L. C. WITKOWSKI.

DISINFECTANT PENCIL CARRIER.

APPLICATION FILED MAR. 21, 1914.

1,138,524.

Patented May 4, 1915.

2 SHEETS—SHEET 1.

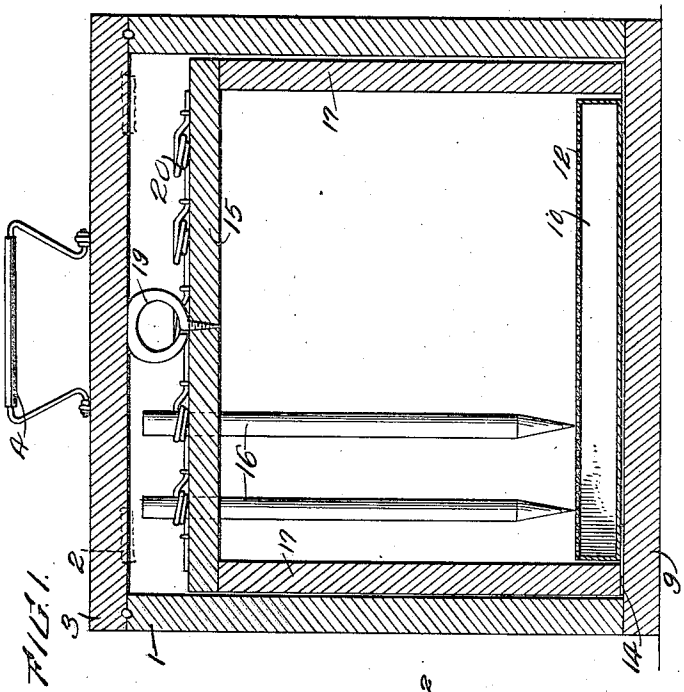


FIG. 1.

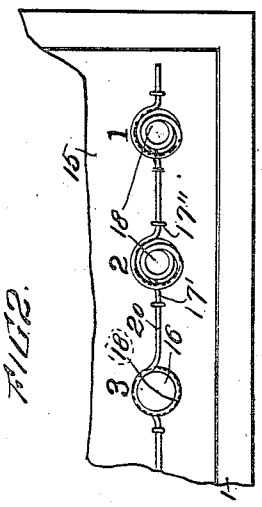


FIG. 2.

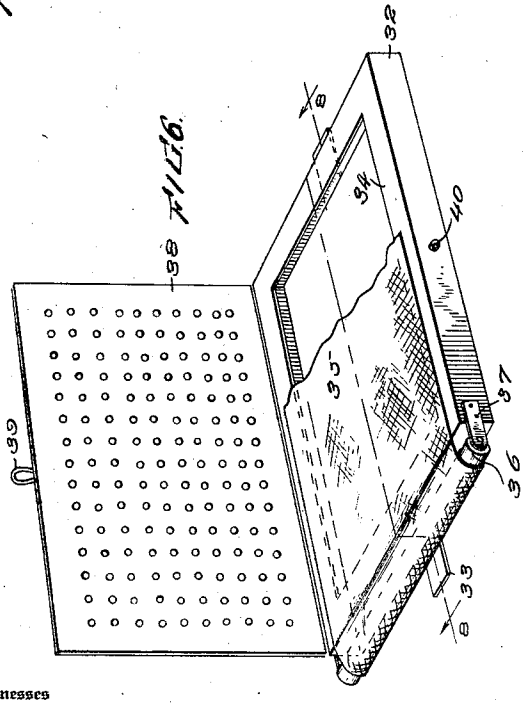


FIG. 6.

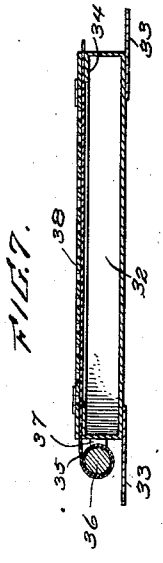


FIG. 7.

Inventor

Louis C. Witkowski.

Witnesses

R. S. Trogner.

W. H. Wakefield

By Mason Fenwick & Lawrence

Attorneys

L. C. WITKOWSKI.

DISINFECTANT PENCIL CARRIER.

APPLICATION FILED MAR. 21, 1914.

1,138,524.

Patented May 4, 1915.

2 SHEETS—SHEET 2.

FIG. 3.

