

(No Model.)

M. FLAMMANG & F. MONIOT.
PHOTOGRAPHIC PLATE HOLDER.

No. 571,855.

Patented Nov. 24, 1896.

Fig. 1.

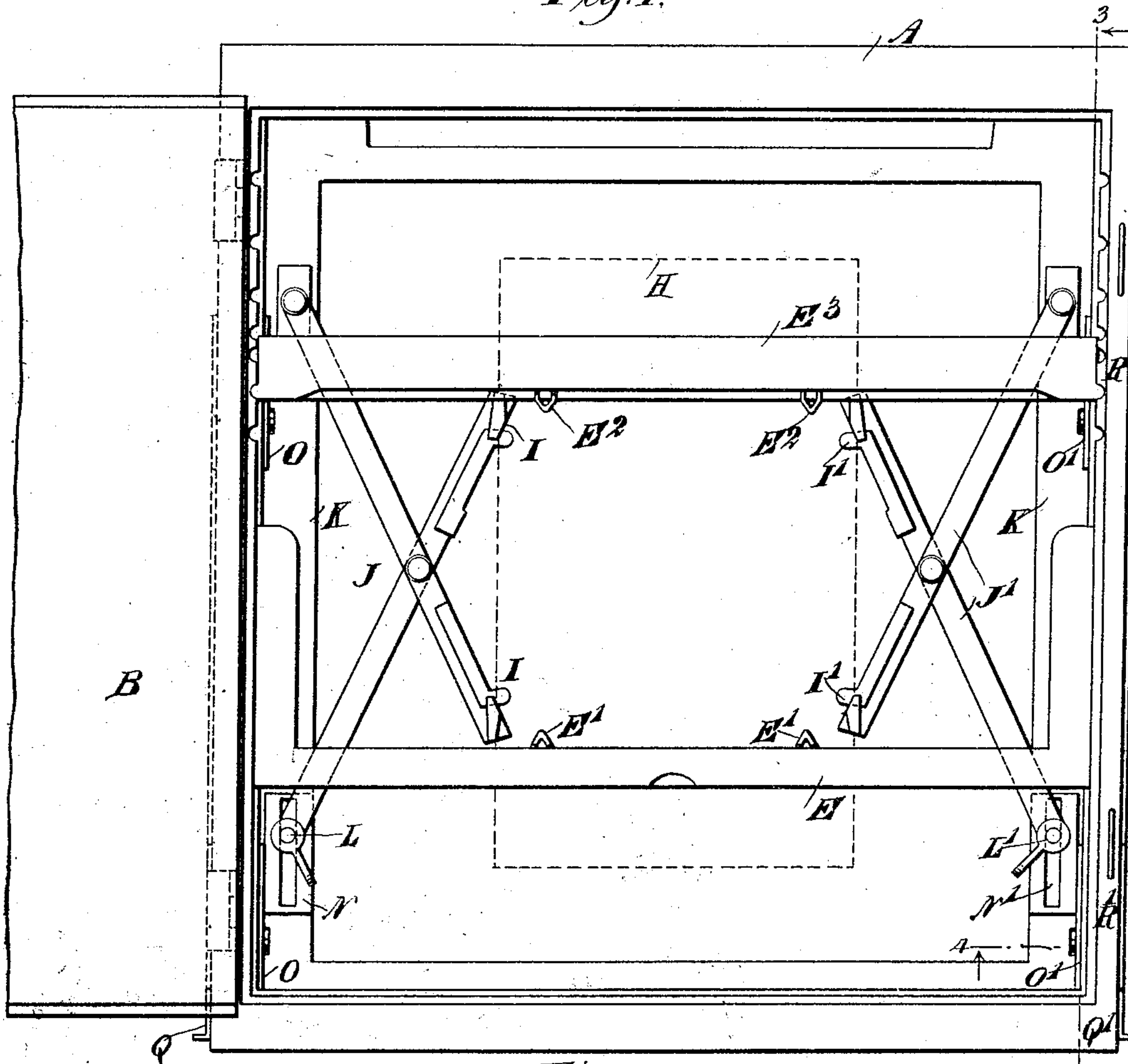


Fig. 2.

