

Description

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates generally to film holders, and particularly to such holders that are mountable on a photographic camera back and cooperate with a compatible film assemblage to facilitate daylight-handling of one or more photosensitive film sheets in the assemblage.

Description of the Prior Art

The prior art is replete with film holders of the type referred to above. Examples may be found in the following documents:

U.S. Patent No. 3,053,160 - Discloses a film holder (12), mountable on a camera back, for holding in exposure position, and then initiating processing of, a self-processable film assemblage (68). The assemblage (68) is held in exposure position between a fixed rear plate (20) and a fixed front plate (18) having an exposure window. A slider (116) is manually actuatable in a plane parallel with those plates (20, 18) to move assemblage-engaging latches (106 & 102, 104) perpendicularly away from the assemblage, to permit withdrawal of the assemblage, and is spring-returned (122, 128) when released to restore said latches (106 & 102, 104) to their assemblage-engaging positions. This film holder is similar to the Polaroid 545 Land Film Holder used by professional photographers.

U.S. Patent No. 3,319,555 - Discloses a film holder (10) having a pressure plate (21) that is actuated to move perpendicularly relative to the film plane by movement of a slider (11) parallel with said plane. The slider (11) has angled spring legs (31) thereon in slidable engagement with the pressure plate (21). The spring legs cause the pressure plate to move away from the film plane when the slider is pushed inwardly, and back toward said plane when the slider is released and spring-returned (17) to its initial, outward position.

International Patent Publication No. WO 87/01469 - Discloses a film holder (47), usable in a camera back, comprising base and cover portions (26 & 33a) that are telescopically associated for relative movement toward and away from each other in directions perpendicular to the film plane. The base and cover portions are normally biased away from each other into an open position by springs (45) disposed therebetween. A rigid, planar film-supporting surface (27) is fixed inside the base portion in parallel relation to the top wall (38) of the cover portion, to define a film pathway (46) extending therebetween in alignment with an access slot

(42) in an end wall (39) of the cover portion. When the holder is in its normally open position, a film assemblage (1a) can be freely inserted and withdrawn through the slot and along the pathway. With an assemblage fully inserted, the base and cover portions are urged toward each other (in opposition to the springs) into a closed position by the act of loading the holder into a spring-loaded camera back. When the holder is thus brought to its closed position, a tab (43) and a stop (43a), which depend from the cover portion top wall, are caused to protrude into the pathway so as to interact with a clip (8) and a stop-strip (14a) on the assemblage. To withdraw or reinsert an assemblage, the holder must first be removed from the camera back and thereby restored to its open position, wherein the tab and stop are both clear of the pathway.

SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide a holder for a photographic film assemblage which is readily and reliably cooperable with the film assemblage in a way that ensures accurate positioning and control of all operative assemblage components in a more economical and convenient manner than the prior art holder.

According to the present invention, there is provided a holder for a photographic film assemblage as defined in claim 1.

Essentially, the holder for a photographic film assemblage according to the present invention comprises a substantially flat pressure-applying member disposed between, and substantially parallel with said housing front and rear walls, said pressure-applying member being movable in directions substantially perpendicular to said front wall and urged by resilient means mounted thereon, toward said movement path, to press the film assemblage, when it is in its seated position, against said front wall frame portion;

a first blocking member disposed inside said housing in said second end region, said first blocking member being movable in directions to and away from said front wall and urged by resilient means mounted thereon, toward said movement path, to engage the light-locking element, when the film assemblage is in its seated position, thereby blocking movement of said light-locking element toward said access opening;

a second blocking member disposed inside said housing, between said front wall frame portion and said access opening, said second blocking member being movable in directions to and away from said front wall and urged by resilient means mounted thereon, toward said movement path, to engage the envelope movement-limiting element (66) during extraction of the envelope from its

seated position toward said access opening, thereby preventing a complete extraction thereof; and

a releasing member disposed between said pressure-applying member and said housing rear wall, said releasing member being movable in first and second opposing directions along a further path extending between said housing first and second end regions respectively, said releasing member being urged by resilient means mounted thereon, toward said first direction to stay in a rest position, and being adapted for manual movement in said second direction away from said rest position; said releasing member having cam means operatively engaging said pressure-applying member and said blocking members, and adapted to disengage, in response to said manual movement in said second direction, said resilient means from urging said pressure-applying and blocking members toward said movement path, thereby removing said members from said movement path and releasing the film assemblage for unrestricted movement to and from its seated position and through said access opening.

Preferred embodiments of the holder for a photographic film assemblage are described in the detailed description with reference to the accompanying drawings and claimed in the subclaims.

BRIEF DESCRIPTION OF THE DRAWINGS

In the detailed description of the preferred embodiment of this invention presented below, reference is made to the accompanying drawings, wherein like reference numerals denote like elements, and wherein:

Fig. 1 is a top-plan view of a photographic film assemblage, or film packet, of a type usable in cooperation with the film holder of this invention, showing the packet in its fully assembled and closed condition;

Fig. 2 is a top-plan view of the film packet depicted in Fig. 1, showing a light-shielding envelope thereof as withdrawn from a photosensitive film sheet therein;

Fig. 3 is an enlarged top-plan view of the film packet of Fig. 1 in its fully assembled and closed condition, showing (via broken lines) the photosensitive film sheet and a carrier sheet therefor as hidden within the light-shielding envelope;

Fig. 4 is an elevational view of the film packet of Fig. 3;

Fig. 5 is an enlarged bottom-plan view similar to Fig. 3 but showing (via broken lines) a second photosensitive film sheet on the other side of the carrier sheet;

Fig. 6 is a top-plan view of a photographic film holder constructed and configured, according to

the preferred embodiment of this invention, for use with the film packet of Figs. 1-5 on a cooperating camera back, with portions shown broken away for clarity of illustration;

Fig. 7 is a cross-sectional elevation of the film holder of Fig. 6, taken along line 9-9 therein, showing its principal components in exploded form;

Fig. 8 is a top-plan view of the film holder of Figs. 6-7, with upper components thereof removed to reveal details of certain lower components as disposed in respective rest positions;

Fig. 9 is a top-plan view similar to Fig. 8 but showing the same lower components as moved to their fully actuated positions;

Figs. 10 and 11 are partial cross-sectional elevations showing an end region of the film holder as taken along line 12/13 - 12/13 in Fig. 6, Fig. 10 depicting operative components disposed in respective rest positions with a film packet locked thereby in a seated position, Fig. 11 illustrating the same components in their actuated positions with the film packet thus released and moving away from the seated position; and

Figs. 12 and 13 are partial cross-sectional elevations showing another region of the film holder as taken along line 14/15 - 14/15 in Fig. 6, Fig. 12 depicting operative components disposed in respective rest positions, Fig. 13 illustrating those components as moved to their actuated positions wherein a film packet (not shown) may be removed from the holder.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Because certain parts of photographic film assemblages and holders therefor are well known, the following description is directed in particular to those elements forming, cooperating directly with, or relating to, this invention. Elements not specifically shown or described herein are selectable from those known in the relevant art.

