(No Model.)

E. C. FISHER.

CAMERA STAND.

No. 419,006. Patented Jan. 7, 1890.

Fig. 3.

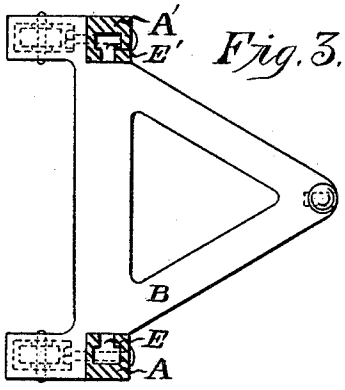


Fig. 1.

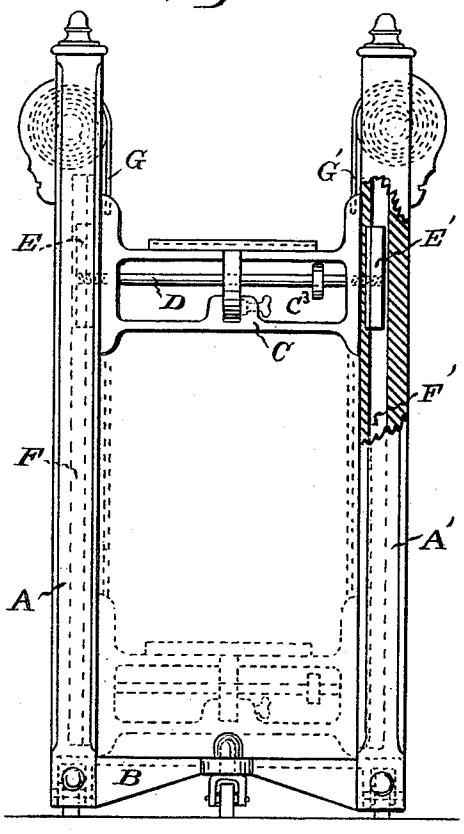
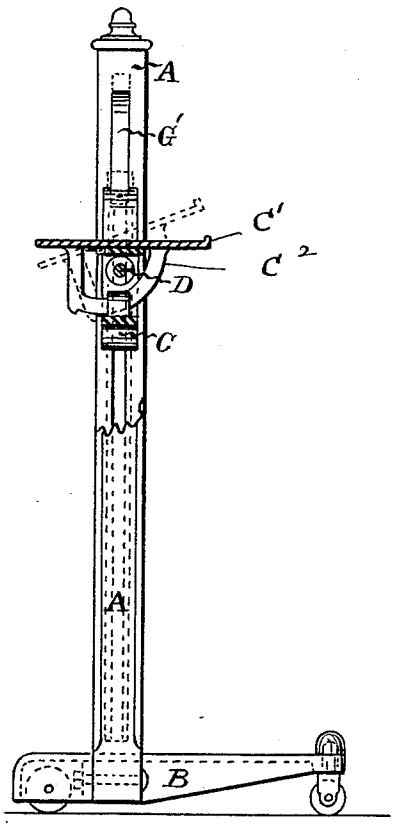


Fig. 2.



WITNESSES:
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UNITED STATES PATENT OFFICE.

EDWIN C. FISHER, OF CLAREMONT, NEW HAMPSHIRE.

CAMERA-STAND.

SPECIFICATION forming part of Letters Patent No. 419,006, dated January 7, 1890.

Application filed July 22, 1889. Serial No. 318,339. (No model.)

To all whom it may concern:

Be it known that I, EDWIN C. FISHER, a resident of Claremont, in the county of Sullivan and State of New Hampshire, have invented certain new and useful Improvements in Camera-Stands; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The object of the invention is to provide a camera-stand combining several advantages, one of which is the capacity of lowering the camera-rest, when desired, to a point nearer the base of the stand than could be done by constructions heretofore employed. Cheapness and simplicity of construction and certainty and ease of operation are also attained.

The invention consists in certain devices and combinations thereof hereinafter described and pointed out.

In the accompanying drawings, Figure 1 is a front elevation partly in section. Fig. 2 is a side elevation partly in section, and Fig. 3 is a horizontal section taken below the camera-rest and above the base.

