Feb. 17, 1953 J. F. HOLTJE 2,629,043

ILLUMINATED MESSAGE CASE

Filed Dec. 22, 1947

Fig. 1.

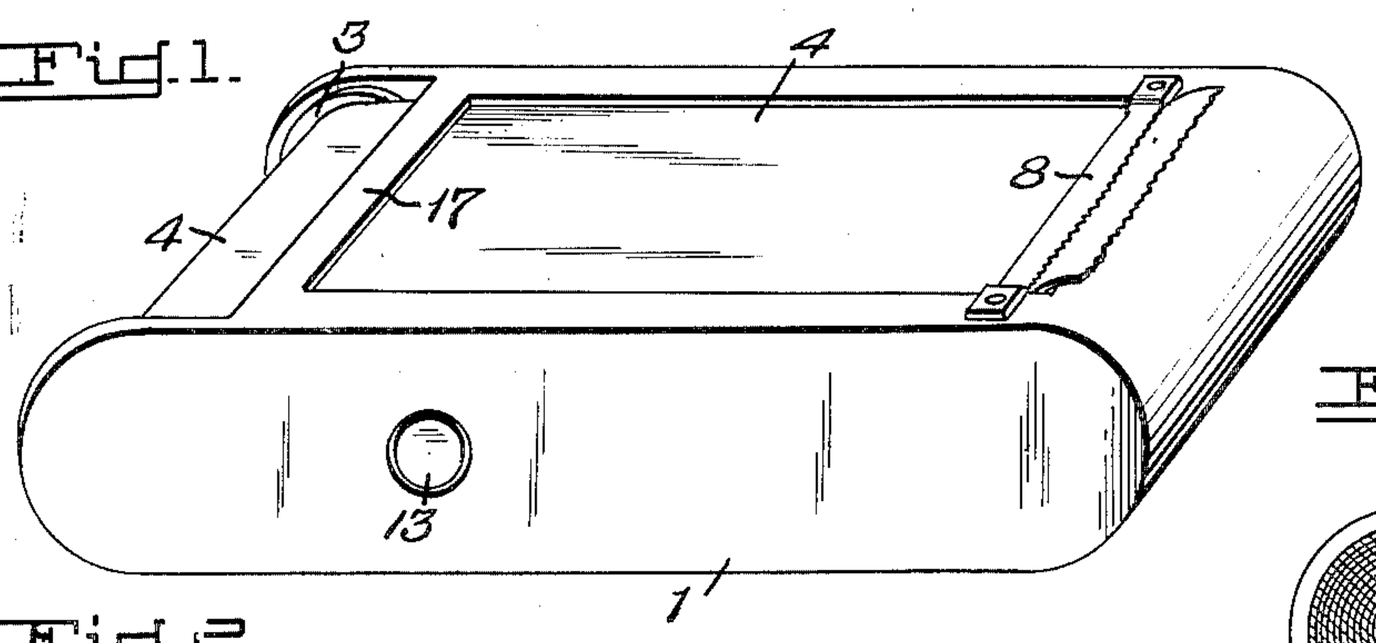


Fig. 6.

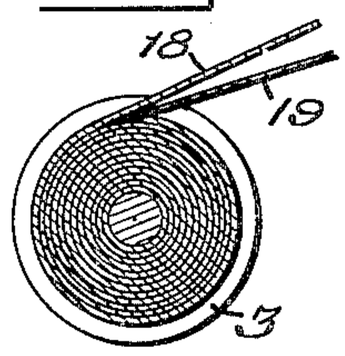


Fig. 2.