Figs. 1-5 illustrate a photographic film assemblage, or film packet, of a type usable in cooperation with the film holder of this invention. Figs. 1, 3, and 5 present plan views of such a packet, designated generally therein by the letter P, as it appears when in its fully assembled and closed condition.

Fig. 1 shows only the exteriorly visible components of packet P, as viewed from a first side thereof, including a light-shielding envelope E made of cardboard or other opaque material. As illustrated in Fig. 2, envelope E removably encloses a photosensitive film sheet F having leading and trailing ends 10 and 12, respectively, and an elon-

gate film carrier sheet C, to which film sheet F is detachably attached for facilitating use of the film sheet.

Figs. 3 and 5 present, respectively, top-plan and bottom-plan views of packet P, Fig. 3 showing the first side thereof seen in Fig. 1, Fig. 5 showing the opposite, or second, side. It will thus be seen in Figs. 3 and 5 that carrier sheet C (shown in broken lines) has first and second outward-facing surfaces 14 and 16 respectively. The carrier sheet includes leading and trailing end sections 18 and 20, respectively, and an intermediate section 22 between the two end sections. As seen in Fig. 3, film sheet F is detachably attached to the first outward-facing surface 14 of intermediate section 22, with its leading and trailing ends 10 and 12 respectively oriented toward the leading and trailing end sections 18 and 20. Similarly, as seen in Fig. 5, a second photosensitive film sheet F' is detachably attached to the second outward-facing surface 16 of intermediate section 22, with its leading and trailing ends 10' and 12' respectively oriented toward leading and trailing end sections 18 and 20.

Leading end section 18 extends longitudinally beyond intermediate section 22 (to the right, as viewed in Figs. 3 and 5) and terminates in a tab 24 projecting therefrom as shown. Trailing end section 20 extends longitudinally beyond intermediate section 22 (to the left, as viewed in Figs. 3 and 5) and includes a transverse edge 28, along which is secured a transversely disposed light-locking element 30. Element 30 may be secured to end section 20 by crimping it thereto, as illustrated by the three series of dimples 32 extending parallel with, and adjacent to, edge 28.

As shown in Fig. 4 (which presents an end view of element 30), the light-locking element is generally V-shaped in cross section, having a vertex 30v with diverging first and second flange portions 30a and 30b projecting angularly therefrom over the first and second outward-facing surfaces 14 and 16, respectively, of end section 20. When so placed, element 30 provides first and second recesses 34a and 34b disposed, respectively, between flange portions 30a and 30b and the outward-facing surfaces 14 and 16 of end section 20.

Light-shielding envelope E comprises first and second opposing walls 36 and 38, respectively, which are joined along their lateral edges 40 and 42 to provide a sleeve-like enclosure for receiving the carrier sheet and attached film sheets. The opposing interior surfaces of walls 36 and 38 comprise first and second inward-facing surfaces 36' and 38' that respectively overlie the first and second outward-facing surfaces 14 and 16 of carrier sheet C when received therebetween.

The envelope further includes longitudinally extending leading and trailing end portions 44 and 46 that respectively overlie the leading and trailing end sections 18 and 20 of the carrier sheet. Leading end portion 44 is sealed closed along its outer edges, and its corners are beveled as shown at 48 and 50. Trailing end portion 46 by itself is left open to permit insertion and withdrawal of the carrier sheet and film sheets therethrough; but when those sheets are fully inserted as shown in Figs. 1 and 3-5, end portion 46 is closed by entry thereof into recesses 34a and 34b and compressive engagement with flange portions 30a and 30b of light-locking element 30.

To facilitate insertion of the carrier and film sheets through end portion 46 and fully into the envelope, the carrier sheet leading end section is beveled as shown at 52 and 54, and the two film sheets F and F' are detachably attached to the carrier sheet at their leading ends 10 and 10'. Also, to facilitate detaching the film sheets from the carrier sheet after withdrawal from the envelope, each film sheet is detachably attached only at its leading end, so that its trailing end and image area can be easily lifted from the carrier sheet and its leading end then peeled off.

As shown in Figs. 1-5, the envelope first and second walls 36 and 38 have a pair of movement-limiting elements, or stop strips, 66 and 68 transversely disposed on their exterior surfaces near the envelope trailing end portion 46. Strips 66 and 68 may be made of cardboard or plastic and adhered or sealed to their respective envelope wall surfaces. Their thickness or height above those surfaces must be sufficient to be readily engageable by one or more cooperating members in a compatible film packet holder such as that described below.

Figs. 6-13 illustrate a photographic film packet holder H adapted for use with the film packet P, described above, on a cooperating camera back (not shown). The holder H comprises a substantially rectangular-shaped housing 100 having parallel, spaced-apart front and rear walls 102 and 104 respectively, opposing sides 106 and 108, and oppositely disposed first and second end regions 110 and 112 respectively.

The front wall 102 includes a frame portion 114 defining a film-exposure window 116. The first end region 110 includes an access opening 118 configured to permit ingress and egress of film packet P along a movement path 120 extending to and from, respectively, a seated position wherein the packet film sheets F and F' are aligned with window 116 and the packet light-locking element 30 is located in second end region 112.

As shown most clearly in Fig. 7, housing 100 comprises separately formed front and rear compo-

nents 122 and 124 which include the front and rear walls 102 and 104 respectively, the two components being light-tightly fitted together with access opening 118 and movement path 120 disposed therebetween. Preferably, each of the front and rear components 122 and 124 is an integral molded plastic piece; and such components include matable interlocking means for snap-fitting them together. Such means are shown as comprising a plurality of resiliently flexible latching fingers 126, which depend from front wall 102 along both sides of front component 122, and a like plurality of mating channels 128 correspondingly located in both side walls of rear component 124.

Inside housing 100, in housing rear component 124, is a substantially flat pressure-applying member, or plate, 130 movably disposed between and substantially parallel with the housing front and rear walls 102 and 104. Plate 130 is movable in directions transverse to the front wall and is normally urged, by influence of biasing means thereon, toward movement path 120 so as to press the film packet, when in its seated position, against the front wall frame portion 114. Biasing means for so urging the pressure-applying plate is shown as comprising a plurality of spring elements 132 depending angularly from the plate toward rear wall 104. To guide movement of plate 130 in directions transverse to front wall 102, and to locate the plate and restrain it from moving in directions parallel with that wall, a pair of guide elements 134 also depend from the plate toward rear wall 104. Guide elements 134 are configured to fit slidably into a pair of correspondingly located hollow bosses 136 that project from rear wall 104 toward the plate.

