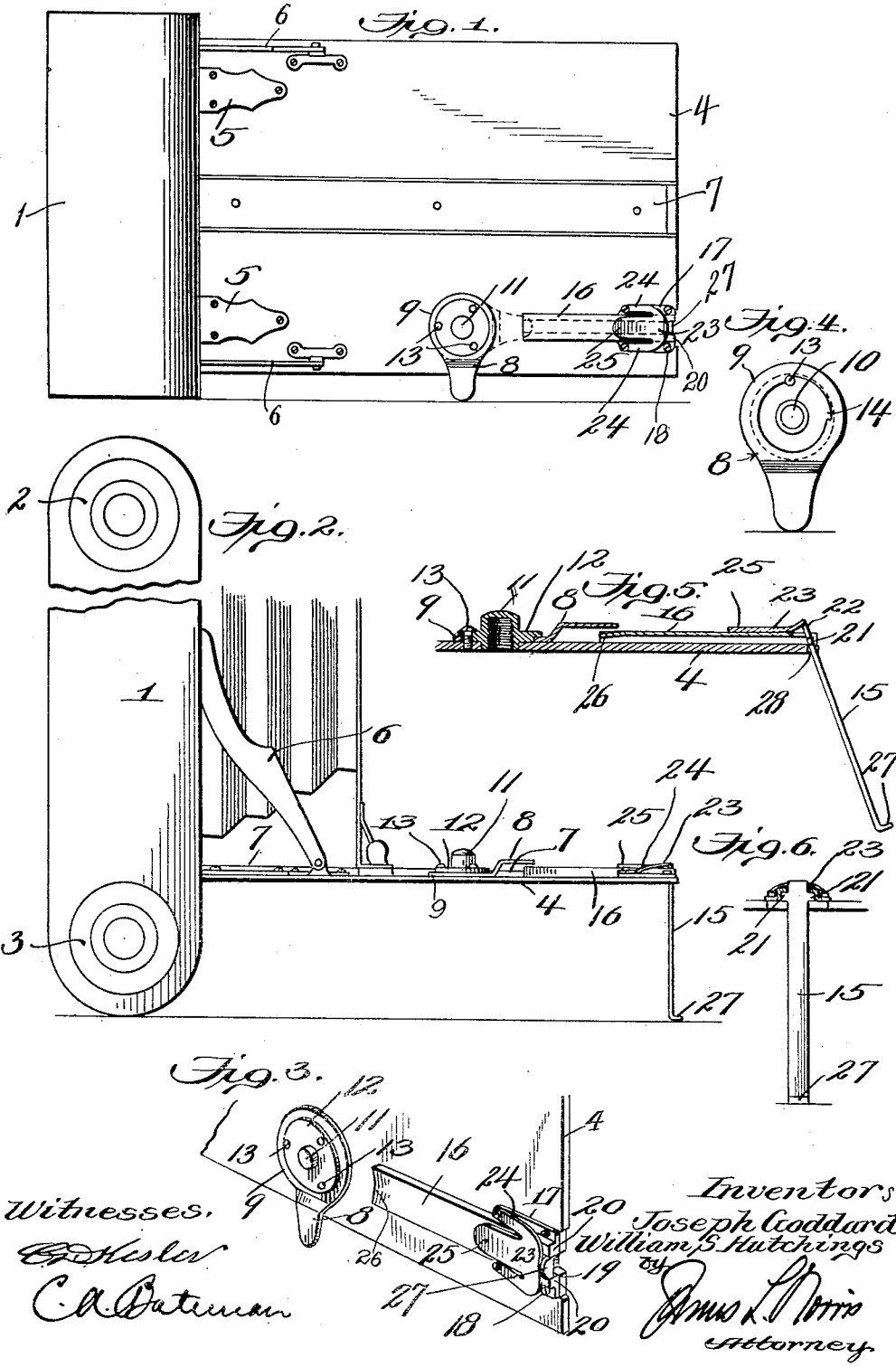


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 PHOTOGRAPHIC CAMERA.
 APPLICATION FILED JULY 10, 1914.

1,129,665.

Patented Feb. 23, 1915.



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PHOTOGRAPHIC CAMERA.

1,129,665.

Specification of Letters Patent.

Patented Feb. 23, 1915.

Application filed July 10, 1914. Serial No. 850,223.