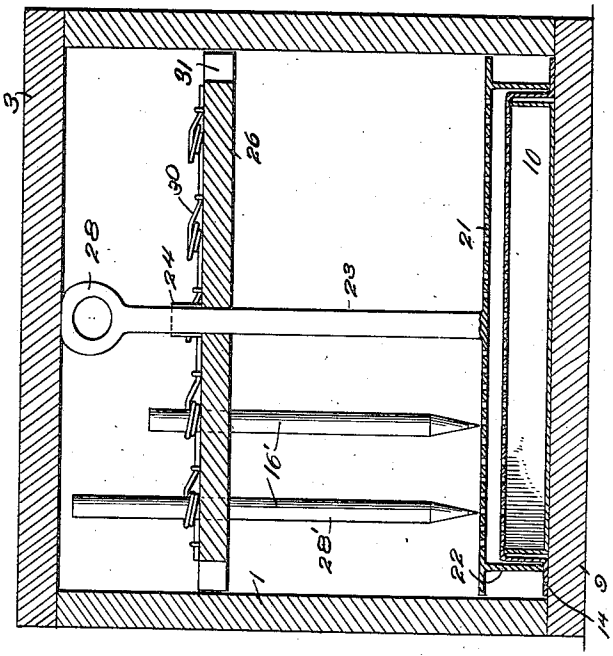


FIG. 5.

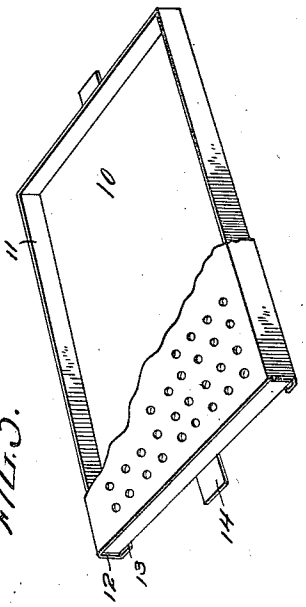
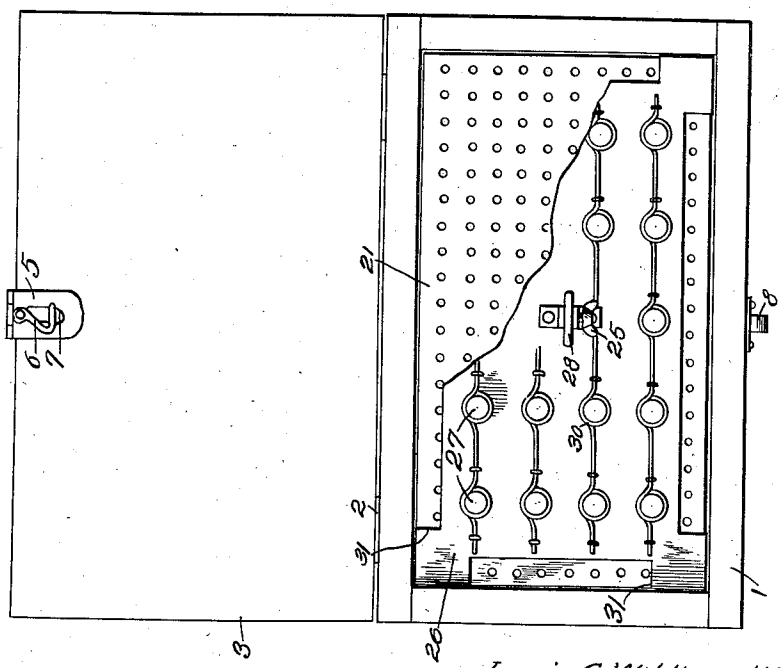


FIG. 4.



Inventor

Louis C. Witkowski.

Witnesses

R. S. Trogner.

W. H. Wakefield

By Mason Fenwick & Lawrence

Attorneys

UNITED STATES PATENT OFFICE.

LOUIS C. WITKOWSKI, OF COLLINGSWOOD, NEW JERSEY.

DISINFECTANT PENCIL-CARRIER.

1,138,524. Specification of Letters Patent. Patented May 4, 1915.

Application filed March 21, 1914. Serial No. 826,433.

To all whom it may concern:

Be it known that I, LOUIS C. WITKOWSKI, a citizen of the United States, residing at Collingswood, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Disinfectant Pencil-Carriers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in disinfecting pencil carriers and an object of the invention is to provide a convenient case for carrying a large number of pencils in such a way that the points of the pencils will all be as close to the disinfecting material as possible.

A further object of the invention is to provide a case for carrying a large number of pencils which shall have the disinfectant held in place by the locking of the box, the entire organized structure being so constructed as to produce very little, if any, harm if the same be upset accidentally.

