May 3, 1960 E. A. BRAUN 2,935,190

FILM GUARD

Filed Oct. 10, 1957

Fig. 1.

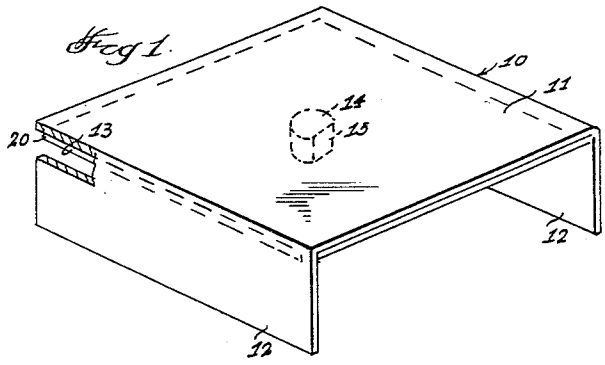


Fig. 2.

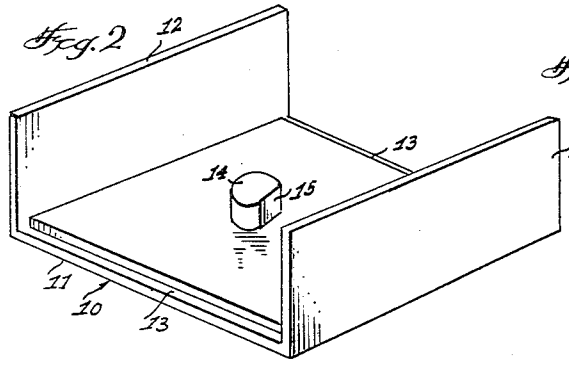


Fig. 3.

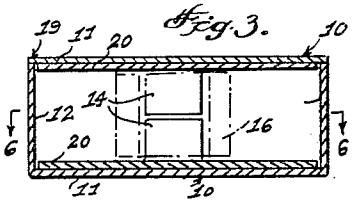


Fig. 4.

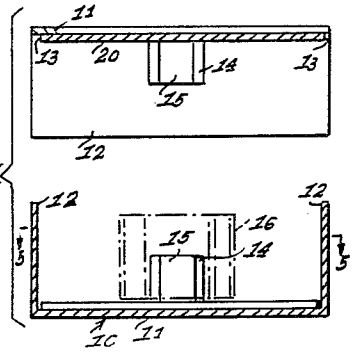


Fig. 5.

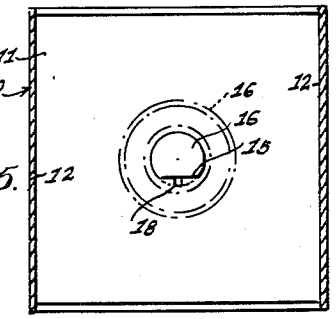


Fig. 6.

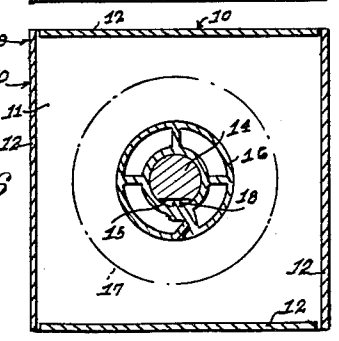


Fig. 7.

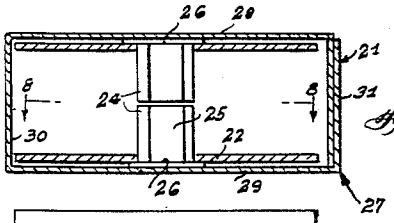


Fig. 8.

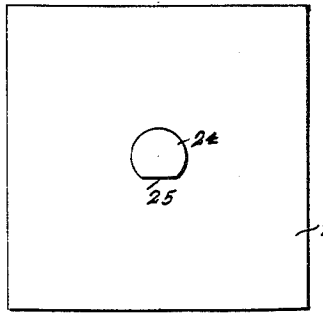
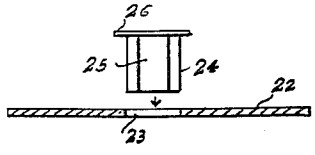


Fig. 9.



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FILM GUARD

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2 Claims. (Cl. 206—52)

This invention relates to roll film, and more particularly to a guard for roll film.

The object of the invention is to provide a guard or protective shield that is adapted to be used for holding rolls of film, as for example when such rolls of film are being stored or shipped.

Another object of the invention is to provide a guard for rolls of film, wherein in one form of the invention the guard includes a pair of similar sections that are adapted to be arranged in interengagement with each other, each of the sections being provided with a hub which is adapted to extend through the core of the roll of film being shipped or stored or handled.