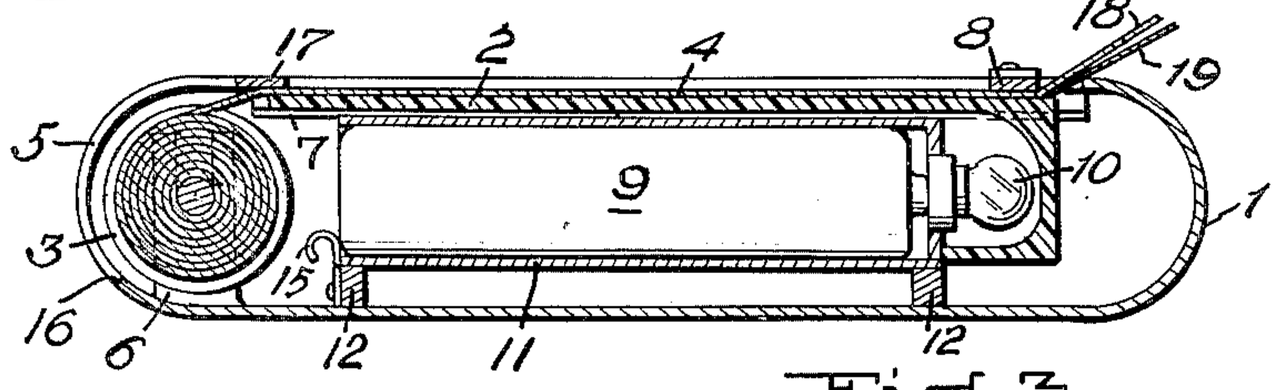


Fig. 3.

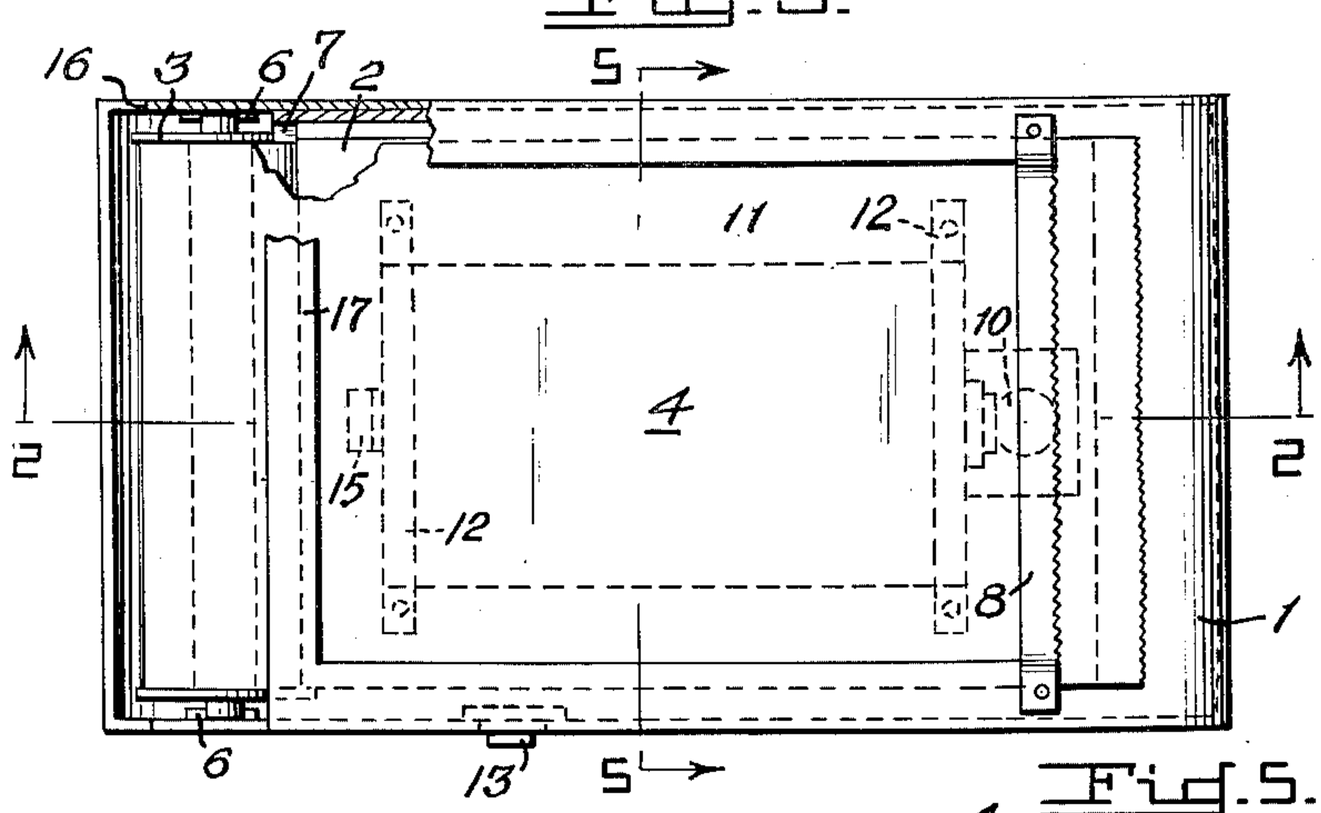


Fig. 4.

