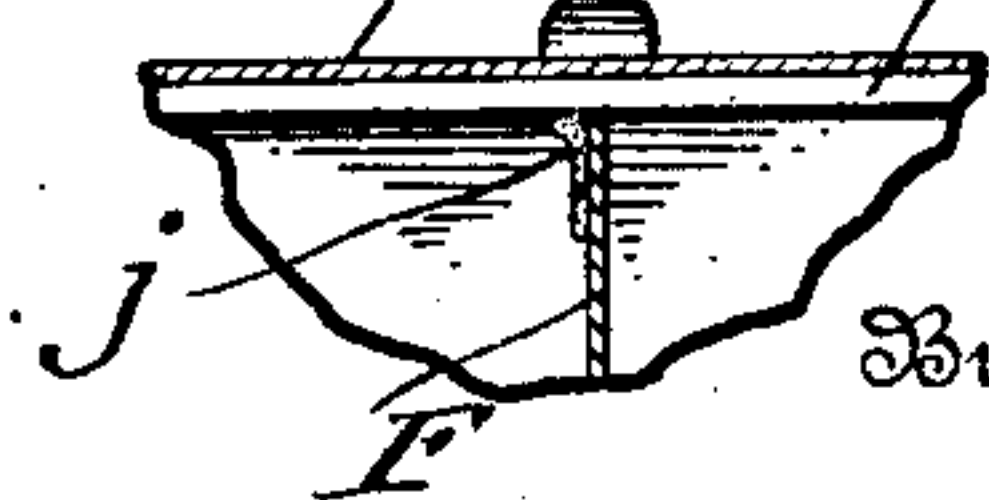
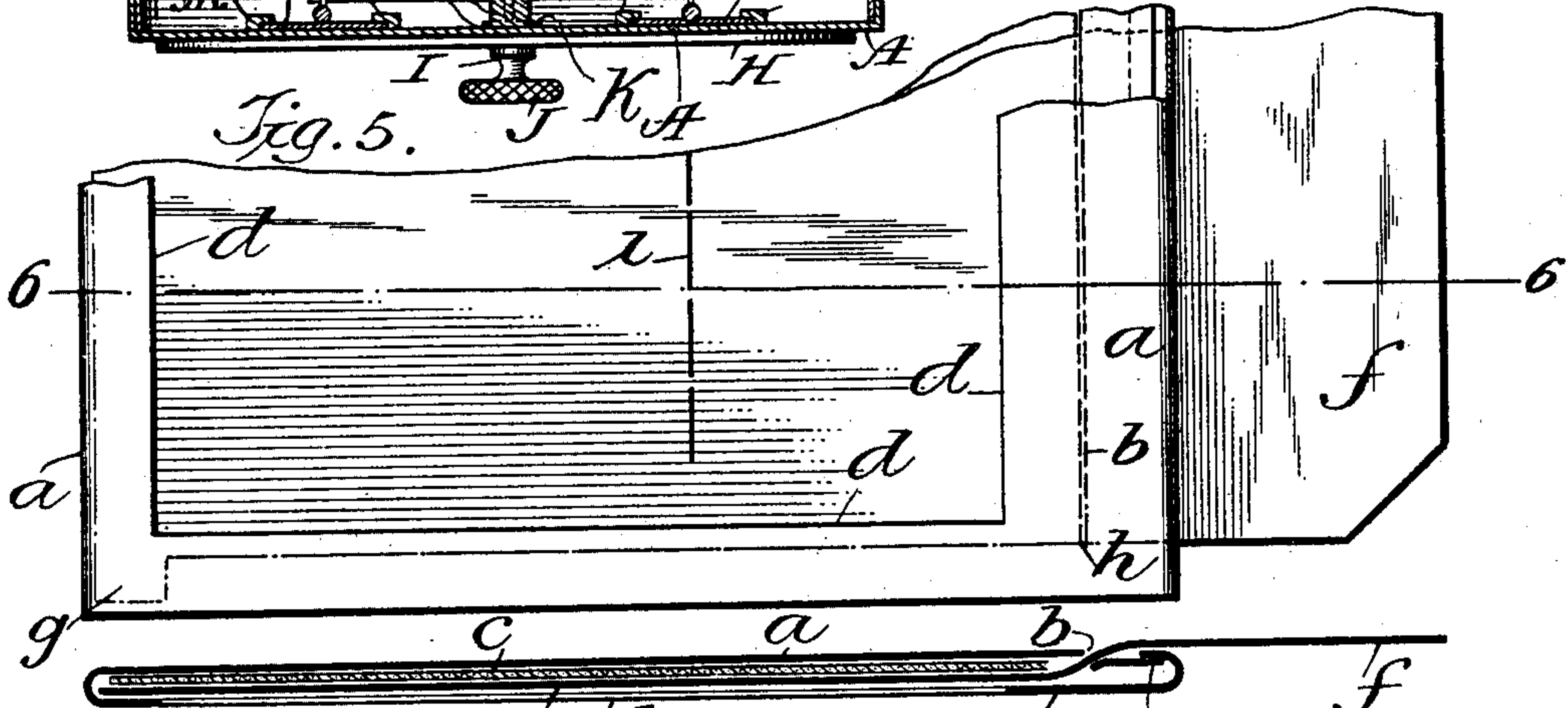