Also in housing rear component 124 is a first blocking member 138, movably disposed in the housing second end region 112. Blocking member 138 also is movable in directions transverse to the front wall; and it too is normally urged by influence of biasing means thereon toward movement path 120, but in this case to engage the packet light-locking element 30, when the packet is in its seated position, to thereby block movement of element 30 toward access opening 118. Biasing means for so urging blocking member 138 is depicted as comprising a cantilever spring element 140 having a fixed end portion 140a secured to rear wall 104 and a movable free end portion 140b resiliently supporting member 138. Fixed end portion 140a includes a pair of flanges 140a' extending laterally therefrom in spaced parallel relation to rear wall 104. Free end portion 140b is bifurcated as shown to provide a pair of engageable legs 140b' depending angularly therefrom toward rear wall 104.

Movably mounted on housing front component 122, between front wall frame portion 114 and access opening 118, is a second blocking member

142. Blocking member 142 also is movable in directions transverse to front wall 102; and it too is normally urged by influence of biasing means thereon toward movement path 120, but in this case to engage the packet envelope movement-limiting element (stop strip 66 or 68) then facing the front wall during movement thereof from its seated position toward the access opening, to thereby block further movement thereof toward the opening. Blocking member 142 comprises a pair of U-shaped blocking elements 142a (one shown) which have been formed as projecting parts of a transversely disposed torsion spring 142b. Torsion spring 142b has a U-shaped central portion 142c fixed to front wall 102, and it terminates in a pair of movable spring legs 142d which are formed at its opposite ends to depend from the front wall and extend toward rear wall 104. Such constituent parts of the torsion spring thus provide both the blocking member itself (elements 142a) and the biasing means (fixed portion 142c and movable legs 142d) normally urging it toward the movement path.

Slidably mounted in housing rear component 124, between plate 130 and rear wall 104, is a releasing member, or slider, 144, which preferably is formed as an integral molded plastic piece. Slider 144 is movable in first and second opposing directions extending toward the first and second end regions 110 and 112 respectively. The slider is normally urged, by influence of biasing means thereon, in the first direction to a rest position (shown in Fig. 8), and is adapted for manual movement in the second direction away from that position (see arrow in Fig. 9).

Slider 144 is provided with means, operatively associated with plate 130 and blocking members 138 and 142, and responsive to said manual movement in the second direction, for negating the aforementioned biasing means influences that normally urge plate 130 and members 138 and 142 toward movement path 120, so as to remove the plate and both blocking members from said path and thereby release the film packet for unrestricted movement therealong from its seated position and out through the access opening.

The slider has front and rear surfaces 146 and 148 facing plate 130 and rear wall 104 respectively, lateral portions 150 and 152 that extend along housing sides 106 and 108 respectively, and first and second end portions 154 and 156 directed toward the first and second end regions 110 and 112 respectively.

The slider negating means, mentioned above, comprises camming means 158 on front surface 146, including a plurality of ramps 160 in lateral portions 150 and 152 and a like plurality of projections 162 and depressions 164 respectively disposed at opposite ends of the ramps. The front

surface camming means 158 interacts with the spring elements 132 that depend angularly from plate 130, to control their biasing influence on the plate.

The slider negating means further comprises camming means 166 and 168 in first and second end portions 154 and 156, respectively, which interact with second blocking member spring legs 142d and first blocking member spring legs 140b', respectively, to control their respective biasing influences on the second and first blocking members. The first end portion camming means 166 includes a pair of laterally projecting ears 170 and 172 respectively disposed in lateral portions 150 and 152 adjacent to housing sides 106 and 108, in engageable relation with spring legs 142d. The second end portion camming means 168 includes a tapered tab 174 that is bifurcated to provide a pair of tapered tab portions 174' which project longitudinally toward blocking member 138 for symmetrical engagement with spring legs 140b' about their common longitudinal center line.

To guide longitudinal movement of slider 144 in its first and second directions, and to locate the slider and restrain it from moving in other directions, a pair of recessed sections 176 are provided to fit slidably between the laterally extending flanges 140a' and opposing areas of rear wall 104.

The aforementioned biasing means normally urging slider 144 in the first direction to its rest position shown in Fig. 8 comprises a pair of S-shaped cantilever springs 178 and 180 that extend transversely from lateral portions 150 and 152, respectively, toward each other, with their free ends 178' and 180' trapped by a flanged tab 182 centrally disposed on rear wall 104.

To facilitate the aforementioned manual movement of slider 144 in the second direction away from its rest position (see arrow in Fig. 9), the slider is provided with externally accessible means, including an L-shaped handle 184, that extends from first end portion 154 through a passageway 186 in housing first end region 110 adjacent to access opening 118.

To limit slider return movement (by springs 178 and 180) in the first direction, and thereby define its rest position, the slider includes a transversely disposed stopping member 188 that abuts opposing surfaces 190, which project from rear wall 104 at opposite sides of passageway 186, when the rest position is reached.

The stopping member also coacts with a transversely disposed, pliant, light-sealing element 192, to help prevent light from entering the holder housing through passageway 186 when the slider is in its rest position. Element 192 extends from passageway 186, into access opening 118, and into the movement path 120, so as to contact film

packet P and thereby help prevent light from entering the housing through the access opening.

Operation of holder H in use with packet P will now be described.

When slider 144 is in its rest position (shown in Fig. 8), spring elements 132, which depend angularly from plate 130, are in resilient engagement with projections 162 on the slider, and thereby provide the biasing influence that urges the plate toward the movement path so as to press packet P (when in its seated position) against front wall frame portion 114. Also, as shown in Fig. 10, spring legs 140b', which depend angularly from free end portion 140b of spring element 140, are engaged by tapered tab portions 174' on the slider, while free end portion 140b resiliently supports blocking member 138 in its position blocking the packet light-locking element 30. Also, as shown in Fig. 12, spring legs 142d, which depend from torsion spring 142b of blocking member 142, are disposed in engageable relation with, but not yet engaged by, ears 170 and 172 on the slider, while torsion spring 142b maintains blocking member elements 142a in their movement-path positions for engagement by the packet movement-limiting stop strip 66 or 68 then facing front wall 102.

Now, when slider 144 is moved from its rest position to its fully actuated position (shown in Fig. 9), by pushing handle 184 inwardly (see Fig. 9 arrow) against the biasing influence of springs 178 and 180, the above-described negating means is actuated to effect its intended functions. The slider projections 162 are thus moved out of engagement with spring elements 132, which in turn follow ramps 160 downwardly (as viewed in Figs. 12 and 13) into depressions 164. That action negates the biasing influence that urged plate 130 toward the movement path. Also, the slider tapered tab portions 174' are moved into further engagement with spring legs 140b' so as to cam them downwardly (as viewed in Figs. 10 and 11), against the biasing influence of spring element 140, and thereby move blocking member 138 downwardly away from the movement path. Also, the slider ears 170 and 172 are moved into engagement with spring legs 142d so as to pivot them clockwise (as viewed in Figs. 12 and 13), against the biasing influence of torsion spring 142b, and thereby pivot blocking member elements 142a clockwise (upwardly) out of the movement path. It will thus be seen that, by a single actuation of handle 184, the pressure-applying plate 130 and both blocking members 138 and 142 are moved away from the movement path, thereby permitting unrestricted movement of the film packet into and out of the holder.

