

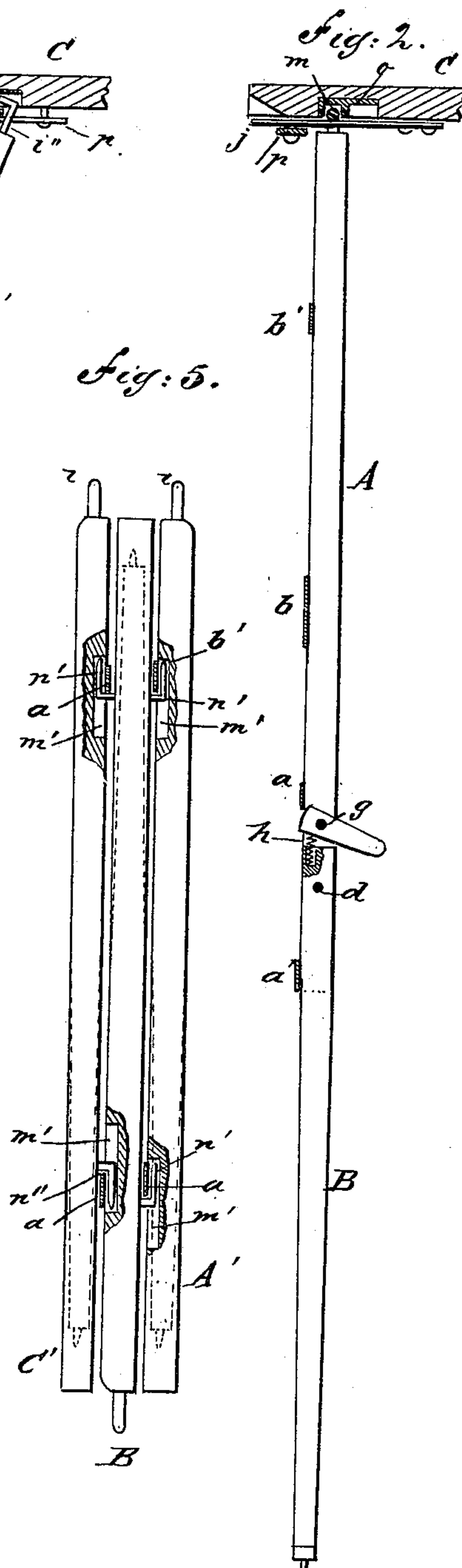
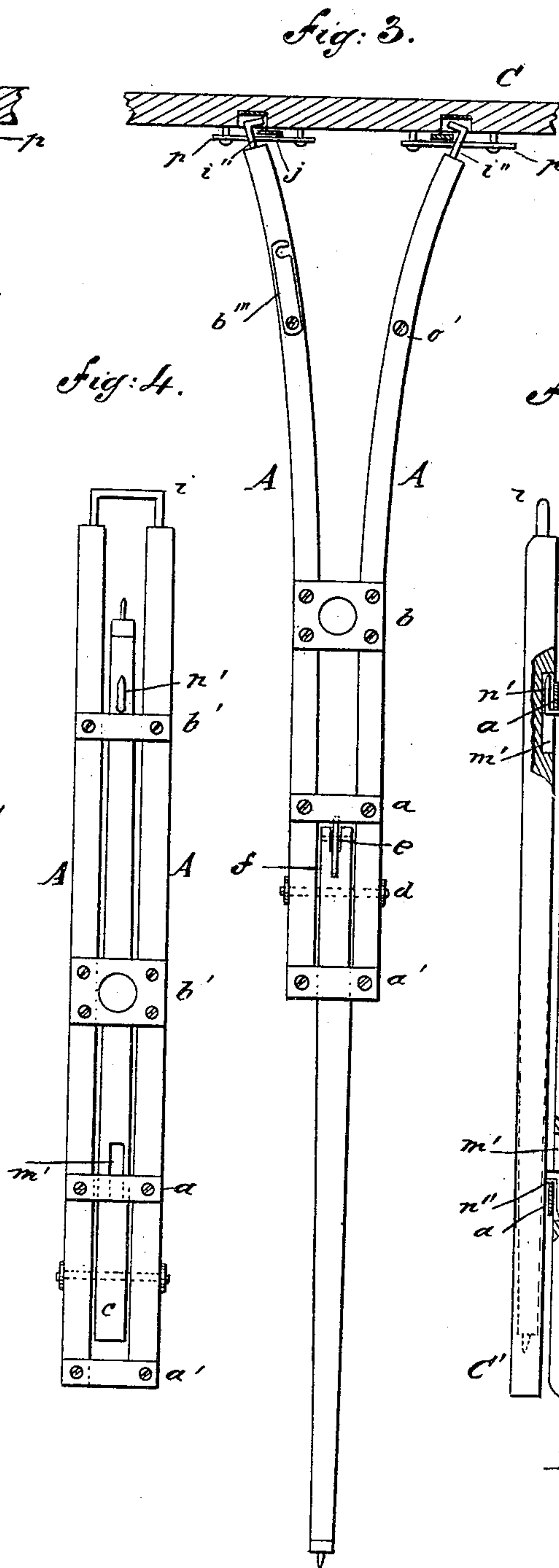
