

(No Model.)

H. D. WAITE.
CAMERA STAND.

No. 432,255.

Patented July 15, 1890.

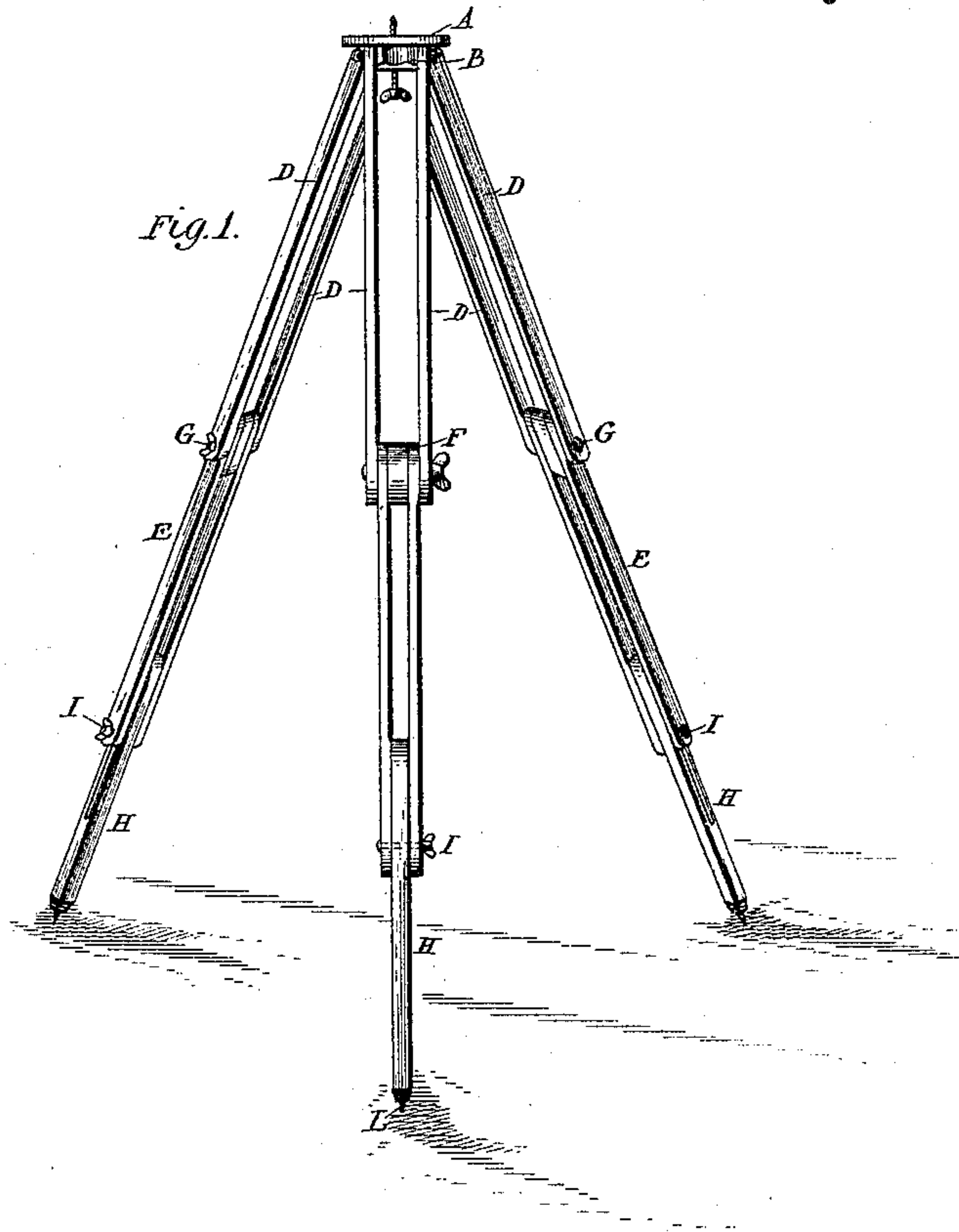


Fig. 3.

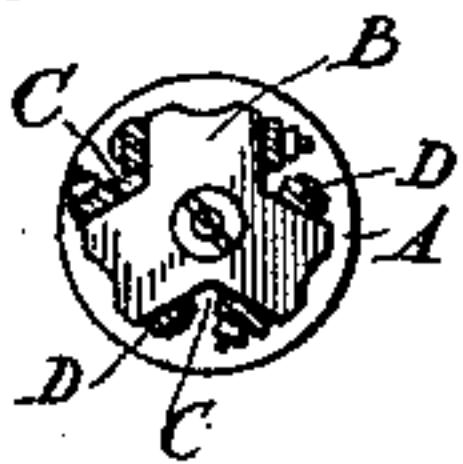


Fig. 2.