A further object of the invention is to provide a film guard which is extremely simple and inexpensive to manufacture.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings, forming a part of this application, and in which like numerals are used to designate like parts throughout the same.

Figure 1 is a perspective view showing one of the sections such as the upper section of the film guard, and with parts broken away and in section.

Figure 2 is a perspective view of one of the sections of the film guard, and looking in the opposite direction from the view shown in Figure 1.

Figure 3 is a sectional view taken through the assembled film guard with the upper and lower sections interconnected together.

Figure 4 is a sectional view showing the sections of the film guard separated or disassembled.

Figure 5 is a sectional view taken on the line 5—5 of Figure 4.

Figure 6 is a sectional view taken on the line 6—6 of Figure 3.

Figure 7 is a sectional view illustrating a modification.

Figure 8 is a sectional view taken on the line 8—8 of Figure 7.

Figure 9 is a sectional view showing the hub disconnected from the plate for use with the assembly of Figure 7.

Referring in detail to the drawings, and more particularly to Figures 1–6 of the drawings, there is shown a film guard which is indicated generally by the numeral 19, and the film guard 19 comprises a pair of similar sections which are each indicated generally by the numeral 10. Each of the sections 10 has the same construction and each comprises a rectangular body portion 11 that has a pair of flaps or wall members 12 extending therefrom. The flaps 12 are arranged in spaced parallel relation with respect to each other, and the flaps 12 are arranged at right angles with respect to the body portion 11.

Arranged contiguous to the inner surface of each of the body portions 11 is a rectangular base 20, and as shown in Figure 2 for example, the width of the base 20 is less than the width of the body portion 11 so that there

is defined adjacent the side edges of the base 20, a pair of spaced parallel longitudinally extending channels or recesses 13. Thus, when the pair of sections 10 are arranged together, the flaps 12 of one section will project into the recesses 13 of the other section so that a snug fit will be insured between the pair of interfitting or coacting sections 10.

Extending outwardly from the base 20 and secured thereto in any suitable manner is a substantially cylindrical hub 14, and the hub 14 is provided with a flat surface 15, Figure 2. When the pair of sections 10 are assembled to form the film guard 19, the pair of hubs 14 are arranged in end to end relation with respect to each other, and these hubs 14 project through the core 16 of a roll of film 17. The flat surface 15 provides clearance for the keyways 18 of the film core 16.

Referring to Figures 7, 8 and 9 of the drawings, there is shown a modified film guard which is indicated generally by the numeral 21, and the film guard 21 comprises a pair of spaced parallel rectangular plates or bases which are each indicated by the numeral 22. Each of the plates 22 is provided with a central opening 23 through which extends a hub 24, and the hubs 24 each have a flat surface 25 thereon. An enlarged flange 26 is provided on an end of each of the hubs 24 so as to prevent the hubs 24 from moving all the way through the openings 23. The numeral 27 indicates a box-like housing which is adapted to receive therein the plates 22 and their associated parts. As shown in Figure 7 the housing 27 is of the type that includes wall sections 28 and 29, and wall members 30 and 31, and the box-like housing 27 may be provided with a suitable flap so that access can be gained to the interior of the housing 27, as for example when a roll of film is to be removed or replaced therefrom.

In the film guard shown in Figures 1–6, the device is indicated generally by the numeral 19 and comprises the pair of similar sections 10 which are arranged in interfitting relationship with respect to each other. The sections 10 may be made of bendable or foldable material such as stiff cardboard, and each of the sections 10 comprises the rectangular body portion 11 that has the pair of right angularly arranged flaps 12 extending therefrom. The base 20 is arranged contiguous to the inner surface of each body portion 11, and extending from each base 20 is the hub 14. The bases 20 are of slightly less width than the body portions 11 whereby the elongated recesses 13 are provided. When the device 19 is in its assembled position, the pair of sections 10 interfit with each other and the sections 10 are arranged at 90 degree angles with respect to each other. That is, the flaps 12 of one section 10 extend between the flaps 12 of the other section 10, and the free edges of each of the flaps 12 are snugly received in the recesses 13. The core 16 of the roll of film 17 is arranged on the pair of hubs 14, and the flat surfaces 15 of the hubs 14 provide clearance for the keys 18 of the usual or conventional core 16, the numeral 17 in Figure 6 indicating a roll of film on the core 16. The device 19 may be arranged in a box-like housing when it is being shipped or stored.