Upon releasing handle 184, the slider is returned to its rest position by springs 178 and 180, causing the foregoing actions to be reversed and

the pressure-applying plate and blocking members to be restored to their described film-path positions.

A significant advantage of this holder is that a film packet may easily be inserted into and withdrawn from it whether or not the holder is mounted on a camera back.

The film packet P is normally supplied by the manufacturer with its envelope graspable zone 62 adhered to its carrier sheet tab 24 via its tape adhesive surface 26, so as to prevent unintended relative movement between the envelope and carrier sheet during shipment, storage, and/or handling.

To use the packet with holder H, first the packet side labeled "A" in Figs. 1 and 3 should be oriented to face the holder film-exposure window 116. Then, with slider handle 184 depressed to actuate slider 144, the packet should be inserted through access opening 118 until it reaches its seated position. Now, with handle 184 released and the holder mounted on a camera back, with its window 116 facing the camera lens, the packet envelope should be grasped at its graspable zone 64 (labeled ① in Figs. 1-3) and pulled outwardly with sufficient force to overcome the adherence provided by its tape adhesive surface 26. The envelope should then be withdrawn until it is stopped by engagement of its stop strip with blocking member elements 142a in the movement path, while the carrier and film sheets are retained in their seated position by engagement of light-locking element 30 with blocking member 138 in the movement path. The film sheet F is thus uncovered and ready for a photographic exposure via the camera shutter and lens.

After that exposure, the envelope should again be grasped at zone 64 (again, ① in Figs. 1-3) and pushed in to its seated position, thereby recovering the now-exposed film sheet. Then, with handle 184 again depressed to actuate slider 144, to thereby release the packet for unrestricted withdrawal, the envelope should be grasped at zone 62 (labeled ② in Figs. 1-3), to re-adhere that zone to tab 24 via tape adhesive surfaces 26, and the whole packet thus pulled out of the holder. The packet may then be turned over so that its side labeled "B" in Fig. 5 faces the holder window 116, and the foregoing steps repeated to effect a photographic exposure of the other film sheet F'.

With both film sheets now exposed and safely re-covered by the envelope and light-locking element 30, the envelope again becomes re-adhered to the carrier sheet tab when the packet is once again grasped at zone 62 (labeled ② in Fig. 5) and removed from the holder. With the adherence provided by tape adhesive surface 26, the packet may be safely handled, stored, and/or transported with-

out risk of unintended film exposure resulting from separation of the envelope from element 30.

Claims

1. A holder (H) for a photographic film assemblage (P) said assemblage being of the type comprising:

a photosensitive film sheet (F) having first and second ends (10, 12);

a film carrier sheet (C) detachably attached to the film sheet (F) for facilitating use thereof, the carrier sheet (C) including first and second sections (18, 20) thereof projecting longitudinally beyond the film sheet first and second ends (10, 12), respectively, the second section (20) having a transverse edge (28) along which is secured a transversely disposed light-locking element (30); and

a light-shielding envelope (E) removably enclosing the film sheet (F) and the carrier sheet (C), the envelope (E) including a film-covering part and first and second parts (44, 46) extending longitudinally and covering the carrier sheet first and second sections (18, 20), respectively, the envelope first part (44) having a closed end that is manually graspable, the envelope second part (46) having an open end that is closable by cooperative engagement with the light-locking element (30), the envelope (E) being removable from the film sheet (F) and the carrier sheet (C) by longitudinal relative movement therebetween in a direction separating the envelope second part end from the light-locking element (30), the envelope (E) further including a movement-limiting element (66) projecting from an exterior surface (36) thereof, near said open end;

said holder (H) having a housing (100) in form of a flat, substantially rectangular box, with spaced apart front and rear walls (102, 104), constituting the major faces of the box, and delimited on the sides by two opposite side walls (106, 108) and two opposite first and second end regions (110, 112), said front wall (102) including a frame portion (114) defining a film-exposure window (116), said first end region (110) including elements delimiting an elongate access opening (118) configured to permit insertion and extraction of the film assemblage (P) along a movement path (120) extending from said aperture to said second end region, wherein, when the assemblage is fully inserted, it occupies a seated position wherein the film sheet (F) is aligned behind said window (116) and the light-locking element (30) is in said second end region (112); said holder (H) being



the pressure-applying plate and blocking members to be restored to their described film-path positions.

A significant advantage of this holder is that a film packet may easily be inserted into and withdrawn from it whether or not the holder is mounted on a camera back.

The film packet P is normally supplied by the manufacturer with its envelope graspable zone 62 adhered to its carrier sheet tab 24 via its tape adhesive surface 26, so as to prevent unintended relative movement between the envelope and carrier sheet during shipment, storage, and/or handling.

To use the packet with holder H, first the packet side labeled "A" in Figs. 1 and 3 should be oriented to face the holder film-exposure window 116. Then, with slider handle 184 depressed to actuate slider 144, the packet should be inserted through access opening 118 until it reaches its seated position. Now, with handle 184 released and the holder mounted on a camera back, with its window 116 facing the camera lens, the packet envelope should be grasped at its graspable zone 64 (labeled ① in Figs. 1-3) and pulled outwardly with sufficient force to overcome the adherence provided by its tape adhesive surface 26. The envelope should then be withdrawn until it is stopped by engagement of its stop strip with blocking member elements 142a in the movement path, while the carrier and film sheets are retained in their seated position by engagement of light-locking element 30 with blocking member 138 in the movement path. The film sheet F is thus uncovered and ready for a photographic exposure via the camera shutter and lens.

After that exposure, the envelope should again be grasped at zone 64 (again, ① in Figs. 1-3) and pushed in to its seated position, thereby recovering the now-exposed film sheet. Then, with handle 184 again depressed to actuate slider 144, to thereby release the packet for unrestricted withdrawal, the envelope should be grasped at zone 62 (labeled ② in Figs. 1-3), to re-adhere that zone to tab 24 via tape adhesive surfaces 26, and the whole packet thus pulled out of the holder. The packet may then be turned over so that its side labeled "B" in Fig. 5 faces the holder window 116, and the foregoing steps repeated to effect a photographic exposure of the other film sheet F'.

With both film sheets now exposed and safely re-covered by the envelope and light-locking element 30, the envelope again becomes re-adhered to the carrier sheet tab when the packet is once again grasped at zone 62 (labeled ② in Fig. 5) and removed from the holder. With the adherence provided by tape adhesive surface 26, the packet may be safely handled, stored, and/or transported with-

out risk of unintended film exposure resulting from separation of the envelope from element 30.

