

(No Model.)

A. A. LOW.
MATCH BOX HOLDER.

No. 459,870.

Patented Sept. 22, 1891.

Fig. 1.

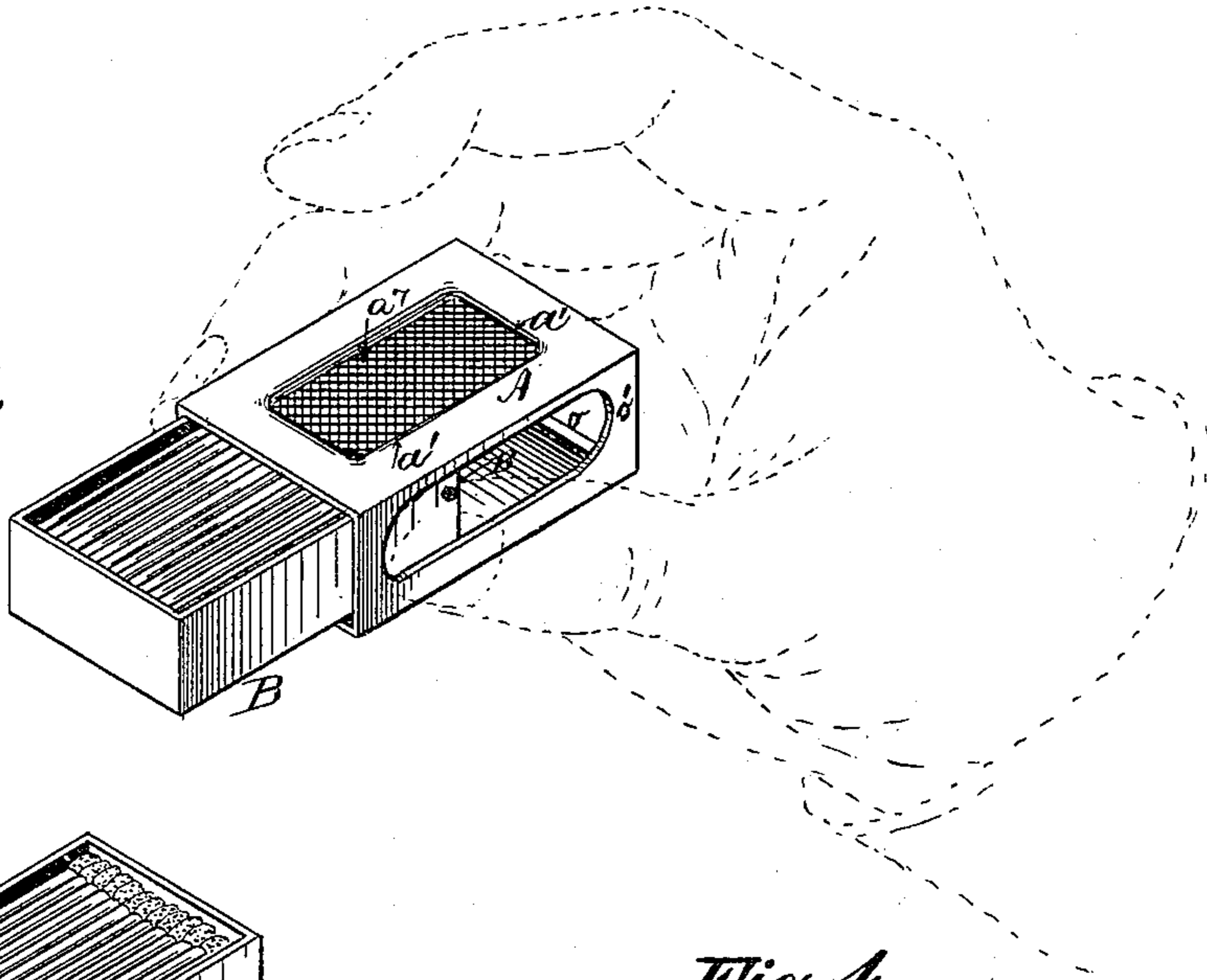


Fig. 2.