Referring to Figures 7, 8 and 9 of the drawings, there is shown a modified film guard 21 which comprises a pair of spaced parallel plates 22 which each have a hub 24, and the hubs 24 are adapted to project through a core such as the core 16 of a roll of film. The roll of film is adapted to be interposed or positioned between the plates 22, and the plates and hubs are held connected together by means of the flanges 26 on the ends of the hubs. The plates and hubs with the roll of film therebetween or thereon, are adapted to be conveniently shipped or stored or placed in a housing or casing such

as the box-like housing **27**, and the housing **27** may be provided with a suitable flap or the like or door or the like so that the film guard with the roll of film can be readily removed from the housing or placed therein.

The parts can be made of any suitable material and in different shapes or sizes.

The construction shown in Figures 7, 8 and 9 is very economical to use since it is only necessary to punch the holes **23** in the members **22** whereby the hat-shaped piece or hub **24** can be readily pushed through the hole **23** and into the core. This would save assembly costs since each unit could be assembled by the user as it is required.

Shipping and storing small rolls of film such as 35 mm. film, or film having television commercials thereon have heretofore been a problem. These vary in length from 8 seconds, 10 seconds and 20 seconds, to 30, 45, 60, and a minute and 15 seconds and longer, or to other lengths. Placing such film in a box is unsatisfactory because the film has a tendency to roll around in the box and unless a great number of different sizes of boxes were made, it would be a complicated procedure, and such boxes would provide little protection to the film unless stuffed with paper or other shock absorbing material to prevent the film from bouncing around in the box.

Reels for small rolls of 35 mm. film are not economical. Heretofore, it has been the practice to place film on a core and then wrap in tissue and place a tape on the outside to designate the nature of the film inside and naturally the tissue paper is damaged or destroyed in the process of unwrapping.

The film guard of the present invention makes various lengths of films fit the same size box snugly for shipment or storage, and the contents can be marked on the outside and the package can be used over and over again.

The sections may be made of corrugated cardboard which has been scored at points which are arranged at the junction of the flaps and body portion whereby the parts can be readily folded. The rectangular base **20** is adapted to be fastened to the body portion **11** in any suitable manner, as for example by means of an adhesive, and the base does not come to the edges of the body portion but is short thereof so as to define the recesses **13**. The hubs **14** are arranged at the center of the bases **20** and the hubs may be made of plastic, wood, metal, or the like and the hubs are flattened as at **15** on one side to take care of cores which are keyed and tapered so that a core can be placed on the hub easily. After a core with film is placed on one hub **14**, another duplicate guard or section is placed on top and the flaps **12** are folded into the recesses **13** to make a sturdy box-like member which is then sealed with tape, tied or the like.

The film guard can be used without the larger section of corrugated cardboard. Using only the section or plate **22** with its hub **24**, one plate can be placed under and another plate can be placed above a core of film and with the film between the plates, the entire unit can be placed in a tight fitting box which prevents the film from bouncing or rolling around, and such a box is indicated generally by the numeral **27**. The box or housing **27** can be marked with identifying marks and the film can be removed and replaced as often as is desired.

The device of the present invention thus provides a simple means to change a roll of film into a square shape through packaging and to provide greater ease and convenience for handling, storing or packing film, tape, ribbon, or similar materials. By using either its self-container or a snug fitting box as previously described, the film guard will protect the contents thereof against damage. The film guard also provides a suitable flat surface for identification including the subject of the film, code number, length, and other information. This identification on the side or on the end flap of the self-container or box is visible even when the film guard containers are stacked one on top of another and provides simple access to the desired film or print.

Minor changes in shape, size and rearrangement of details coming within the field of invention claimed may be resorted to in actual practice, if desired.

I claim:

1. In a film guard, a pair of spaced parallel rectangular plates said plates being of the same size and shape, there being a central opening arranged in each of said plates, a hub extending through each of said openings and said hubs having means thereon for accepting keyed cores, said hubs being arranged in end to end aligned relation with respect to each other and adapted to extend through the core of a roll of film, an enlarged flange on an end of each of said hubs, so as to prevent the hubs from moving all the way through the openings, and a box-like housing surrounding said film guard and including wall sections and wall members and a flap so that access can be gained into the interior of the housing, as for example when a roll of film is to be removed or replaced therefrom.

2. In a film guard, a pair of spaced parallel rectangular plates, said plates being of the same size and shape, there being a central opening arranged in each of said plates, a hub extending through each of said openings and said hubs having means thereon for accepting keyed cores, said hubs being arranged in end to end aligned relation with respect to each other and adapted to extend through the core of a roll of film, an enlarged flange on an end of each of said hubs, so as to prevent the hubs from moving all the way through the openings, and a box-like housing surrounding said film guard and including wall sections and wall members and a flap so that access can be gained into the interior of the housing, as for example when a roll of film is to be removed or replaced therefrom, each of the hubs having a flattened surface thereon.

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