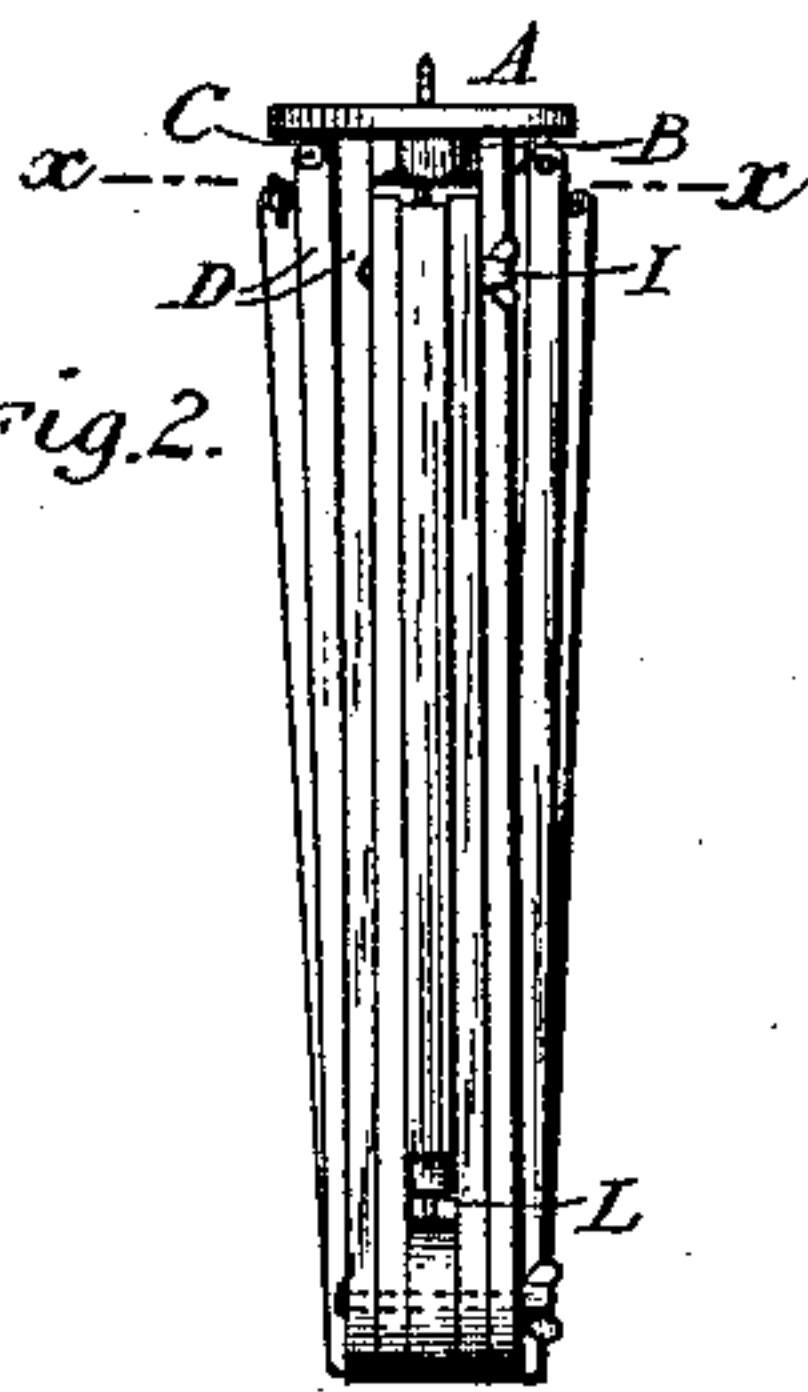


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

HAMILTON DEANE WAITE, OF WATERTOWN, NEW YORK, ASSIGNOR TO
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CAMERA-STAND.

SPECIFICATION forming part of Letters Patent No. 432,255, dated July 15, 1890.

Application filed August 21, 1889. Serial No. 321,506. (No model.)

To all whom it may concern:

Be it known that I, HAMILTON DEANE WAITE, a citizen of the United States, residing at Watertown, in the county of Jefferson and State of New York, 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 appertains to make and use the same.

This invention relates to certain improvements in photographic-camera stands or tripods of that class in which the legs are made in folding sections, so that they may be compactly closed for convenient transportation or can be extended and opened out to conveniently support the camera when the apparatus is employed for outdoor, field, or other work where a portable stand or tripod is essential.

