

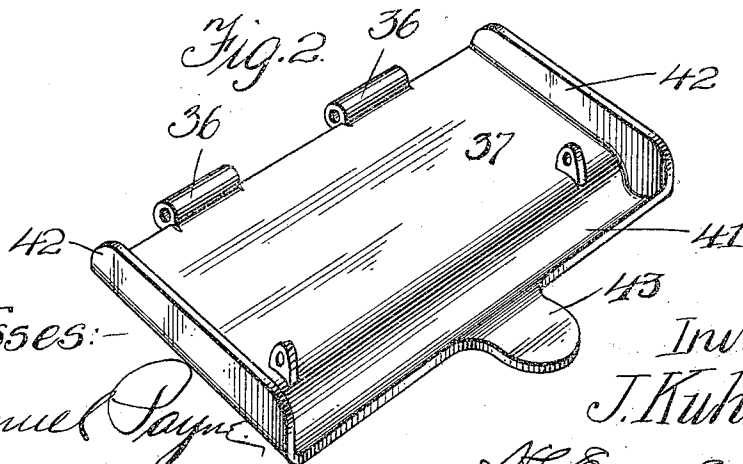
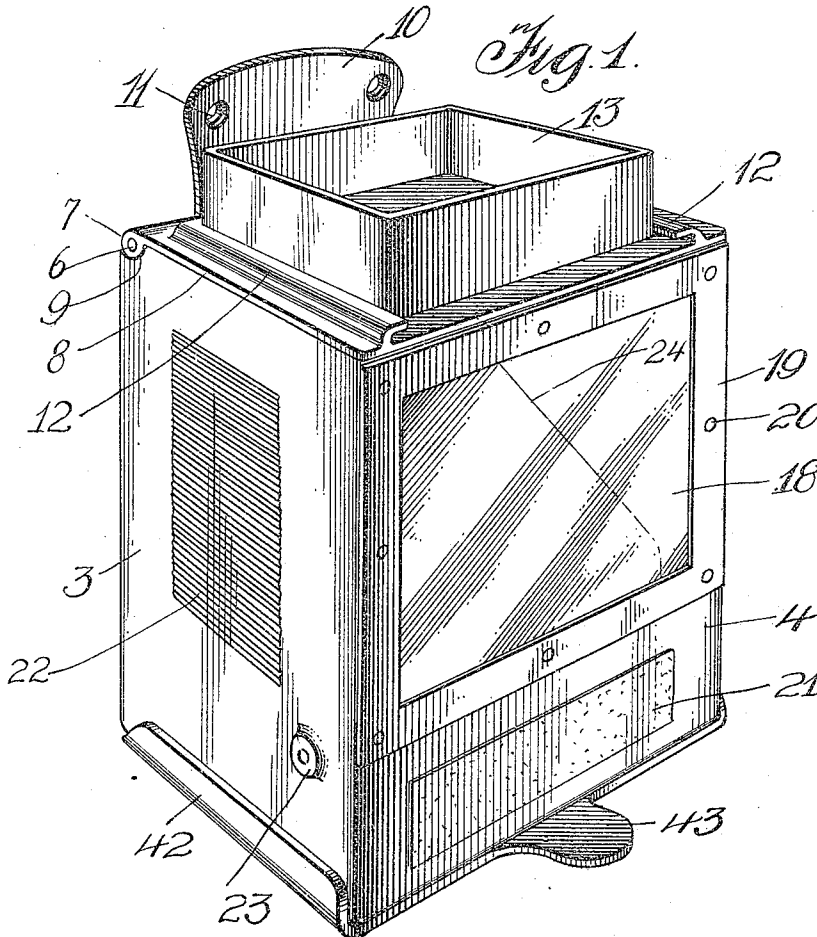
J. KUHN.
MATCH BOX.

APPLICATION FILED DEC. 7, 1909.

953,471.

Patented Mar. 29, 1910.