A still further object of the invention is to provide a case for carrying a large number of pencils of such construction that pencils may be quickly removed and the case immediately closed to prevent the escape into a room of unpleasant or irritating fumes, the source of the fumes being placed in the most remote part of the pencil carrying case.

A still further object of the invention is to provide a pencil disinfectant device having a tray for carrying the pencil adjustably with respect to a disinfectant material for the purpose of accommodating pencils of different lengths.

With these and other objects in view the invention comprises certain novel constructions, combinations and arrangement of parts as will be hereinafter more fully described and claimed:

In the accompanying drawings, wherein corresponding parts are designated by similar reference characters, and wherein two embodiments of my invention are shown: Figure 1 is a vertical section taken through the complete case. Fig. 2 is a fragmentary top plan view of the case with the cover open showing in detail the means for holding the pencil. Fig. 3 is a vertical section through a modified view of the pencil carrying plate. Fig. 4 is a top plan view of the form shown in Fig. 3 with the cover removed. Fig. 5 is a perspective view of the tray used either in the preferred or modified form of the invention. Figs. 6 and 7 show a perspective view and vertical section respectively of the modified view of the tray.

Referring to Figs. 1 and 2, where the preferred form of the invention is shown, 1 designates the case made of wood or any other suitable material having hingedly connected thereto as by means of hinges 2, a cover 3 carrying a suitable bail 4 and having hinged thereto a hasp 5. This hasp has pivotally connected thereto a hook 6 and is provided with a slot 7 through which eye 8 passes. The bottom 9 of the case may be secured to the sides in any approved manner and all of the joints are made substantially air tight. Mounted in the bottom of the casing 1 is a disinfectant tray 10 shown particularly in Fig. 5, where the tray is seen as comprising a metallic pan 11, the sides and top of which are covered by a perforated plate 12, the edges of the material being turned in as at 13 to engage portions of the bottom of the pan to hold the two portions together. Extending centrally from the ends of the perforated cover 12 are tabs 14 which bend down along the ends of the tray 11 and out, so as to rest upon the bottom 9 of the case. The cover 12 need not necessarily be formed as shown in the drawings, but I have described the perforated plate as being a convenient means for holding a dry disinfectant near tray 11 and at the same time admit of the undisturbed passage of fumes therethrough.

Referring to Fig. 1 it will be seen that rack 15, which carries the pencils 16 has depending therefrom guides or supports 17 which lie in close proximity to the ends of the case 1 and rest upon the horizontal portions of the tabs 14, so as to hold the tray and cover in place.

As seen in Fig. 2, the rack 15 is provided with a number of perforations 18 which may be numbered consecutively and are made of such size as may engage a pencil frictionally or may be so proportioned as to allow the pencils to pass freely therethrough. A suitable handle 19 is provided in the central portion of the plate 15 for raising and lowering the same out of and into the case 1.

If for any reason it should be found desirable to make the perforations 18 of such size as will not engage frictionally the pencils there may be provided a resilient pencil engaging spring 20 which may be secured to the rack 15 and lie thereupon above the rows of perforations 18, as shown in detail in Fig. 2. The spring may be made of any form, but I prefer to make the same as shown in Fig. 2, where it is seen that the convolutions are nested above the adjacent pencil openings, as indicated at 17′, and any suitable means, such as staple 17″ may be used for holding the center of the convolutions substantially above the center of the openings 18. The springs are flattened as shown in Fig. 1 so that as the pencil is inserted through the spring the latter will grip the pencil and the openings 18 will serve to guide the pencil to the proper position. Of course the diameter of the interior convolutions of the spring 17′ is somewhat less than the diameter of the pencil. It will be readily understood that it is desirable to keep the point of the pencil out of actual contact with the contents of the tray 10 and the provision of the spring 20 is sufficient for accomplishing this result, although, when the pencils frictionally engage the perforations 18, the pencils will also remain out of contact with the tray.

In the operation of this form of the invention, when it is desired to remove the plate carrying the pencils, the hook 6 which has previously been passed through eye 8 will be unlatched and hasp 5 folded out so as to remove eye 8 from the slot 7 and cover 3 will be raised sufficiently to allow an attendant to remove rack 15 by means of the handle 19, after which the cover will be tightly closed. The pencils may then be distributed to the users in a disinfected condition. After the pencils have served their purpose an attendant will carry the pencil holding rack 15 around to the separate users and each pencil will be placed in its proper opening, each user of the pencils having a particular number and being careful to insert his pencil within the opening or through the hole which bears the number corresponding to his number. It will be understood that the user of the pencil can insert the same to substantially the desired position; that is. to the position shown by the pencils in Fig. 1, but of course, the pencils will not all have their tops in the same plane, and after all of the pencils have been inserted the plate 15 will be inserted within the box, the cover of which has been closed but opened for the reception of the plate, and cover 3 then closed down, and if any of the pencils should be extending too far beyond the plate the top will engage the same and depress them so that the points will all be located at substantially the same distance from the tray 10. This placing of the pencils by means of the cover as will be apparent makes it unnecessary for the attendant or any person to touch the pencil except the one who has used the same. The cover may then be locked and kept locked until the pencils are required for use again.

