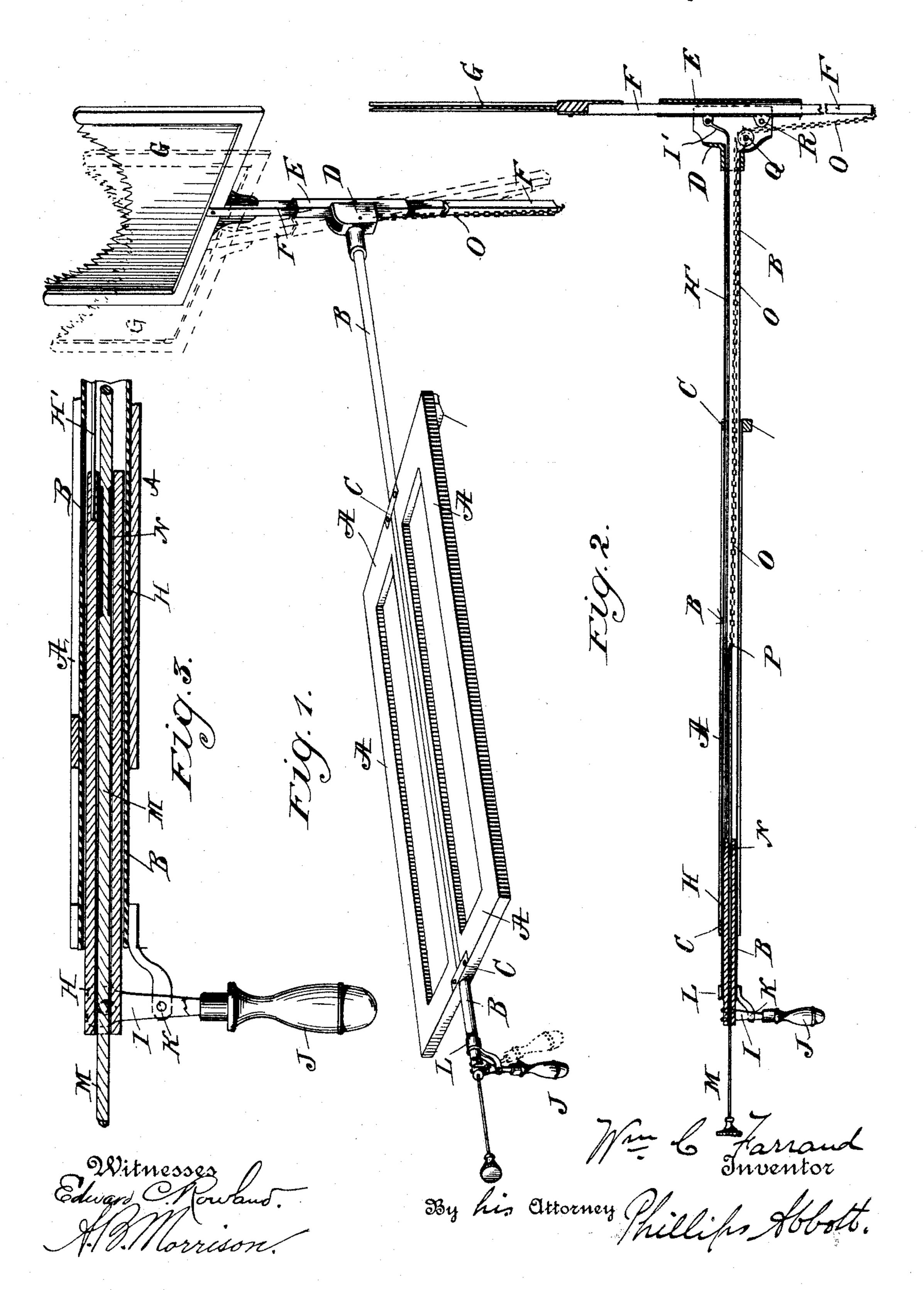
## W. C. FARRAND. PHOTOGRAPHIC VIGNETTER.

No. 586,963.

Patented July 27, 1897.



## United States Patent Office.

WILLIAM C. FARRAND, OF NEW YORK, N. Y., ASSIGNOR TO THE E. & H. T. ANTHONY & COMPANY, OF SAME PLACE.

## PHOTOGRAPHIC VIGNETTER.

SPECIFICATION forming part of Letters Patent No. 586,963, dated July 27, 1897.

Application filed May 15, 1897. Serial No. 636,609. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. FARRAND, a citizen of the United States, and a resident of New York, in the county of New York and 5 State of New York, have invented certain new and useful Improvements in Vignetting Apparatus, of which the following is a specification.

The invention relates to an improved vignetter for photographic purposes; and it consists in the peculiar construction and arrangement of the parts shown and described below.

Figure 1 illustrates a perspective of the apparatus. Fig. 2 illustrates a vertical section. Fig. 3 illustrates an enlarged detail of a sectional view of a portion of the actuating apparatus.

A is a frame which may be made of wood or other material, and is adapted to be attached in any suitable manner to the top of the tripod or base of the camera, as the case may be.

B is a tube supported in recesses in the frame A and held in place by clamping-pieces 25 C C, which are preferably made of spring metal, so that the tube may be moved backwardly and forwardly through the frame, if desired, but preferably under pressure to hold it in the desired position.

D is a head on the end of the tube B, in which is pivoted a slideway E, through which moves vertically a bar or rod F, which supports a vignetter frame and shield G upon its upper end.