2 SHEETS—SHEET 1.



Witnesses:—

Samuel Payne
R. H. Butler

Inventor

J. Kuhn.

A. C. Ernst & Co.
by *Attorneys.*

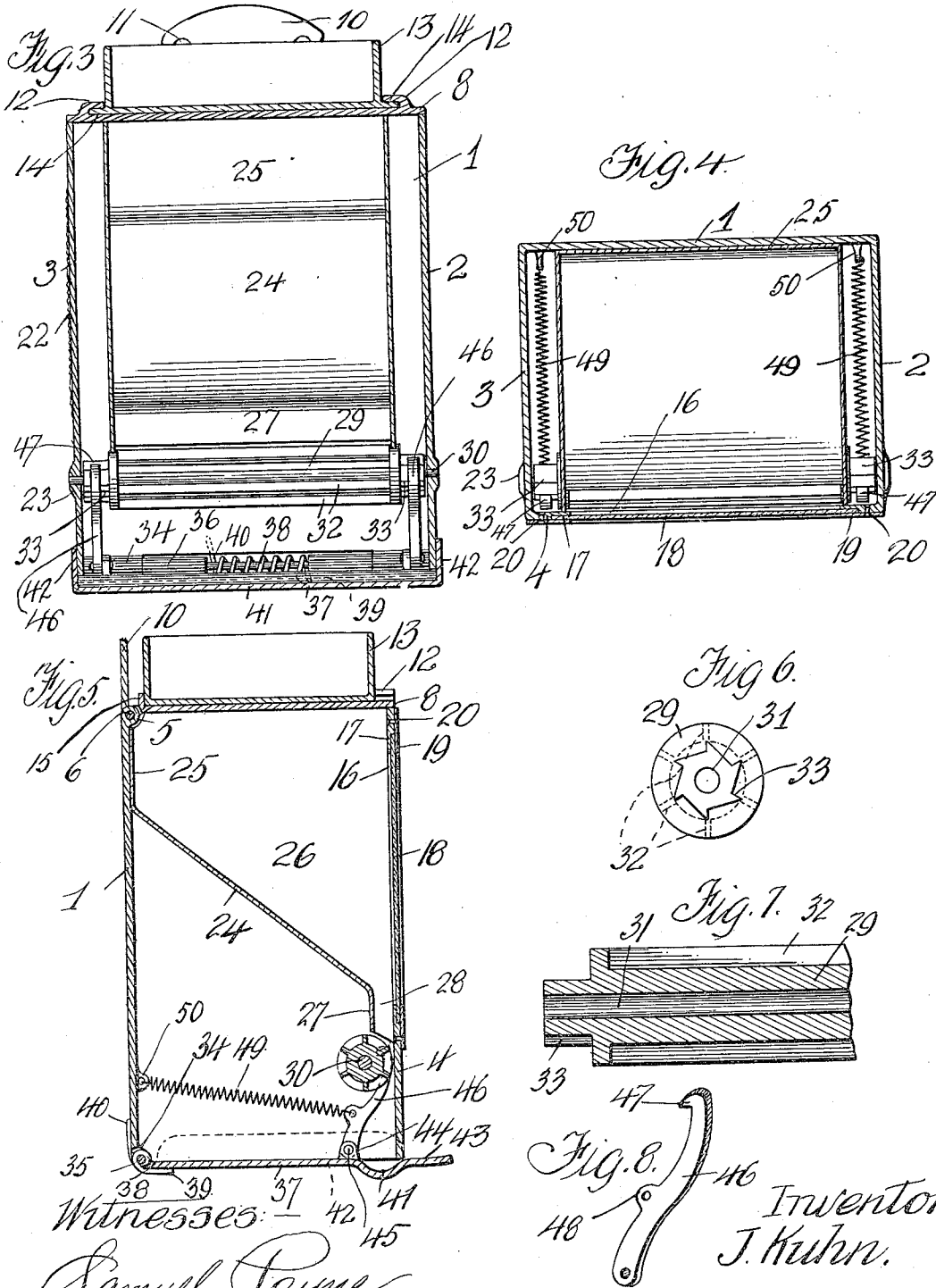
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Fig. 8.
Inventor
J. Kuhn.
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UNITED STATES PATENT OFFICE.

JOSEPH KUHN, OF PITTSBURG, PENNSYLVANIA.

MATCH-BOX.

953,471.

Specification of Letters Patent. Patented Mar. 29, 1910.

Application filed December 7, 1909. Serial No. 531,857.