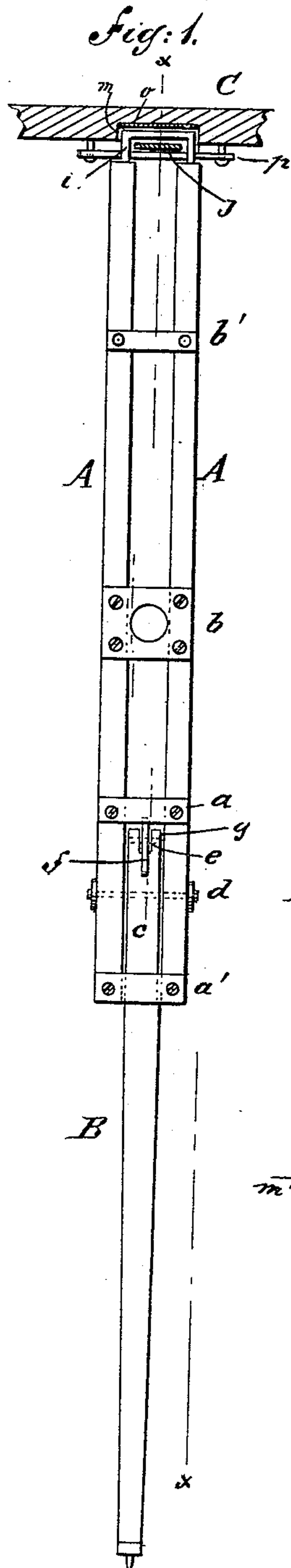
(No Model.)

