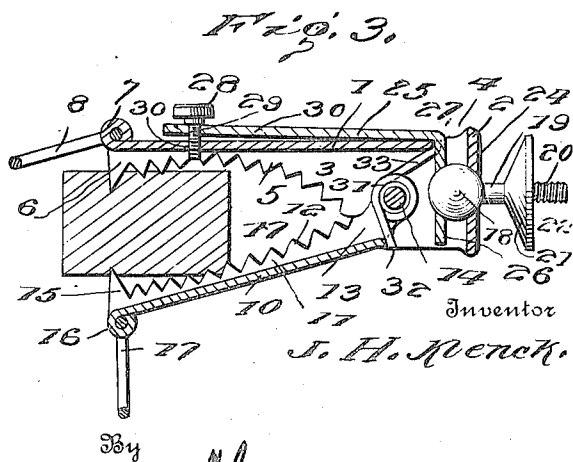
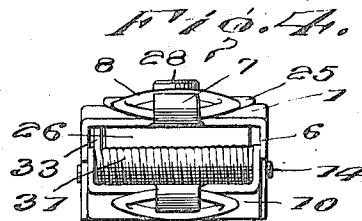
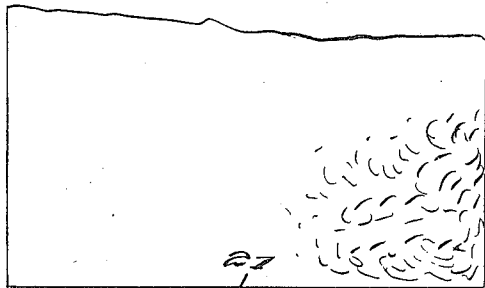
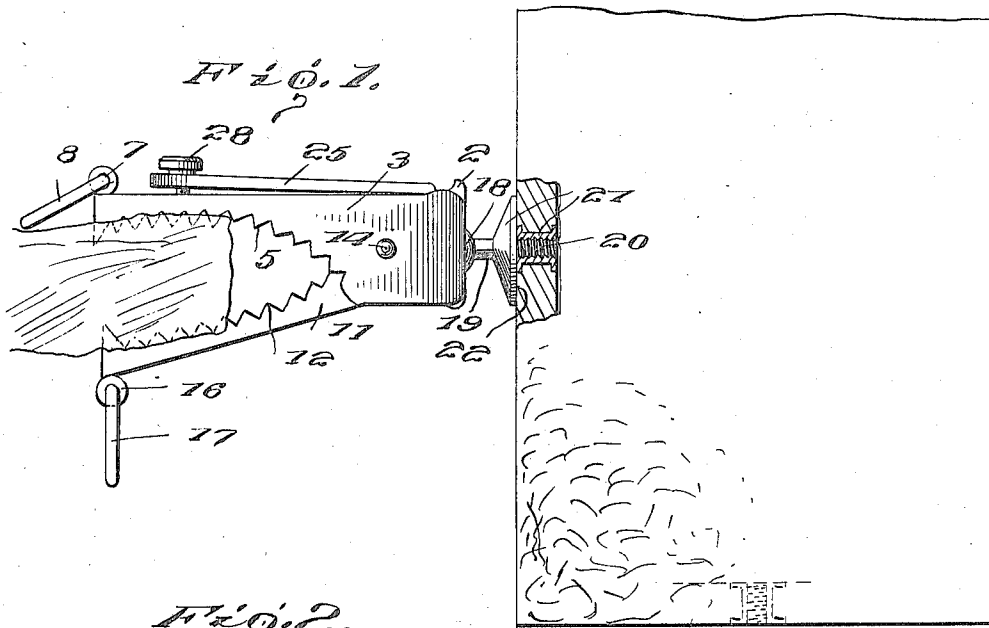


J. H. KLENCK.
CAMERA SUPPORT.
APPLICATION FILED JUNE 27, 1914.

1,153,320.

Patented Sept. 14, 1915.



Witnesses
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UNITED STATES PATENT OFFICE.

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CAMERA-SUPPORT.

1,153,320.

Specification of Letters Patent.

Patented Sept. 14, 1915.

