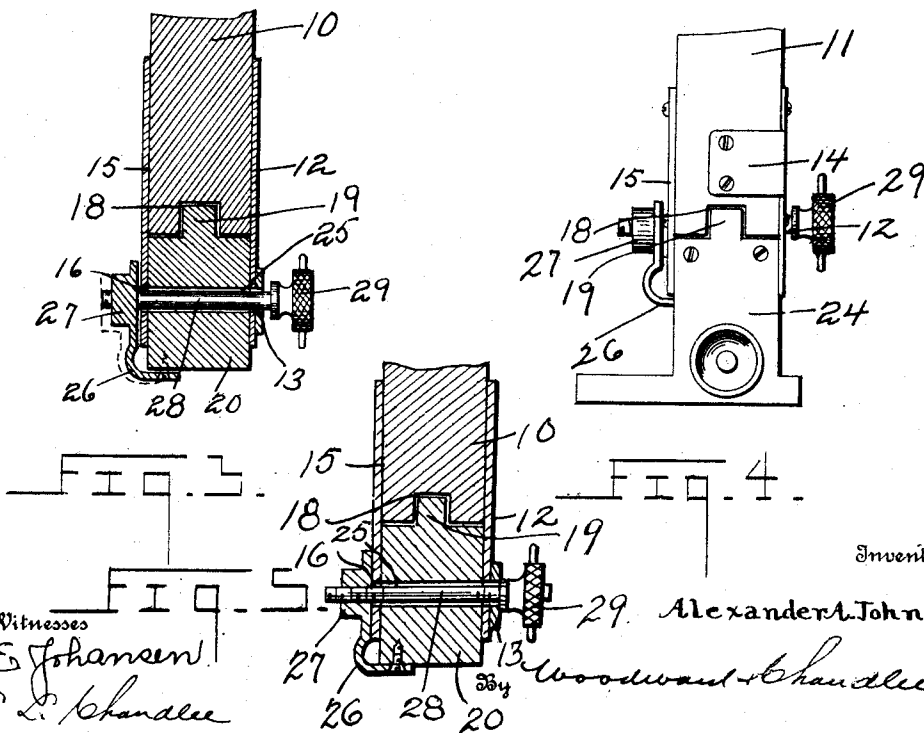
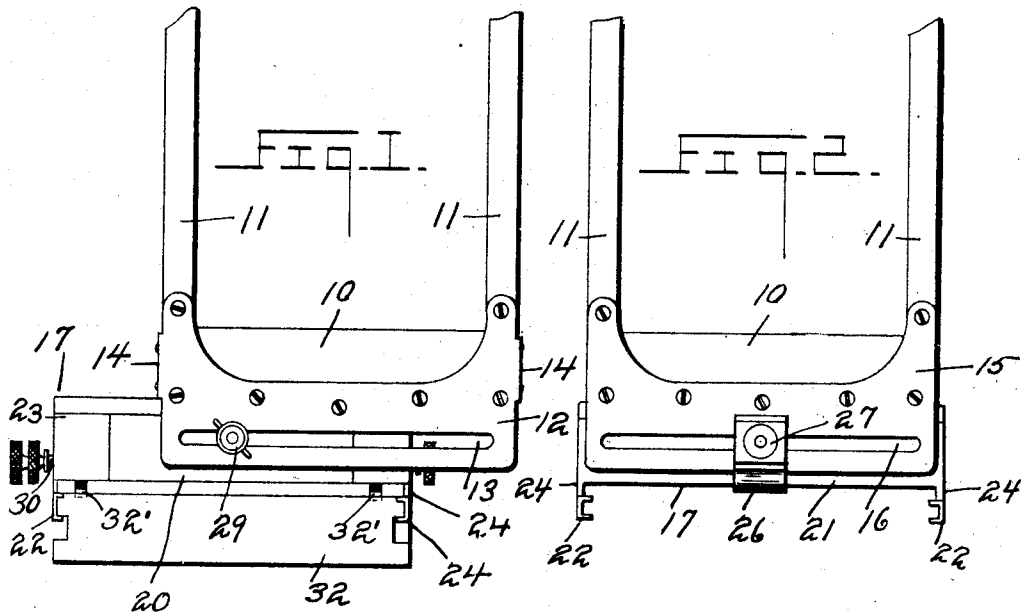


A. A. JOHNSON.
SLIDING CAMERA FRONT.
APPLICATION FILED NOV. 12, 1908.

978,027.