2 Sheets—Sheet 1.

J. J. HIGGINS.  
CAMERA STAND.

No. 353,856.


Patented Dec. 7, 1886.



WITNESSES:

Chas. Vida  
-C. Bedgwick

INVENTOR:

BY *J. J. Higgins*  
*Munn & Co*  
  
ATTORNEYS.

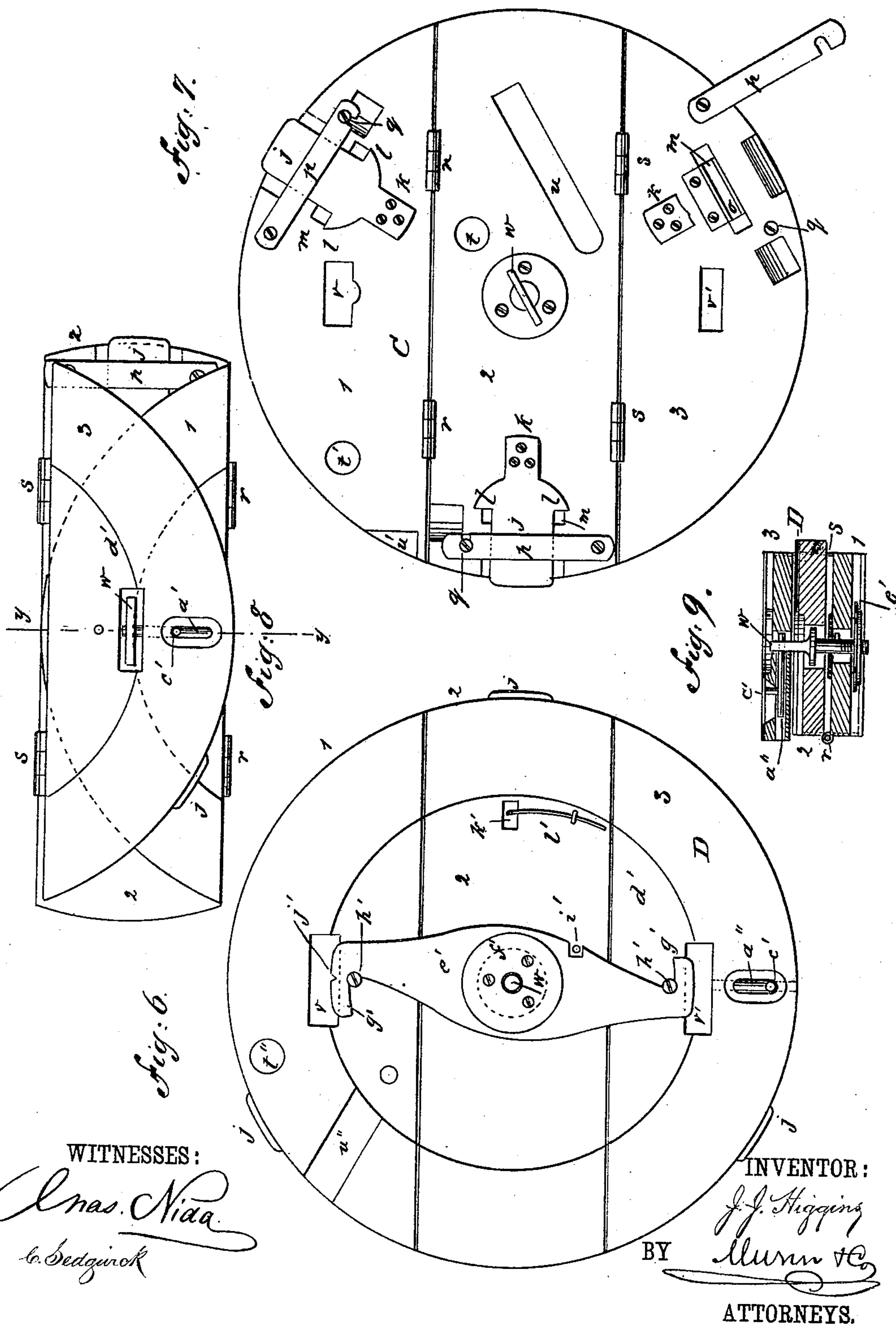
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# UNITED STATES PATENT OFFICE.

JOHN J. HIGGINS, OF NEW YORK, N. Y., ASSIGNOR TO E. & H. T. ANTHONY  
& CO., OF SAME PLACE.

## CAMERA-STAND.

SPECIFICATION forming part of Letters Patent No. 353,856, dated December 7, 1886.

Application filed April 30, 1886. Serial No. 200,664. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN J. HIGGINS, of the city, county, and State of New York, have invented a new and useful Improvement in Camera-Stands, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a front elevation of a portion of a camera-stand embodying my improvement. Fig. 2 is a vertical transverse section taken on line *x x* in Fig. 1. Fig. 3 is a front elevation of a portion of a modified form of camera-stand. Fig. 4 is a side elevation of one of the camera-stand legs folded. Fig. 5 is a side elevation, partly in section, showing the three legs of the camera-stand folded and hooked together, parts being broken out. Fig. 6 is a plan view of the camera-stand top. Fig. 7 is an inverted plan view of the camera stand top. Fig. 8 is a plan view of the camera-stand top folded. Fig. 9 is a transverse section taken on line *y y* in Fig. 8.

Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of my invention is to construct a simple, compact, and light camera-stand which may be readily arranged for use and easily taken apart and compactly folded for transportation or storage.

My invention consists in a camera-stand top formed of two or more parts hinged together, arranged to fold one upon the other and provided with leg-holding devices, and in the combination therewith of three or more legs, each consisting of an upper section formed of parallel bars connected together by plates and provided at their upper ends with staples or right-angled hooks inserted in the ends of the parallel bars, and a lower section pivoted between the lower ends of the parallel bars, carrying a spring-acted latch for holding the leg in an extended position, all as hereinafter more fully described.

The bars *A*, forming the upper portion of the leg of a camera-stand, are connected together at their lower ends by the plates *a a'*, and at a short distance above the plate *a* by a plate, *b*, and above the plate *b*, near their upper ends, by a plate, *b'*, the several plates being secured to the edges of the bars by means

of ordinary screws, or in any other convenient way. The distance between the bars *A* is sufficient to permit of receiving between them the square end *c* of the lower section, *B*, of the leg, which is pivoted on a rivet or screw, *d*, extending transversely through the bars *A* in the section *B*.