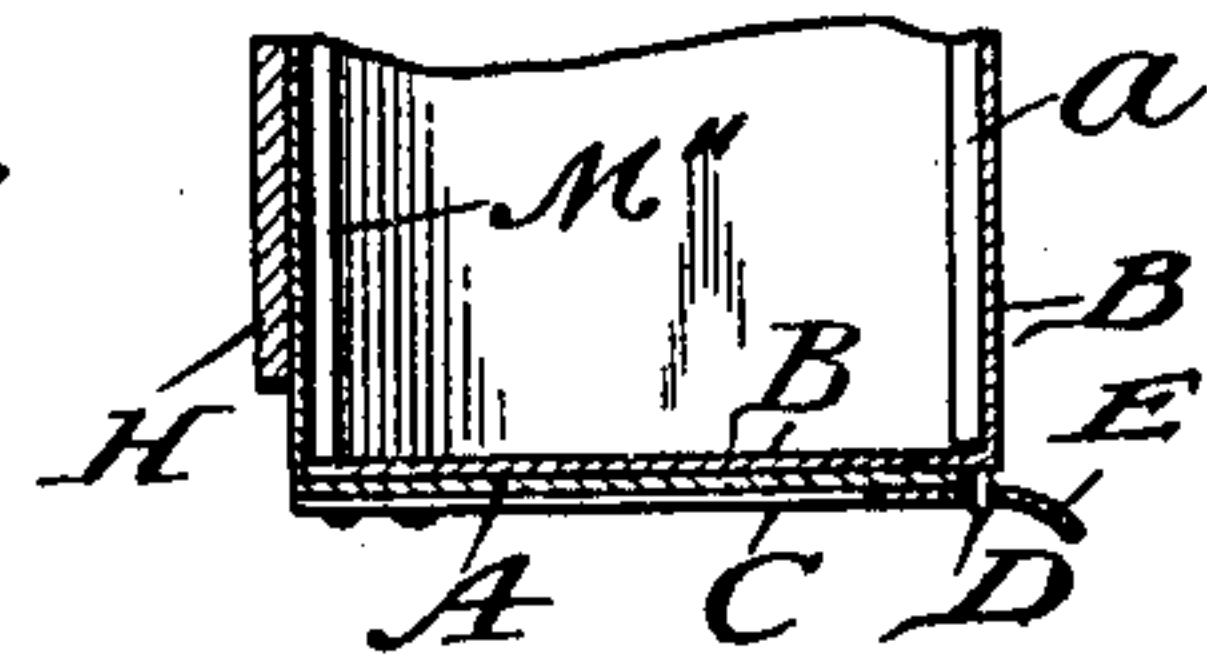