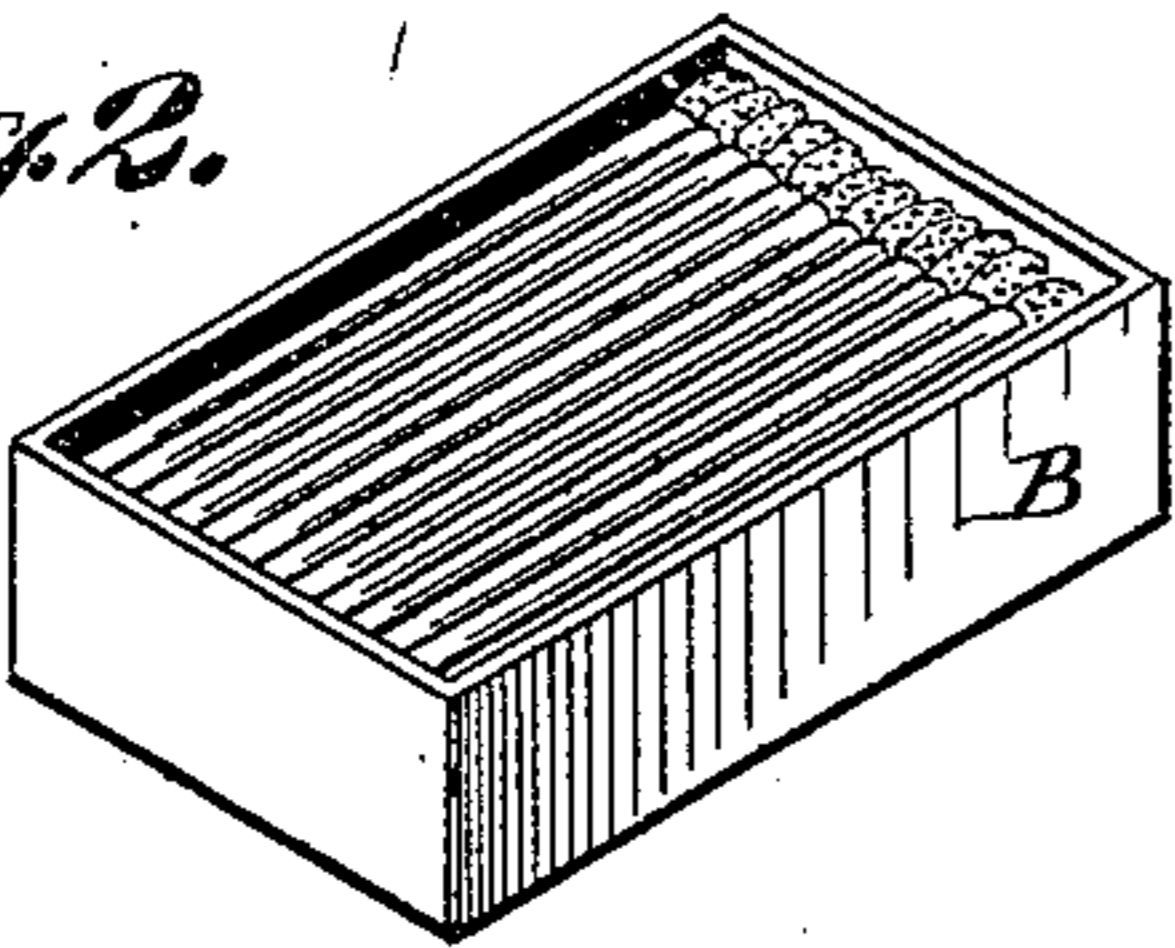


Fig. 3.