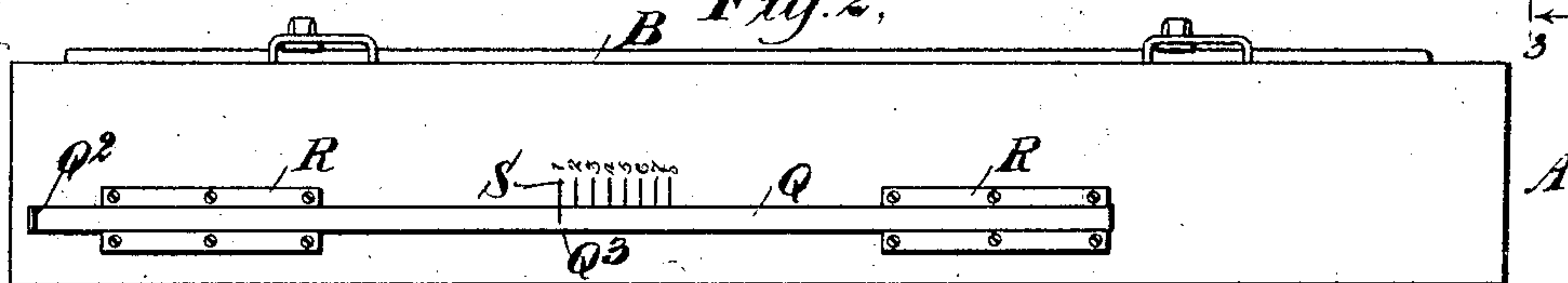
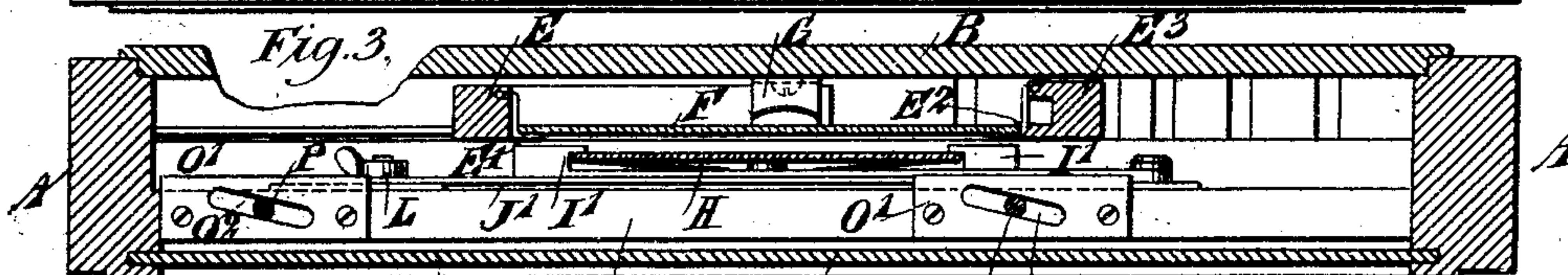


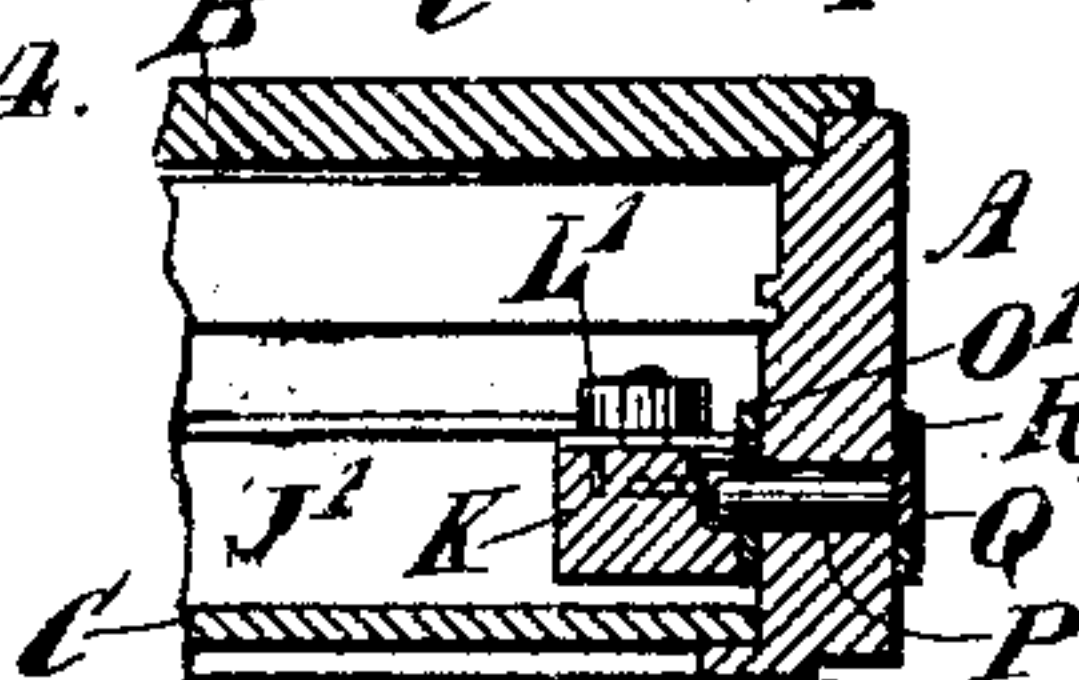
Fig. 3.



WITNESSES:

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Fig. 4.



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PHOTOGRAPHIC-PLATE HOLDER

SPECIFICATION forming part of Letters Patent No. 571,855, dated November 24, 1896.

Application filed January 28, 1896. Serial No. 577,164. (No model.)

To all whom it may concern:

Be it known that we, MATHIAS FLAMMANG, of Newark, in the county of Essex and State of New Jersey, and FRANK MONIOT, of New York city, in the county and State of New York, have invented a new and Improved Photographic-Screen-Plate Holder, of which the following is a full, clear, and exact description.

10 The invention relates to apparatus for producing half-tone plates; and its object is to provide a new and improved photographic-screen-plate holder which is simple and durable in construction and arranged to enable
15 the operator to accurately adjust the screen relatively to the sensitive plate according to the nature of the object to be photographed.