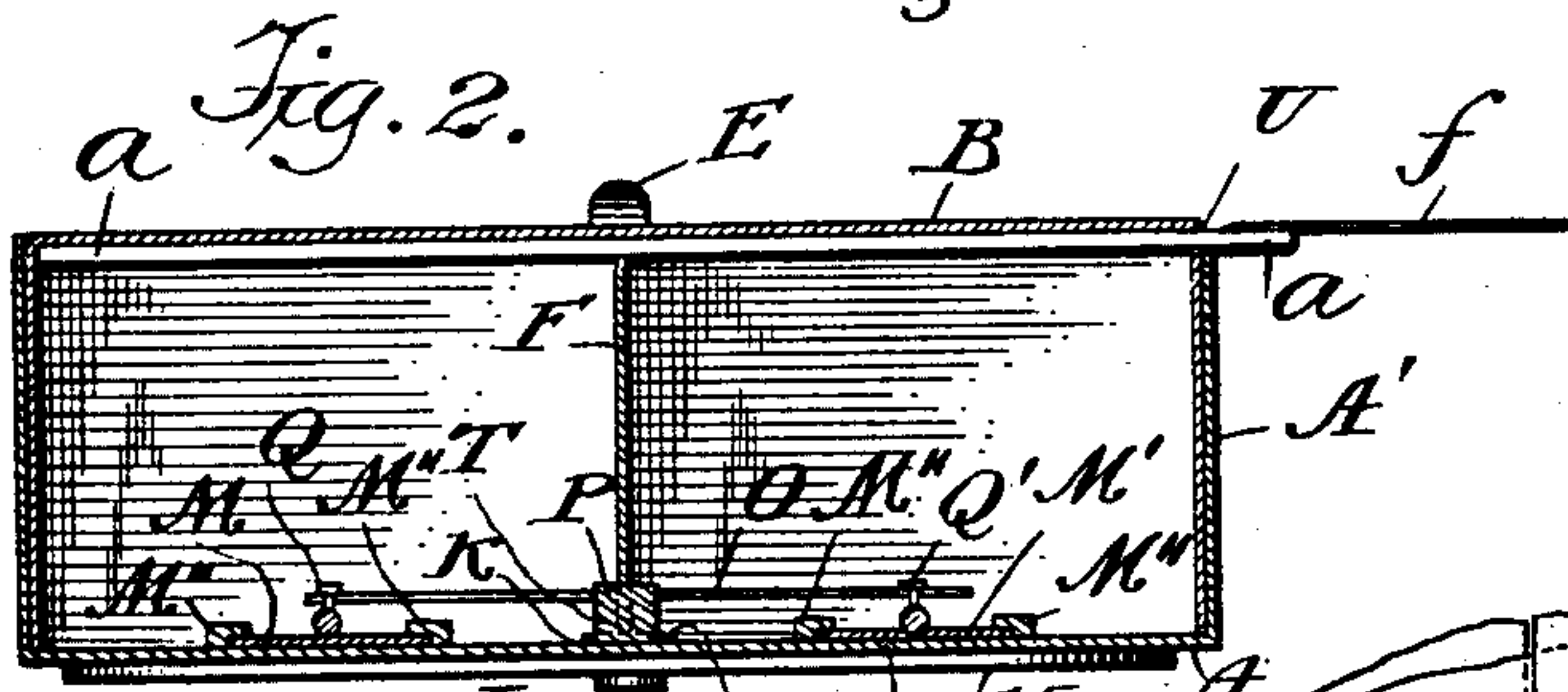
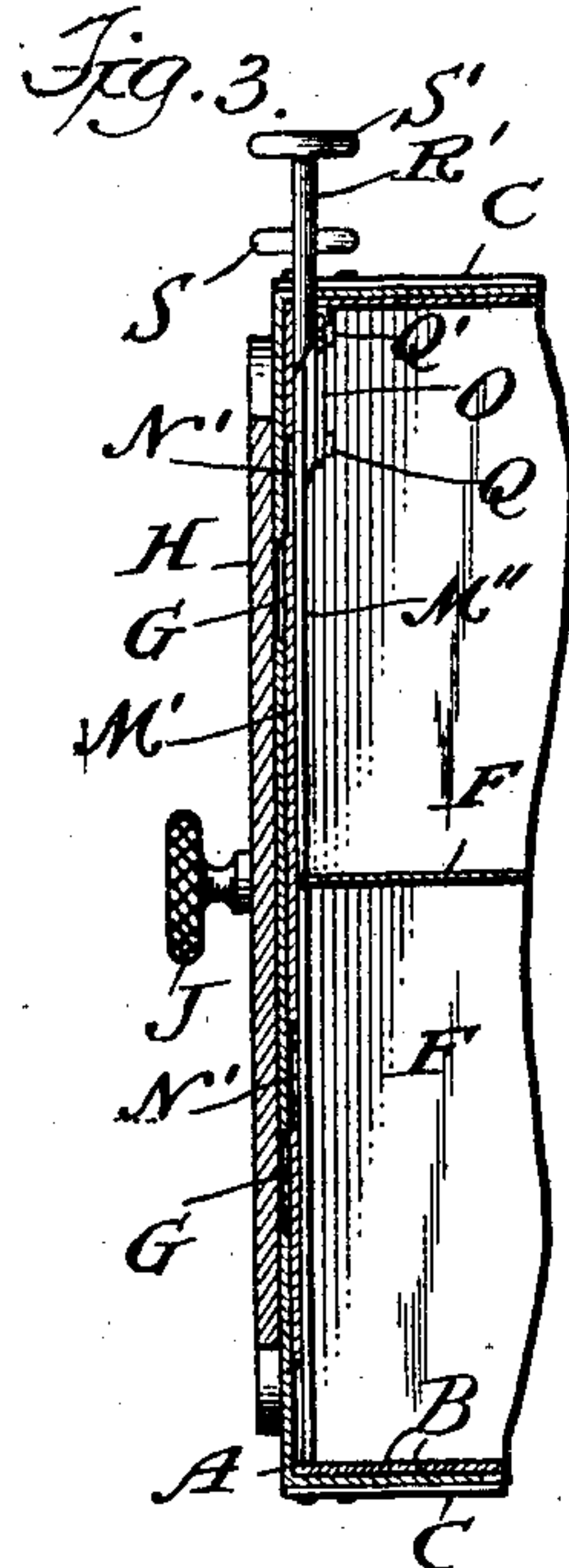