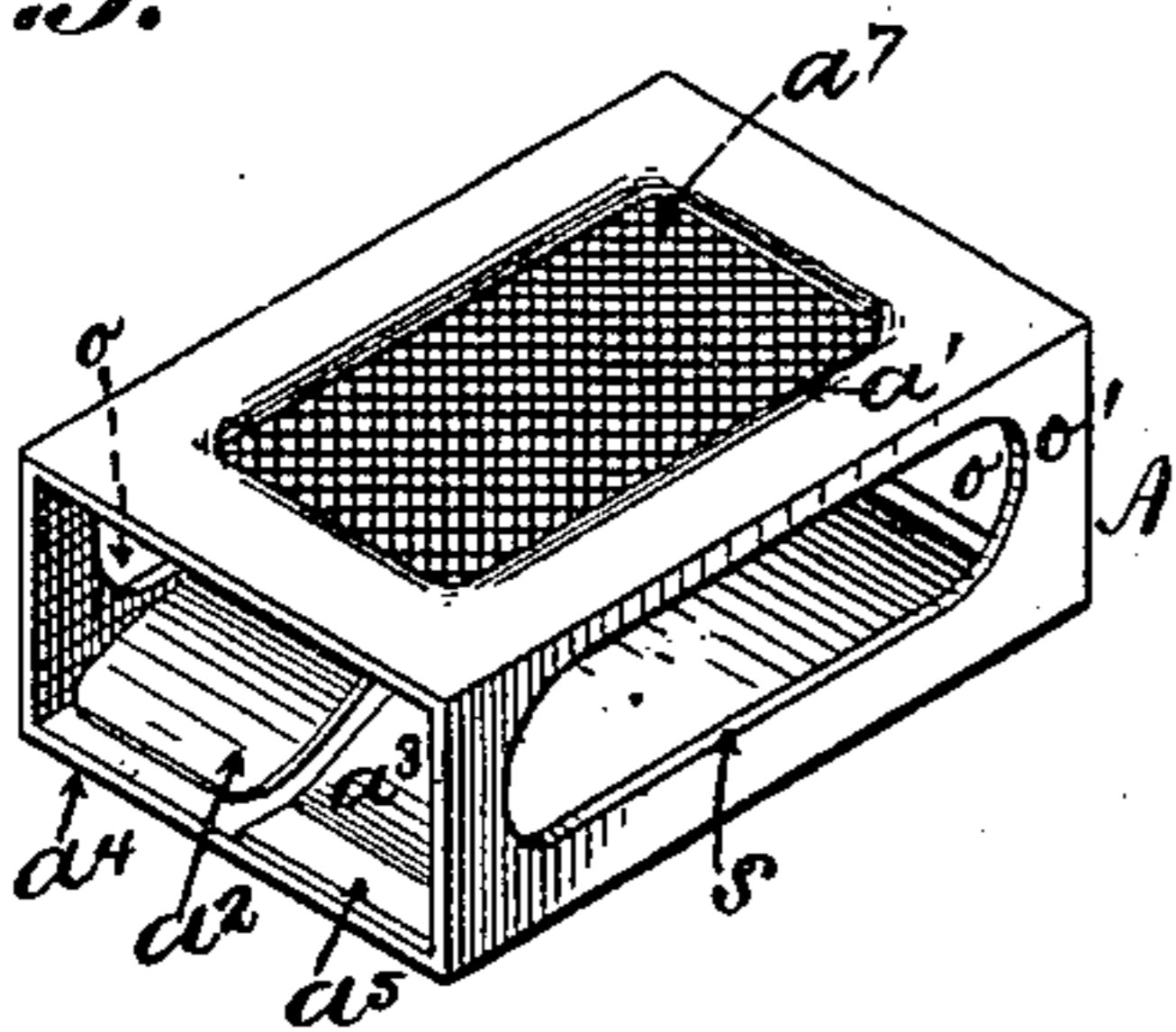


Fig. 4.

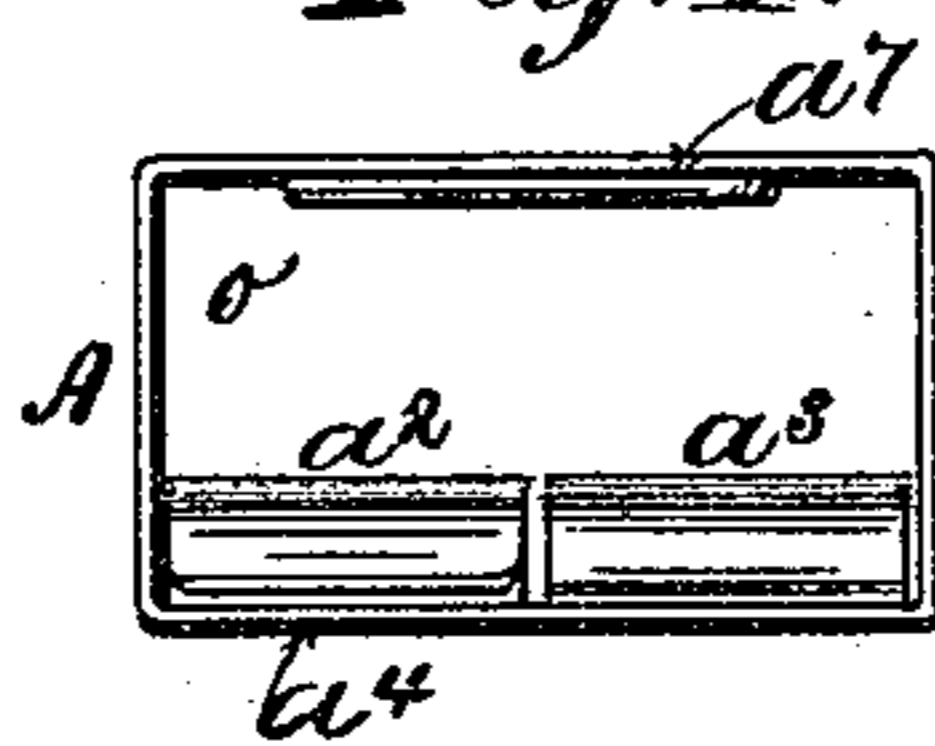


Fig. 5.