It is generally understood that pencils which have been used, but particularly used by children, have their points moistened with saliva which causes the pencil to swell so that the pores are larger than when the pencil is dry; the ingress of germs from the child's mouth into the pores is therefore facilitated. It will be noted that the points of the pencils are close to the disinfectant tray, a feature which I believe is not to be found in any other pencil disinfectant cases which have been proposed. By providing a simple rack supporting all of the pencils and locating that rack at the top or substantially at the top of the casing I have disposed with all intermediate structure which would interfere with the circulation of the fumes arising from the disinfectant and in this connection it will be noted by reference to Fig. 2 particularly that the rack 15 does not cut off connection between the space below the plate and the space thereabove, so that both ends of the pencils may be subjected to the action of the disinfecting fumes.

Some pencils will be shorter than others, and in order that the points of all of the pencils, no matter what their length, may be subject to the fumes of the disinfectant and held as closely thereto as possible, I have shown the modified form as seen in Fig. 3 particularly. This figure shows a removable pedestal 21 perforated and surrounding the top and sides of the disinfectant tray 10. The pedestal has the depending apron 22 thereof resting upon the horizontal portion of the tab 14 and in this respect holds the tray against dislodgement, as in the case of the preferred form of the invention. Extending centrally from the pedestal 21 is a standard 23 surrounding which is a sleeve 24 through which passes a screw having a winged head 25, which screw may be locked against the pedestal 23 in any desired position. The sleeve 24 is rigid with respect to rack 26 which is comparable with rack 15 in that it is provided with perforations 27, through which pass pencils 16′. The top of the standard 23 is provided with a suitable handle 28. It should be mentioned here that handle 28 in the modified form and handle 19 in the preferred form are so positioned as to engage the bottom side of the top of the casing when the top is locked, so that the locking of the top holds the tray in the bottom of the casing against displacement. Secured

to the rack 26 is a spring 30 comparable with and serving the same purpose as spring 20 in the preferred form of the invention.

It is to be understood that the casing in the modified form of the invention is identical with the casing used in the preferred form, the only change being in the device which is employed for holding the pencils. As seen in Fig. 3, the pencils are of various lengths and are placed in the rack 26 so that their points are substantially at the same level and are in close proximity to the disinfectant tray 10 although of course in the modified form the pedestal 21 is interposed between the tray and the points of the pencils. As the pencils becomes shorter, due to use, the screw 25 may be loosened and rack 26 lowered to the desired point, after which the same may be made fast with respect to the standard by tightening the screw 25. It will be seen that this adjustment of the rack 26 does not affect the locking of the disinfectant tray 10 by means of the cover 3, inasmuch as the standard 23 and handle 28 are unaffected by the adjustment of the rack 26. In order that the disinfectant fumes may pass from below plate 26 to the space thereabove I provide notches 31 in the sides and ends of the rack 26 through which fumes may pass.

Referring to Fig. 6, where there is shown in perspective a modified form of the invention, it will be seen that the tray 32 has extending therefrom and secured to the bottom thereof lugs 33 which are secured substantially in the manner shown in Fig. 7. Extending from the sides of the tray 32 are flanges 34 which form a support for a cloth or other fabric sheet 35 mounted upon a roller 36 which is journaled in lugs 37 secured to opposite sides and at one end of the tray. In order to cover the fabric 35 there is provided a perforated plate 38 having a suitable handle or hasp 39 which engages the eye 40. If desired the plate 38 may be hinged or otherwise secured to the tray 32 so that the same may be raised, for removing the cloth 35 and the contents of the tray. It will be understood that this tray can be used in either form of the invention disclosed in Figs. 1 and 3, the members 17 shown in Fig. 1 and 22 shown in Fig. 3 being so arranged as to rest upon projections or lugs 33 and have located therebetween the entire tray structure, including the roller. This modified form of the tray is used when it is desired to prevent all possibility of the pencil points coming in contact with the disinfectant in the tray. It may by some circumstance happen that a pencil point may pass through one of the perforations of the plate 38 or the other plates which are used as covers for the tray but with the use of the fabric cloth 35 a point cannot possibly come in contact with the disinfectant. The disinfectant can be removed by raising the cover to the position shown in Fig. 6 and throwing back the fabric 35. The roller 36 may have wound therearound a sufficient length of fabric 35 to furnish several strips so that if the fabric should become weakened because of its closeness to the disinfectant or for any other purpose should require replacement the fabric can be unwound from the roller. By making the lugs 33 Fig. 7 rigid with the bottom of the tray instead of bending over the sides of the boxes, as at 14, Fig. 3, all bending of said lugs is prevented.