The objects of the invention, particularly, are to provide a stand consisting of jointed sections, which, while the parts may be readily detached from each other, are permanently connected, so that they will not have to be moved one from another in setting up or taking down the stand, to provide simple connections at the joints of the sections of the legs, whereby the same may be clamped rigidly at such joints when the stand is set up or loosened to permit the sections to be folded, and, further, to provide for regulating and adjusting the height or inclination of the stand or tripod within certain limits when set up, as more fully hereinafter explained.

The above-mentioned objects are attained by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of the improved stand or tripod in position for work. Fig. 2 is a side elevation of the stand or tripod with the parts folded for storage or transportation. Fig. 3 represents a sectional view of the tripod or stand, taken on the line *xx* of Fig. 2; and Fig. 4 represents a side elevation showing one of the lower slotted extensible sections and the intermediate sections, to which it is adjustably connected.

Referring to the drawings, the letter A indicates the table or plate which supports the body of the camera. This consists, prefer-

ably, of a disk of wood of suitable size to form a proper base for the bottom of the camera-box. The lower side of said plate or table is provided or constructed with a substantially circular block B, having formed in its periphery three angular recesses C, to the sides of which are bolted the upper ends, respectively, of the couples of members D constituting the upper sections of the three respective legs of the tripod, one bolt being employed for each set, so as to hold each securely to the block and in position thereon without necessity for removal in setting up or taking down the stand. These members D, at their lower ends, embrace the upper ends of a series of intermediate members E, which are arranged in couples, and between the upper ends of the couples are secured the short blocks F, which hold the upper ends of the intermediate members closely within the lower ends of the upper members.

G indicates a screw-bolt passing through the joints of the upper and intermediate members and the intervening blocks, the said bolts being provided with clamping-nuts, by means of which the parts may be readily tightened or loosened at the joints.

Between the lower ends of the intermediate members are located the single members H, which form the lower sections of the legs of the tripod or stand. These members H are slotted longitudinally, and are adjustably secured by means of the screw-bolts I, which pass through the lower ends of the intermediate members E and the slots in the said single members H, so that the said single members may be swung up between the intermediate members for folding or moved to or clamped in variable positions between the said intermediate members for regulating the length of the legs when unfolded, so as to vary the height of the tripod when set up or give a differential length to the legs, if desired. The bolts I are also provided with clamping-nuts, by means of which the parts which they connect may be rigidly held at the joints or loosened, as may be desired.

Between the heads of the binding-nuts of the clamping-bolts and the members of the respective sections metallic washers K may be secured to prevent undue wear. The

lower ends of the single members are provided with the usual spikes L to take a firm foothold upon the ground.

As constructed, it will be seen that the parts
5 are all securely connected, so that they need not be taken apart except for repairs, while they may be compactly folded for transportation or readily opened out and clamped at their joints, so as to form a rigid support for
10 the camera when the tripod is set up. The lower extensible sections enable the stand to be readily adjusted so as to place the camera in a convenient position for operators of different heights, and also afford another im-
15 portant advantage of enabling the operator to conveniently level his camera upon irregular ground or to give it various degrees of inclination, which is important where it is necessary to work in inconvenient positions in order to properly include the object within the
20 field of the ground glass and the plate to be exposed in the camera.

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

1. In a camera stand or tripod, the combination, with the camera-supporting plate provided on its underside with the recessed block, of the upper members embracing the edges of
30 said recesses and pivoted thereto, the intermediate members embraced between the lower ends of the upper members, and pivoting-bolts and thumb-screws, whereby the respective

members are adjustably secured together, and may be rigidly clamped when unfolded, substantially as described. 35

2. The combination, with the upper members, of the intermediate members embraced between the same, the blocks secured between the intermediate members, and the confining-
40 bolts, whereby the members are clamped rigidly when extended, substantially as specified.

3. The combination, with the intermediate members, of the slotted single members located between their lower ends and the clamping-
45 bolts, whereby the single members may be held in position to be folded or to be opened out and extended so as to vary the length of the legs of the tripod, substantially as specified. 50

4. The combination, in a camera tripod or stand, of the upper members pivoted to the supporting-plate, the intermediate members pivoted between the upper members, the lower single slotted members pivoted between
55 the intermediate members and the clamping bolts and nuts, whereby the members may be folded, opened out, and adjusted to regulate their length, substantially as specified.

In testimony whereof I affix my signature in
60 presence of two witnesses.

HAMILTON DEANE WAITE.

Witnesses:

CHARLES T. NIMOCKS,
MILTON L. ROGERS.