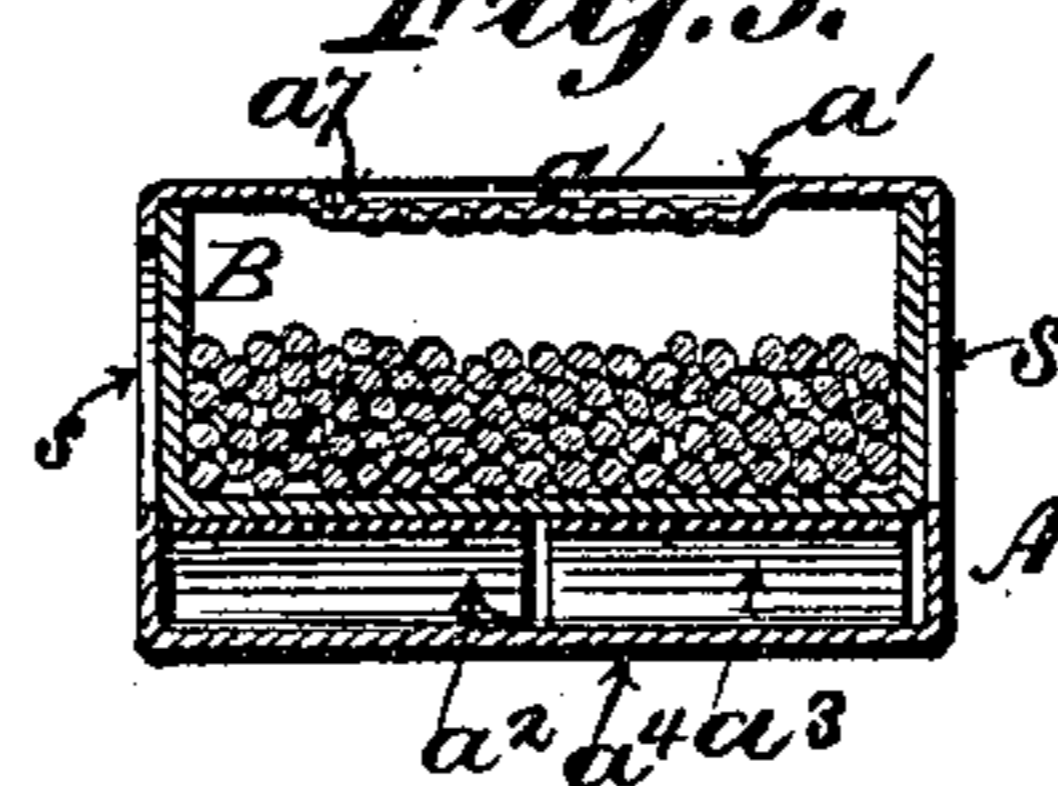


Fig. 7.

