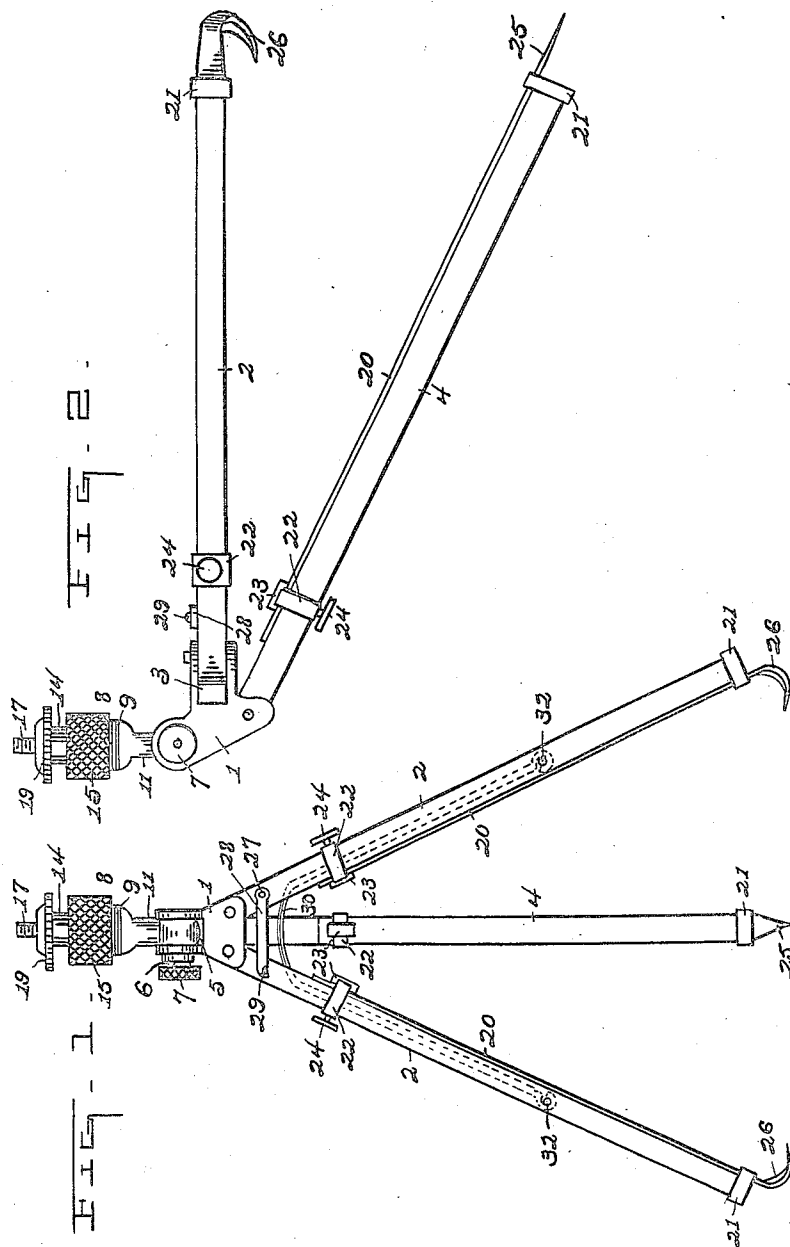


No. 816,268.

PATENTED MAR. 27, 1906.

O. W. STEINDORF.
TRIPOD FOR CAMERAS.
APPLICATION FILED MAR. 30, 1905.

2 SHEETS—SHEET 1.



Witnesses:

Robt. F. Wilbur
E. J. Linnard

Inventor

Otto W. Steindorf

By *H. E. Linnard*
Attorney

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2 SHEETS—SHEET 2.

FIG. 3.

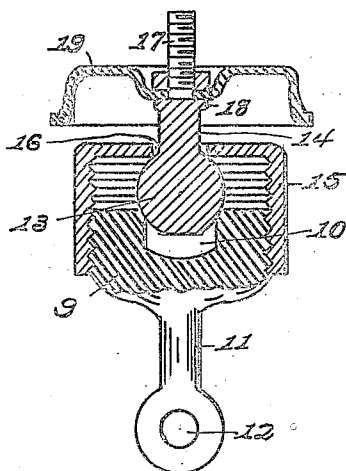


FIG. 4.

