

# H. Manger, Camera Stand,

N<sup>o</sup> 48,193.

Fig. 1.

Patented June 13, 1865.

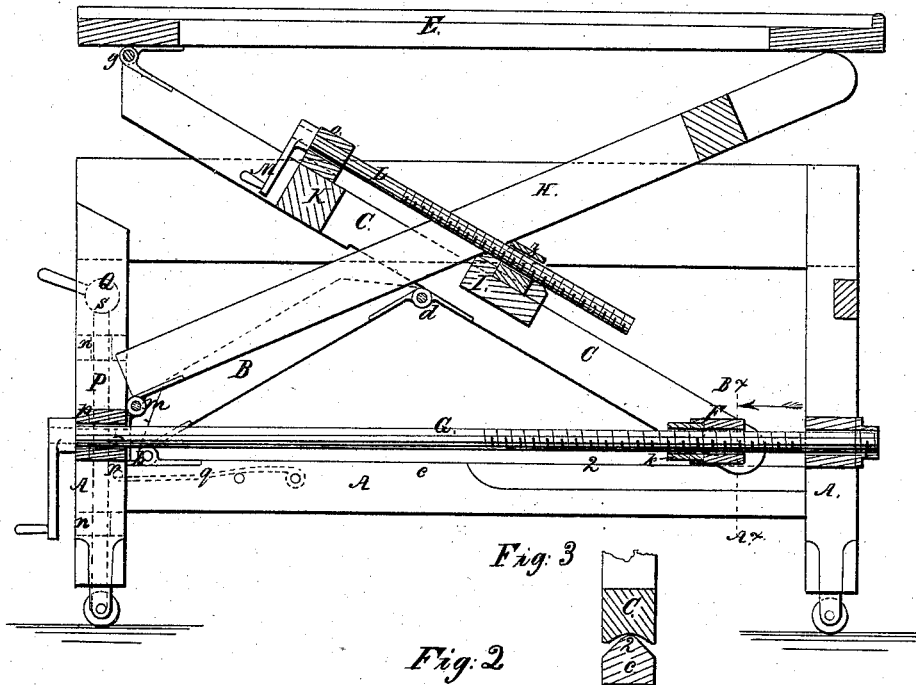
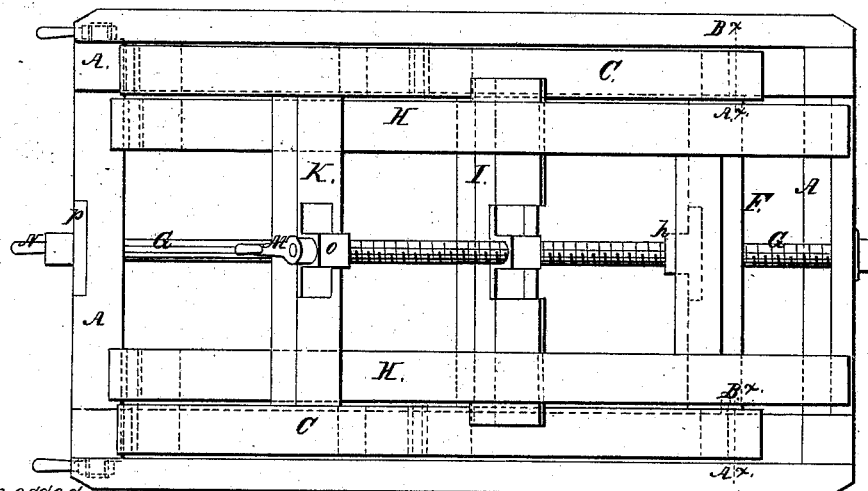


Fig. 2



Witnesses:

E. Cohen  
O. Hase

Inventor:

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# UNITED STATES PATENT OFFICE.

HENRY MANGER, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN PHOTOGRAPHIC-CAMERA STANDS.

Specification forming part of Letters Patent No. **48,193**, dated June 13, 1865.

