No. 787,424. PATENTED APR. 18, 1905.

J. S. WRIGHT.

LIGHT SEAL FOR PHOTOGRAPHIC PLATE HOLDERS.

APPLICATION FILED JUNE 11, 1904.

2 SHEETS—SHEET 1.

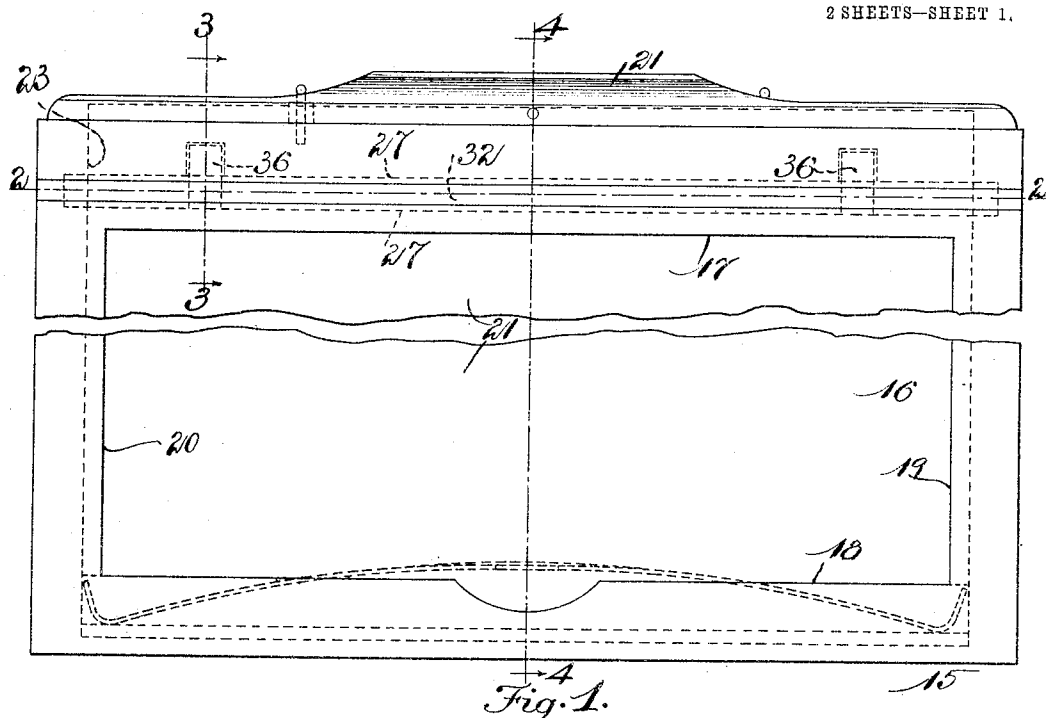


Fig. 1.

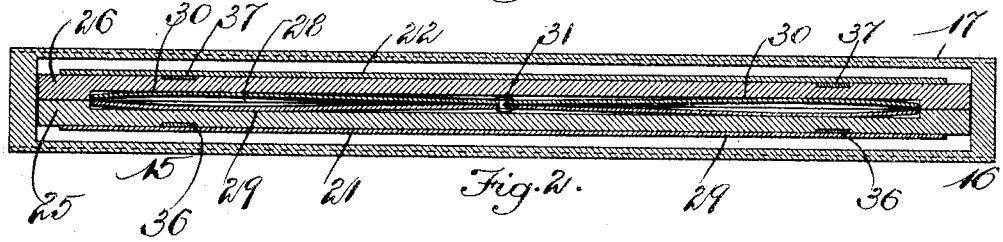


Fig. 2.

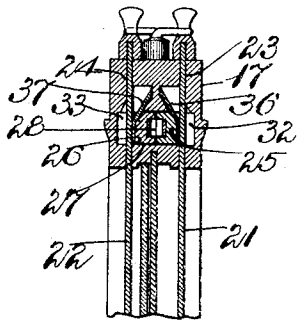


Fig. 3.

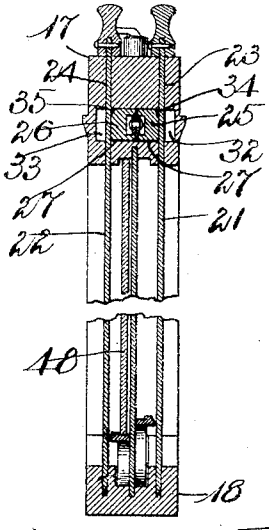


Fig. 4.

