(No Model.)

S. V. ALLEN.

PHOTOGRAPHIC CAMERA.

No. 274,079. Patented Mar. 13, 1883.

Fig. 1.

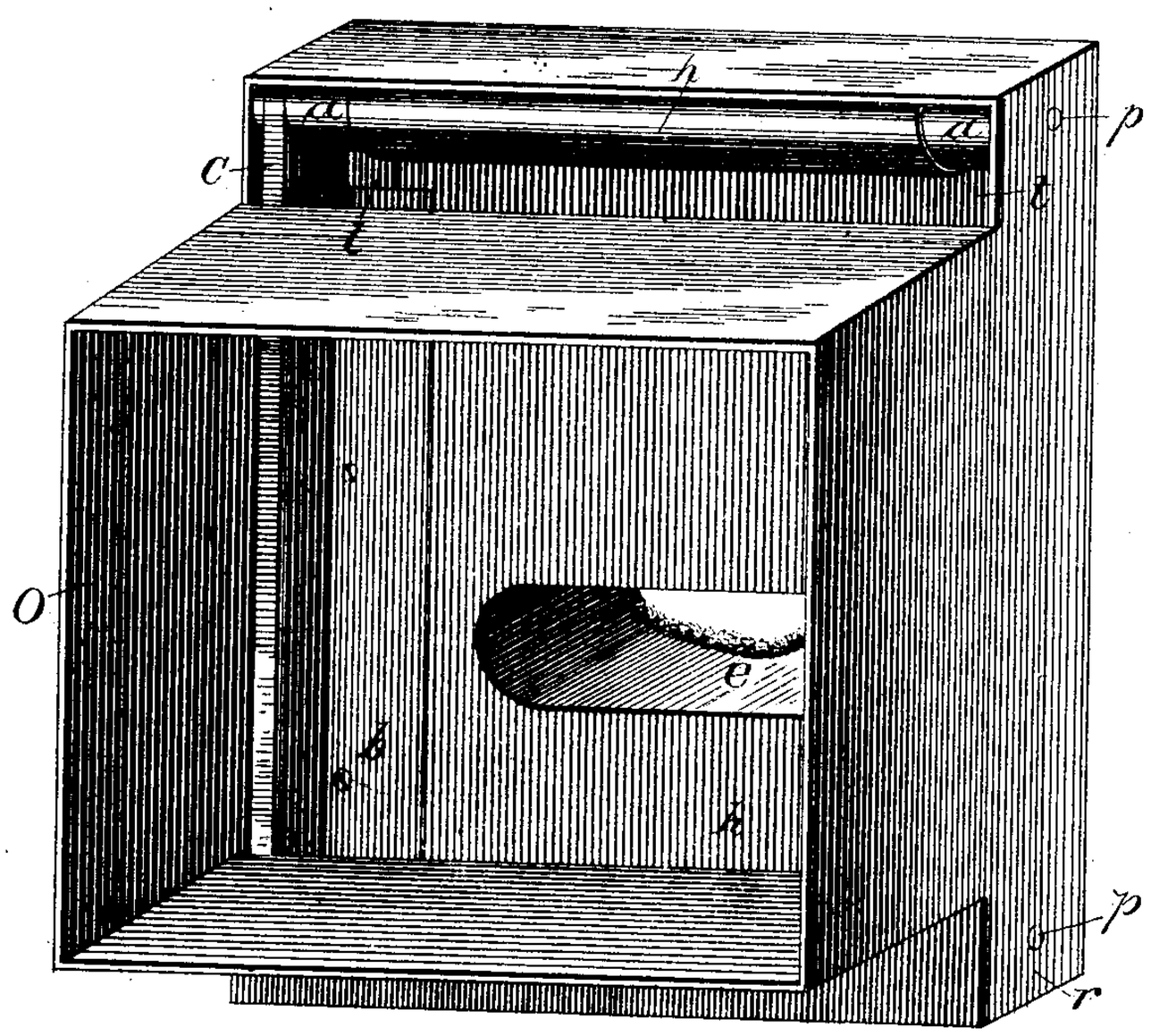


Fig. 2.