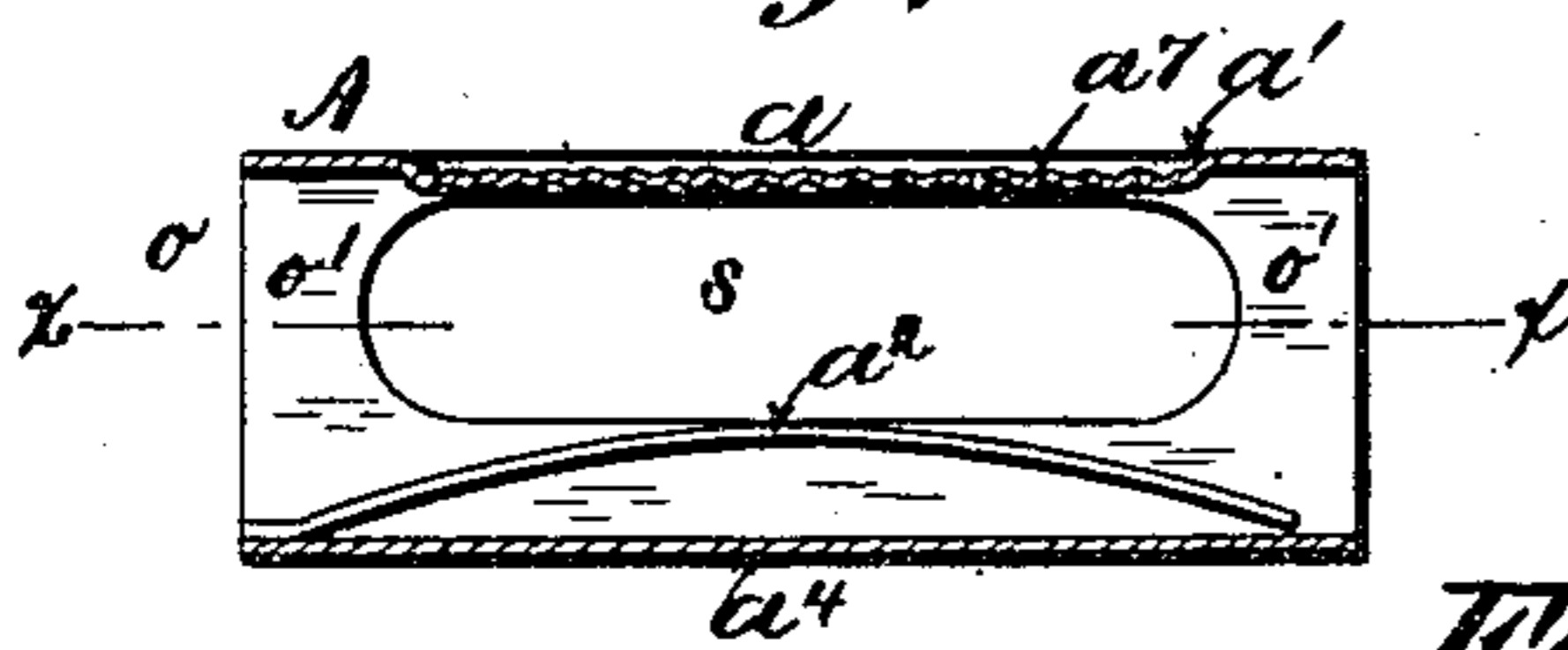


Fig. 6.

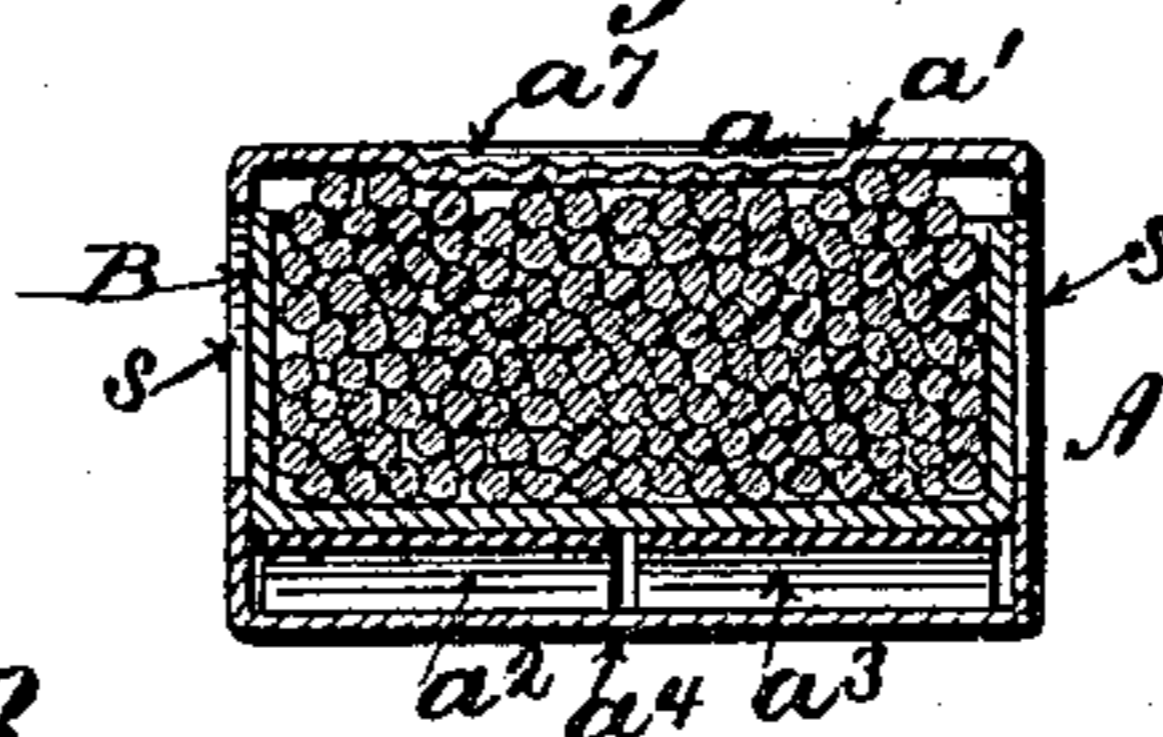
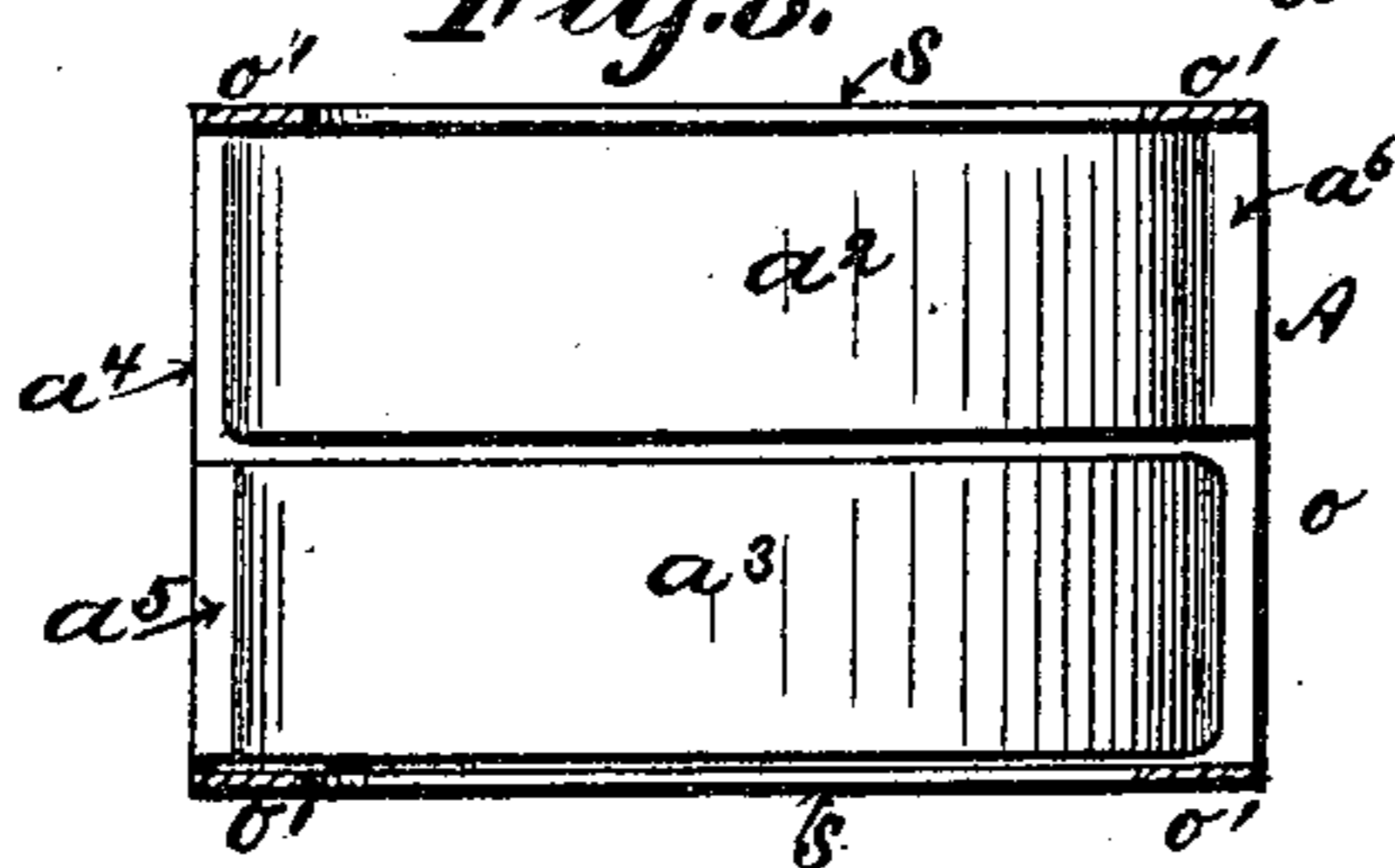