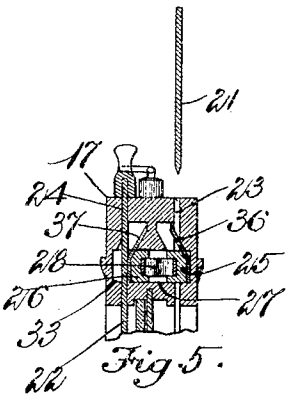


Fig. 5.

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2 SHEETS—SHEET 2.

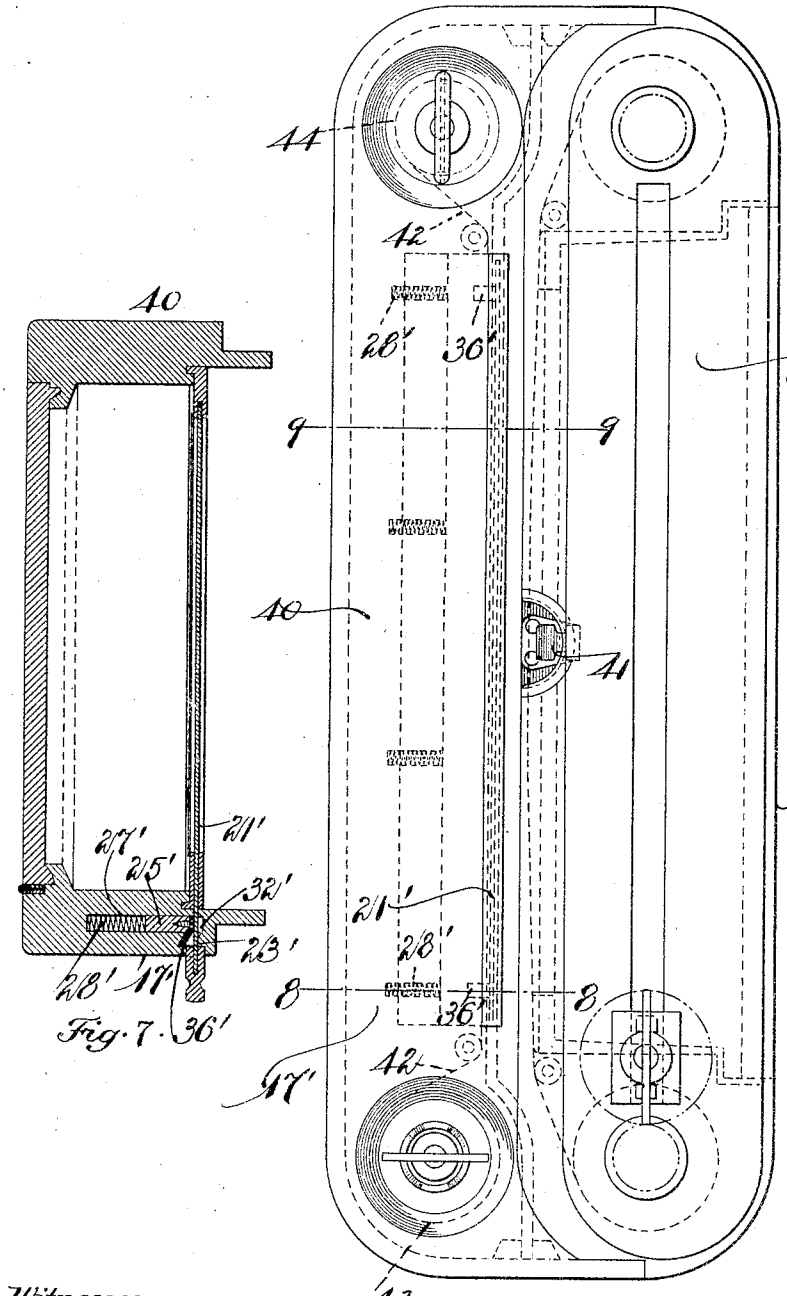


Fig. 6.

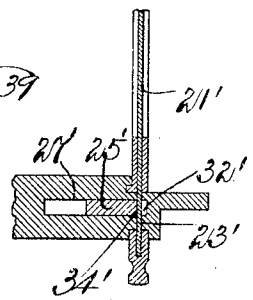


Fig. 8.