Application filed June 27, 1914. Serial No. 847,791.

To all whom it may concern:

Be it known that I, JOHN H. KLENCK, a citizen of the United States, residing at Warren, in the county of Warren and State of Pennsylvania, have invented certain new and useful Improvements in Camera-Supports, of which the following is a specification.

This invention relates to devices and appliances used for supporting cameras while making the photographic exposure on the sensitized plate or film, and has as its object to supplant the more cumbersome tripod which is usually used for the above mentioned purpose, and also to provide means for supporting a camera from the trunk of a tree, the side of a house, fence, boat, chair-back, or in fact any other suitable and convenient object, and in situations where it might be impossible to use the ordinary tripod.

It is one aim of the invention to provide a support of the class mentioned which may be applied without the use of tools of any sort and readily removed and which will be so constructed that it may be carried in a small space, as for example, in one's pocket.

Another aim of the present invention is to so mount the member of the support, to which member the camera is to be attached, that the camera may be quickly and readily adjusted to the desired position for making the exposure and after having been so adjusted may be securely held in place.

In the accompanying drawings: Figure 1 is a side elevation of the device, the same being applied to a horizontal support. Fig. 2 is a rear elevation of the device applied to a vertical support. Fig. 3 is a vertical longitudinal sectional view through the device. Fig. 4 is an end elevation of the device.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The device includes what may be considered as a relatively fixed jaw and a movable jaw pivoted thereto, these jaws being designed to clamp between them the support to which the device is applied. The relatively fixed jaw comprises a back 1, an end 2, and spaced sides 3 which preferably lie in planes at right angles to the planes occupied by the back 1, the end 2 being spaced from the adjacent end of the back whereby to provide a slot 4 for a purpose to be pres-

ently explained. The sides 3 of the fixed jaw have their free edges of arcuate form and toothed, as indicated at 5, one of the teeth located at that end of each side opposite the end at which the slot 4 is located being relatively long and indicated by the numeral 6. The end of the back is turned over upon itself to form a pivot lug 7 which supports a finger ring 8.

The pivoted jaw includes a back 10 and sides 11 which have arcuate toothed edges 12 and, by reference to Figs. 1 and 4 of the drawings, it will be observed that the said sides 11 at one end are formed each with an ear 13, which ears are received within the sides 3 of the fixed jaw, a pivot pin 14 being fitted through said sides 3 and through openings in the said ears 13 whereby to pivotally connect the movable jaw to the fixed jaw.

By reference to Figs. 1 and 3 it will be apparent that the sides 3 and 10 of the fixed and movable jaws respectively are of greater depth at their portions through which the pivot pin passes and that the toothed edges 5 and 12 are concave so that when the jaws are pulled open, the end of a post or other object to be engaged by the jaws may seat within the opposing concave toothed edges of the said sides of the jaws whereby slipping of the jaws will be prevented. The back 10 of the movable jaw is provided with teeth 15 which correspond in location to the spurs 6. The back 10 of the movable jaw is turned over to form a pivot ear 16 carrying a finger ring 17. The jaws are held closed by means of a spring in a manner which will be presently explained, and it will be apparent that by engaging the forefingers of the two hands in the finger rings 8 and 17, the jaws may be readily pulled apart against the tension of the spring for the purpose of engaging the device with a support or disengaging the same therefrom. The member of the device to which the camera is to be connected and by which the camera is to be directly supported comprises a spherical head 18 and a shank 19 having a threaded portion 20.

Between its ends the shank 19 is formed with a conical head 21, the base of which is flat, as indicated at 22, so as to bear against the side or bottom of the camera when the threaded portion 20 of the shank is screwed into the ordinary tripod socket, as indicated at 23 in Fig. 1 of the drawings.

The end 2 of the fixed jaw is provided

with an opening 24 and the shank 19 of the camera supporting member projects through this opening, the spherical head 18 being partly received within the opening, it being understood that the camera supporting member may have universal angular adjustment with relation to the said end of the fixed jaw.

