof, and,

Fig. 7 is a detail horizontal section taken substantially on line 7—7 of Fig. 2.

Referring now to these figures, my improvements are mounted in connection with a vertically disposed casing rectangular in cross section and consisting of a front wall 10, side walls 11 and 12, and a rear wall 13, the several walls having inwardly projecting apertured lugs adjacent the corners of the casing and at the upper and lower ends thereof, as indicated at 14, by which they are bolted together. The casing is open at its upper and lower ends, and is provided with an upper lid 15, hinged to the upper edge of the side wall 12 to normally close its upper end, its lower and normally open end being secured to a horizontally disposed supporting frame 16, preferably of greater area than the cross sectional area of the casing, and provided with an upstanding surrounding flange 17, so as to form a tray 18 around the lower portion of the casing to receive and temporarily hold the match sticks for their discharge, as well as the cigar cuttings, as hereinafter described.

The front wall 10 of the casing has a vertical slot 19 extending upwardly from its lower end centrally between its side edges, and is provided at a point vertically spaced above the upper end of the slot with a vertically extending aperture 20 normally closed by a hinged door 21, the details of which are seen in Fig. 5. This door has a lower block 22 projecting inwardly of the casing, and provided with lower openings 23 receiving a hinge pin 24, the latter of which extends through apertured and inwardly projecting lugs 25 of the front wall to form the hinge on which the upper portion of the door 21 may be shifted outwardly, said upper portion being adapted for engagement with that portion of the front wall 10 at the upper end of its opening 20, and having a rotatable locking piece 26, by which the door is normally held in closed position.

Intermediate its ends the door 21 has a vertical slotted opening 27, which is arranged above the block 22, the latter of which forms a seat for the bracket 28 of the lighter, the latter consisting of an abrasive member 29, removably disposed and held between the upwardly and inwardly bent side edges 30 of a holder 31, pivotally supported by the upper ears 32 of the

bracket 28. The bracket 28 has a spring 33 normally engaging the lower end of the holder 31 to yieldingly support the latter in upright position, and is provided below the spring with an elongated slot 34, through which a connecting screw 35 is threaded into the block in order to support the bracket in vertically adjustable relation.

Mounted within the casing above the lighter thus constituted is a rectangular magazine 36 having an upper open end, and having laterally projecting lugs 37 detachably connected to similar lugs 38 projecting inwardly from the side walls 11 and 12, the lower end of the magazine being tapered to a substantially central discharge slot 39, as best seen in Fig. 3, registering with the upper portion of a slotted discharge guide 40, the latter secured by forward and rear pins 41, extending through the apertures of lugs 42 projecting forwardly and rearwardly from the lower portion of the magazine 36, substantially in alinement with the discharge slot, the latter of which, it will be noted, is slightly below the level of the match discharge opening 27 of the front of the casing.

Flanged to interfit the grooved discharge member 40 is a sliding ejector 43, as seen in Fig. 4, having depending apertured side portions 44, through the apertures of which is extended a pin 45 connecting the upper rear end of a link 46 to the ejector, the upper portion of the ejector having secured thereto, a rearwardly and upwardly bowed spring member 47, which thus follows the movement of the ejector and in the forward position of the latter prevents lowering of a match into the discharge slot. In this way the feed of a match behind the ejector is obviated.

On the forward surface of the front wall 10 are secured vertical parallel and grooved guide members 48, in which a transverse pin 49 is slidable, this pin being extended through the upper end of a guide arm 50, the latter of which is pivotally connected at its lower extremity to the forward external portion of the actuating lever 51. This lever 51 projects inwardly through the vertical slot 19 of the front wall 10, and is fulcrumed at 52 upon rearwardly supporting projecting members 53 upon the front wall, the upper inner end of the lever being pivotally connected at 54 to the lower end of the link 46 before described.

The upper outer end of the lever 51 is pivotally connected at 55 to the lower forward portion of a cutter box 56 having an apertured top plate 57 through the aperture of which the end of a cigar to be cut is introduced, and provided with a reciprocating cutter plate 58 having a depending lug 59 rearwardly, against which the angular nose 60 of the upper end of the actuating lever 51 engages. Forwardly against the lug 59 engages the angular nose 61 of a lever 62, pivotally connected at its upper end at 63 in the lower rear portion of the cutter box 56, and pivotally connected at its lower end to the guide arm 50, at a point intermediate the ends of the latter. Thus by virtue of the connection of the lever 51, to the cutter box 56, and to the link 46 of the ejector 44, downward pressure upon the cutter box to move the latter from its upper normal position shown in full lines in Fig. 2 to the lower position shown in dotted lines therein, serves not only to cut the tip of the cigar, but to shift the ejector 44 forwardly in the discharge guide 40 so as to thrust a match lying within the discharge groove at that time forwardly against the lighter 31. Thus, it being understood that the matches are placed within the magazine 36 with their headed ends forward, the headed end of each match so discharged will be thrust against the abrasive material 29 carried by the lighter, and rubbed over the surface of such material as the lighter 31 yields forwardly under tension of its spring 33, the match being lighted in the course of such movement and its forward lighted end thrust immediately thereafter through the discharge opening 27. In its position shown in dotted lines in Fig. 2, the lighted match will be held by virtue of the engagement of the spring actuated lighting member with the match at a point between the extreme inner end of the match and the point at which the match engages that portion of the door 21 at the upper end of the discharge opening 27.