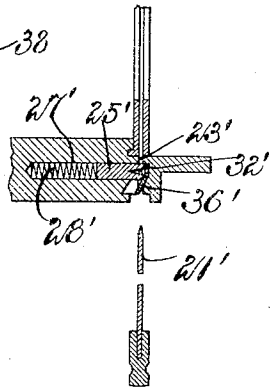


Fig. 9.

Fig. 7.

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UNITED STATES PATENT OFFICE.

JOHN S. WRIGHT, OF DUXBURY, MASSACHUSETTS.

LIGHT-SEAL FOR PHOTOGRAPHIC-PLATE HOLDERS.

SPECIFICATION forming part of Letters Patent No. 787,424, dated April 18, 1905.

Application filed June 11, 1904. Serial No. 212,060.

To all whom it may concern:

Be it known that I, JOHN S. WRIGHT, a citizen of the United States, residing at Duxbury, in the county of Plymouth and State of Massachusetts, have invented new and useful Improvements in Light-Seals for Photographic-Plate Holders, of which the following is a specification.

This invention relates to an improvement in cameras and plate-holders therefor which has for its object to quickly and perfectly close the slot through which the light-shield slide of the camera or of the plate-holder is introduced, and thus avoid any possibility of injury to the photographic plates or films by reason of light entering said camera or plate-holder through said slot.

The invention consists in certain details of construction and combination of parts, as set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings, Figures 1 to 5, inclusive, illustrate my improved light-guard as applied to a plate-holder adapted to contain two photographic plates. Figs. 6 to 9, inclusive, illustrate my improved light-guard applied to a camera-casing.

Fig. 1 is a front elevation of a photographic-plate holder constructed in accordance with my invention, the same being partly broken away to save space in the drawings. Fig. 2 is a section taken on line 2 2 of Fig. 1. Fig. 3 is a section, partly in elevation, taken on line 3 3 of Fig. 1. Fig. 4 is a section, partly in elevation, taken on line 4 4 of Fig. 1. Fig. 5 is a section similar to Fig. 3 with one of the light-shield slides removed. Figs. 3, 4, and 5 are each broken away to save space in the drawings. Fig. 6 is a side elevation of a folding pocket-camera with my improved light-guard attached thereto adapted to contain a roll-film. Fig. 7 is a transverse section of the film-holder of said camera, taken on line 8 8 of Fig. 6. Fig. 8 is a detail section through a portion of one side wall of the film-roll holder, taken on line 9 9 of Fig. 6. Fig. 9 is a detail section through one of the side walls of the film-holder, taken on line 9 9 and similar to Fig. 7 with the light-shield slide withdrawn. Figs. 8 and 9 are broken away to save space in the drawings.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, referring to Figs. 1 to 5, inclusive, 15 is a photographic-plate holder consisting of a hollow rectangular frame or casing 16, having four sides 17, 18, 19, and 20. Two light-shield slides 21 and 22 are provided in said holder. The side 17 is provided with slots 23 and 24, through which the slides 21 and 22, respectively, project. The sides 18, 19, and 20 are also provided with grooves for the reception of the sides, respectively, of the slides 21 and 22, such construction being common in this art. To prevent the light from entering the plate-holder when the slides are withdrawn, two light-guards 25 and 26 are provided, adapted to slide in ways 27 in the side 17 and between the slides 21 and 22. Said guards are forced apart and against the slides 21 and 22 by a flat spring 28, located between said guards and formed of two leaves 29 and 30, joined together by a rivet 31. Recesses 32 and 33 are provided in the side 17 adjacent to and extending transversely of the slots 23 and 24, respectively, and upon the opposite sides, respectively, of the slides 21 and 22 from that upon which the light-guards 25 and 26 are located.

Each of the light-guards 25 and 26 has a beveled or chamfered outer edge 34 and 35, respectively. Said light-guards 25 and 26 are each provided with guide-plates 36 and 37, respectively, fast thereto and extending therefrom toward the outer edge of the side 19 at an acute angle to the slots 23 and 24, respectively.

The operation of the slide and light-guard in my improved photographic-plate holder is as follows: Assuming the slide 22 to have been already inserted in the plate-holder and the slide 21 removed therefrom, as illustrated in Fig. 5, it will be seen that the light-guard 25 is forced by the spring 28 across the slot 23 and into the recess 32, while the light-guard 26 is forced by the spring 28 against the slide 22, holding the same firmly in position against the side 17 of the plate-holder.

