W. A. CARTER.

AUTOMATIC MATCH BOX.

APPLICATION FILED JAN. 23, 1909.

936,302. Patented Oct. 12, 1909.

Fig. 1.

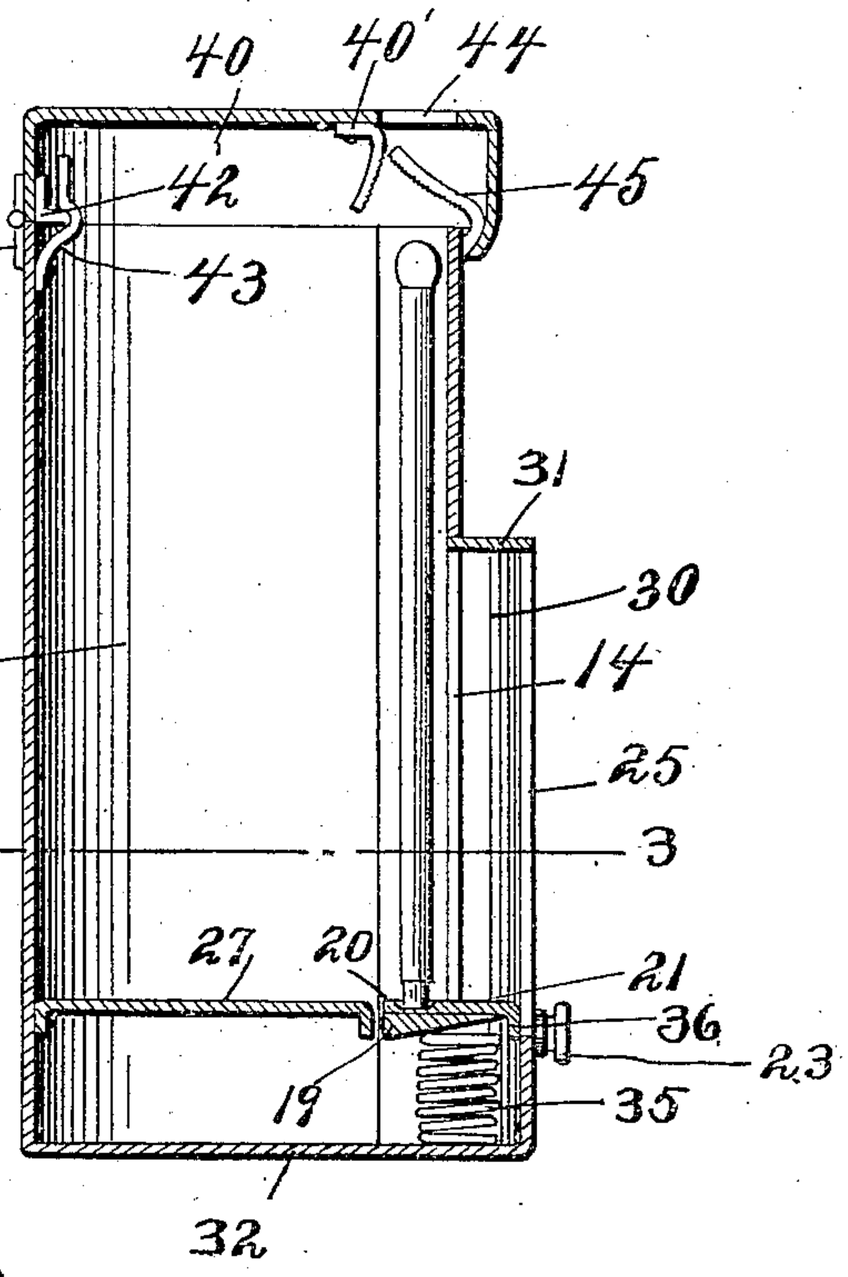
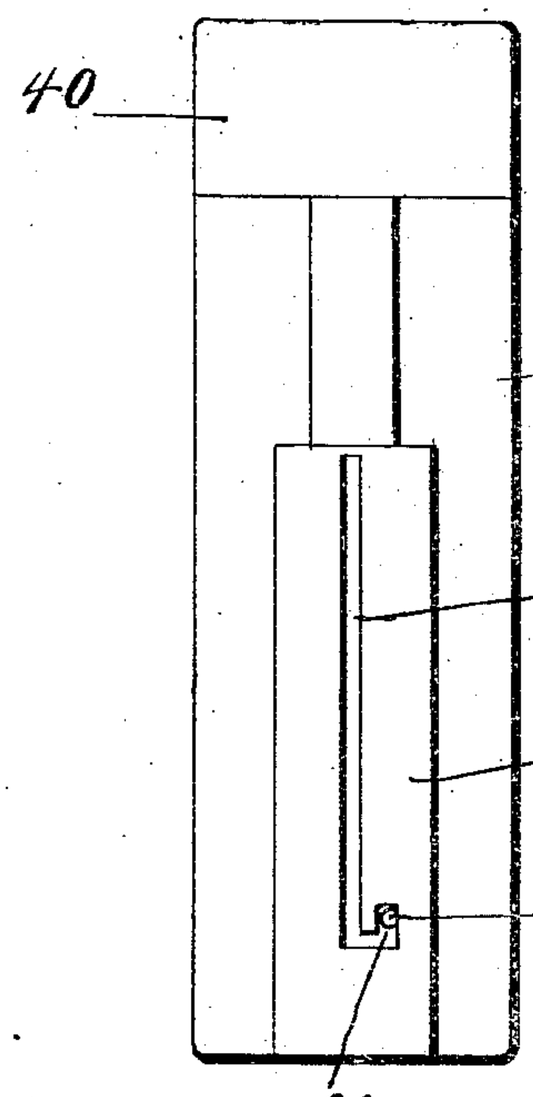
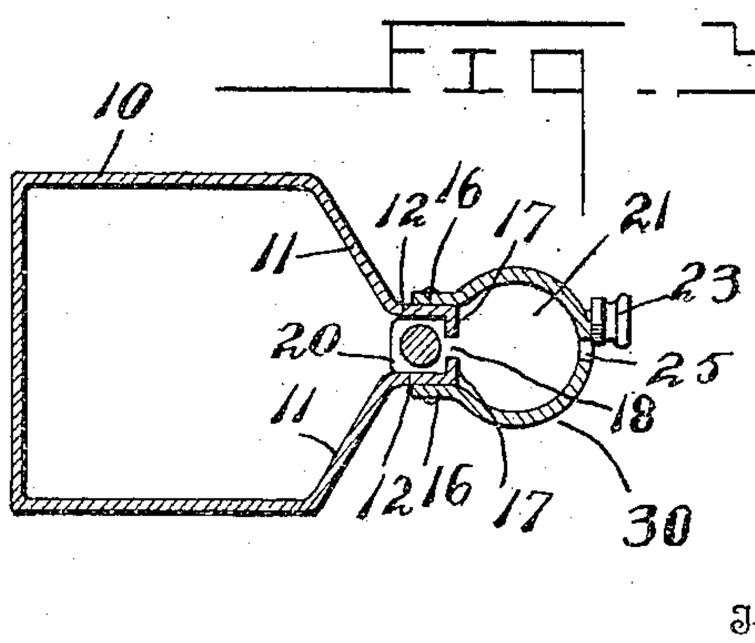