To all whom it may concern:

Be it known that I, JOSEPH KUHN, a subject of the Emperor of Germany, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Match-Boxes, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to match boxes, and the objects of my invention are to provide a match box with positive and reliable means for delivering one match at a time, and to house the matches within the box whereby the box cannot be rifled and a large quantity of matches removed.

Other objects of my invention are to provide a match box with a tray or receptacle adapted to hold matches that have been used, and to provide a box that will be simple in construction, durable and highly efficient for the purposes for which it is intended.

Further objects of the invention are to furnish a match box with a phosphorescent plate that will permit of the box being easily located in the dark, and to provide a box that can be advantageously used in cigar stores, hotels and public stands where matches are gratuitously distributed.

With these and such other objects in view as may hereinafter appear, the invention consists of the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing forming a part of this specification, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof can be varied or changed, as to the size, shape and manner of assemblage without departing from the spirit of the invention.

In the drawings:—Figure 1 is a perspective view of the match box, Fig. 2 is a perspective view of a detached delivery lid adapted to form part of the box, Fig. 3 is a vertical longitudinal view of the box, Fig. 4 is a horizontal sectional view of the box, Fig. 5 is a vertical sectional view of the same, Fig. 6 is an end view of a delivery roller adapted to form part of the box, Fig. 7 is a longitudinal sectional view of a portion of the same, and Fig. 8 is a perspective view of a detached actuating pawl adapted

to form part of the operating mechanism of the box.

In the accompanying drawings I have illustrated a match box that is preferably constructed of metal, the box being rectangular and of a sufficient size to contain the contents of two or three ordinary match boxes. The box comprises a rear wall 1, side walls 2 and 3 and a front wall 4. The rear wall 1 is provided with hinged members 5 and pivotally connected to said members by pins 6 are the hinged members 7 of a lid 8 adapted to close the upper end of the box. The upper rear edges of the side walls 2 and 3 are cut away, as at 9 to provide clearance for the hinged members 7 of the lid. The rear wall 1 is further provided with a vertical extension 10 having openings 11, whereby suitable fastening means, as screws or nails, can be employed for fastening the box to a wall or suitable support.

The lid 8 is provided with transverse guide flanges 12 adjacent to the side edges thereof, these flanges extending from the front edge of the lid in proximity to the rear edge thereof. The flanges are adapted to retain a rectangular tray or receptacle 13 upon the lid 8, the said tray or receptacle having the lower edges thereof provided with flanges 14 adapted to engage under the flanges 12. The rear ends of the flanges 12 are connected by a transverse rib 15 adapted to limit the rearward movement of the tray or receptacle 13 upon the lid.

The front wall 4 of the box is cut away to provide an opening 16 and the material bordering upon said opening at the outer side of the wall is cut away to provide a seat 17 for a pane of glass 18, which is retained in the seat by a rectangular frame 19 riveted or otherwise secured, as at 20 to the wall 4. The opening 16 is approximately three-fourths the depth of the front wall 4, and upon the lower front side of said wall is suitably mounted a phosphorescent plate 21, but I reserve the right to place the phosphorus directly upon the front wall 4.

The side wall 3 is ribbed, corrugated or serrated, as at 22 whereby matches can be struck upon the box and both of the side walls adjacent to the front edges thereof are provided with bosses 23, for a purpose that will hereinafter appear.

In the box is mounted a chute, comprising an inclined bottom plate 24, a rear wall 25, 110

side walls 26 and a depending front wall 27, this front wall being removed from the front edges of the walls 26 to provide a longitudinal opening 28 between the wall 27 of the chute and the front wall 4 of the box. The chute is adapted to hold matches and feed the same into the opening 28.

To control the discharge of matches from the box, a delivery roller 29 is located beneath the opening 28. This roller is revolvably supported upon a spindle 30 mounted in the bosses 23 of the side walls 2 and 3. The roller 29 is provided with a longitudinal opening 31 to receive the spindle, and with a plurality of longitudinally disposed pockets 32 to receive matches from the opening 28. The ends of the roller 29 are reduced and provided with ratchet teeth 33.