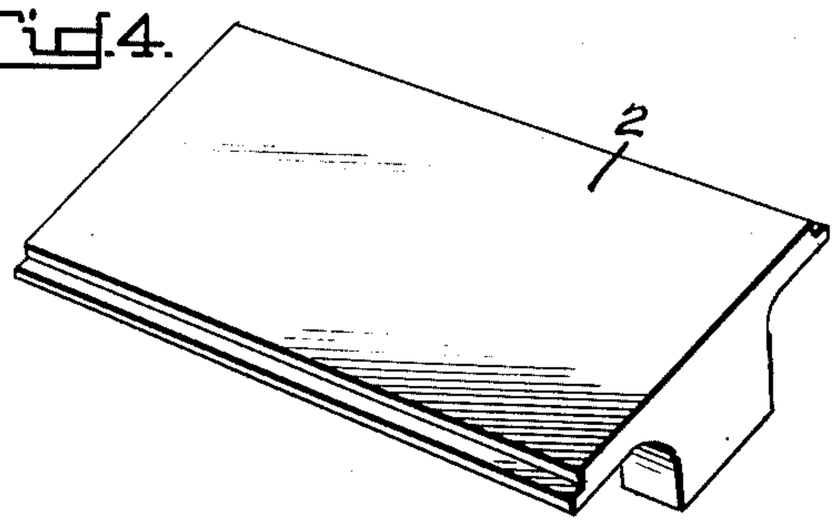
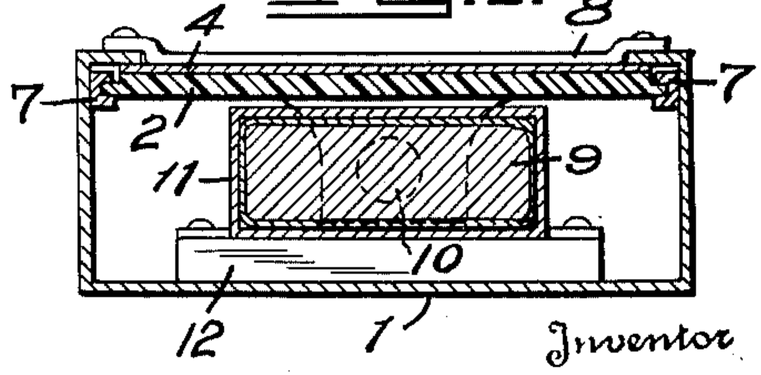


Fig. 5.



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2,629,043

ILLUMINATED MESSAGE CASE

John F. Holtje, New York, N. Y.

Application December 22, 1947, Serial No. 793,177

6 Claims. (Cl. 240—6.4)

(Granted under Title 35, U. S. Code (1952), sec. 266)

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The invention described in the foregoing specification and claims may be manufactured and used by or for the Government for governmental purposes without the payment to me of any royalty thereon.

This application is a continuation in part of my copending application Serial No. 487,271, filed May 17, 1943, now abandoned.

This invention relates to an illuminated message case, particularly adapted for the preparation and reading of written messages, and the like, in the dark.

The primary object of the invention is to provide a means for the preparation of written messages with safety in areas where the use of a flashlight or like means would be dangerous.

While the invention hereinafter set forth will be described in one particular instance as applied to a field message case, it is to be understood that the invention is not to be limited thereto.

At present, a reconnaissance scout responsible for transmitting written messages at night to his superiors utilizes a flash-light or lamp as a light source. In order to black out the light, the writer of the message ordinarily makes use of a coat or shelterhalf as a shield. This necessitates the writer to kneel or crouch on the ground. The cramped position of the writer affects the clarity and legibility of the message and a slight movement of the writer will permit light leaks and consequent detection by any nearby enemy personnel.