In the upper end of the lower section, *B*, of the leg is formed a transverse slot, *e*, in which is pivoted a latch, *f*, on the pin *g*. The end of the section *B* is bored longitudinally to receive a spiral spring, *h*, which presses the shorter arm of the latch *f* upward. The end of the shorter arm of the latch is formed on a curve which is eccentric to the pin *g*, and which automatically engages the inner surface of the plate *a* when the leg is unfolded for use. The longer arm of the latch *f* projects beyond the surface of the leg in position to be easily operated.

In the upper ends of the bars *A* is inserted a staple, *i*, which projects a short distance beyond the ends of the bars for receiving the retaining-spring *j*, secured to the under surface of the camera-stand top *C*. The retaining-spring *j* consists of a plate of spring metal provided with the arm *k*, secured to the undersurface of the camera-stand top *C* by means of ordinary screws, and with projections *l* on opposite edges thereof, for limiting the inward movement of the staple *i*. The width of the free end of the retaining-spring *j* is about the same as that of the space between the parallel ends of the right-angled staple *i*.

In the under surface of the camera stand top is formed a slot, *m*, arranged at right angles to the spring *j*, and located immediately in front of the projections *l*. The slot *m* has a metallic lining, *o*. The length of the slot *m* is about equal to the width of the staple *i*.

The edge of the camera-stand top is beveled on the under surface thereof, adjoining the free end of the retaining-spring *j*, to facilitate passing the staple *i* under the retaining-spring to the slot *m*, in which it is held by the spring. The spring is re-enforced by the latch *p*, which is pivoted at one edge of the spring *j*, and is notched to receive a screw, *q*, near the opposite edge of the retaining-spring. The latch *p* is closed over the retaining spring *j*, after the staple *i* has been introduced between the



spring and the camera-stand top and received in the slot *m*.

The camera-stand top C is preferably made of circular form, and is divided into three parts, 1 2 3. The part 1 is connected with the part 2 by means of ordinary butt-hinges, *r*. The part 3 is connected with the part 2 by means of long butt-hinges *s*, which allow the part 3 to fold over the part 1, after part 1 has been folded upon part 2, as shown in Figs. 8 and 9. There are three retaining springs, *j*, upon the undersurface of the camera-stand top, arranged at three equally distant points in the periphery of the top, and the retaining-springs are so disposed as to bring one of them on each of the sections 1 2 3, as shown in Fig. 7. Recesses *t u* are made on the central part, 2, for receiving the screws and latch of the retaining-spring on the part 1, when the part 1 is folded over upon part 2, and part 1 is provided with recesses *t' u'*, for receiving the fastening screws and latch of the retaining-spring on part 2, when the parts are folded together. Part 1 is also provided with a mortise, *v*, for receiving the thumb-screw *w*, which projects through the mortise *v* of part 1, and into the mortise *v'* in part 3. The thumb-screw *w* is apertured to receive a bolt, *a''*, sliding in a radial hole in the camera-stand top, and serving to fasten the top together after it is folded. The bolt *a''* is provided with a pin, *c'*, which projects through an oblong countersunk aperture in the top of the camera-stand top for moving the bolt.

In the upper surface of the camera-stand top is formed a shallow circular recess, *d'*, in which is placed a cross-bar, *e'*, arranged to turn on the boss of a central plate, *f'*, secured to the top by ordinary screws. The ends of the cross-bar *e'* are provided with hooks *g'*, which are oppositely arranged with respect to each other, and are adapted to engage screws *h'*, projecting from the parts 1 3, and hold the parts of the camera-stand top in an unfolded position. A stop-pin, *i'*, projects from the part 2, for limiting the movement of the cross-bar, and the hook *g'*, at one end of the cross-bar, is provided with a notch, *j'*, which engages a wire spring, *l'*, secured to part 2, and provided with an angled end projecting into an aperture, *k'*, in part 2, when the cross-bar *e* is not in use.

The annular surface D of the camera-stand top is covered with plush or velvet, or other suitable yielding material, to partially or wholly prevent the communication of the vibrations of the camera-stand top to the camera supported thereby. When the camera-holding screw *w* is received in the mortises *v v'*, it is wholly contained by the folded top, and is therefore out of the way.