Fig. 8.



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MATCH-BOX HOLDER.

SPECIFICATION forming part of Letters Patent No. 459,870, dated September 22, 1891.

Application filed November 15, 1890. Serial No. 371,591. (No model.)

To all whom it may concern:

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Match-Box Holders, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My invention is designed to afford a simple convenient receptacle or holder for matches to be carried upon the person, and while the improved device may be provided with a permanent drawer or match-box, and thus rendered available for use, in connection with matches, fuses, &c., of various kinds, it is especially applicable for use in connection with the original packages in which a box or drawer wherein the matches rest is inclosed in a shield or four-sided cover which protects and isolates the match-box and its contents, the match-box or drawer being slid out lengthwise from the shield when it is desired to remove the matches for use.

As ordinarily manufactured for the market these sliding match-boxes and covers or receptacles are made of wood or paper, and are discarded when emptied of their contents. Owing to the fragile quality of the material used in their formation they are not adapted to be carried upon the person with safety or convenience in use; and one of the main objects of my invention is to avoid this difficulty and to provide suitable means for utilizing the temporary paper boxes or drawers in which the matches are sold for use in connection with a permanent shield or safe adapted to be carried upon the person of the user without risk of breakage or of the accidental ignition of the matches. As a matter of fact these original packages as found in the market contain more matches than the drawer or box proper will hold comfortably—that is to say, they project above and beyond the top of the drawer—and the temporary shield or cover which surrounds the box or drawer, being made of comparatively soft yielding material, permits of this by accommodating itself to the outward pressure thus created, thereby causing a permanent bulging of the cover or shield, which renders it

loose or unreliable after a few of the matches have been withdrawn and the pressure thereby removed. This difficulty arises from an effort to compress a prescribed number of matches in as small a space as possible in the original packages and results in rendering the original exterior shield or cover surrounding the drawer and matches unsuitable for use when the matches are to be carried upon the person.