The lower edge of the rear wall 1 is provided with hinged members 34 and connected to said members by a pin 35 are the hinged members 36 of a delivery lid 37. The lid 37 is normally maintained in a closed position at the bottom of the box by a spring 38 coiled upon the pin 35, one end of the pin engaging under the lid 37, as at 39 while the opposite end of the spring engages the wall 1, as at 40. The delivery lid 37 has the front edge thereof shaped to provide a longitudinal groove or holder 41 for matches, said groove extending from one end of the lid to the opposite end thereof, and the ends of the groove are closed by the forward ends of vertical flanges 42 carried by the ends of the lid, these flanges being adapted to extend upwardly upon the outer sides of the walls 2 and 3, when the lid is closed. The forward edge of the lid intermediate the ends thereof is provided with a projecting lug 43 serving functionally as a handle, whereby the lid can be swung downwardly to expose the groove or holder 41 and permit of the operator of the lid removing a match from the groove or holder. The delivery lid 37 at the rear edge of the groove 41 and adjacent to the flanges 42 of said lid is provided with apertured lugs 44 and pivotally connected to said lugs by pins 45 are actuating pawls 46 having the upper ends thereof toothed, as at 47 to engage the reduced toothed ends of the delivery roller 29. The rear edges of the actuating pawls 46 are provided with apertured lugs 48 and connected to said apertured lugs are coiled retractile springs 49 having the opposite ends thereof connected to apertured lugs 50 carried by the inner side of the rear wall 1. The springs 49 normally hold the pawls 46 in engagement with the ratchet teeth 33, whereby when the lid 37 is lowered the roller 29 will be revolved to deliver a match into the groove or holder 41. With the lid 37 in a lowered position the match can be easily removed from the groove or holder and when

the lid is released, the spring 38 will close the lid and raise the pawls 46 to obtain a fresh hold upon the ratchet teeth 33 to again rotate the roller 29 when the lid is lowered.

The pane of glass 18 permits of the quantity of matches within the box being observed, whereby the box can be refilled when it is nearly empty.

The tray or receptacle 13 is detachably connected to the lid 8 whereby it can be removed, emptied and cleaned.

Having now described my invention what I claim as new, is:—

1. A match box comprising a rear wall, side walls and a front wall, a lid hinged to the upper edge of said rear wall and adapted to close the upper end of said box, a delivery lid hinged to the lower edge of said rear wall and adapted to close the lower end of said box, means adapted to normally maintain said lid in a closed position, a chute mounted in said box and having an opening adjacent to the front wall of said box, a delivery roller revolvably mounted in said box beneath said opening and provided with pockets adapted to receive matches from said opening, said roller having the ends thereof reduced and provided with ratchet teeth, and actuating pawls pivotally connected to the inner side of said lid and adapted to engage said ratchet teeth and revolve said roller to deliver a match to said lid.

2. A match box comprising a rear wall, side walls and a front wall, said front wall having an opening formed therein, a transparent pane mounted over said opening, a lid hinged to the upper edge of said rear wall and adapted to close the top of said box, a delivery lid hinged to the lower edge of said rear wall and adapted to close the bottom of said box, means at the hinged edge of said lid adapted to maintain said lid in a closed position, said lid having a match holder, a chute arranged in said box and having an opening adjacent to the front wall of said box, a delivery roller revolvably mounted in said box adjacent to said opening, said roller having pockets formed therein adapted to receive matches from said opening, and actuating pawls pivotally connected to said lid and adapted to engage said roller for revolving said roller when said lid is opened.

3. A match box comprising a rear wall, side walls and a front wall, said front wall having an opening formed therein, a transparent pane mounted over said opening, a lid hinged to the upper edge of said rear wall and adapted to close the top of said box, a delivery lid hinged to the lower edge of said rear wall and adapted to close the bottom of said box, means at the hinged edge of said lid adapted to maintain said

lid in a closed position, said lid having a
match holder, a chute arranged in said box
and having an opening adjacent to the front
wall of said box, a delivery roller revolubly
5 mounted in said box adjacent to said open-
ing, said roller having pockets formed there-
in adapted to receive matches from said
opening, actuating pawls pivotally connect-
ed to said lid and adapted to engage said

roller for revolving said roller when said lid 10
is opened, and a tray detachably mounted
upon the first mentioned lid.

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

JOSEPH KUHN.

Witnesses:

X. H. RABSÁG,

KARL H. BUTLER.