Claims

1. A holder (H) for a photographic film assemblage (P) said assemblage being of the type comprising:

a photosensitive film sheet (F) having first and second ends (10, 12);

a film carrier sheet (C) detachably attached to the film sheet (F) for facilitating use thereof, the carrier sheet (C) including first and second sections (18, 20) thereof projecting longitudinally beyond the film sheet first and second ends (10, 12), respectively, the second section (20) having a transverse edge (28) along which is secured a transversely disposed light-locking element (30); and

a light-shielding envelope (E) removably enclosing the film sheet (F) and the carrier sheet (C), the envelope (E) including a film-covering part and first and second parts (44, 46) extending longitudinally and covering the carrier sheet first and second sections (18, 20), respectively, the envelope first part (44) having a closed end that is manually graspable, the envelope second part (46) having an open end that is closable by cooperative engagement with the light-locking element (30), the envelope (E) being removable from the film sheet (F) and the carrier sheet (C) by longitudinal relative movement therebetween in a direction separating the envelope second part end from the light-locking element (30), the envelope (E) further including a movement-limiting element (66) projecting from an exterior surface (36) thereof, near said open end;

said holder (H) having a housing (100) in form of a flat, substantially rectangular box, with spaced apart front and rear walls (102, 104), constituting the major faces of the box, and delimited on the sides by two opposite side walls (106, 108) and two opposite first and second end regions (110, 112), said front wall (102) including a frame portion (114) defining a film-exposure window (116), said first end region (110) including elements delimiting an elongate access opening (118) configured to permit insertion and extraction of the film assemblage (P) along a movement path (120) extending from said aperture to said second end region, wherein, when the assemblage is fully inserted, it occupies a seated position wherein the film sheet (F) is aligned behind said window (116) and the light-locking element (30) is in said second end region (112); said holder (H) being



characterized by

a substantially flat pressure-applying member (130) disposed between and substantially parallel with said housing front and rear walls (102, 104), said pressure-applying member (130) being movable in directions substantially perpendicular to said front wall (102) and urged by resilient means mounted thereon, toward said movement path (120), to press the film assemblage (P), when it is in its seated position, against said front wall frame portion (114);

a first blocking member (138) disposed inside said housing in said second end region (112), said first blocking member (138) being movable in directions to and away from said front wall (102) and urged by resilient means mounted thereon, toward said movement path (120), to engage the light-locking element (30), when the film assemblage is in its seated position, thereby blocking movement of said light-locking element toward said access opening (118);

a second blocking member (142) disposed inside said housing (100), between said front wall frame portion (114) and said access opening (118), said second blocking member (142) being movable in directions to and away from said front wall (102) and urged by resilient means mounted thereon, toward said movement path (120), to engage the envelope movement-limiting element (66) during extraction of the envelope from its seated position toward said access opening (118), thereby preventing a complete extraction thereof; and

a releasing member (144) disposed between said pressure-applying member (130) and said housing rear wall (104), said releasing member (144) being movable in first and second opposing directions along a further path extending between said housing first and second end regions (110, 112) respectively, said releasing member (144) being urged by resilient means (178, 180) mounted thereon, toward said first direction to stay in a rest position, and being adapted for manual movement in said second direction away from said rest position; said releasing member (144) having cam means operatively engaging said pressure-applying member (130) and said blocking members (138, 142), and adapted to disengage, in response to said manual movement in said second direction, said resilient means from urging said pressure-applying and blocking members (130 & 138, 142) toward said movement path (120), thereby removing said members (130, 138, 142) from said movement path (120) and releasing the film assem-

blage (P) for unrestricted movement to and from its seated position and through said access opening (118).

2. A holder (H) as claimed in Claim 1 wherein said housing (100) comprises separately formed front and rear components (122, 124) that include said front and rear walls (102, 104), respectively, said components (122, 124) being light-tightly fitted together with said access opening (118) and movement path (120) disposed therebetween.
3. A holder (H) as claimed in Claim 2 wherein said pressure-applying member (130), said first blocking member (138), and said releasing member (144) are movably mounted on said housing rear component (124), and said second blocking member (142) is movably mounted on said housing front component (122).
4. A holder (H) as claimed in claim 3 wherein said releasing member (144) has front and rear surfaces (146, 148) facing said pressure-applying member (130) and said housing rear wall (104) respectively, lateral portions (150, 152) extending substantially parallel to said housing sides (106, 108) respectively, and first and second end portions (154, 156) directed toward said housing first and second end regions (110, 112) respectively; wherein said releasing member includes cam means (158) on said front surface (146), engaging said resilient means urging said pressure-applying member (130) toward said movement path (120), for reducing said resilient means influence on said pressure-applying member (130) in response to said manual movement in said second direction; and wherein said releasing member further includes cam means (166, 168) on said first and second end portions (154, 156), engaging said resilient means urging said second and first blocking members (142, 138), respectively, toward said movement path (120), for reducing said resilient means influences on said blocking members (142, 138) in response to said movement in said second direction.
5. A holder (H) as claimed in Claim 4 wherein said front surface cam means (158) includes a plurality of ramps (160) on said lateral portions (150, 152), and said resilient means urging said pressure-applying member (130) toward said movement path (120) includes a like plurality of spring elements (132) extending from said pressure-applying member (130) into resilient engagement with said ramps (160); wherein said first end portion cam means (166)



includes laterally projecting ears (170, 172) on said lateral portions (150, 152), and said resilient means urging said second blocking member (142) toward said movement path (120) includes spring elements (142d) extending from said second blocking member (142) into engageable relation with said ears (170, 172); and wherein said second end portion cam means (168) includes a tab (174) projecting longitudinally toward said first blocking member (138), and said resilient means urging said first blocking member (138) toward said movement path (120) includes a spring element (140b) resiliently supporting said first blocking member (138) and engageable by said tab (174).

6. A holder (H) as claimed in Claim 5 wherein said front surface cam means (158) includes a like plurality of projections (162) and depressions (164) respectively disposed at opposite ends of said ramps (160); wherein said first end portion cam means (166) includes a pair of said ears (170, 172) respectively disposed adjacent to said opposing housing sides (106, 108); and wherein said second end portion cam means tab (174) and said first blocking member spring element (140b) are bifurcated for symmetrical engagement about a common longitudinal center line.
7. A holder (H) as claimed in Claim 6 wherein said releasing member (144) includes externally accessible means (184) extending from said first end portion (154) through a passageway (186) in said first end region (110), adjacent to said access opening (118), for effecting said manual movement.
8. A holder (H) as claimed in Claim 7 wherein each of said releasing member (144) and said housing front and rear components (122, 124) is an integral molded plastic piece; and wherein said front and rear components include matable interlocking means (126, 128) for snap-fitting said components (122, 124) together.