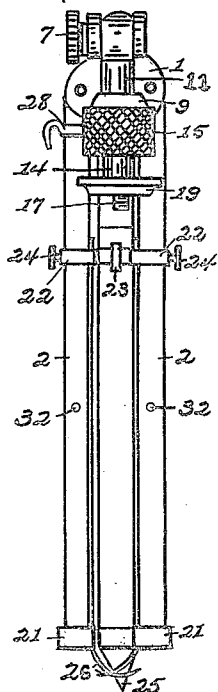
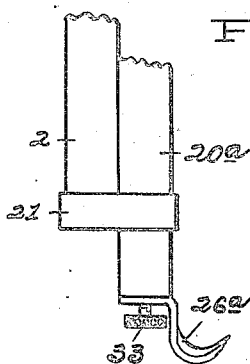


FIG. 5. FIG. 6.



FIG. 7.



Witnesses:

Robt. F. Wilbur
E. Hennard

Inventor.

Otto W. Steindorf
By H. E. Dunlap
Attorney.

UNITED STATES PATENT OFFICE

OTTO W. STEINDORF, OF WHEELING, WEST VIRGINIA.

TRIPOD FOR CAMERAS.

No. 816,268.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed March 30, 1905. Serial No. 252,796.

To all whom it may concern:

Be it known that I, OTTO W. STEINDORF, a citizen of the United States of America, and a resident of Wheeling, county of Ohio, and State of West Virginia, have invented certain new and useful Improvements in Tripods for Cameras, of which the following is a specification.

My invention relates to new and useful improvements in tripods, and more particularly to a tripod for cameras, and still more particularly to what may be termed a "pony" tripod; and it consists in the particular construction, arrangement, and combination of parts, which will hereinafter be fully described.

The chief object of my invention is to provide an adjustable folding tripod which may be conveniently applied to a table, fence, tree, wall, or other fixed object to serve as a support for a camera.

A further object is to provide a tripod which may be adjusted to hold the camera in any desired position whether the former is stood upon a flat surface or is suspended from a fixed object; and a still further object of the invention is to provide a tripod which is particularly adapted for being carried in a pocket.

In describing the invention in detail reference is herein had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front elevation of my invention standing in an upright position. Fig. 2 is a side elevation illustrating the position of the invention when mounted upon a post, fence, wall, or the body of a tree as a support. Fig. 3 is a vertical section through the ball-and-socket joint. Fig. 4 is an elevation showing the invention folded for convenient carrying. Fig. 5 is a cross-section of a leg. Fig. 6 is a similar view showing a modification in the construction of a leg, and Fig. 7 is a view showing the supporting-hook employed with the modified construction of leg.

Referring to said drawings, in which like reference numerals designate like parts throughout the several views, 1 indicates a head to which two legs 2 are pivoted directly opposite each other in a bifurcation 3, and a third leg 4 is pivoted in the rear end of a second bifurcation 5 in said head. Pivotally mounted upon a set-screw 6, having a milled head 7, in the front end of said bifurcation, 5, is a ball-and-socket joint 8. Said ball-and-

socket joint consists of an exteriorly-threaded cup 9, with a socket 10 therein and having a stem 11 with an eye 12, through which said set-screw is passed, a ball 13, mounted in said socket 10, said ball having an integral stem 14, and an interiorly-threaded cap 15. Said cap has an opening 16 in its top, through which the stem 14 projects and is adapted for manipulation to impinge upon the ball 13 to hold the same in a fixed position. The opening 16 is of sufficient size to admit of considerable play in the ball. The extreme end of said stem 14 is threaded, as shown at 17, to receive a camera thereon, and an integral collar 18 is provided on said stem below said threaded end. Mounted upon said end to rest upon said collar is a disk or cap 19, upon which the camera rests when it is secured upon said threaded end 17.

Extension-strips 20 are preferably provided upon each of the legs of the tripod. Said strips are preferably made of metal and are held in place on the inner sides of the legs by fixed keepers 21 on the ends of said legs and by keepers 22, which are slidable upon said legs, the last-mentioned keepers being fixedly secured or attached to said strips by means of tie-plates 23. Set-screws 24 are provided in said keepers 22 for holding the strips 20 in fixed positions with relation to the legs. The strip 20 upon the leg 4 is provided with a pointed end 25 for a purpose which will presently be made apparent, while the strips 20 upon the legs 2 are each provided with a pointed inwardly and rearwardly inclined or projecting hook-shaped claw or spur 26, as shown.