To this end, I have devised a message writing device comprising a case within which is enclosed a light source, means for restraining light from emitting from the case and a cellulose film having an opaque wax coating upon which the message is to be written.

The invention can best be understood from the following description to be read in view of the accompanying drawings in which:

Figure 1 is a view in perspective of the preferred embodiment of the invention,

Figure 2 is a sectional view on the line 2—2 Figure 3,

Figure 3 is a view looking at the inside of the case,

Figure 4 is a view in detail of one feature of the invention.

Figure 5 is a section on line 5—5 of Figure 3.

Figure 6 is a cross section through a modified type of message film.

Referring to the drawing, 1 indicates a case having rounded or curved edges to enable the case to be easily slipped into a coat pocket. I

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have found that the most convenient sized case is that which approximates in size the average sized folding camera case, that is approximately 6 inches long by 3 inches wide. On one flat surface of the case, I provide an opening occupying the greater portion of the surface into which is inserted a slab 2, of thermoplastic such as a methyl methacrylate resin which is the commercial product known as "Lucite." The slab or pane 2 is held in position by means of channel members 7 within the grooves of which the side edges of the slab fit.

Positioned within the case, and close to one end thereof, is a spool 3, upon which is wound a roll of cellulose type film completely coated with a uniform opaque coating of wax. An opening 5, of sufficient width is provided through which the spool of film can be inserted into the case onto spool sockets 6. As shown in Figure 5, the film 4 passes over the slab or pane 2 of "Lucite" and its two longitudinal edges slide between the slab 2 and the parts of the case 1 which extend over the side edges of the slab 2. If desired, a substantially semi-cylindrical opaque cover may be hinged at its lower edge to the adjacent lower edge 16 of the casing, to effect a light-impervious closure of opening 5 to thereby prevent any possibility of stray light escaping from the casing. This cover may have a spring hinge urging it to closed position and/or a spring catch on its upper edge engaging a latch on transverse strip 17 of case 1. At the end of the case opposite from the opening 5 is a combined clamp and film cutter 8 which serves to keep the film firmly pressed against the Lucite slab and also affords means to tear the film easily and with a straight edge.

Also contained within the case is a light source, comprising a battery 9 and a light bulb 10. The battery may be encased in a suitable container 11 secured to supports 12 which are affixed to the bottom of case 1. A push button connection 13 is provided on the side of the case for closing a circuit, not shown, including the battery and bulb. A spring catch 15 attached to support 12 serves to hold the light source means in position.

The Lucite slab 2 as shown in Figures 4 and 5 is preferably formed with rabbetted side edges and a downwardly extending reverse bend at one end. By this means light emitted from the light bulb will be caused to traverse the slab or plate from end to end.

In one form of the invention, the film 4 comprises a strip 18 which, per se, may be transparent, and coated on both sides with an opaque

wax such, for example, as that used to coat ordinary carbon paper. The two coats are of a combined thickness such as will render the strip opaque. In addition, a strip 19 of thin, uncoated paper, is interwound with the waxed film in such a manner that the aforesaid strip 19 will be interposed between the strip 18 and slab 2, when the composite film is drawn thereover, as shown at Figure 2.

With the film thus drawn over the slab, the bulb 10 is illuminated by pressing button 13, and a pen, pencil, nail, or specially prepared stylus, is used to write upon the exposed portion of the film. As the lines are formed, the upper wax coating, or a portion thereof, is removed by the stylus along the line of writing so that a faint light appears, therethrough, thus enabling the writer to properly form the characters and to review what has been written. The light so transmitted, while readily observable by the writer, is so faint as to be unnoticeable a very short distance away. At the same time, the written message is transferred by the second wax coating on the lower side of strip 18, to the paper strip 19 therebeneath, in the manner of ordinary carbon paper, thus providing a duplicate message for retention by the writer or for transmittal to a second destination.

When the message is completed, the film is drawn out the necessary distance past strip 8, and torn off for transmittal to the desired destination. A message thus written upon strip 18, may be easily read by holding it up to a subdued light. For example, messages so produced have been read by holding them above the horizon on a moonlit or starlit night. Or they may be read by superposing them over the luminous dial of a watch. It is also contemplated that they may be ready by placing them over the slab 2 of a message case such as the one shown but without a film thereover.