Patented Dec. 6, 1910.



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ALEXANDER A. JOHNSON, OF TACOMA, WASHINGTON.

SLIDING CAMERA-FRONT.

978,027.

Specification of Letters Patent.

Patented Dec. 6, 1910.

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To all whom it may concern:

Be it known that I, ALEXANDER A. JOHNSON, a citizen of the United States, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Sliding Camera-Fronts, of which the following is a specification.

This invention relates to photographic cameras, and more particularly to adjustable fronts therefor, and has for its object to provide an adjustable front of novel and durable construction, which may be manufactured at low cost from stock material.

A particular object of the invention is to provide a front of the class described having a locking means adapted to allow the device to be adjusted with great ease, the locking means being especially constructed and adapted to obviate binding between the sliding parts.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claims, and that any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a front view of a front board equipped with the present device, Fig. 2 is a rear view of the same, Fig. 3 is a cross sectional view centrally of the device, Fig. 4 is an end view. Fig. 5 is a view similar to Fig. 3, showing the members in binding position.

Referring to the drawings, there is shown a camera front of the usual type comprising a base 10 carrying standards 11 adapted to support a lens board by any of the usual methods. Secured to the front of the base portion there is a guide plate 12 extending across the front of the base, and projecting therebelow, as shown, a horizontal slot 13 being formed therethrough stopping short of the opposite sides of the front. The plate 12 is provided with integral end flanges 14 bent over the ends of the base 10 and secured thereto as shown.

Secured to the rear face of the base 10 there is a guide plate 15 similar to the one 12 and having a slot 16 formed therein similar to and in registry with the one 13. It

will be noted that the plates 12 and 15 project downwardly below the base 10 to provide guide portions adapted to receive a carriage 17 slidably therebetween. In the lower face of the base 10 there is formed a groove 18 extending across the front and receiving a tongue 19 carried by the upper edge of the carriage 17. The carriage member 17 comprises a cross piece 20 having a guide piece 21 secured thereto, and comprising a plate secured across the rear face of the cross piece 20 and having its opposite end portion stamped to form the usual pendant guides 22 utilized in such construction. A flange portion 23 is extended beyond the guide portion, and is secured over the front face of the cross piece 20, the intermediate portion 24 to which the guides 22 are directly connected being disposed over the ends of the cross piece 20. It will be understood that the plates 12 and 15 and the guide members 22 may be secured to the adjacent supporting portions in any suitable manner.

Formed centrally of the carriage 17 and through the member 21 there is a laterally extending passage 25 registering with the slots 13 and 16 for a purpose to be subsequently indicated. Secured to the lower face of the cross piece 20, and extending upwardly and outwardly over the slot 16 there is an angular spring 26 having a nut portion 27 at its upper end, provided with a threaded perforation disposed in registry with the passage 25. Disposed revolvably in the passage 25, there is a shaft 28 having a knurled head 29 disposed at its forward end, inwardly of which there is a washer engaged around the shaft and adapted to take up the pressure of the head 29 upon the adjacent portion of the plate 12. It will be noted that the shaft 28 extends through the slots 13 and 16, and at its rearward end is threaded and engaged in the nut 27 for clamping engagement upon the plates 12 and 15 upon manipulation of the head 29, as will be clearly apparent. The spring 26 normally tends to set outwardly from the adjacent plate 15 as will be noted in Fig. 3, and the downwardly projecting guide portions of the plates 12 and 15 also normally set away from the adjacent faces of the carriage 17 to allow free sliding movement thereof. It will thus be seen that upon release of the shaft 28 from engagement with the nut 27, the spring 26 will move out-

wardly from engagement with the plate 15 and the carriage 17 will thus be relieved of any binding action between the guide portions, as will at once be apparent.