*To all whom it may concern:*

Be it known that I, HENRY MANGER, of the city and county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Photographic-Camera Stands; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical section through said camera-stand. Fig. 2 represents a top view of the same. Fig. 3 represents a section through line A<sup>x</sup> B<sup>x</sup> of Fig. 2.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the rigid frame of my camera-stand, upon which the adjustable frame and table are supported.

B represents braces, which are hinged at *b* to the longitudinal timbers *c* of the frame A, and whose upper ends are hinged at *d* to the inclined beams C, which rest at their lower ends on the ways 2 of the timbers *c*, and can slide thereon longitudinally. The upper ends of the pieces C are hinged to one end of the table E by means of the hinges *g*. The lower ends the pieces C are connected by means of a cross-head, F, which is provided with a screw-bearing, through which the endless screw-shaft passes to operate said cross-head F and the ends of the timbers *c* in a longitudinal direction upon the ways 2. H represents another pair of beams or braces, which are hinged at *m* to the main frame A. They are supported in their positions by the cross-piece I, which is set upon the timbers *c*. K represents another cross-piece, which is firmly secured to the timbers *c*, and which is provided with a journal-box, *o*, in which the endless screw-shaft L can be turned by means of the crank M. The end of said screw passes through the female screw *z* on the movable cross-piece I, which can slide upon the beams C, and whose position can thus be adjusted higher or lower to adjust the position of the beams H, which latter support the end of the table E.

The endless screw G, by means of which the beams C are operated, has its bearings within the journal-box *p*, and its end is supported in

the main frame A, and the screw-shaft is prevented from moving longitudinally by any of the well-known devices used for that purpose.

In operating this camera-stand it will be found that it is susceptible of the nicest adjustments, as well in regard to regulating the height of the table as also the inclination of the same, for in turning the screw-shaft G by means of the crank N the lower ends of the timbers *c* are moved longitudinally upon the ways 2 of the main frame. If, then, said motion takes place in the direction of the arrow, the beams C will turn upon their hinges *d*, and cross-piece I will be raised, as well as the beams H, and the result will be the raising of the table E bodily and parallel to its plane, the different parts being so constructed that they move in unison and that the extent of the movements in a vertical direction of the upper ends of the timbers *c* and H shall be identical.

When it is desired to change the inclination of the table E the screw-shaft L is turned by means of the crank M, and the result is that the cross-piece I is slid up or down on its beams C, and the beams H, resting thereon, will participate in said movement, and the end of the table E which is supported by them will be raised or lowered, as the case may be; but the end which is secured to the hinges *g* remains stationary, and thus the inclination of the table E is adjusted. The lower ends of the beams C, which slide upon the ways 2, may be provided with grooved friction-wheels, which pass over said ways, so as to facilitate the operation of the apparatus.

P represents sliding spring-shafts, which are set upon the sides of the supporting-timbers A and can slide within their bearings *n*. They are forced and retained in an elevated position by the action of the springs *q* upon the studs *r* of said shafts, and they can be forced downward by means of the cams Q, which turn upon pins *s*. The object of these sliding rods is to prevent the frame A from moving on its caster-wheels after its distance from the object has been properly adjusted, and I effect this by forcing the rods P downward so as to bear upon the floor, and by thus slightly raising the caster-wheels, which support the main frame A. This construction may also be modified by securing the caster-wheels to the sliding rods P in.

stead of to the main frame, and when used in this manner the cams Q are turned so as to release the rods P when the stand has been adjusted, and the action of the springs *q* will press the rods P upward, and thus bring the stand upon the feet of the frame A.

Having thus fully described the nature of my invention, what I claim herein as new, and desire to secure by Letters Patent, is—

1. In combination with the rigid and main supporting-frame of a camera-stand, the hinged beams B C H, endless screw-shaft G, and table E, substantially as and for the purposes specified.

2. In combination with the main supporting-frame of a camera-stand, the hinged beams B C H, endless screw-shafts G L, and table E, substantially as and for the purposes specified.

3. In combination with the adjustable camera-stand herein described, the adjustable spring supporting-rods P, whether the same are used with or without caster-rolls, substantially as and for the purposes specified.

HENRY MANGER.

Witnesses:

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E. COHEN.