Patentansprüche

1. Halter (H) für eine fotografische Filmeinheit (P) aus einem lichtempfindlichen Blattfilm (F) mit einem ersten und einem zweiten Ende (10, 12); einem Blattfilmträger (C), der an dem Blattfilm (F) lösbar befestigt ist und dessen Verwendung erleichtert, und der einen jeweils in Längsrichtung über das erste bzw. zweite

Ende (10, 12) des Blattfilms hinausragenden ersten und zweiten Abschnitt (18, 20) besitzt, wobei der zweite Abschnitt (20) eine quer verlaufende Kante (28) aufweist, an der ein quer verlaufendes Lichtsperrerelement (30) befestigt ist, und

einer Lichtschutzhülle (E), die den Blattfilm (F) und den Blattfilmträger (C) entfernt umgibt und ein Filmabdeckteil sowie einen ersten und einen zweiten Abschnitt (44, 46) aufweist, der sich jeweils in Längsrichtung erstreckt und den ersten bzw. zweiten Abschnitt (18, 20) des Blattfilmträgers abdeckt, wobei der erste Abschnitt (44) der Lichtschutzhülle ein von Hand ergreifbares geschlossenes Ende besitzt, der zweite Abschnitt (46) der Lichtschutzhülle ein offenes Ende aufweist, das durch Eingriff mit dem Lichtsperrerelement (30) verschließbar ist, die Lichtschutzhülle (E) von dem Blattfilm (F) und dem Blattfilmträger (C) mittels einer in Längsrichtung erfolgenden Relativbewegung entferntbar ist, bei der das Ende des zweiten Abschnitts der Lichtschutzhülle von dem Lichtsperrerelement (30) abtrennbar ist, und die Lichtschutzhülle (E) außerdem ein Bewegungsbegrenzungselement (66) enthält, das aus einer ihrer Außenflächen (36) in der Nähe des offenen Endes herausragt,

wobei der Halter (H) ein als flacher, im wesentlichen rechteckiger Kasten ausgebildetes Gehäuse (100) besitzt, dessen im Abstand voneinander angeordnete Vorderwand und Rückwand (102, 104) die Hauptkastenflächen bilden, die an den Seiten durch zwei einander gegenüberliegende Seitenwände (106, 108) sowie einen ersten und einen zweiten sich gegenüberliegenden Endbereich (110, 112) begrenzt werden und von denen die Vorderwand (102) ein ein Filmbelichtungsfenster (116) umgebendes Rahmenteil (114) aufweist, während der erste Endbereich (110) Elemente enthält, die eine langgestreckte Zugangsöffnung (118) begrenzen, die so ausgelegt ist, daß die Filmeinheit (P) längs einer sich von der Zugangsöffnung zu dem zweiten Endbereich erstreckenden Bewegungsbahn (120) einlegbar und entnehmbar ist und, wenn vollständig eingelegt, sich in einer Paßstellung befindet, in der der Blattfilm (F) hinter dem Filmbelichtungsfenster (116) ausgerichtet ist und das Lichtsperrerelement (30) sich im zweiten Endbereich (112) befindet, dadurch gekennzeichnet,

daß der Halter (H) ein im wesentlichen flaches Andrückerelement (130) aufweist, das zwischen und im wesentlichen parallel zu der Vorder- und Rückwand (102, 104) des Gehäuses angeordnet, in im wesentlichen senkrecht zu der Vorderwand (102) verlaufenden Richtungen be-



wegbar und von auf dieser angeordneten Federmitteln so zu der Bewegungsbahn (120) hin vorgespannt ist, daß es die Filmeinheit (P) gegen das Rahmenteil (114) der Vorderwand drückt, wenn sich diese in ihrer Paßstellung befindet,

daß ein erstes Blockierelement (138) innerhalb des Gehäuses in dem zweiten Endbereich (112) so angeordnet ist, daß es zu der Vorderwand (102) hin und von ihr weg bewegbar ist, und daß das erste Blockierelement durch auf der Vorderwand gelagerte Federmittel derart zu der Bewegungsbahn (120) hin vorgespannt ist, daß es mit dem Lichtsperrerelement (30) in Eingriff gelangt, wenn sich die Filmeinheit in ihrer Paßstellung befindet, und damit die Bewegung des Lichtsperrerelements zur Zugangsöffnung (118) blockiert,

daß ein zweites Blockierelement (142) innerhalb des Gehäuses (100) zwischen dem Rahmenteil (114) der Vorderwand und der Zugangsöffnung (118) so angeordnet ist, daß es zu der Vorderwand (102) hin und von dieser weg bewegbar ist und durch auf der Vorderwand gelagerte Federmittel so zur Bewegungsbahn (120) hin vorgespannt ist, daß es mit dem Bewegungsbegrenzungselement (66) der Lichtschutzhülle in Eingriff gelangt, wenn die Lichtschutzhülle aus ihrer Paßstellung heraus zur Zugangsöffnung (118) hin herausgezogen wird, und so ein vollständiges Herausziehen der Lichtschutzhülle verhindert, und

daß ein Freigabelement (144) zwischen dem Andrückelement (130) und der Rückwand (104) des Gehäuses so angeordnet ist, daß es in einer ersten und einer dieser entgegengesetzten zweiten Richtung längs einer weiteren zwischen dem ersten und dem zweiten Endbereich (110, 112) des Gehäuses verlaufenden Bahn bewegbar ist, daß das Freigabeelement (144) durch auf ihm gelagerte Federmittel (178, 180) so in die erste Richtung vorgespannt ist, daß es in einer Ruhestellung verbleibt und von Hand aus dieser Ruhestellung in die zweite Richtung bewegbar ist, und daß es Nockenmittel besitzt, die mit dem Andrückelement (130) und den Blockierelementen (138, 142) in Eingriff bringbar sind und auf die manuelle Verschiebung in die zweite Richtung ansprechend die Federmittel so außer Eingriff bringen, daß diese das Abdrückelement und die Blockierelemente (130 und 138, 142) nicht mehr zu der Bewegungsbahn (120) hin vorspannen und damit die Elemente (130, 138, 142) aus der Bewegungsbahn (120) herausbewegen und die Filmeinheit (P) für eine ungehinderte Bewegung in ihre und aus ihrer Paßstellung und durch die Zugangsöffnung (118) freigeben.

2. Halter (H) nach Anspruch 1, dadurch gekennzeichnet, daß das Gehäuse (100) getrennt ausgebildete vordere und hintere Elemente (122, 124) aufweist, die die Vorder- bzw. die Rückwand (102, 104) enthalten und die lichtdicht zusammengefügt sind und die Zugangsöffnung (118) und die Bewegungsbahn (120) zwischen sich einschließen.

3. Halter (H) nach Anspruch 2, dadurch gekennzeichnet, daß das Andrückelement (130), das erste Blockierelement (138) und das Freigabeelement (144) auf dem hinteren Gehäuseelement (124) bewegbar gelagert sind und das zweite Blockierelement (142) auf dem vorderen Gehäuseelement (122) bewegbar gelagert ist.