What I claim is:—

1. A pencil disinfecting device comprising a casing, a removable plate mounted therein, a tray carrying disinfectant material, plate supporting means rigid with the plate adapted to position the tray and means carried by the plate for holding the pencils in vertical position but spaced from the tray.

2. A pencil disinfecting device comprising a casing, a removable plate therein, a disinfectant tray located in the bottom of the casing, tabs rigid with and extending from the tray and engaging the casing, plate supporting means extending from the plate adapted to engage the tabs to hold the tray in place, and means carried by the plate for holding the pencils vertical so that their points may be in proximity to but spaced from the tray.

3. A pencil disinfecting device comprising a casing, a removable rack carried therein, a disinfectant carrying tray in the bottom of the casing, a cover for said tray, rack supporting means depending from the plate engaging said cover adapted to position the cover and rack, and means for holding the pencils in a vertical position so that their points will be above the tray.

4. A pencil disinfecting device comprising a casing, a cover hingedly connected thereto, a pencil carrying rack removably mounted within the casing, a handle for said rack, disinfectant carrying means located in the bottom of the casing, and rack supporting means carried by the rack adapted to engage the disinfectant carrying means, said cover adapted to engage the handle to force the supporting means against the disinfectant carrying means and thereby hold the disinfectant carrying means against displacement.

5. A pencil disinfecting device comprising a casing, a horizontally disposed disinfectant carrying tray within the casing, and means for holding the points of the pencils equi-distant from the tray.

6. A pencil disinfecting device comprising a casing, a disinfectant carrying tray, and means for holding the pencils out of contact one with the other.

7. A pencil disinfecting device comprising a casing, a disinfectant carrying tray located in the casing, and means for holding the pencils spaced one from another and for holding the points thereof substantially equi-distant from the tray.

8. A pencil disinfecting device comprising a casing, a tray located therein, a rack for carrying the pencils, means to move the rack in a direction toward or away from the tray, and means for holding the rack in any adjusted position.

9. A pencil disinfecting device comprising a casing, a rack adjustably mounted within the casing, a tray located within the casing, and a perforated plate substantially parallel to the tray located in proximity to the points of the pencils which are carried by the rack.

10. A pencil disinfecting device comprising a casing having substantially vertical walls and a cover hinged to the top thereof, a tray for disinfectant material located in the bottom of the casing, a rack of substantially the same dimensions as the horizontal cross section of the casing and adapted to carry pencils, and means for removing the rack and the pencils carried thereby when the cover is raised.

11. A pencil disinfecting device comprising a casing, a rack for carrying the pencils, a perforated plate, means for making the rack and plate rigid one with respect to the other, a tray located in the bottom of the casing, a cover pivoted to the top of the casing, and means for raising the rack and pencils carried thereby and the perforated plate when the cover is raised, said perforated plate being of dimensions substantially the same as the cross section of the casing, and being located below the points of the pencils.

12. A pencil disinfecting device comprising a casing, a perforated rack within the casing, means to adjust the position of the rack, the pencils adapted to pass through the perforations of said rack, and means rigid with the rack engaging the pencils adapted to space said pencils one from the other, and a tray for carrying disinfectant material located within the casing.

13. A pencil fumigating device comprising a casing, a disinfectant housing device located therein, a movable perforated cover, and a movable sheet of fabric material located below said cover when the latter is in place and means to hold the pencils in vertical position with the points thereof in proximity to the perforated cover.

14. A pencil disinfecting device comprising a casing, a rack removably mounted therein and provided with openings, a spiral spring secured to the rack located adjacent each of the said openings, and a disinfectant carrying means within the casing located below the rack, the plane of the spring members being substantially parallel to the plane of the plate, so that the pencil points pass through the openings and through the center of the spiral springs, by which the pencils are gripped and held spaced from the disinfectant carrying means.

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

LOUIS C. WITKOWSKI.

Witnesses:

ROBT. T. LANG,

W. H. WAKEFIELD.