(No Model.)

T. POWERS.

CAMERA STAND.

No. 369,124. Patented Aug. 30, 1887.

Fig. 1.

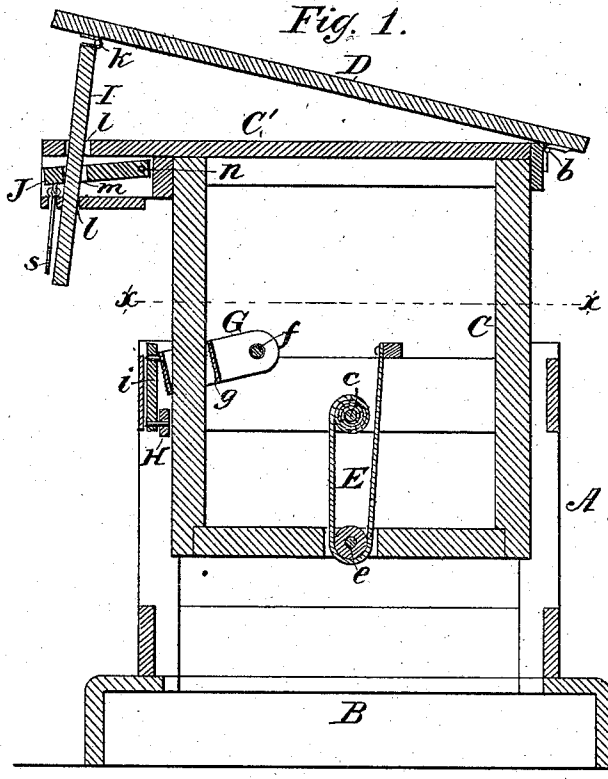


Fig. 2.

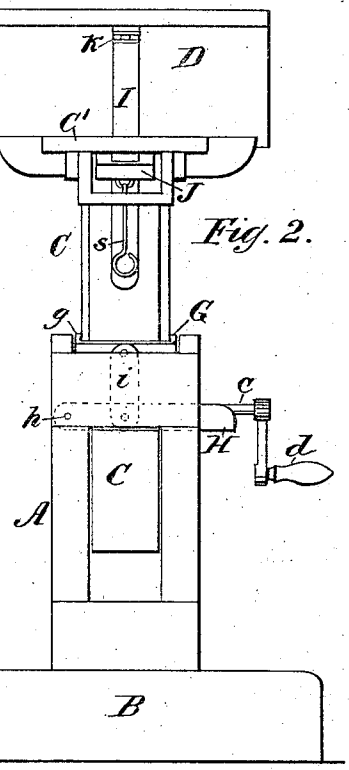
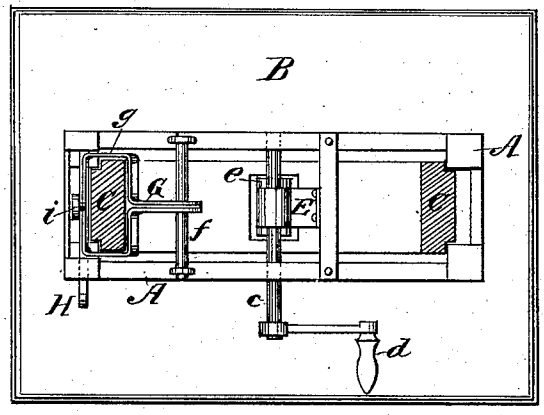


Fig. 3.



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CAMERA-STAND.

SPECIFICATION forming part of Letters Patent No. 369,124, dated August 30, 1887.

Application filed May 10, 1887. Serial No. 237,755. (No model.)

To all whom it may concern:

Be it known that I, THOMAS POWERS, of Perryville, in the county of Perry and State of Missouri, have invented new and useful Improvements in Camera-Stands, of which the following is a full, clear, and exact description.

This invention relates to photographic-camera stands for gallery and other uses, in which the bed or platform is made capable of being raised or lowered and of being adjusted to occupy different angular positions; and the invention consists in novel constructions of the same and in the means and certain automatic stops used for operating the bed or platform, and for holding it at its different adjustments, substantially as hereinafter described, and pointed out in the claims.

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

Figure 1 is a vertical longitudinal section of my improved camera-stand, with its bed or platform adjusted to occupy an angular position relatively to the horizon. Fig. 2 is an end elevation of the same, and Fig. 3 a horizontal section upon the line *x x* in Fig. 1.

A is a stationary frame mounted upon a base, B. This frame, which may be an open one, serves to guide and receive down within it a rising and falling center frame, C C'.

D is the bed or platform on which the camera, when being used, is placed. Said bed or platform is hinged at or near its one end, as at *b*, to the one end of the top or table C' of the center frame, down on which the platform rests when required to occupy a horizontal position.