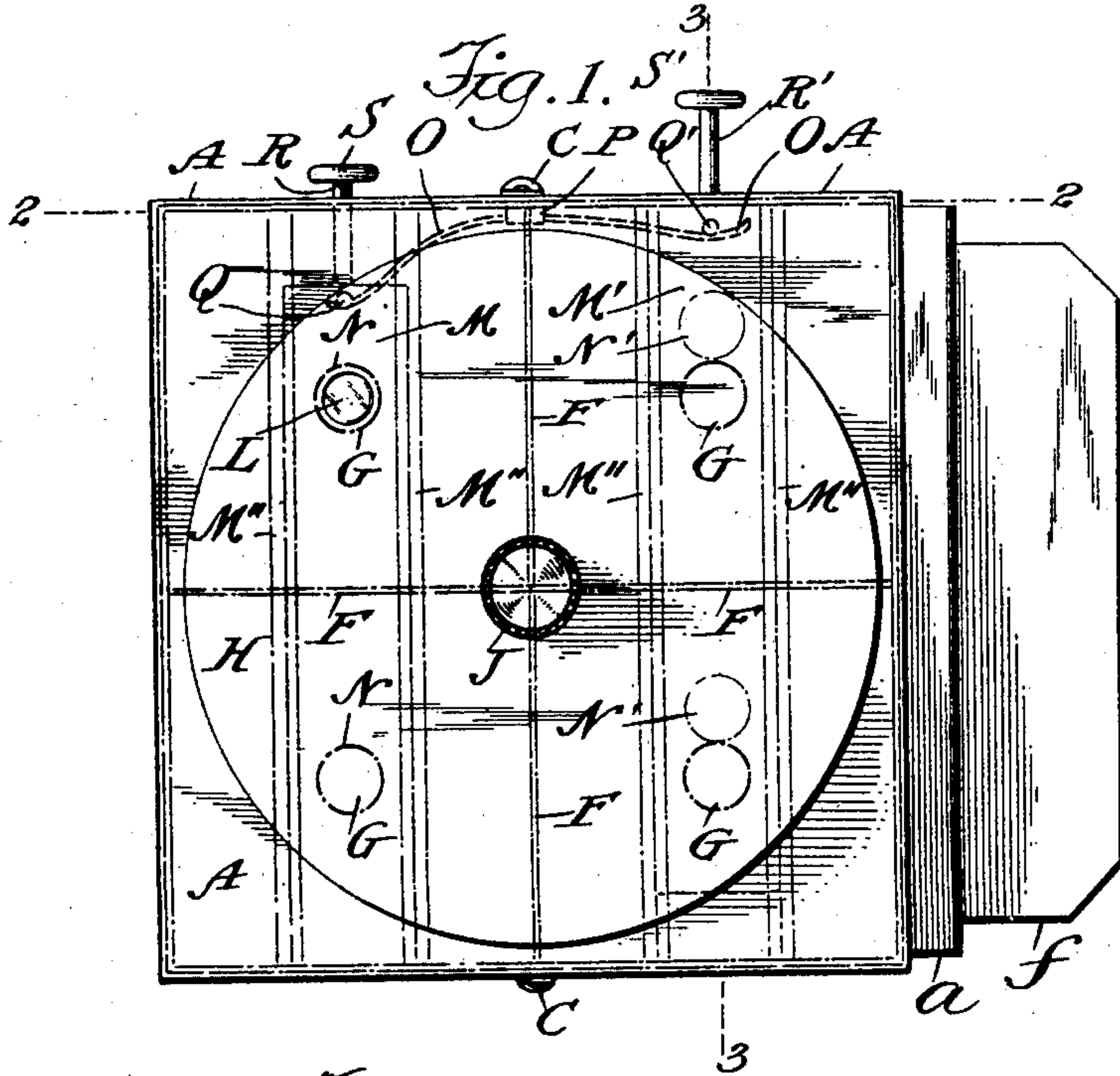