My invention consists, primarily, of a shield or safe of suitable material adapted to afford the necessary degree of strength and durability, formed to receive and inclose one of the ordinary boxes or drawers in which the matches are bought in the market, together with any excess of matches protruding therefrom, said shield or safe being in form and function substantially like the comparatively light frail cover or shield which accompanies the matches and which is discarded for my permanent shield or holder, the latter being preferably made of metal or some other hard rigid material; but my permanent shield differs in one important particular from the temporary shield discarded, since it has what may be designated as a “yielding” entrance at one or both ends, the actual mouth or opening being considerably wider than the depth of the box or drawer which it is designed to accommodate, while the interior of the shield is contracted by a curved false bottom, consisting of one or more flat yielding springs, which tend constantly to force the match-drawer and its contents up against the top or roof of the shield. Hence any variation in the size of the original package or any protuberance of the matches above the edges of the drawer is compensated for, and while the area of the entrance is extended laterally to facilitate the insertion or removal of the match-drawer the drawer and its contents are held firmly in position when within the shield irrespective of the quantity of matches present. This enlarged lateral opening and yielding entrance is in marked contrast to the contracted area of the cover or shield of paper or other comparatively soft material in which the matches are packed originally and is a feature that gives great practical value and importance to my device as a permanent shield or holder for use in connection with

the original boxes or drawers, which latter may be discarded when emptied of their contents by use, and a new box or drawer full of matches substituted bodily without the inconvenience of handling and transferring individually from one box to another, as heretofore. Of course the feature of the yielding entrance or false spring-bottom may be applied to the temporary shields or covers for the match-boxes, if desired, but under ordinary conditions of manufacture for the market would be unnecessary and would render the device too expensive, whereas by the use of my permanent shield adapted to receive and retain the common temporary match-boxes or drawers in the market all the advantages of a permanent rigid device is attained, in which the matches may be carried about the person with perfect safety.

Secondary only in importance to the feature of the comparatively wide yielding opening to the shield is another special feature of construction, which consists in forming the longitudinal side walls of the shield with elongated finger-slots, through which the match drawer or box may be grasped between the thumb and finger in manipulating the device as a whole. Thus in grasping the match-receptacle for removal from the pocket the match-drawer, as well as the protecting-shield, may be positively held against relative displacement, and in projecting the match-drawer out of the shield a sufficient distance to permit of access to and the removal of the matches the thumb and finger grasping the sides of the match-drawer may in like manner be employed, as well as in the operation of subsequently withdrawing or retracting the drawer into the shield, the ends of the longitudinal slots in the shield in both cases gaging and limiting the extent of movement. In fact, these longitudinal slots in the shield, while not in the least detracting from the simplicity of the device, and even advantageously decreasing the weight of the shield without objectionably weakening it, render the device much more convenient and effective in use, as will hereinafter be more fully seen.

As before intimated, a special advantage attending the use of my shield or cover is that all loading or filling of the safe or receptacle with matches in the usual manner is dispensed with, the ordinary temporary match box or drawer full of matches being inserted directly and bodily into the shield to be withdrawn and discarded when its contents are used and to be in turn replaced by another. All handling of the matches, except when required for immediate use, is thus avoided, with the attendant advantages of greater safety, convenience, and economy of time.

Another feature of my invention consists in forming the top of my permanent shield with a central depression of dishing shape, the under side of which answers the double

purpose of affording a central bearing upon the contents of the box when full and of counteracting all undue tendency of the match drawer or box to longitudinal movement or displacement within the shield after the first few matches have been removed, at the same time affording a convenient depressed exterior frictional ignition-surface upon the top.

In the accompanying drawings I illustrate the embodiment of my improvements in practical form, although I do not wish to confine myself to the identical form and construction of parts herein shown and described, since it is obvious that various modifications may be made in details without departing from the essential feature of my invention.

Figure 1 is an isometrical perspective of my improved device in actual use, the match drawer or box being shown as partially projected from the shield to give access to the matches, the position of the hand of the user being indicated by dotted lines. Fig. 2 is an isometrical view of an ordinary match box or drawer not quite full. Fig. 3 is an isometrical perspective of my improved shield. Fig. 4 is an end elevation of the shield empty. Fig. 5 is a transverse section of the shield, showing a partially-filled match box or drawer in position; Fig. 6, a similar view showing a match-box containing a surplus of matches in position. Fig. 7 is a central longitudinal section of the shield empty. Fig. 8 is a longitudinal section of the shield upon plane of line xx , Fig. 7, showing a plan of the springs.