4. Halter (H) nach Anspruch 3, dadurch gekennzeichnet, daß das Freigabeelement (144) eine Vorder- und eine Rückfläche (146, 148) besitzt, die dem Andrückelement (130) bzw. der Rückwand (104) des Gehäuses zugewandt sind, Seitenteile (150, 152), die im wesentlichen parallel zu den Seitenwänden (106 bzw. 108) des Gehäuses verlaufen, sowie einen ersten und einen zweiten Endabschnitt (154, 156), der zum ersten bzw. zweiten Endbereich (110, 112) des Gehäuses weist, und daß das Freigabeelement an der Vorderfläche (146) Nockenmittel (158) aufweist, die an den das Andrückelement (130) zu der Bewegungsbahn (120) hin vorspannenden Federmitteln angreifen und, ansprechend auf die manuelle Bewegung in die zweite Richtung, deren Einfluß auf das Andrückelement (130) reduzieren, und daß das Freigabeelement außerdem auf dem ersten und dem zweiten Endabschnitt (154, 156) Nockenmittel (166, 168) aufweist, die an den das erste und das zweite Blockierelement (142 bzw. 138) zu der Bewegungsbahn (120) hin vorspannenden Federmitteln angreifen und, ansprechend auf die Bewegung in die zweite Richtung, deren Einfluß auf die Blockierelemente (142, 138) reduzieren.

5. Halter (H) nach Anspruch 4, dadurch gekennzeichnet, daß die Nockenmittel (158) der Vorderfläche auf den Seitenteilen (150, 152) mehrere Rampen (160) aufweisen und die das Andrückelement (130) zu der Bewegungsbahn (120) hin vorspannenden Federmittel eine entsprechende Anzahl von Federelementen (132) umfassen, die sich von dem Andrückelement (130) aus in eine Eingriffsstellung an den Rampen (160) erstrecken, daß die am ersten Endabschnitt vorgesehenen Nockenmittel (166) seitliche, aus den Seitenabschnitten (150, 152) herausragende Vorsprünge (170, 172) besitzen



und die das zweite Blockierelement (142) zu der Bewegungsbahn (120) hin vorspannenden Federmittel Federelemente (142d) enthalten, die sich von dem zweiten Blockierelement (142) aus in eine Eingriffsstellung gegenüber den Vorsprüngen (170, 172) erstrecken, und daß die Nockenmittel (168) des zweiten Endabschnitts eine Spitze (174) aufweisen, die in Längsrichtung zu dem ersten Blockierelement (138) hin ragt, und die das erste Blockierelement (138) zu der Bewegungsbahn (120) hin vorspannenden Federmittel ein Federelement (140b) enthalten, auf dem das erste Blockierelement (138) federnd gelagert ist und das mit der Spitze (174) in Eingriff gelangen kann.

6. Halter (H) nach Anspruch 5, dadurch gekennzeichnet, daß die Nockenmittel (158) der Vorderfläche eine jeweils gleiche Anzahl von Vorsprüngen (162) und Vertiefungen (164) aufweisen, die an jeweils entgegengesetzten Enden der Rampen (160) angeordnet sind, daß die Nockenmittel (166) des ersten Endabschnitts jeweils zwei Vorsprünge (170 bzw. 172) besitzen, die den gegenüberliegenden Seiten (106, 108) des Gehäuses benachbart angeordnet sind, und daß die Spitze (174) der Nockenmittel des zweiten Endabschnitts und das Federelement (140b) des ersten Blockierelements (140b) für einen symmetrischen Eingriff um eine gemeinsame längs verlaufende Mittellinie gegabelt sind.

7. Halter (H) nach Anspruch 6, dadurch gekennzeichnet, daß das Freigabeelement (144) zur manuellen Bewegung ein von außen zugängliches Teil (184) aufweist, das von dem ersten Endabschnitt (154) aus durch eine Öffnung (186) im ersten Endbereich (110) benachbart der Zugangsöffnung (118) verläuft.

8. Halter (H) nach Anspruch 7, dadurch gekennzeichnet, daß das Freigabeelement (144) sowie die vorderen und hinteren Gehäuseelemente (122, 124) zusammen ein einstückiges Kunststoffteil bilden und daß die vorderen und hinteren Gehäuseelemente ineinandergreifende Verriegelungsmittel (126, 128) aufweisen, die durch eine Schnappverbindung in Eingriff bringbar sind.

Revendications

1. Support (H) destiné à un ensemble (P) à film photographique, l'ensemble étant du type qui comprend :
une feuille (F) de film photosensible ayant une première et une seconde extrémité (10,

12),

une feuille (C) de support de film fixée temporairement à la feuille de film (F) afin qu'elle facilite son utilisation, la feuille de support (C) comprenant un premier et un second tronçon (18, 20) qui dépassent longitudinalement au-delà de la première et de la seconde extrémité (10, 12) de la feuille de film respectivement, le second tronçon (20) ayant un bord transversal (28) le long duquel est fixé un élément (30) d'arrêt de lumière disposé transversalement, et

une enveloppe (E) de protection contre la lumière, entourant de façon amovible la feuille de film (F) et la feuille de support (C), l'enveloppe (E) comportant une partie de recouvrement de film et une première et une seconde partie (44, 46) dépassant longitudinalement et recouvrant le premier et le second tronçon (18, 20) de la feuille de support respectivement, la première partie (44) d'enveloppe ayant une extrémité fermée qui peut être saisie manuellement, la seconde partie (46) d'enveloppe ayant une extrémité ouverte qui peut être fermée par coopération avec l'élément (30) d'arrêt de lumière, l'enveloppe (E) pouvant être retirée de la feuille de film (F) et de la feuille de support (C) par déplacement relatif longitudinal mutuel en direction de séparation de l'extrémité de la seconde partie d'enveloppe de l'élément (30) d'arrêt de lumière, l'enveloppe (E) comportant en outre un élément (66) de restriction de déplacement qui dépasse d'une surface externe (36) de l'enveloppe près de l'extrémité ouverte,

le support (H) ayant un boîtier (100) sous forme d'une boîte plate sensiblement rectangulaire, ayant des parois avant et arrière distantes (102, 104) formant les grandes faces de la boîte et délimitées sur les côtés par deux parois latérales opposées (106, 108) et une première et une seconde région d'extrémité (110, 112) qui sont opposées, la paroi avant (102) ayant une partie de cadre (114) délimitant une fenêtre (116) d'exposition de film, la première région d'extrémité (110) ayant des éléments qui délimitent une ouverture allongée d'accès (118) dont la configuration permet l'introduction et l'extraction de l'ensemble à film (P) le long d'un trajet de déplacement (120) allant de l'ouverture vers la seconde région d'extrémité, et dans lequel, lorsque l'ensemble est totalement introduit, il occupe une position montée dans laquelle la feuille de film (F) est alignée derrière la fenêtre (116) et l'élément (30) d'arrêt de lumière est placé dans la seconde région d'extrémité (112), le support (H) étant caractérisé par



un organe sensiblement plat (130) d'application de pression, disposé entre les parois avant et arrière (102, 104) du boîtier et sensiblement parallèle à celles-ci, l'organe (130) d'application de pression étant mobile en directions sensiblement perpendiculaires à la paroi avant (102) et étant rappelé par un dispositif élastique monté sur lui vers le trajet de déplacement (120) afin qu'il repousse l'ensemble à film (P), lorsqu'il est dans sa position montée, contre la partie (114) de cadre de la paroi avant,