To all whom it may concern:

Be it known that we, JOSEPH GODDARD and WILLIAM S. HUTCHINGS, citizens of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented new and useful Improvements in Photographic Cameras, of which the following is a specification.

The present invention relates to improvements in photographic cameras and more especially to those of the folding type having a hinged door which when opened or extended, projects forwardly from the camera casing and serves as a bed or support for the lens and bellows.

The object of the invention is to provide improved legs to support the forwardly projecting door or bed when the camera is placed in the different exposing positions, such legs being simple and substantial in construction and capable of being easily and quickly set in operative and inoperative positions.

To this end, the invention consists in certain improvements and combinations and arrangements of parts, all as will be hereinafter more fully described, the novel features being pointed out particularly in the claims at the end of the specification.

In the accompanying drawing:—Figure 1 shows a folding camera equipped with supporting legs constructed in accordance with the present invention, the camera being shown as resting on its side with the corresponding leg in position to support the extended door, the inoperative position of said leg being shown by the dotted lines; Fig. 2 is a side elevation of the camera shown in Fig. 1, the camera standing in upright position and the corresponding leg being set to support the extended door; Fig. 3 is a detail perspective view of a corner of the door showing the two supporting legs; Fig. 4 is a detail view of the leg which supports the door when the camera rests on its side; Fig. 5 is a diagrammatic view in section illustrating the manner of restoring to inoperative position the leg which supports the door when the camera is in upright position; Fig. 6 is a front elevation of the leg shown in Fig. 5.

Similar parts are designated by the same reference characters in the several views.

The present invention is shown in con-

nection with a folding camera of the well known type embodying a casing 1 having the spool compartments 2 and 3 at the ends thereof to cooperate with the sensitized film, the latter being exposed through a chamber in the central portion of the casing. A door 4 is adapted to open and close the central chamber in the casing, this door being pivoted to the casing by the hinges 5 and, when extended, is held in proper relation to the casing by braces 6. The door 4, when extended, serves to support the camera lens and bellows, it being provided for this purpose with the usual track 7 on which the lens-carrying front is adjustable, as usual.

Cameras of this type are usually proportioned to make pictures having a greater height than width, the longer dimension of the picture being vertical, when the camera is stood in upright position as shown in Fig. 2, and the longer dimension of the picture being horizontal, when the camera rests on its side, as shown in Fig. 1. Owing to the weight of the forwardly extended door, the lens and bellows, it is desirable to provide legs to support and steady the camera when the latter is set in either of the two positions stated. According to the present invention, a leg 8 is provided to support the forwardly extended door when the camera rests on its side, this leg in the present instance being pivoted to swing laterally beyond the adjacent edge of the door and into a point in line with the respective side of the camera casing so as to rest upon the same support and thereby position the camera horizontally, and this leg is adapted to swing into a position substantially longitudinal of the door, as shown by the dotted lines in Fig. 1, when not in use. In the present instance, this leg has a hub 9 which has a central aperture 10 to cooperate with a pivot 11, this pivot also serving preferably as a socket for the attachment of a tripod to the door of the camera when it is desired to use the camera in that manner. A cap or plate 12 is applied to the top of the hub 9 of the leg 8 to secure the leg from detachment, the cap in the present instance being fixed to the door of the camera by a suitable number of rivets 13 one of which rivets extends through a segmental recess 14 formed in the hub 9 of the leg 8, thereby permitting the requisite swinging or pivoting movements of the leg

about the pivot 11 and at the same time limiting the movement of the leg to preferably an arc of approximately 90°, the limits of which define the operative and inoperative positions of this leg.

A leg 15 is provided for supporting the forward end of the door when the latter is extended and the camera is stood in upright position. This leg 15 is provided with a housing 16 which incloses it when not in use. The housing 16 embodies preferably a strip of metal of channel form, the flanges being turned downwardly to engage the upper face of the door 4. This housing is preferably unattached to the door at its rear end and is secured thereto at or near its forward end by out-turned flanges 17 and securing screws 18, this construction permitting the unattached end of the housing to have a yielding motion toward and from the face of the door.