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CAMERA.

APPLICATION FILED SEPT. 8, 1906.

929,648.

Patented Aug. 3, 1909.



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CAMERA.

No. 929,648.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed September 8, 1906. Serial No. 333,863.

To all whom it may concern:

Be it known that I, FREDERICK A. ANTHONY, a citizen of the United States, and a resident in the town of Hackensack, county of Bergen, State of New Jersey, have invented a new and Improved Camera, of which the following is a specification, reference being had to the accompanying drawings, in which—

10 Figure 1 illustrates a front elevation of the camera; Fig. 2 illustrates a horizontal sectional view taken on the line 2—2 of Fig. 1; Fig. 3 illustrates a vertical sectional view taken on the line 3—3 of Fig. 1; Fig. 4 illustrates a sectional view of the lower part of the camera, showing one of the clips which hold the two parts of the camera together; Fig. 5 illustrates a plan view, partly broken away, of the frame or holder for film or plate; Fig. 6 illustrates a sectional view taken on the line 6—6 of Fig. 5; Fig. 7 illustrates a detail showing one means for preventing the film from becoming light-struck.

Referring to the drawings, A and B represent two telescoping boxes, each without cover. They are made of different size, so that the box B is adapted to slide within the box A.

30 C, C, are snap catches on the exterior box A which catch over pins D, D, which project from the box B. The spring catches C are turned outwardly, as at E (see Fig. 4) and have holes in them so that when the two parts of the box are telescoped, the spring will ride up upon the pin D until the hole in the spring is in registration with the pin. Thereupon the resiliency of the spring will cause the pin to pass through the hole, thus locking the parts together.

40 F are partitions extending across the interior of the boxes, whereby, in the instance shown, they are divided into four separate compartments and in the front of the box A there are openings G, G, G, G, one in each compartment, through which the light passes to make the exposure. H is a disk, centrally pivoted, as at I, the pivot being provided with a thumb-nut J, whereby the disk can be turned. The pivot is firmly held in the center of the box A by passing through the disk H, through the side of the box A and is provided with a flat washer K on the inside of the box. L is a lens, which is set in the revolving disk H, adapted to come succes-

sively into registration with the openings G 55 in the face of the box A.

M, M', are two sliding shutters in which there are two holes, M, and N' respectively, which are so spaced as to properly register with the openings G, G, in the face of the box A when the shutters are depressed. These shutters slide in slideways M'', M''.