To insert the slide 21 in the plate-holder, said slide is pushed downwardly into the slot 23, with its edge parallel to the outer edge of the side 17, until the edge of said slide strikes the inclined guide-plates 36 36, fast to the light-guard 25, and forces said plates, together with the light-guard 25, toward the left from the position shown in Fig. 5 to that shown in Figs. 3 and 4. Upon the withdrawal of either of the slides from the plate-holder its respective light-guard will be forced across the slot 23 or 24 and into the recess 32 or 33, as the case may be, completely preventing any light from entering the plate-holder through the slot in the side 17 for the reception of the light-shield slide.

In the insertion of the slide hereinbefore described the edge of the slide first contacts with the angular guide-plates 36, and subsequently as the slide is forced back the edge of the slide contacts not only with said guide-plates, but also with the chamfered edge 34, said chamfered edge thus assisting in the withdrawal of the light-guard from the recess 32.

In Figs. 6 to 9, inclusive, I have illustrated a form of my invention in which the light-guard is applied directly to the casing of a camera, which may be of any desirable form. In the present instance said camera is known as a "folding pocket-camera" and is made in two parts 39 and 40. The part 39 contains a focal-plane shutter mechanism, and the part 40 is a roll-film holder, said parts being joined together by a spring-catch 41. The film 42 is shown in dotted lines and is wound upon rolls 43 and 44. The light-shield slide 21′ is inserted through a slot 23′ in the side 17′ of the film-holder casing 40. The light-guard 25′ is adapted to slide in ways 27′, provided in the side 17′, and is forced toward the right, Fig. 7, and against the light-shield slide 21′ by spiral springs 28′, inserted in the side 17′, and when said slide 21′ is removed, as illustrated in Fig. 9, said springs force the light-guard 25′ across the slot 23′ and into a recess 32′, formed in the side 17′ adjacent to the slot 23′ and extending transversely thereof, thus cutting off all light which might otherwise pass through the slot 23′ and into the interior of the camera-casing. The light-guard 25′ is provided with guide-plates 36′ and with a beveled or chamfered edge 34′, as in the form of my invention illustrated in Figs. 1 to 5, inclusive.

The operation of inserting the slide and withdrawing the same and the operation of the light-guard in being forced across the slot 23′ and into the recess 32′ is substantially the same as in the other form of my invention hereinbefore described. In both of the forms of my invention it will be noted that in order to introduce the slide into the casing and through the slot in the side of said casing it is necessary that the slide should be placed with the entire edge thereof parallel to the side of the casing in order that the light-guard may be forced back, so that one corner of said slide cannot be inserted, thus partly opening the light-guard and allowing the light to pass through before the slide enters and passes through the entire slot formed in the side of the casing therefor.

The advantages derived from my improved light-guard reside in the fact that said light-guard is of a very substantial construction and is held not only across the slot, but into a recess upon the opposite side of said slot from that in which the light-guard itself is located, thus making a complete cut-off of the light. Again, it is necessary that the slide should be inserted with its entire edge parallel to the light-guard and to the side of the camera through which said entire edge is passed.

Having thus described my invention, what I claim, and desire by Letters Patent to secure, is—

1. A photographic-plate holder comprising in its construction a casing provided with a slot extending through one wall thereof and adapted to receive a light-shield slide, a light-guard having a flat top with a beveled edge constructed to slide transversely of said slot in ways provided in said casing, said casing provided with a recess adjacent to and extending transversely of said slot, into which recess said beveled edge is adapted to project, with said flat top extending across said slot, a guide-plate fast to said top adjacent to said beveled edge and extending upwardly therefrom at an acute angle to said slot, and a spring acting to normally hold said light-guard across said slot.

2. A photographic-plate holder comprising in its construction a casing provided with a slot extending through one wall thereof and adapted to receive a light-shield slide, a light-guard having a flat top constructed to slide transversely of said slot in ways provided in said casing, said casing provided with a recess adjacent to and extending transversely of said slot, said flat top extending entirely across said slot, a guide-plate fast to said top, extending upwardly therefrom at an acute angle to said slot and extending a portion of the length of said light-guard, and a spring acting to normally hold said light-guard across said slot.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN S. WRIGHT.

Witnesses:
CHARLES S. GOODING,
SYDNEY E. TAFT.