In order to securely clamp the camera supporting member after it has been adjusted, there is provided a clamp member comprising a body portion 25 having a flat head 26 projecting substantially at right angles from one end thereof, this head being formed with an opening 27 and the member being assembled with the fixed jaw by inserting the head within the slot 4 with the body portion 25 of the clamp member extending beside the back 1 of the fixed jaw. The wall of the opening 27 engages that side of the spherical head 18 of the camera supporting member opposite the side engaged by the walls of the opening 24, and it will be observed that the clamp member rests, at its bend between the body portion and head, against that end of the back 1 which constitutes one wall of the slot 4, so that the member may be rocked upon this end of the back as a fulcrum and may therefore be brought to bear more or less firmly against the spherical head 18.

A thumb screw 28 is fitted through an opening 29 in the body portion 25 of the clamping member, at that end opposite the end at which the head 26 is located, and the said screw is threaded into an opening 30 formed in the back 1. It will now be apparent that by tightening the screw 28, the clamping member will be rocked upon the end edge of the back 1 in a manner to move its body portion toward the said back and its head 26 into firm engagement with the spherical head 18. As before stated, a spring is provided for holding the jaws yieldably closed and this spring is indicated by the numeral 31, and is coiled about the pivot pin 14, and has one end 32 bearing against the pivoted end of the back 10 of the movable jaw and its other end 33 bearing against the end of the back 1 of the fixed jaw.

From the foregoing description of the invention it will be understood that by pulling open the jaws, the device may be engaged with a horizontally or vertically disposed support and that after it has been applied to such support it will be securely held against accidental displacement. The thumb screw 28 is then loosened so as to decrease the tension of the clamping member and permit of angular adjustment of the camera supporting member. The camera may then be, or have previously been, connected to the said supporting member and, in any event, it is adjusted until it has been brought to the de-

sired position and in proper position for making the exposure. The thumb screw 28 is then tightened so as to securely bind the head 18 and thereby hold the camera supporting member against accidental displacement.

Having thus described the invention, what is claimed as new is:

1. In a support of the class described, a jaw having a bearing portion, a clamping member carried by the said jaw and having a bearing portion spaced from the bearing portion of the jaw, a supporting member having a head fitted between the said bearing portions and angularly adjustable, a jaw pivoted to the first-mentioned jaw, and a spring yieldably holding the jaws closed.

2. In a support of the class described, pivotally connected jaws, a supporting member angularly adjustable with respect to the jaws, a clamping member coöperating with the supporting member to hold the same at adjustment, and means for moving the said member into clamping engagement with the supporting member.

3. In a support of the class described, a jaw having a bearing portion provided with an opening, a supporting member having a head seating within the opening and angularly adjustable, a clamping member having a bearing portion opposing the bearing portion of the jaw and bearing against the said head, means for adjusting the clamping member to bring its bearing portion into clamping engagement with the head, and a jaw pivoted to the first-mentioned jaw and coöperating therewith.

4. In a support of the class described, a jaw having a bearing portion provided with an opening, a supporting member having a head seating within the opening and angularly adjustable, a clamping member having a bearing portion opposing the bearing portion of the jaw and bearing against the said head, means for adjusting the clamping member to bring its bearing portion into clamping engagement with the head, a jaw pivoted to the first-mentioned jaw and coöperating therewith, and a spring for holding the jaws closed.

5. In a support of the class described, a jaw having a bearing portion, a clamping member mounted for rocking movement upon the jaw and having a bearing portion opposing the first-mentioned bearing portion, a supporting member having a bearing portion fitted between the first-mentioned bearing portions, means for moving the clamping member upon its fulcrum to bring its bearing portion into clamping engagement with the said bearing portion of the supporting member, and a jaw pivoted to the first-mentioned jaw and coöperating therewith.

6. In a device of the class described, a

jaw having a back and spaced sides and provided with a bearing portion extending between its sides, a jaw having spaced sides fitted between the sides of the first-mentioned jaw, a pivot pin fitted through the 5 said sides of the jaw, a clamping member having a portion opposing the bearing portion of the first-mentioned jaw, a supporting member having a head fitted between the

said bearing portions and angularly adjustable, and a spring holding the jaws closed. 10

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

JOHN H. KLENCK. [L. S.]

Witnesses:

ALICE M. KISTLER,
J. E. F. GROZINGER.