The invention consists of certain parts and details and combinations of the same, as will
20 be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

25 Figure 1 is a side elevation of the plate-holder with the cover open. Fig. 2 is an end elevation of the same. Fig. 3 is a cross-section of the same on the line 3 3 of Fig. 1, and
30 Fig. 4 is an inverted sectional plan view of part of the plate-holder on the line 4 of Fig. 1.

The improved photographic-screen-plate holder is provided with the usual box A, having a hinged cover B and a slide C for exposing the sensitive plate, as is well known. In
35 the sides of the box A is fitted to slide an arm E, carrying projections E' for one edge of the sensitive plate to rest upon, the other edge resting on similar projections E², held on an
40 arm E³, engaging with its ends notches formed in the sides of the box A. By this arrangement the two arms E E³ can be moved nearer to or farther from each other to accommodate
45 any-sized sensitive plate F, it being understood that the film of the plate is at the front, and the back of the plate is engaged by the usual spring G, secured to the inner face of the cover B.

50 Directly in front of the film-face of the sensitive plate F are arranged the spring-holders I I' for carrying the screen H, said holders

being arranged on the free ends of the arms of the lazy-tongs J J', fulcrumed on the sides of a frame K, fitted to slide laterally in the box A, so as to bring the screen H nearer to or
55 farther from the sensitive plate F, according to the nature of the object to be photographed.

One arm of the lazy-tongs J engages a rigid pivot on the side of the frame K, while the other arm has its pivot L adjustable in a
60 guideway N, formed on that side of the frame K, said pivot being adapted to be locked in place by a suitable clamping screw or cam to hold the lazy-tongs J in place after the same
65 have been once adjusted to the required size of screen. The other lazy-tongs J' is similarly arranged, that is, one arm has a fixed pivot and the other arm has its pivot L' movable in a guideway N', secured to the other
70 side of the frame K.

Now in order to impart lateral movement to the frame K we provide each side thereof with a pair of plates O O', each plate being formed with an inclined slot O², engaged by a pin P, projecting through a suitable slot in
75 the side of the box A, and the pair of pins for the plates O are secured at their outer ends on slides Q, fitted to move in suitable guideways R, arranged on the outer side of the box A. (See Fig. 2.) The pins P for the
80 other set of plates O' are similarly arranged and secured on a slide Q', fitted to move in suitable bearings R', arranged on the side of the box A. The slides Q Q' are formed at one
85 end with a suitable handle Q² for enabling the operator to readily manipulate said slides; that is, to shift the same forward or backward and cause the pins P to move laterally with the plates O O', and consequently move the
90 frame K in the same direction to bring the screen H nearer to or farther from the sensitive plate F.

Each of the slides Q is provided with a line Q³, (see Fig. 2,) adapted to indicate on a graduation S, representing one thirty-second of an
95 inch, or a like subdivision of a unit measurement, that is, the distance between two graduation-marks corresponds to one thirty-second of an inch space between the screen H and the sensitive plate F.

Now it will be seen that by the arrangement described the operator by manipulating
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the slides Q can readily adjust the screen H so as to bring it to the desired distance from the film of the sensitive plate F, said regulation being accomplished from the outside of the holder after the plates F and H are in place and the exposure is to be made.

It will further be seen that by the arrangement described the lazy-tongs can be readily adjusted to accommodate any size of screen, and the latter is freely suspended within the box and without danger of its coming in contact with the sensitive plate or any part of the box.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

1. A holder for photographic-screen plates and the like, provided with oppositely-arranged lazy-tongs, movable toward and from each other, and carrying plate-holding devices, substantially as described.

2. A holder for photographic-screen plates and the like, provided with oppositely-arranged lazy-tongs adapted to move toward and from each other and carrying plate-holding devices at their inner ends, substantially as described.

3. A holder for photographic-screen plates and the like, provided with lazy-tongs pivotally connected at one end to the frame of the holder, and slidably connected thereto at the other end, and plate-holding devices at the free ends of the lazy-tongs, substantially as described.

4. A photographic - screen - plate holder,

comprising the main frame adapted to carry a negative or auxiliary frame adjustable toward and from the negative and lazy-tongs secured to said auxiliary frame and carrying holders for a screen-plate, substantially as described.

5. A photographic - screen - plate holder, provided with a frame held laterally adjustable, means for adjusting said frame, lazy-tongs adjustably held on said frame, and holders carried by said lazy-tongs and adapted to carry the screen, substantially as shown and described.

6. A photographic - screen - plate holder, comprising a main frame adapted to receive a negative auxiliary frame movable toward and from said negative and provided with inclined slots, pins mounted to slide in the main frame and engaging the slots of the auxiliary frame, and lazy-tongs secured to said auxiliary frame and provided with holders for a screen-plate, substantially as described.

7. A holder for photographic-screen plates and the like, provided with a holder for the negative, a screen-plate holder movable toward and from said negative-holder, and actuating devices for shifting said screen-plate holder, said actuating devices extending through the frame to the outside thereof, substantially as described.

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