The center frame, C C', and with it the bed or platform D, is raised, and its drop, if desired, controlled by turning in a suitable direction a horizontal barrel or shaft, *c*, on which may be fitted a crank or handle, *d*. This barrel or shaft, which is intermediate of the length of the stationary frame A, and has its bearings in the upper portion thereof at a suitable height from the floor, extends across the frame A, and has attached to it the one end of a band-like strap or other flexible connection, E, which passes down from said shaft, under or round a roller, *e*, in the lower portion of the center frame, C C', and up to the top of the stationary frame A, where it is made fast at its opposite end, so that by turning the shaft *c* in a given direction the flexible band or connection E will serve to lift the center frame as required. Said center frame is quickly and automatically held at any point in its lift by a peculiar stop, G, which consists of a lever-like clamp fitted to loosely rock at its inner end upon or with a cross-shaft, *f*, mounted upon the upper portion of the stationary frame A. The outer or opposite end of said lever clamp or stop G is bent and spread to form a free strap-like loop, *g*, that embraces in a loose manner the one upright of the center frame, C C'. When said center frame is lifted, then the friction of its upright, which passes through the loop *g*, against or on said loop, will raise the clamp or stop G to an approximately horizontal position, or so as to relieve it from pressure on the moving upright. So soon, however, as the operator ceases to lift the center frame, C C', and releases hold of its lifting-shaft *c*, then the strap-like portion *g* of the clamp G will be relieved of all lifting force, and its tendency to drop, combined with any slight reaction from its raised position of the center frame, C C', will cause the loop-like end of the clamp G to fall and tightly wedge or bear against the upright of the center frame, the weight of the latter, together with any superincumbent weight it may carry, adding to the binding or holding action of the clamp. Thus, it will be seen, the tilting clamp G operates automatically to instantly hold the center frame at any height the operator may desire.

When it is required to lower the center frame, C C', then the outer or loop end of the tilting friction-clamp G is slightly lifted by means of a lever, H, pivoted at *h* to the stationary frame and connected with the tilting clamp by a link, *i*.

The bed or platform D is tilted or adjusted to any required angle by means of a prop or leg, I, hinged, as at *k*, to or near the free end of the hinged or rocking platform, and arranged to pass freely down through apertures *l* in the one end portion of the table C' of the

rising and falling center frame, and freely through an aperture, *m*, in a tilting clamp or stop, J, pivoted or hinged at its one end, as at *n*, to the center frame. After the bed or platform D has been raised to any desired angle and lifting force released from it, then its weight and the tendency of it and of the tilting friction-clamp J to drop, will cause the pendent prop or leg I to be instantly and automatically gripped by the tilting clamp, thereby immediately and securely holding the bed or platform at its required angle. The moment, however, the tilting clamp J is touched to raise it, or is slightly raised—as, for instance, by pushing up upon an attached rod, *s*—the clamp is released and the bed or platform D drops.

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

1. In adjustable stands for photographic cameras, the combination of a stationary frame, a rising and falling guided center frame carrying the bed or platform on which the camera is to be placed, and an automatic tilting clamp or stop having a free strap-like loop embracing an upright of the rising and falling frame, and which clamp or stop has a central arm pivoted to the stationary frame, but operating to bind or lock and hold the latter immediately upon lifting force being released from the center frame, substantially as specified.

2. In adjustable stands for photographic cameras, the combination of the stationary frame A, the rising and falling center frame, C C′, guided in its up-and-down movement by said stationary frame, the tilting bed or platform D, carried by said center frame and provided with a hinged pendent prop or leg passed through an automatic tilting clamp or stop and a rod connected to the said clamp or stop, and the automatic tilting clamp or stop G, having a free strap-like loop embracing an upright of the rising and falling frame, and which clamp or stop has a central arm pivoted to the stationary frame, essentially as shown and described.

3. In adjustable stands for photographic cameras, the combination of the stationary frame A, the rising and falling guided center frame, C C′, the tilting bed or platform D, carried by said center frame and provided with a hinged pendent prop or leg passed through an automatic tilting clamp or stop and a rod connected to the said clamp or stop, the barrel or shaft *c*, the flexible lifting band or connection E, and an automatic stop adapted to catch or hold the center frame upon lifting force being removed from it, which stop is provided with a free strap-like loop embracing an upright of the rising and falling frame, and which stop has a central arm pivoted to the stationary frame, substantially as specified.

4. In adjustable stands for photographic cameras, the combination, with the rising and falling frame C C′, and the bed or platform D pivoted or hinged thereto, of the pendent prop or leg I, pivoted or hinged to the platform, and the automatic tilting clamp or stop J, through which passes said leg and the rod connected to said clamp or stop, substantially as shown and described.

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