Fig. 2.





Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM A. CARTER, OF GOOD GROUND, NEW YORK.

AUTOMATIC MATCH-BOX.

936,302. Specification of Letters Patent. Patented Oct. 12, 1909.

Application filed January 23, 1909. Serial No. 473,912.

To all whom it may concern:

Be it known that I, WILLIAM A. CARTER, a citizen of the United States, residing at Good Ground, Long Island, and State of New York, have invented certain new and useful Improvements in Automatic Match-Boxes, of which the following is a specification.

This invention relates to certain new and useful improvements in match boxes and has for its object to provide a neat, light, and simply operated match box so constructed that when a match is removed from the box, the same will be ignited.

Other objects and advantages will be apparent from the following description and it should be understood that changes in the specific structure shown and described may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a central sectional view of a match box embodying my invention, Fig. 2 is an edge view of the match box with the operating knob removed, Fig. 3, is a transverse sectional view on line 3 of Fig. 1.

In carrying out the aim of my invention I employ a suitable match receiving receptacle 10 made of sheet metal. This receptacle is of a length slightly longer than the matches to be held therein, and has one of its longitudinal ends bent outward to form two spaced narrow wall sections marked 12 and disclosed in Fig. 3. The receptacle 10 adjacent these wall sections 12 end in the form of two obliquely held wall portions as is shown at 11 in Fig. 3. The portion 17 uniting these wall portions 12 is slotted approximately two-thirds of its length as disclosed at 14 in Fig. 1. The sections 12 and 17 form a match receiving channel adapted to receive but one match at a time, as is disclosed in Fig. 1, where a match is shown in a position just previous to being delivered.