The match continues to be held in such position when pressure is released from the cutter box 56, the latter of which is then moved to its upper position by virtue of a spring 64 engaging the inner portion of the lever 51 rearwardly of its fulcrum 52, at the same time shifting the ejector 44 rearwardly to permit another match to drop into the discharge groove forwardly of the ejector in position for the necessary operation. Upon discharge of each subsequent match, the match discharged at the preceding operation is released and falls into the tray 18. In the return movement of the cutter box 56, rearward movement of the ejector 44 is limited to prevent its entire withdrawal from the rear end of the guide 40, by means of a forwardly projecting nose 65 of the link 46, which engages the under-surface of the ejector in the rearmost position and thus binds the parts.

Within the lower portion of the casing is a horizontally disposed lever 66 mounted beneath the actuating lever 51, with its rear end pivoted at 67 to lug 68, projecting forwardly from the rear wall 13, and to which lever is connected the lower end of the

spring 64. When the cutter box 56 is pressed downwardly, the lever 51 bears against the forward end of the lever 66, and forces the latter downwardly upon its pivot so as to lower a connecting rod 69, through a slot 70 at the lower end of which the lever 66 loosely extends, as seen in Fig. 3. This connecting bar 69 is slidable in a guide 71 carried by the side wall 12, and has its upper end pivotally connected to the outer end of the shank 72 of a feed slide 73 within the magazine 36, and the shank of which projects through a vertical slot 74 in one side wall of the magazine. This feed slide 73 normally assumes a substantially vertical position with its lower free end upon one side of the sloping base of the magazine, and the upper end of the connecting bar 69 works against downwardly tapering projection 75 at opposite sides of the slot 74, so as to permit the lower end of the feed slide 73 to follow downwardly upon the sloping base of the magazine as the connecting bar is lowered, the upper end of the connecting bar shifting laterally toward the magazine in its downward movement and away from the same in its upward movement. In this way the matches are prevented from wedging against one another in the magazine and feed of a match downwardly into the discharge groove upon each rearward movement of the ejector is assured.

It is obvious from the foregoing that my invention provides for the automatic discharge of a lighted match actuated by downward movement of the cigar cutting mechanism and that this result is brought about by simple, comparatively inexpensive means, conveniently located and readily accessible for purposes of cleaning, repair or substitution of parts.

By simply releasing the upper fastener 26 of the forward door 21, the latter may be moved forwardly upon its hinge pin 24, so as to expose the lighter 31, and permit either of the cleaning of its abrasive member 29 or the substitution of another member therefor.

It is furthermore obvious that the supply of matches may be readily replenished by simply lifting the hinge cover 15 and dropping the matches with their heads foremost into the upper open end of the magazine disposed adjacent thereto.

I claim:—

1. In a device of the character described, a casing having a front opening, a door detachably mounted in the opening and provided with a discharge aperture, a match holding magazine within the casing, means for discharging matches from the magazine through the aperture of the door, and a lighting member arranged between the discharging means and the door aperture, said lighter being adjustably mounted and yieldingly supported on the inner portion of the said door.

2. In a device of the character described, a match holding magazine having a lower inwardly inclined portion, discharging means adjacent thereto including a movable ejector, an actuating lever for the ejector, said magazine having a vertical slot in one side wall above the said inclined portion, a plate within the magazine shiftable vertically upon the said side wall and the said inclined lower portion to agitate matches within the magazine and having a shank portion projecting from its upper end through the side wall slot, a connecting bar having a pivotal connection at one end with the shank of said plate, and a lever having a movable connection with the opposite end of said bar and disposed in the path of movement of the actuating lever of the ejector.

3. In a device of the character described, a match holding magazine, discharging means adjacent thereto including a movable ejector, and an actuating lever for the ejector, said magazine having a vertical slot in one side wall, a plate within the magazine shiftable to agitate matches therein and having a shank projecting outwardly through the said side wall slot, a vertically disposed connecting bar having a pivotal connection with the shank of the said feed plate, and a lever having movable connection with the lower portion of the said connecting bar and disposed in the path of movement of the actuating lever of the ejector.

CHARLES H. COHN.

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