The manner in which the legs A' B' C' of the camera-stand are secured together is shown in Fig. 5. The back of the section B of the leg A' is provided with recesses *m'* opposite the plates *b' a*. The outer surface of the sec-

tion B of the leg B' is provided with two right-angled hooks, *n'*, projecting in the same direction, which are received in the recesses *m'* and engage the plates *b' a*. The under surface of the section B of the leg B' is provided with a recess, *m'*, opposite the plate *a*, and with a right-angled hook, *n''*, near the opposite end. The leg C' is similarly provided with a recess, *m'*, opposite the plate *a*, and with a hook, *n'*, near the opposite end, the hook *n'* of the leg B' being received in the recess *m'* of the leg C' and brought into engagement with the plate *a*. In a similar manner the hook *n''* of the leg C' is received in the recess *m'* of the leg B and engages the plate *a* of that leg.

When it is desired to widen the distance between the upper ends of the bars A, each bar is provided with a right-angled hook, *i''*, and the camera-stand top C is provided with two retaining-springs, *j*, and latches *p*, and the plate *b'* is replaced by a latch, *b''*, which is pivoted to one of the bars A, and engages a screw, *o'*, projecting from the other bar, when the camera-stand top is folded for storage or transportation.

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

1. A camera-stand top formed of two or more parts hinged together at their adjacent edges and arranged to fold flatwise one upon the other, corresponding faces of the sections of the top being folded inward, substantially as herein shown and described.

2. The combination, with the camera-stand top having the circular recess *d'*, and formed of parts hinged together and adapted to fold one upon the other, of a cross-bar, *e'*, pivoted to the central part of the top, in the recess *d'*, and arranged to hold the parts of the top in an unfolded position, substantially as herein shown and described.

3. The combination, with the camera-stand top provided with a recess, *d'*, and formed of parts hinged together and adapted to fold one upon the other, of a cross-bar, *e'*, pivoted to the central part of the top, and the screws *h'*, inserted in the parts 1 3, for receiving the hinged ends of the cross-bar *e'*, substantially as herein shown and described.

4. The combination, with the pivoted cross-bar *e'*, provided with a notch, *j'*, of the spring *l'*, secured to the middle portion of the top and adapted to engage the notch *j'*, substantially as herein shown and described.

5. The combination, in a camera-stand top, of the central part, 2, provided with the apertured camera-holding screw *w*, the parts 1 3, arranged to fold upon the part 2 and provided with mortises *v v'*, and the bolt *a''*, sliding in the part 3, adapted to enter the aperture of the screw *w* and hold the several parts of the top in their folded position, substantially as herein shown and described.

6. The combination, with the camera-stand top provided with the slots *m*, of the springs



*j* and latches *p*, for receiving and holding the camera-stand legs, substantially as herein shown and described.

5 7. The combination, with the camera-stand top provided with the slots *m* and beveled surfaces at the edges thereof, of the springs *j* and latches *p*, for receiving and holding the camera-stand legs, substantially as herein shown and described.

10 8. The combination, with the camera-stand top provided with the metal-lined slot *m* and beveled surfaces at the edges thereof, of the springs *j* and latches *p*, for receiving and holding the camera-stand legs, substantially as  
15 herein shown and described.

9. In a camera-stand, a leg formed of parallel bars *A*, provided with connecting-plates *a a' b b'*, and the section *B*, pivoted between the bars *A* and provided with a spring-acted latch,  
20 *f*, for engaging the plate *a*, substantially as herein shown and described.

10. In a camera-stand, the combination, with the folding legs, of an automatic or self-acting locking device adapted to lock the legs in extended position by the act of opening the same,  
25 as herein set forth.

11. The combination, with the bars *A* of a camera-stand top, of staples or hooks inserted in the ends of the bars and adapted to be retained by springs *j* on the camera-stand top, 30 substantially as herein shown and described.

12. In a leg for camera-stands, the combination, with the bars *A*, of a staple, *i*, secured to the ends of the bars and adapted to be retained by the spring *j*, substantially as herein shown 35 and described.

13. The combination, with the camera-stand top *C*, provided with slots *m*, springs *j*, and latches *p*, of legs formed of bars *A* and provided with staples *i*, substantially as herein 40 shown and described.

14. A camera-stand top provided with a yielding covering for supporting the camera and preventing the jarring of the camera-stand from being communicated to the camera, sub- 45 stantially as described.

JOHN J. HIGGINS.

Witnesses:

EDGAR TATE,  
EDWD. M. CLARK.