In the interior of the tube B at the rear end is a sleeve H, to which is pivotally connected a lever I, provided with a handle J. This lever is pivoted, as at K, to a bracket L, which is rigidly soldered or otherwise fastened to the exterior tube B.

M is a rod which slides longitudinally through the sleeve H and is preferably arranged to have some frictional contact with it. This frictional contact may be a section of a rubber or leather tube, as shown at N in Fig. 3, which binds upon the sides of the rod M or any other suitable friction-generating device. At the forward end of the rod M and within the exterior tube B a chain or cord O is fastened, as shown at P. This chain extends forwardly through the tube B and

passes over a little roller or sheave Q, then downwardly, and is connected with the end of the sliding bar F. The slideway is pivoted to the head D, as at R. The sleeve H 55 has connected with it a forwardly-extending rod H', which connects by a link I' with the slideway E', as shown.

Instead of the link I' a rigid extension from the rod H' may be provided, and instead of 60 this rod the sleeve H may be extended to the end of the exterior tube B.

The operation of the device is as follows: The camera being properly located and the frame A attached to the tripod or camera, as 65 the case may be, and the subject duly located the vignetter as a whole may be moved closer to or farther from the subject by sliding the rod B through the frame A under the springclips or equivalent devices C, as desired, and 70 then for the vertical and horizontal adjustments the handle J may be manipulated. If pushed to the right, then its upper end moves to the left and the sleeve H, with the rod H', is drawn rearwardly, which rocks the slide- 75 way in which the vignetter is supported away from the subject, thus rendering less defined the line of the vignette, the slideway rocking upon its pivot R. If, on the contrary, the handle J be pulled to the left, then the sleeve 80 H, rod H', and slideway E are pushed forwardly toward the subject, and the line of the vignette is made more defined or sharp. If the vignetter is too low or too high, the proper adjustment is attained as follows: To 85 elevate the vignetter, thus reducing the extent of the picture, the rod M is pulled to the left, whereupon the chain which passes over the sheave or pulley Q is likewise pulled in the same direction, and the shaft or bar F is 90 moved upwardly, sliding through the slideway E, thus elevating the vignetter and cutting off more of the body of the subject, and by reverse movement of the rod M the vignetter is allowed to drop under the action of 95 gravity, being held in any desired position by the chain or cord O, and more of the body of the subject is exposed. The frictional device N (shown in Fig. 3) is adapted to counterbalance the weight of the vignetter and 100 its rod F, so that those devices will remain in such position as they may be left.

In addition to the movements above described by rocking the handle J transversely of the axis of the apparatus the exterior tube B will be rotated upon its longitudinal axis and consequently the vignetter be inclined to the right or left, as the case may be, as shown in dotted lines in Fig. 1, so that by this apparatus, in a simple, effective, and convenient manner, any desired scope or position of the vignette may be obtained.

It will be obvious to those who are familiar with this art that various modifications may be made in the details of construction of this invention without departing from its essentials. I therefore do not limit myself to the special form of parts and their arrangement

shown.

I claim—

1. In a vignetting apparatus, the combina-20 tion of a tube, a slideway pivoted to the tube, a shield supported on a rod which slides through the slideway, means to elevate the shield, and means to oscillate the tube on its

axis, for the purposes set forth.

25 2. In a vignetting apparatus, the combination of a tube, a slideway pivoted to the tube, a shield supported on a rod which slides through the slideway, and means inclosed within the tube, when connected with the said rod to elevate the shield, for the purposes set forth.

3. In a vignetting apparatus, the combination of a tube, a slideway pivoted to the tube, a shield supported on a rod which slides through the slideway, means inclosed within the tube when connected with the said rod to elevate the shield, and means to oscillate the tube on its axis, for the purposes set forth.

4. In a vignetting apparatus, the combina40 tion of a tube, a slideway pivoted to the tube,
a shield supported on a rod which slides
through the slideway, means to elevate the
shield, other means to rock the slideway on
its pivot and means to oscillate the tube on
its axis, for the purposes set forth.

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5. In a vignetting apparatus, the combination of a tube, a slideway pivoted to the tube, a shield supported on a rod which slides through the slideway, means to elevate the shield, and other means to rock the slideway. 5° on its pivot, for the purposes set forth.

6. In a vignetting apparatus, the combination of a tube, a slideway pivoted to the tube, a shield supported on a rod which slides through the slideway, means inclosed within 55 the tube for rocking the slideway upon its pivot, and other means likewise inclosed within the tube for elevating the shield, for

the purposes set forth.

7. In a vignetting apparatus, the combina- 60 tion of a frame, a tube supported upon the frame and adapted to slide through it, a slide-way pivoted to the tube, a shield supported upon a rod which slides through the slide-way, a lever fastened to the tube and which 65 engages with a sleeve inclosed within the tube, and which engages with the slideway whereby, upon manipulation of the lever the slideway may be tilted, and the tube oscillated on its axis, for the purposes set forth.

8. In a vignetting apparatus, the combination of a tube, a slideway pivoted to the tube, a shield supported on a rod which slides through the slideway, a lever rigidly attached to the tube and which engages with a sleeve 75 or rod inclosed within the tube, which in turn engages with the slideway, another rod likewise inclosed within the tube provided with a chain, which engages with the lower end of the rod which supports the shield, and a friction device applied to said last-named rod, for the purposes set forth.

Signed at New York, in the county of New York and State of New York, this 11th day

of May, A. D. 1897.

WILLIAM C. FARRAND.

Witnesses:

E. Simpson, Λ. B. Morrison.