No. 880,657. PATENTED MAR. 3, 1908.

L. G. HAASE.

FILM PACK.

APPLICATION FILED JULY 30, 1907.

Fig. 1.

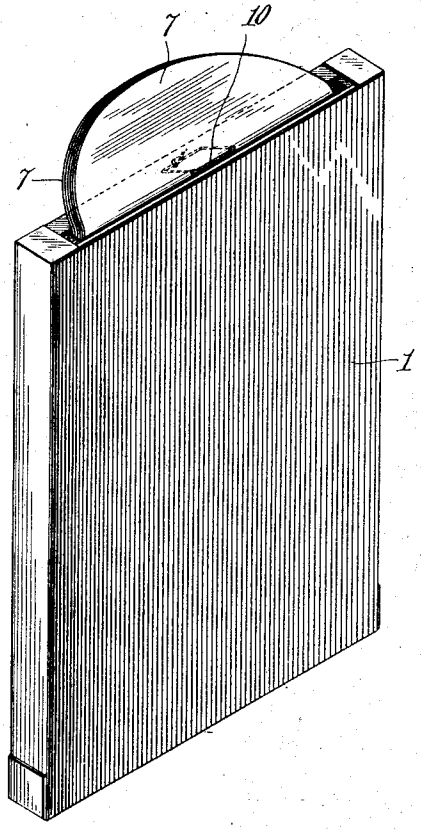


Fig. 2.

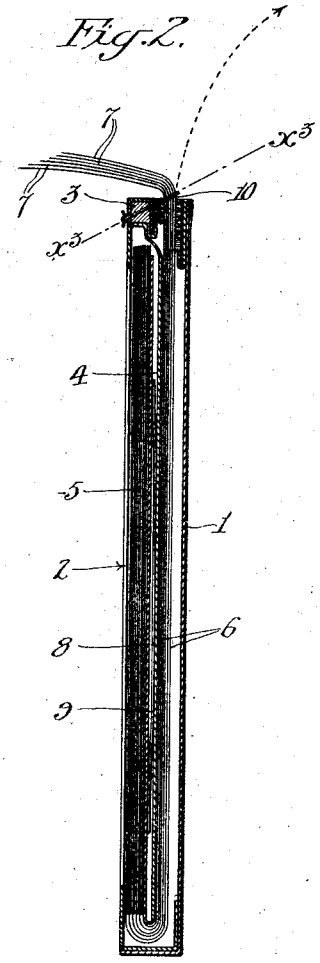


Fig. 3.

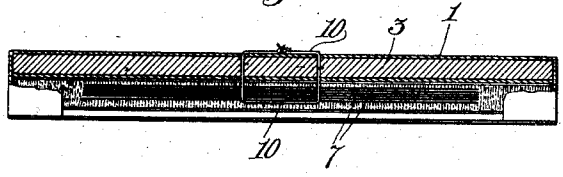
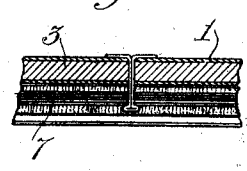


Fig. 5.



Witnesses:-

Frank L. A. Graham

Louis W. Gratz

Fig. 4.



Inventor;

Leo G. Haase.

by Townsend & Townsend & Hackley

His attys.

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEO G. HAASE, OF PASADENA, CALIFORNIA.

FILM-PACK.

No. 880,657. Specification of Letters Patent. Patented March 3, 1908.

Application filed July 30, 1907. Serial No. 386,311.

To all whom it may concern:

Be it known that I, LEO G. HAASE, a citizen of the United States, residing at Pasadena, in the county of Los Angeles and State of California, have invented a new and useful Improvement in Film-Packs, of which the following is a specification.

This invention relates to an improvement in the well known film pack used in the photographic art. With the film pack now generally in use both hands of the operator are required to manipulate it and it is necessary that directions be prominently placed on the pack cautioning the user to be careful in performing certain operations. This is due in one instance to the fact that the tabs to which the films are attached do not always travel in a straight line when pulled out, but rub against one or the other side of the case cutting the edge of the paper and often making it not only impossible to draw that tab out, but also putting all the other tabs with their attached films out of use so that unless access can be had to a dark room no more pictures can be taken with that pack.

Another difficulty with the film pack, as at present constructed, is that it frequently happens in drawing out a tab with its film that the whole pack will follow, thus destroying not only one film but the whole pack. This more often happens if the balance of tabs are not most securely held down by one hand.