Upon the front side of one of the legs 2, as at 27, is pivoted one end of a bar or hook 28, the opposite end of which on its under side or edge is provided with a recess adapted for engagement with a pin 29 in the face of the opposite leg 2 to hold said legs in extended positions with relation to each other against the tension of a spring 30. Said spring 30 consists of a substantially U-shaped wire the members of which are held in grooves 31, provided in the inner faces of said legs 2, and have their ends held in fixed positions by pins 32, as shown.

As is obvious, the modified construction illustrated in Figs. 6 and 7 of the drawings may be employed, if desired. As shown, the modification consists in employing a slidable extension 20^a instead of the strip 20 and a claw or spur 26^a instead of the integral spur

26, said spur 26^a being secured to the end of the extension by means of an adjusting-screw 33, which admits of the spur being adjusted to any desired position.

5 When not in use, the device may be closed or folded in the position shown in Fig. 4, when it may be conveniently carried either in the hand or pocket. When it is desired to use the device on a level surface, as upon a
10 table or box, the legs may be spread apart and the device set upright thereon, as shown in Fig. 1, or when used on the ground the legs may be extended, as hereinbefore mentioned.

15 As is well known by camera users, it frequently happens that in using cameras in the open air, no suitable rest for a camera is at hand. With my invention the camera may be suspended from a post or a tree, the legs 2
20 being made to embrace the sides thereof with the spurs 26 in supporting engagement therewith and the pointed end 25 also engaging to brace or support the same, the parts all assuming substantially the positions shown in
25 Fig. 2. When it is desired to attach the device to the body of a tree which is too large to be embraced by the legs 2, the strips 20 may be extended to render the capacity thereof
30 greater, or the claws may be inserted directly in the face of the tree, in a building-wall, &c. A fence may likewise be employed as a support for the device, the spurs 26 being made to engage one of the top rails or boards there-
35 of to suspend the device therefrom and the pointed end 25 being brought into bracing engagement with a lower rail thereof.

From the foregoing it will be seen that I provide an extremely simple and convenient tripod of the character described, and it is ob-
40 vious that various slight alterations may be made in the construction and arrangement of its parts without departing from the general spirit or scope thereof. Hence I do not wish to limit myself to the precise construction
45 and arrangement of parts herein shown and described.

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

50 1. In a tripod, a head, legs pivoted in said head, adjustable extension-strips carried by said legs, a prong on the end of one of said strips, and a hook or claw carried by each of the other strips, a ball-and-socket joint ad-
55 justably mounted in said head, and means for mounting a camera upon said joint.

2. In a tripod, a head provided with a bifurcation therein, legs pivotally mounted in the opposite ends of said bifurcation, a second bifurcation in said head at right angles 60 to the first, a leg pivotally mounted in the rear end of said second bifurcation, slidable extensions carried by said legs, hooks or claws carried by the extensions on the first-mentioned legs, a prong carried by the extension 65 on the other leg, and adjustable means for mounting a camera on said head.

3. In a tripod, a head provided with bifurcations therein, legs pivotally mounted in the opposite ends of one of said bifurcations and a leg similarly mounted in the rear end of the other bifurcation, slidable extensions carried by said legs, hooks or claws carried by the extensions on the first-mentioned legs, a prong 70 carried by the extension on the other leg, and a ball-and-socket joint adjustably mounted in said head, said joint comprising an exteriorly-threaded cup with a socket therein and having a stem with an eye therethrough, a ball mounted in said socket, an integral stem 80 having a threaded end carried by said ball, and an exteriorly-threaded-cap encircling said stem and adapted for manipulation on said cup to adjust said ball in position.

4. In a tripod, a head, legs pivoted in said 85 head, adjustable extension-strips carried by said legs, a prong on the end of one of said strips, and a hook or claw on the end of each of the other strips, a spring for normally holding the last-mentioned legs close together, 90 means for holding said legs spread against the tension of said spring, a ball-and-socket joint adjustably mounted in said head, and means for mounting a camera upon said joint.

5. In a tripod, the combination with a 95 head and adjustable legs suitably mounted in said head, of a ball-and-socket joint pivotally mounted in said head over said legs, said joint comprising an exteriorly-threaded cup with a socket therein and having a stem 100 with an eye therethrough, a ball mounted in said socket, an integral stem having a threaded end carried by said ball, and an interiorly-threaded cap encircling said stem and adapted for manipulation on said cup to 105 adjust said ball in position.

Signed by me in the presence of two subscribing witnesses.

OTTO W. STEINDORF.

Witnesses:

H. E. DUNLAP,
J. H. DUNLAP.