The receptacle near its lower end is provided with a bottom 27, as shown in Fig. 1. Held to the receptacle adjacent to the match receiving channel and at the lower end of the receptacle, is a cylindrical spring receiving housing provided with the top 31 and the bottom 32, while extending from this housing are two securing flanges 16 which are secured upon the channel forming portion 12 of the receptacle, as disclosed in Fig. 3. As shown in Fig. 2 this cylindrical housing 30 is provided with a longitudinally disposed slot 25, which below is recurved as is shown at 26, forming what is known as a bayonet slot. Held within this spring housing 30 is a circular plate 21, which is provided with a narrow neck portion 18 as disclosed in Fig. 3, from which extends the dished nib 20 extending into the match channel as clearly disclosed in Fig. 3. The nib 20, as disclosed in Fig. 1 is provided below with a supporting web 19. This nib serves as a pusher and receives the lower end of the match as the same is expelled from the receptacle.

Held within the cylindrical housing 30 is a coil spring 35, the upper end of which normally presses against the plate 21, as disclosed in Fig. 1. This plate 21 is provided with a downwardly extending portion 36 as disclosed in Fig. 1 from which extends a pin 22, this pin being provided with an operating knob 23, as clearly disclosed. The plate 21 is normally held in alinement with the bottom 27 of the receptacle as disclosed. In its retractile position, the plate 21 is held by means of the stem 22 which locks within the recurved end 26 of the bayonet slot.

The match box is provided with a cap 40 secured by means of a hinge 41 which has the angle ear 42 engaging the spring 43 so that this cap will be held in a spring closed condition, as is usual in devices of this class.

The cap 40, in alinement with the match channel is provided with an escape opening 44 and held adjacent to this escape opening 44 is the scratcher plate 40′ while secured to the cap 40 at a point opposite this scratcher plate is the spring 45 also having a rough or abrasive surface. This spring 45 closing the escape opening 44 within the cap 40.

The receptacle having been charged with suitable matches, the operation of the device is as follows:—The receptacle is tilted so that a match will drop into the match receiving channel of the receptacle. In this position the pushing nib 20 will come below the end of the match as disclosed in Fig. 1. The operating knob 23 is then taken out of the slot 26 and the spring 35 will propel the plate 21 upward within the cylindrical housing 30. This movement of the plate will result in the match being carried between the

scratcher or igniting members 45 and 40′, and escaping through the opening 44 in a lighted or ignited condition. The match will project beyond the lid or cap 40 a suitable distance so that the same may be grasped below the burning end thereof.

Having described my said invention, what I claim as new and desire to secure by United States Letters Patent is:—

1. A match holding receptacle, having one of its longitudinal ends bent outward to form two spaced narrow wall sections united by a bottom forming section, these sections providing a match receiving channel, the lower portion of said channel being provided with a longitudinally disposed slot, of a cylindrical spring receiving housing of a length less than said receptacle having two spaced securing flanges fixed to the channel forming portion of said receptacle, said cylindrical housing having a longitudinally disposed bayonet slot, a bottom within said receptacle and positioned near the lower end thereof, the end of said bayonet slot ending proximal to said bottom, a plate slidably held within said cylindrical housing having a dished nib extending into said match receiving channel, an operating pin projecting from said plate and through said bayonet slot, and a spring within said spring receiving housing and resting against said plate, all arranged substantially as and for the purpose set forth.

2. A match holding receptacle having one of its longitudinal ends bent outward to form a match receiving channel, the lower portion of said channel being provided with a longitudinally disposed slot, of a cylindrical spring receiving housing of a length less than said receptacle having two spaced receiving flanges fixed to the channel forming portion of said receptacle, said cylindrical housing having a longitudinally disposed bayonet slot, a bottom within said receptacle and positioned near the lower end thereof, the end of said bayonet slot ending proximal to said bottom, a plate slidably held within said cylindrical housing having a dished nib extending into said match receiving channel, an operating pin projecting from said plate and through said bayonet slot, a spring within said spring receiving housing and pressing against said plate and a spring held scratcher at the end of said channel.

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

WILLIAM A. CARTER.

Witnesses:

H. D. Oliver,

Jas. J. Brumley.