The forward end of the housing is closed, except for an opening 19 of substantially the width of the leg 15, thus forming stops 20 at opposite sides of the leg. The leg is provided with lugs 21 which are movable longitudinally in the housing 16 and which abut against the stops 20 at the forward end of the housing and thereby limit the forward withdrawing movement of the leg. A portion of the leg projects rearwardly or upwardly beyond the lugs 21 to form a locking projection 22, and a catch or dog 23 is provided to cooperate with said projection. This catch or dog 23 in the present instance embodies a pair of resilient arms 24 which are fixed at their free ends to the upper side of the door, and a spring tongue 25 projects rearwardly and bears on top of the housing, the forward end of the catch being beveled and arranged to cooperate with the locking projection 22 of the leg 15 to hold the latter in extended position, although a positive force applied to the leg to swing the latter into alinement with the housing will cause deflection and release of the catch. An indented portion or projection 26 is preferably provided toward the rear or unattached end of the housing and extends partially into the path of the leg 15 when the latter is inserted into the housing, producing a frictional action upon the leg 15 which will prevent accidental withdrawal of the latter from the housing, this frictional action being due to the relative yield between the unattached end of the housing and the door. Normally, the leg 15 is inclosed within the housing, as shown in Figs. 1 and 3, a laterally-turned foot 27 formed on the lower end of the leg projecting slightly from the housing beyond the catch 23 and providing a projection which can be engaged by the finger when it is desired to withdraw the leg 15. To bring this leg into operative position, it is first

withdrawn forwardly until the lugs 21 thereon abut against the limiting stops 20 on the housing, further movement of the leg being thereby arrested and the leg is then swung downwardly about the lugs 21 as an axis, the forward end of the catch or dog 23 being deflected by the locking projection 22 on the leg 15, and when said leg reaches a vertical position, the catch or dog 23 will spring behind the projection 22 and thereby lock the leg in such position. To brace the leg when in operative position, the forward end of the door is preferably formed with a recess which provides a shoulder 28 below the pivot lugs 21, this shoulder 28 operating in conjunction with the catch or dog 23 and preventing movement of the leg in either direction about the lugs 21. The leg 15 is returned to inoperative position by swinging it into alinement with the housing whereby the locking lug 22 of the leg cooperates with the beveled portion of the catch and is thereby unlocked, whereupon the leg is pushed rearwardly until it is completely entered in the housing.

We claim as our invention:—

1. In a photographic camera, the combination with a casing and a door adapted to project therefrom, of a door supporting leg movable longitudinally and also having a pivotal movement, and a catch cooperative automatically with the leg for retaining the latter in angular position when the leg is caused to assume such position.
2. In a photographic camera, the combination with a casing and a door adapted to project therefrom, of a housing on the door, and a door-supporting leg movable longitudinally into and out of said housing and having pivots to engage the housing to afford a pivotal movement of the leg about a relatively fixed axis to and from operative position.
3. In a photographic camera, the combination with a casing and a door adapted to project therefrom, of a door-supporting leg, a housing to inclose the leg and providing means for guiding it for longitudinal movement, and cooperative means on the leg and housing for guiding said leg for pivotal movement about a fixed axis.
4. In a photographic camera, the combination with a casing and a door adapted to project therefrom, of a housing on the door, and a door-supporting leg movable longitudinally into and out of said housing and having pivot lugs thereon to cooperate with the housing and guiding the leg for pivotal movement about a fixed axis.
5. In a photographic camera, the combination with a casing and a door adapted to project therefrom, of a door-supporting leg movable longitudinally and also having a pivotal movement, and a spring catch for

automatically locking the leg against pivotal movement when set in operative position.

6. In a photographic camera, the combination with a casing and a door adapted to project therefrom, of a housing on the door having limiting lugs thereon, and a door-supporting leg movable longitudinally into and out of said housing and having lugs cooperative with the lugs of the housing to arrest the outward movement of the leg relatively to the housing and to form an axis about which the leg swings.

7. In a photographic camera, the combination with a casing and a door adapted to project therefrom, of a housing on the door, and a door-supporting leg movable longitudinally into and out of said housing, the latter producing a yielding pressure on the leg to retain the latter within the housing.

8. In a photographic camera, the combi-

nation with a casing and a door adapted to project therefrom, of a housing on the door having limiting lugs thereon, a door-supporting leg movable longitudinally into and out of said housing and having lugs cooperative with the lugs of the housing to arrest the outward movement of the leg relatively to the housing and to form an axis about which the leg swings, and a catch cooperative with the leg to lock it against swinging movement about said axis when in operative position.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

JOSEPH GODDARD.
WILLIAM S. HUTCHINGS.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."