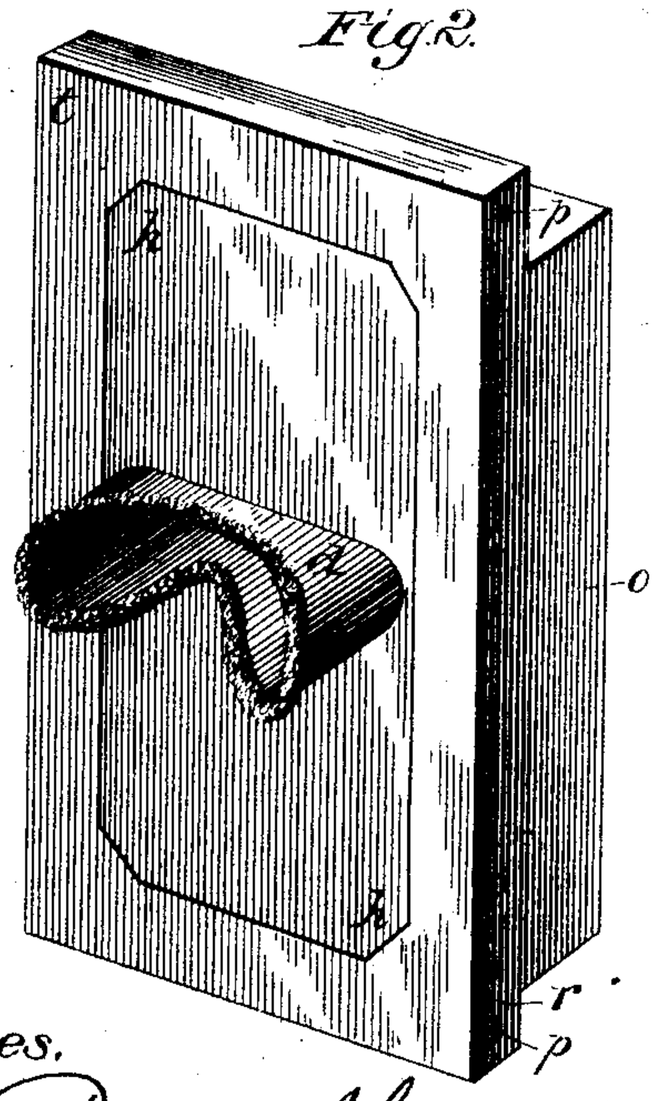
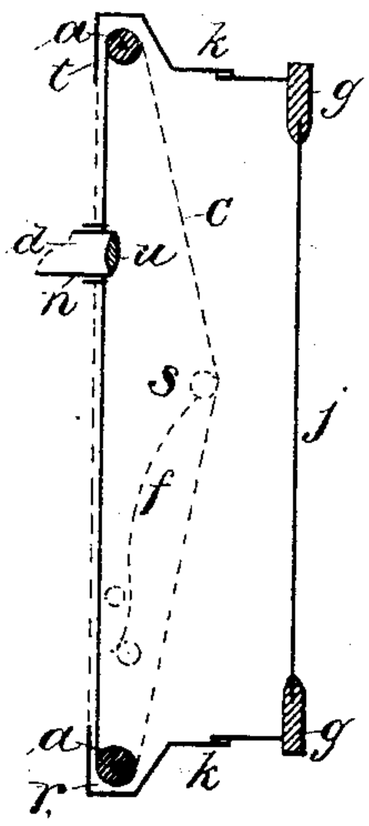


Fig. 3.



Witnesses.
John Burrell.
Wm. M. Swentzell.

Inventor.
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UNITED STATES PATENT OFFICE.

SAMUEL V. ALLEN, OF FREEPORT, ILLINOIS.

PHOTOGRAPHIC CAMERA.

SPECIFICATION forming part of Letters Patent No. 274,079, dated March 13, 1883.

Application filed November 16, 1880. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL V. ALLEN, a resident of Freeport, Illinois, have invented a new and useful Improvement in Photographic Cameras, which has not been patented to me or to any other person, with my consent or knowledge, in any foreign country, of which the following is a specification.