5 It will be noted that the plate 21 and the guides 22 are adapted to be stamped integrally from sheet material and provide an unusually strong carriage when secured to the cross piece 20 by means of a suitable
10 screw as illustrated at 20'.

Suitable openings are provided in the adjacent portion 24 of the plate 21 above the guides 22 for the reception of a revoluble shaft 30 carrying the usual pinions for en-
15 gagement with the rack 32' carried by a track portion 32 engaged with the guides 22.

It will be noted that by the construction of the guide portions, as presented, the standards are secured in rigid relation with
20 the carriage 17, by the use of material of a minimum size, the clamping engagement of the shaft with the nut being calculated to further strengthen and increase the rigidity of the engagement of the upper section with
25 the carriage.

What is claimed is:

1. A camera front adapted for adjustable lateral movement and comprising a carriage portion and a lens carrying frame engaged
30 slidably thereon, said frame carrying front and back side plates having pendent portions provided with registering slots extending laterally of the front and engaged slidably with the carriage portion, said carriage
35 portion having a brace plate secured to the rear face thereof and extending over its opposite ends, the end portions of the plate being provided with pendent track engaging portions, and carrying revolvably a shaft and
40 pinion adapted for engagement with a rack, said carriage having a passage therethrough registering with said slot and having an angular spring secured thereto and extending upwardly over one of the guide plates, said
45 spring normally setting outwardly of said plate, and carrying a centrally threaded nut portion at its outer end disposed in registry with said passage, and a threaded shaft engaged through the passage and with said
50 nut, and having a knurled head at its opposite end outwardly of the adjacent guide plate, and adapted for clamping engagement with said plates to retain the frame adjustably upon the carriage.

55 2. In a camera front, the combination with a carriage portion, of a frame having spaced plates secured to opposite sides thereof and engaged slidably with the carriage, said plates having laterally extending registering slots, a nut member carried by the car-
60 riage and having a threaded opening there- through in registry with the slot, said car-

riage having a passage therethrough registering with said slots and opening, and a headed screw member engaged through the
65 slots and opening and with the nut for clamping engagement with the guide plates, to hold the frame adjustably at various points on the carriage.

3. In a camera front, the combination with
70 slidable sections, one of said sections having a passage therethrough, and the other of said sections having a slotted portion disposed in registry with the passage: of a nut member carried by the first named section
75 and disposed in resilient spaced relation with the slotted portion, and a headed screw member engaged through the slotted portion, through the passage and with the nut for clamping engagement with the sections. 80

4. A camera front comprising relatively
85 slidable sections, one of said sections having an overlapping slotted portion, the other of said sections having a perforation therethrough registering with the slot and carry-
90 ing a nut disposed in resilient spaced relation with the slotted portion, said nut having a threaded opening therethrough registering with the perforation, and a headed screw member engaged through the slot and
95 passage and with the nut for clamping engagement with the sections.

5. In a camera front, the combination with
100 a section carrying a headed screw member of a relatively slidable section having a slot-
105 ted portion disposed slidably over the screw, and a nut member disposed in resilient spaced relation with the slotted portion and adapted to receive the screw therein.

6. In a camera front including resiliently
110 overlapped relatively slidable members, one of said members having a central perforation therethrough and the other having a slot disposed in sliding registry with the
115 opening, of an interiorly threaded nut disposed in resilient spaced relation with the overlapped members, and a headed screw member engaged with the nut and through the overlapped members for adjustable
120 clamping engagement of the members.

7. In a sliding front for cameras, the combination with relatively slidable members,
125 of a lock member carried by one of the sliding members in resilient spaced relation with the other, and an engaging member engaged with and adapted to clamp the lock member adjustably against the second slid-
130 able member.

In testimony whereof I affix my signature, in presence of two witnesses.

ALEXANDER A. JOHNSON.

Witnesses:

JOE TOMYOK,

ANTHONY LUCAS.