A A′ indicate parallel standards supported on the base B. They are each provided interiorly with a groove or channel F or F′, extending to the base, which is preferably T-shaped in cross-section, and extends through the inner side of the standard in manner as indicated, and so that the clamping-nuts E E′, connected by the rod or bolt D, may be moved up or down therein. The rod is provided at its ends with reversely-formed screw-threads engaging similarly-formed threads in the nuts, the construction being such that the latter can be made simultaneously to approach or recede from each other by turning rod D.

C denotes a vertically-movable camera rest or frame having a top or table C′, made adjustable vertically by means of curved arm or bracket C^2 and set-screw C^3, as shown. Other means for effecting this adjustment may be employed. The rod D passes through the ends or upright members of the frame, and springs G G′ are secured to the upper portions of the same. The springs are coiled in recesses formed in the upper parts of the standards or in suitably-enlarged parts thereof.

The base is preferably provided with three feet, and also with casters, as indicated.

In operation the camera-rest can be moved up or down, the nuts E E′ having been loosened by suitably turning the screw-rod, and it can be fastened in any desired position by turning the rod in the opposite direction, with the effect to cause the nuts to approach each other and clamp or press upon the inner wall of the groove, it being understood that each of these nuts is wider than the narrow part of the groove through which the rod extends, while it preferably has a narrower projecting part that fits in said narrow part of the groove. It will be seen that by the construction described the camera-rest can be moved down to the base, and as the latter need be but a few inches high the rest can be moved to a point very near the level of the floor or ground. The construction also is such that by dispensing with casters, or by employing very small ones in a thin base, the rest could be moved to within one or two inches of the floor, or the standards, with or without casters, might rest directly on the floor, being connected and supported by a lateral frame outside the path of the rest, said frame having a vertical member also resting on the floor to give stability, substantially as indicated in Fig. 4. It is often desired to drop the camera much lower than practicable by means of stands such as now in use, which support the camera-rest entirely above the standards, and do not permit of its free adjustment between them and down to a point near their feet or near the floor. The springs G G′ are so arranged that they tend to support the camera-rest, and that their tension is increased when it is lowered, and they therefore assist in raising it. These springs are conveniently arranged, as indicated, and the structure as a whole is simple, durable, and well adapted for the uses and advantages indicated.

In manufacture its proportions may be varied according to circumstances, and various details can also be varied by mechanical skill without departing from the invention. Thus the springs might be omitted or a different form of spring employed, or even counterbalancing-weights substituted; and neither the particular form of camera-rest nor of clamping devices, nor of means for connect-

ing the rest and the standards, nor the number or particular form of the standards, is of the gist of the invention, nor the form of the base. It is, however, characteristic of the improvement that the camera-rest can be raised and lowered and suitably supported at the side of one or more standards, substantially as specified, and so that it can be raised to near the top of such standard or lowered to its foot, the latter position being a desirable one for some uses, as those skilled in the art will understand.

I am aware that a camera-table has been combined with toggle-levers, spring, and handle or operating-lever, whereby the table could be held at any desired position, and such devices are not of my invention.

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

1. In a camera-stand, a vertical standard, a camera-rest, and devices for clamping the rest to the standard, the rest being adjustable to points below the top of the standard and near its foot, substantially as described.

2. In a camera-stand, vertical standards, a camera-rest, and clamping devices to clamp the rest to the sides of the standards, the rest being adjustable to a point near the foot of the standards, substantially as described.

3. In a camera-stand, the standards provided with springs secured to the camera-rest, said rest and clamping devices adjustable at the sides of the standards to near their foot, substantially as described.

4. In a camera-stand, the grooved standards, the camera-rest, the reversely screw-threaded rod, and the threaded nuts located in the channels or grooves, all the parts being below the plane of the table, and the rod and nuts being adapted to draw the standards toward each other, substantially as described.

5. In a camera-stand, the grooved standards, the camera-rest, the reversely screw-threaded rod, the threaded nuts, said rod passing through the ends of the rest, the table or top above the rest provided with a curved bracket, and a set-screw in the bottom of the rest arranged to engage the bracket, substantially as described.

6. In a camera-stand, the rest provided with vertical parts or ends adapted to move in contact with standards, the lower horizontal part provided with a set-screw, the upper horizontal part, the clamping-rod accessible between said horizontal parts, and the table provided with a curved bracket extending around the rod and upper horizontal part, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWIN C. FISHER.

Witnesses:
ALBERT BALL,
FRANK A. BALL.