The object of my invention is to enable the photographic operator to dispense with the use of the focusing-cloth while adjusting and focusing the image upon the ground-glass screen of the camera; and it may be described as follows, reference being had to the accompanying drawings, in which similar letters refer to similar parts throughout the several views:

Figure 1 is a view of the invention as it would appear if removed from the ground-glass frame (to which in use it is always attached) and the front wall of the upper recess taken away to show the upper roller, flexible slide, and upper end of guide, also the reversed band. Note—This view shows the opening in which the hood is to be placed, but not the hood itself. Fig. 2 is a rear view of the same as it would, if in use, appear to a person standing nearly back of the camera. Fig. 3 is a sectional view of the invention as it would appear if attached to the ground-glass frame and both it and the ground glass cut down the middle into two equal and similar halves. Exception—The spring *f*, which is attached to inner side of the chamber, and band *c*, which joins the ends of the rollers, and both of which are indicated by dotted lines, are obviously not in the same plane with the other lines of Fig. 3, though so placed for convenience in illustrating.

A dark chamber, Fig. 1, 2, or 3, of which the open front part is to be joined to the rear part of the ordinary ground-glass frame, *g j g*, is shown in Fig. 3, combined at the back with a sight-piece or hood, *d*, Fig. 2 or 3, which is attached to a flexible slide, *h*, Fig. 1, 2, or 3, which slide has its upper and its lower end attached to the twin rollers *a a*, turning upon the gudgeons *p p*, Fig. 1 or 2, in such manner as to permit of the image on the ground glass being inspected at pleasure by raising or lowering the sight-piece *d*, the flexible slide *h* being kept taut by a band or cord, *c*, Fig. 1 or 3, moving in reversed direction from the flexible slide around the rollers and joining them.

Note 1. In Fig. 1 the front wall of the upper recess of the chamber is removed to exhibit the roller, band, and flexible slide.

Note 2. With the exception of the hood *d* and the spring *f*, the upper half of the chamber and all its adjuncts is but a duplicate of the lower half.

It is evident that various modifications of and adjuncts to my invention, which I call a "skiascope," may be introduced, as follows:

First. The flexible slide may be kept taut by other means than the one described—as by spring-rollers, or by an elastic band used instead of the inelastic band—and a more even tension may be secured to the band or cord by the insertion in the middle of the same of a coiled spring, or, as shown in Fig. 3, by the spring *f*, attached to the side of the chamber and pressing upon the cord.

Second. A sliding or telescopic form may be given to the chamber, as indicated at *k*, Fig. 3, by means of which the distance of the hood from the ground glass may be adjusted to any eyesight.

Third. The hood or sight-piece may be so constructed as to slide in and out, as shown at *n* in Fig. 3. This, also, is to adapt the distance to different eyes.

Fourth. The hood of the skiascope should not be made to fit loosely, as is usual with hand-stereoscopes and similar instruments, but should be made of such form and so padded with velvet or soft tubing or other suitable material as to fit closely to the face below as well as above the eyes, as shown at *d* in Fig. 2.

Fifth. Guides *b b*, Fig. 1, may be so placed as to keep the flexible slide against the rear wall of the skiascope *t* for the purpose of excluding the light. These guides may be attached to the rear wall, *t*, or to the sides *o*.

Sixth. It is desirable that the flexible slide should not be made of heavy material. I therefore, while making the body of the slide of thin and light material—as leather, oil-cloth, &c.—increase the rigidity near the hood-opening *e*, Fig. 1, where such rigidity is desirable to give stability and smoothness of motion, by a piece of thin wood, metal, or other suitable material, which I glue or tack to the thin slide.

Seventh. A magnifying-glass, *a*, may be employed, as in Fig. 3, where it occupies the front of the hood, and its setting may be made to slide in the hood, telescope style; or it may be attached to the hood by hinges, allowing it to fall or rise when not in use.

Eighth. It is evident that when it is not necessary for the hood to traverse the whole perpendicular height of the ground grass the rollers may be brought nearer together and the recess above and below be entirely dispensed with, thus making the chamber of a simpler form and more economical of construction.

I claim as my invention and desire to secure by Letters Patent—

The combination of the dark chamber with the flexible slide *h*, the rollers *a*, and the hood *d*, substantially as described.

SAMUEL V. ALLEN.

Witnesses:
JOHN BURRELL,
JOSEPH EMMERT.