un premier organe d'arrêt (138) placé à l'intérieur du boîtier dans la seconde région d'extrémité (112), le premier organe d'arrêt (138) étant mobile de manière qu'il puisse se rapprocher et s'écarter de la paroi avant (102) et étant rappelé par un dispositif élastique monté sur lui, vers le trajet de déplacement (120) afin qu'il coopère avec l'élément (30) d'arrêt de lumière lorsque l'ensemble à film est dans la position montée, et empêche ainsi le déplacement de l'élément d'arrêt de lumière vers l'ouverture d'accès (118),

un second organe d'arrêt (142) disposé à l'intérieur du boîtier (100), entre la partie (114) de cadre de la paroi avant et l'ouverture d'accès (118), le second organe de blocage (142) étant mobile afin qu'il se rapproche et s'écarte de la paroi avant (102) et étant rappelé, par un dispositif élastique monté sur lui, vers le trajet de déplacement (120) afin qu'il coopère avec l'élément (66) de restriction du déplacement de l'enveloppe pendant l'extraction de l'enveloppe de sa position montée vers l'ouverture d'accès (118) et empêche ainsi son extraction complète, et

un organe de libération (144) disposé entre l'organe (130) d'application de pression et la paroi arrière (104) du boîtier, l'organe (144) de libération étant mobile dans un premier et un second sens opposés le long d'un trajet supplémentaire disposé entre la première et la seconde région (110, 112) d'extrémité du boîtier respectivement, l'organe de libération (144) étant rappelé, par un dispositif élastique (178, 180) monté sur lui, dans le premier sens afin qu'il reste en position de repos, et étant destiné à être éloigné manuellement dans le second sens de la position de repos, l'organe de libération (144) ayant un dispositif à came coopérant pendant le fonctionnement avec l'organe d'application de pression (130) et les organes d'arrêt (138, 142) et destiné, à la suite du déplacement manuel dans le second sens, à rendre inopérant le dispositif élastique de rappel des organes d'application de pression et d'arrêt (130 et 138, 142) vers le trajet de

déplacement (120), si bien que ces organes (130, 138, 142) sont écartés du trajet de déplacement (120) et libèrent l'ensemble à film (P) qui peut se déplacer sans restriction vers sa position montée et à partir de celle-ci et dans l'ouverture d'accès (118).

2. Support (H) selon la revendication 1, dans lequel le boîtier (100) comporte des éléments avant et arrière (122, 124) formés séparément et qui comprennent des parois avant et arrière (102, 104) respectivement, les éléments (122, 124) étant ajustés de manière étanche à la lumière sur l'ouverture d'accès (118) et le trajet de déplacement (120) placé entre eux.
3. Support (H) selon la revendication 2, dans lequel l'organe (130) d'application de pression, le premier organe d'arrêt (138) et l'organe de libération (144) sont montés de façon mobile sur l'élément arrière (124) du boîtier, et le second organe d'arrêt (142) est monté afin qu'il soit mobile sur l'élément avant (122) du boîtier.
4. Support (H) selon la revendication 3, dans lequel l'organe de libération (144) a des surfaces avant et arrière (146, 148) tournées vers l'organe d'application de pression (130) et la paroi arrière (104) du boîtier respectivement, des parties latérales (150, 152) qui sont sensiblement parallèles aux côtés (106, 108) du boîtier respectivement, et une première et une seconde partie d'extrémité (154, 156) dirigées vers la première et la seconde région d'extrémité (110, 112) du boîtier respectivement, dans lequel l'organe de libération comprend un dispositif à came (158) placé sur la surface avant (146), coopérant avec le dispositif élastique de rappel de l'organe d'application de pression (130) vers le trajet de déplacement (120) afin qu'il réduise l'influence du dispositif élastique sur l'organe d'application de pression (130) à la suite du déplacement manuel dans le second sens, et dans lequel l'organe de libération comporte en outre un dispositif à came (166, 168) placé sur la première et la seconde partie d'extrémité (154, 156), et coopérant avec le dispositif élastique qui rappelle le second et le premier organe d'arrêt (142, 138) respectivement vers le trajet de déplacement (120) afin qu'il réduise les influences du dispositif élastique sur les organes d'arrêt (142, 138) lors du déplacement dans le second sens.
5. Support (H) selon la revendication 4, dans lequel le dispositif (158) à came de la surface avant comporte plusieurs rampes (160) for-



mées sur les parties latérales (150, 152), et le dispositif élastique rappelant l'organe d'application de pression (130) vers le trajet de déplacement (120) comporte un nombre analogue d'éléments élastiques (132) dépassant de l'organe d'application de pression (130) et coopérant élastiquement avec les rampes (160), dans lequel le dispositif à came (166) de la première partie d'extrémité comprend des oreilles (170, 172) qui dépassent latéralement sur les parties latérales (150, 152), et le dispositif élastique de rappel du second organe d'arrêt (142) vers le trajet de déplacement (120) comporte des éléments élastiques (142d) dépassant du second organe d'arrêt (142) afin qu'ils viennent coopérer avec les oreilles (170, 172), et dans lequel le dispositif à came (168) de la seconde partie d'extrémité comporte une patte (174) qui dépasse longitudinalement vers le premier organe d'arrêt (138), et le dispositif élastique rappelant le premier organe d'arrêt (138) vers le trajet de déplacement (120) comporte un élément élastique (140b) qui supporte élastiquement le premier organe d'arrêt (138) et qui peut coopérer avec la patte (174).

quement les éléments (122, 124) en coopération.

6. Support (H) selon la revendication 5, dans lequel le dispositif (158) à came de la surface avant comprend des nombres analogues de saillies (162) et de cavités (164) disposées respectivement aux extrémités opposées des rampes (160), dans lequel le dispositif (166) à came de la première partie d'extrémité comporte deux oreilles (170, 172) disposées respectivement près des côtés opposés du boîtier, et dans lequel la patte (174) du dispositif à came de la seconde partie d'extrémité et l'élément élastique (140b) du premier organe d'arrêt ont une forme fourchue afin qu'ils coopèrent symétriquement autour d'un axe longitudinal central commun.
7. Support (H) selon la revendication 6, dans lequel l'organe de libération (144) comprend un dispositif (184) accessible de l'extérieur, dépassant de la première partie d'extrémité (154) par un passage (186) formé dans la première région d'extrémité (110) près de l'ouverture d'accès (118) afin qu'il assure le déplacement manuel.
8. Support (H) selon la revendication 7, dans lequel l'organe de libération (144) et chacun des éléments avant et arrière (122, 124) de boîtier est en une seule pièce de matière plastique moulée, et les éléments avant et arrière comportent des dispositifs coopérants d'emboîtement (126, 128) destinés à enclencher élasti-