It is also within the purview of my invention to omit the strip 19 and the lower wax coating on strip 18, in which event only a single copy is produced; or two interwound strips 19 may be provided to form three copies in conformance with Army message center routine. In the latter case, of course, the strip 19 immediately next to strip 18, will have a carbon wax coating on its under side to transfer the message to the lowermost strip. In all cases, the wax film or films are so proportioned as to thickness, as to be opaque before a message is written, but to transmit a faint light along and through the line of writing after the stylus has passed therealong and has removed a portion of the upper wax coating.

Thus I have provided a message case which, in combination with the specially-prepared film, may be used with ease to write messages in complete darkness and without danger of detection from the accidental escape of light rays. The case is conveniently carried in the user's pocket and messages so written are easily read from natural light sources or from artificial illumination so faint as to be undetectable a few feet away.

In the claims, the word "film," as distinguished from "strip" or "sheet," is used to designate the composite roll of material on spool 3. Thus, for example, where two interwound strips 18 and 19 are used as in Figure 6, the term "film" includes both of said strips.

While I have shown and described the preferred form of the invention, together with a

number of modifications, other changes, substitutions and modifications will occur to those skilled in the art after a study of the present disclosure. Hence the disclosure should be taken in an illustrative rather than a limiting sense; and it is my desire to reserve all such changes as fall within the scope of the subjoined claims.

Having now fully disclosed the invention, what I claim and desire to secure by Letters Patent is:

1. A black-out message writing case, said case having opaque side and bottom walls and an opening in its top wall, a pane of translucent plastic slidable into said case beneath overlapping said edges of said case to close said opening, a lamp in said case beneath said pane, switch means located on said case exteriorly thereof to control energization of said lamp, and a roll of film journaled in one end of said case for movement over and across said pane, there being guide channels formed between the side edges of said pane and the overlapping side edges of said casing to receive the respective side edges of said film and guide the same across said pane, said film having an opaque ceraceous coating on at least one side thereof.

2. In combination, a black-out message writing case having opaque walls except for a translucent pane of material forming a portion of the top wall thereof, the adjacent walls of said casing overlapping the side edges of said pane, a roll of film journaled in said case, said film being guided for movement over and in contact with said pane by and beneath said overlapping edges, said film having an opaque ceraceous coating on its side remote from said pane, and means within said case for illuminating said pane.

3. The combination with an inclosed case, said case being opaque except for a plane writing surface translucent over its entire area and forming a wall portion of said case, of a discrete translucent sheet extending completely over and in contact with said writing surface and separable as a unit therefrom, said sheet having an opaque removable film completely covering its exposed outer surface, and illuminating means in said case.

4. In a black-out message writing device, a completely inclosed case having a translucent writing surface forming a wall portion of said case, said case being otherwise opaque, a lamp in said case to illuminate said writing surface, a one-piece strip of flexible film, an opaque wax-like layer adhesive to and completely covering one surface of said film, and means carried by said case and mounting said film over and for longitudinal translation across said writing surface with said wax-like layer outermost and in completely covering relation with said surface, whereby said casing is rendered impervious to light when said film is in position thereover.

5. In a message-writing device for use at night, a closed case opaque except for a translucent writing surface forming one wall portion of said case, illuminating means within said case, control means externally of said case for turning said illuminating means on and off at will, an elongated translucent discrete manipulable film having an opaque removable coating on one side thereof, and means carried by said case guiding said film for longitudinal translation over, across and in completely-covering contact with said writing surface to cover the same, said film having its coated side outermost.

6. In a black-out message writing case, a cas-

ing closed and opaque except for an opening in one wall thereof, a translucent writing surface secured to said casing and completely covering said opening in contiguous relation with the edges thereof, a film comprising an elongated strip of flexible translucent material having an opaque coating removably adhering to one side thereof, means carried by said casing and mounting said film for longitudinal translation over and in contact with said surface to completely cover said opening and with said coating outermost, whereby said casing is rendered impervious to the ingress of light, and means within said casing for illuminating said surface.

JOHN F. HOLTJE.

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