O is a suitable spring which may be fastened, as by block P, at its central portion to the side of the box A and its ends engage with pins Q, Q' in the respective shutters. The shutters are also provided with stems R, R', respectively, which project through the side of the box A and are provided with depressing buttons S, S' at their outer ends. 70

The sensitive surface which I purpose to use with this camera may be sensitized glass plate, cut films, film pack, or other construction of sensitized surface. An inexpensive and desirable construction for this purpose 75 however has been invented by me, which is illustrated in Figs. 5 and 6, wherein *a* is an exterior envelop of paper folded as shown in Fig. 6, and cemented together at the meeting edges, as shown at *a'* and the lateral 80 edges of this folded envelop are likewise sealed together. A transverse slit is made in the envelop as seen at *b*. The sensitive plate or sheet *c* is introduced within the envelop and is of such size as to be slightly 85 larger than the opening *d* made in its face.

e is a black paper slide or shield which, during the construction of the envelop, is inserted within it, as shown in Fig. 6, projecting outwardly through the slit *b* and 90 having a laterally projecting end *f*. This slide or shield is made larger than the opening *d* in the face of the envelop as shown in Fig. 5, and at its rear end is provided with laterally projecting ear-like parts *g*, which 95 engage with the envelop at the corners *h* of the slit, as likewise shown in Fig. 5, so that this shield may not be drawn too far outwardly, and I prefer to make the shield of such length that when the ears *g* are stopped 100 by the corners *h*, the rear edge of the shield will lap somewhat upon the edge of the sensitive plate or sheet. I also prefer to make a cross-mark *i*, or other suitable designation, on the exposed face of the shield, so 105 that when it is drawn outwardly to such an extent that this designation appears at the outer edge of the envelop, then further

drawing of the shield may be stopped until the two sections of the sensitive plate thus exposed may be acted upon by the light and then the remaining two in turn. This is not
 5 necessary, but it affords a means for additionally protecting the two sections of the sensitive surface against the action of light. This envelop embodying the sensitized material and the shield is inserted at the rear
 10 of the camera as shown in Fig. 2, and in order to secure more perfect light tightness between the edges of the dividing partitions F, F', and the face of this shield and envelop, I sometimes attach foldable pieces of cloth
 15 or felt *j* to the partitions, as shown in Fig. 7, the projecting edges of which will engage with the envelop and shield upon the introduction thereof within the camera and prevent the passage of light from one of the
 20 chambers to the other, yet will not interfere with the introduction and withdrawal of the envelop and shield. I will say here that I prefer to make the partitions loose, that is to say, not physically attached to either of
 25 the boxes, so that they may be removed at pleasure when they are separated and I prefer to make them of such width that when the boxes are forced together and held by the snap fastenings C, C', the edges of the
 30 partitions will press with light tight pressure against the adjacent parts of the two boxes, thus excluding the passage of light from one of the chambers to the other. Of course the partitions will be nicely fitted
 35 about any part of the apparatus that may be in their way, as for instance the block P and washer K. I prefer in fact that the section of the partition extending from the washer K to the block P, shown at T, shall
 40 be a permanent part of the box structure and not a part of the partition F. This is a detail of construction, however, which, as all other details, may be modified to suit the convenience or preference of the maker.

45 In order that the envelop may be introduced into the camera I provide a slit shown at U, see Fig. 2, in one side of the inner box B, through which the envelop may be passed and I shorten the side of the outer box A, as
 50 shown at A', so that it does not extend sufficiently far to cover the slit in the inner box B, and I prefer to make the envelopes of such size that their edge will project slightly beyond the side of the camera box, as shown in
 55 Fig. 2, so that this projecting edge may be readily caught hold of for inserting and withdrawing the envelop.

From the foregoing the operation is obvious. The lens which is in the rotating disk
 60 H is adapted to register with the several exposure openings in the respective compartments and the disk H covers, in addition to the covering of the interior shutters M, M', the exposure openings in each of the com-
 65 partments, excepting that with which the