The shield A is preferably made of sheet metal, although any other suitable material of sufficient strength and rigidity may be substituted, if preferred. It is of rectangular form in cross-section and made of a length and depth adequate to receive an ordinary wooden or paper match drawer or box B, such as is to be found in the market, inclosed in a shield of paper or other light material. The bottom of the shield A is provided with one or more flat springs, which press the box B and its contents upward toward the under surface of the upper side of the shield A, as shown in Figs. 5 and 6.

In the accompanying drawings two springs $a^2 a^3$ are shown, each attached at one extremity of the floor a^4 of the shield A, but free at the other extremity. In order to render the action of these springs more uniform upon the match-box, they are preferably attached to the floor at opposite ends of the shield, as shown in Fig. 8, in which a^5 and a^6 respectively represent where the springs are secured by soldering or otherwise. It is obvious that one spring may be used, if preferred, or that other forms of spring-pressure may be substituted for that shown without departing from the essential feature of my invention in this respect. The depth of the shield A is considerably greater than that of the match drawers or boxes B to be accommodated. The springs $a^2 a^3$ are arched or curved centrally, and, as they reach nearly to the edges

of the floor of the shield A at the openings *o*, they gradually contract the passage in either direction and afford a yielding resistance to the end of the match box or drawer when inserted at either end of the shield. Thus, while the openings *o o* are amply large enough to receive and compensate for variations in the size of the match-drawers used, even when overbrimming with matches, (as is usually the case as purchased in the market,) they may be said to be gradually contracted by a flexible false bottom or floor, which affords pressure sufficient to guide and retain the match-box and its contents firmly in place against the top of the shield. Where an excess of matches exists, as shown in Fig. 6, the false bottom or springs $a^2 a^3$ accommodate themselves to circumstances, allowing the box B and contents more room than in the case of a partially-filled box or drawer, in which latter case the edges of the box or drawer are forced directly against the under side of the top of the shield A. The side walls of the shield A are formed with longitudinal slots *s s* of sufficient width to permit of the partial insertion of the fingers to give access to the sides of the match-drawer B. Thus the match-drawer B while in the shield may be grasped between the thumb and finger (as illustrated, for instance, in Fig. 1) and projected partially from or retracted into the shield by a simple and convenient movement of the hand. Both drawer and shield may thus be conveniently grasped and held in one hand in the extended position, as shown in Fig. 1, while the fingers of the other hand are available for the removal of the matches. The portions *o' o'* of the side walls at the ends of the slots *s s* act as gages or stops against which the ends of the fingers rest when proper movement of the drawer in either direction has been effected through the medium of the slots.

The top of the shield A is formed with an internal projection a^7 , which protrudes into the upper portion of the drawer B when the latter is in place and bears against the contents thereof when full or nearly so. This interior protuberance performs another function in that its edges a^7 , which are preferably curved or inclined to facilitate the forcible insertion or removal of the match-drawer, act as shoulders which encounter the upper edges of the ends of the box B and prevent the unintentional withdrawal or displacement of said drawer. This interior projection a^7 is preferably formed by stamping the sheet metal, as indicated in the drawings, thus creating a depression or dish *a*, the upper surface of which is roughened or otherwise formed to constitute an ignition-surface for the match.

I am aware that stationary wall-pockets have been provided for the reception of match boxes or drawers and the envelopes in which they are sold, as in the patent to Cary, No. 379,680, dated March 20, 1888, in which the envelope is held down by a spring-claw, while the drawer is held open by a projection from the bottom of the device; but I do not seek to cover any such construction or arrangement of parts.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A shield or receptacle for match-boxes, substantially as and for the purpose set forth, formed with the two retaining-springs $a' a^2$, attached to the floor a^4 at opposite ends, substantially as shown.

2. A shield or receptacle for match-boxes, substantially as and for the purpose described, formed with a central depression or bearing surface a^7 , in combination with one or more opposed retaining-springs, substantially as shown.

3. A shield or receptacle for match-boxes, formed with the box-retaining shoulders $a' a'$, in combination with one or more retaining-springs, substantially in the manner and for the purpose described.

4. A portable shield for open-top match boxes or drawers, consisting of a rectangular envelope open at both extremities to permit of the insertion or removal of the match box or drawer at either end, said shield being formed with side walls, which are slotted longitudinally to form parallel finger-openings by which the sides of the contained match box or drawer may be grasped, and with an arched spring-bottom, which tends constantly to press the open edges of the match box or drawer against the under side of the top of the shield, substantially in the manner and for the purpose set forth.

5. A portable shield for open-top match boxes or drawers, consisting of a rectangular envelope formed with openings at both extremities, which openings are considerably wider than the depth of the match box or drawer to be accommodated, said shield being also formed with a yielding arched spring-bottom, which converges toward the edge of the bottom plate at each end of the shield to facilitate the insertion or removal of the match box or drawer at either extremity of the shield, substantially in the manner and for the purpose set forth.

ABBOT AUGUSTUS LOW.

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