Another disadvantage is that in holding down the balance of tabs the operator unconsciously pushes the tabs towards the edge of the case and each time one of the films is retired after its exposure it shoves the tabs and unnecessarily crowds them against the edges so that succeeding tabs are apt to be nicked in their edges and cause a narrow strip to roll up which generally places the pack out of commission.

The objects of this invention are to remove these difficulties by a simple and inexpensive device whereby all the tabs and films except the one being manipulated are firmly held properly in place without requiring the hand of the operator, which is particularly advantageous when using a tripod as then it is more difficult for the operator to hold down the balance of the tabs.

Another advantage of the present invention is that the tabs cannot be tampered with except by leaving a telltale mark.

The accompanying drawings illustrate the invention and referring thereto:—Figure 1 is a perspective view of the film pack. Fig. 2 is a vertical section through the pack. Fig. 3 is a transverse section on the line x^3—x^3 Fig. 2. Fig. 4 is a modification showing a different method of attaching the tab. Fig. 5 is another modification of the same.

The pack is constructed in well known manner comprising an outer case 1 having a large opening 2 through which the exposure of the film is made. A wooden bar 3 at the top of the case extends across the front edge inside of the case, and depending therefrom is a partition or diaphragm 4. The respective films 5 are arranged in front of the partition 4 and the respective films are attached to their respective black paper strips 6, each strip 6 having the usual tab 7, the tabs extending through the aperture in the upper edge of the case. Arranged between the films 5 and partition 4 is the usual follower plate 8 which is provided with springs 9 which bear against the partition 4 and thus hold the follower plate 8 forward against the films, thereby holding the films flatly in place. This construction is well known and further detail description is unnnecessary.

The particular feature which constitutes my invention consists of a fastening device which detachably holds all of the tabs or strips together and also holds them detachably to the case 1, and in the preferred embodiment herein shown this fastening device comprises a thread or wire 10 which is passed through two holes in the respective tabs 7 preferably at or near the junction of the tabs 7 with the strips 6, thereby forming a loop which holds the strips or tabs to the case. As clearly shown in Fig. 2, this loop or stitch extends diagonally through the bar 3 and through the case 1. It will be observed that this fastening device holds all of the tabs, strips and films from being disarranged. In removing the first black paper strip or "safety cover", which before the pack is used closes the exposure opening 2, the tab of the safety cover is torn loose from the thread 10 and the safety cover is then removed in the ordinary manner. In tearing the tab from the thread 10 it should be understood that the tab is not torn from the strip of paper but is simply pulled away from the fastening thread which obviously causes a small tear in the form of a short slit in the tab, which, however, does not weaken the paper, and the tab still has a permanent

and secure connection with the strip. In pulling out the strip, by means of the tab, it will be observed that the fastening thread 10 holds the other strips securely from being shifted sidewise or from being withdrawn with the strip which is being removed, and obviates the necessity of holding the thumb on the remaining tabs. After the first film has been exposed and is ready to be retired back of the partition 4, the tab of the strip attached to that film is torn from the fastening thread 10 and then that tab is pulled out to retire the film and the other films are in turn manipulated in the same manner. All of the films which are connected with those tabs which have not been separated from the fastening are securely held in position and can not become dislodged until their tabs are detached from the fastening 10. This stitch or loop may be located at other points on the tabs, if desired. For example, the tabs may be of graduated width and all of them pasted to the case at 11 as shown in Fig. 4. In place of the stitch a tack could be driven through the tabs into the bar, as shown in Fig. 5, and to detach a tab the tab would be pulled to cause the head of the tack to tear through the tab.

What I claim is:—

1. A plurality of photographic films, each having a separate tab connected thereto, a casing inclosing said films, and means for detachably fastening the tabs together.

2. A plurality of photographic films, each having a separate tab connected thereto, a casing for said films, and means for detachably fastening the tabs together and to the casing.

3. A plurality of photographic films, a casing inclosing said films each film having a separate tab connected thereto, and a thread passing through the tabs and case.

4. A casing, a plurality of photographic films therein, and means positively fastening all of the films to the casing.

5. A film package comprising a casing having connected chambers for exposed and unexposed films, a plurality of films in the casing, each film having a flexible manipulating portion, and means detachably securing the flexible manipulating portions to the casing.

6. A casing, a plurality of films in the casing having tabs which are fastened to the casing, thereby requiring a tab to be torn from the casing before moving the film.

7. A casing, a plurality of films therein, and severable devices fastening the respective films to the casing.

In testimony whereof, I have hereunto set my hand at Los Angeles, California, this 24th day of July, 1907.

LEO G. HAASE.

Witnesses:

GEORGE T. HACKLEY,

FRANK L. A. GRAHAM.