lens is at that time in registration. The parts being brought together as described and the envelop bearing the sensitized material as stated, the operator to expose the material in the two left-hand compartments, 70 catches hold of the projecting flap *f* of the shield and pulls it outwardly until the indication *i*, if it be used, appears at the outer edge of the camera. He then knows that the sensitized surface is ready for exposure in 75 the two left-hand compartments. Thereupon having properly adjusted the camera relative to the subject, he depresses the thumb-button S, which, assuming the parts are in the position shown in Fig. 1, makes 80 exposure in the upper left hand corner of the camera. The depression of the shutter M causes the lower exposure opening N in it to register with the lower opening G in the camera box, but no light can enter there be- 85 cause the disk H at that time covers and protects that opening. As soon as the exposure is made, which may be effected by a mere depression and immediate release of the shutter, depending upon the quickness of the 90 sensitive surface, the spring O returns the shutter to its elevated position, thus cutting off the passage of light into either of the left-hand compartments. Thereupon, to make a second exposure, the thumb-button J is 95 turned and the disk H rotated until the lens L comes in registration with the lower opening G, which is central in the lower left-hand compartment.* Thereupon a second exposure may be made in the same way as above 100 described. There can be no double exposure in the upper compartment because at this time an imperforate part of the disk H covers and excludes the light from that opening. In like manner exposures are made in the 105 right-hand compartments, excepting that before they are made, the shield *e* is entirely withdrawn, that is to say, until the ears *g* therein striking against the corners *h* in the slit *b* preclude its further outward move- 110 ment.

After all exposures have been made, the slide or shield *e* is pushed inwardly again, thus covering the exposed sensitized material and protecting it against the action of 115 light. Thereupon the operator removes the exposed material by grasping the exposed edge of the envelop and pulling it with its shield bodily away from the camera. The operator places the inclosed envelop where it 120 will not become light struck, as for instance, in an inside pocket, or a receptacle, and then may introduce another envelop containing fresh or unexposed sensitized material, these operations being all performed in open day- 125 light, if desired.

It will be obvious to those who are familiar with this art that by proper modification of the mechanical construction, my invention is adapted to cameras of any size and shape 130

and having substantially any number of exposure compartments. Thus upon the same plate or sheet of sensitized material any number of pictures may be taken and negatives made therefrom, which may afterward be cut up as desired. Also that by obvious modification a roll holder may be added at the rear of the box B. Further that certain phases of my invention are adapted to use in cameras of altogether different construction, as for example, the telescoping feature whereby the camera may be physically and instantaneously separated into two distinct parts, exposing all the interior of the structure and then telescoped or collapsed again until the focal plane is reached; also the feature of making a two-part camera box, light tight, by pressing the parts together and then holding them by automatically acting catches; also the feature of a movable lens carrying device which brings the lens into registration with separate exposure openings and presents an imperforate part to other exposure openings. There are in addition to the above other novel features which will be covered by the claims hereof.

It will also be obvious to those who are familiar with such matters that modifications within the scope of the appended claims may be made in the details of construction of the parts without departing from the essentials thereof. I therefore do not limit myself to such details.

I do not herein claim the envelop, illustrated and described herein by me, which carries and protects the sensitized surface, because that will form the subject-matter of a separate application for Letters Patent.

I claim:—

1. A photographic camera comprising a front and a rear part adapted to telescope together, the front part being provided with a plurality of exposure openings, a movable lens-carrying device movably connected to said front part adapted to shift the lens from one exposure opening to the other, a shutter located inside the front part and supported on the front wall thereof, the rear

part of the box supporting near its rear wall sensitized material and both of said overlapping or telescoping boxes having side openings to permit insertion and removal of said sensitized material without moving the parts relatively to one another.

2. A camera comprising two telescoping boxes, one of them having an exposure opening, a shutter for the opening arranged on the inside of said box which has the exposure opening, a rotary disk pivotally connected to the outside of the box having the exposure opening and a lens carried by the disk which is adapted to register with the opening in the box, the other telescoping box supporting the sensitized material near its rear wall, and both of said overlapping boxes having openings in their sides through which the sensitized material may be introduced and removed without separating the boxes.

3. A camera consisting of two boxes adapted to telescope together, one of which is provided with a plurality of exposure openings in its front wall, a lens carrying-disk pivotally connected to the outside of said front wall, shutters supported on the inside of said front wall, the other of said telescoping boxes having an opening at the side for the insertion and removal of sensitized material and detachable partitions which bear against the front wall of one box section and also bear against the sensitized material in the other box sections when the sections are closed.

4. A camera, comprising two telescoping boxes, one of them provided with a lens, a shutter for the lens arranged on the inside of said box, the other telescoping box supporting the sensitized material, and partitions which divide the interior of the box into separate exposure chambers.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK A. ANTHONY.

Witnesses:

PHILLIPS ABBOTT,
JOSEPH N. PATCH.