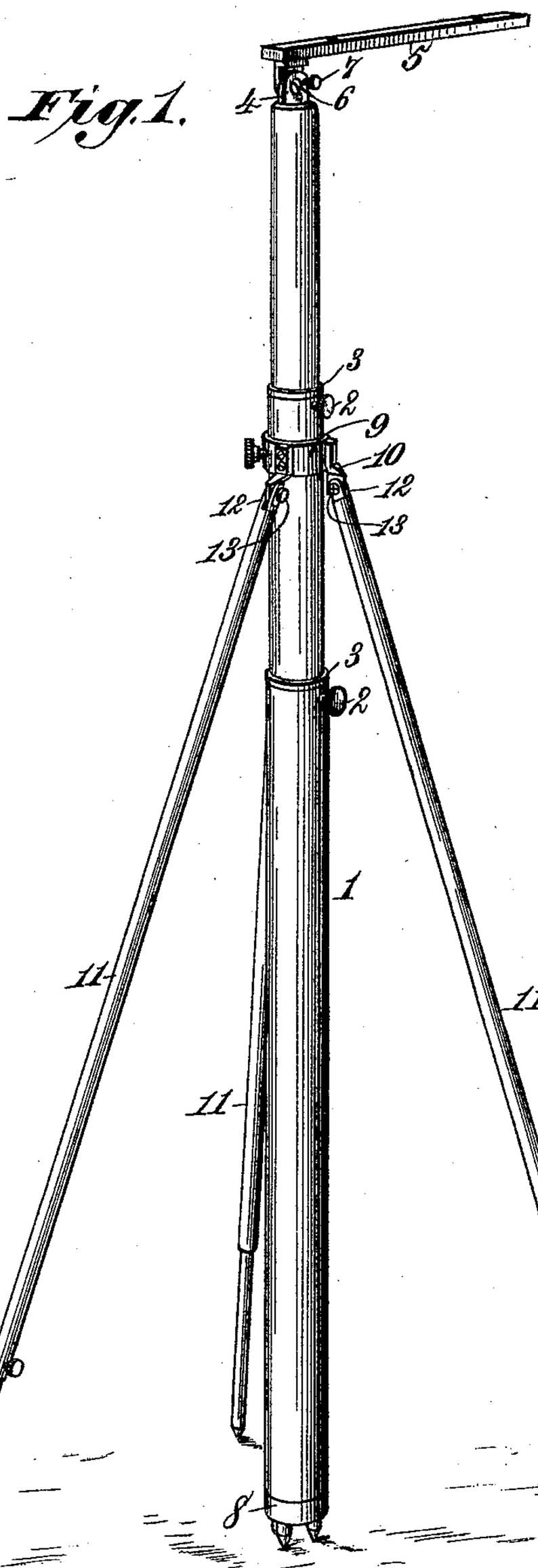
(No Model.) 2 Sheets—Sheet 1.

W. BUNKER & L. W. BUTLER.

TRIPOD.

No. 496,851. Patented May 9, 1893.

Fig. 1.



Witnesses.
Robert Swatt,
J. A. Rutherford.

Inventors.
William Bunker,
Louis W. Butler.
By James L. Norris.
Atty

(No Model.) 2 Sheets—Sheet 2.

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TRIPOD.

No. 496,851. Patented May 9, 1893.

Fig. 2.

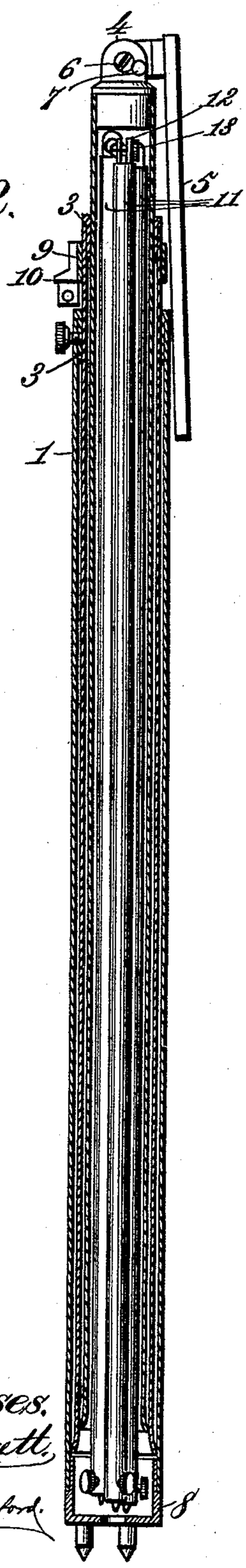


Fig. 3.

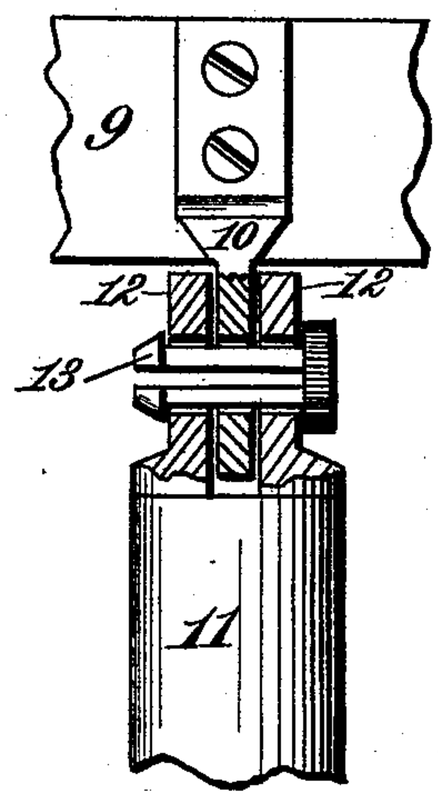
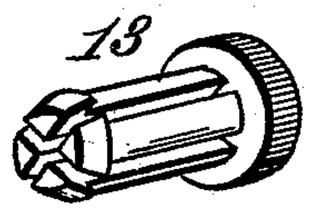


Fig. 4.



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Atty.

UNITED STATES PATENT OFFICE.

WILLIAM BUNKER, OF NEW YORK, AND LOUIS W. BUTLER, OF BROOKLYN, NEW YORK.

TRIPOD.

SPECIFICATION forming part of Letters Patent No. 496,851, dated May 9, 1893.

Application filed June 11, 1892. Serial No. 436,397. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM BUNKER, residing at New York, in the county of New York, and LOUIS W. BUTLER, residing at Brooklyn, in the county of Kings, State of New York, citizens of the United States, have invented new and useful Improvements in Tripods, of which the following is a specification.

Our invention relates to tripods for supporting photographic cameras and it has for its object to provide a novel, simple and economic tripod which shall afford a strong and steady support for the camera when in use, as well when it is used where there are inequalities of ground as when the surface of the ground is level, and which may be packed within a small area when not in use and for transportation.

To these ends our invention consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed, reference being made to the accompanying drawings, wherein—

Figure 1 is a perspective view of our improved tripod, partially extended. Fig. 2 is a longitudinal sectional view of the same, packed for transportation, or when out of use. Fig. 3, is an enlarged, sectional detail showing the means of attaching the radiating legs to the center post and Fig. 4 is an enlarged detail of the split spring pin constituting a part of this means.

In the drawings the reference numeral 1 designates the center post which is composed of a plurality of tubular sections capable of sliding one within another. These sections are adjustable to any desired degree of extension, whereby the camera may be supported at any suitable height from the ground, by means of set screws 2, passing through holes formed therefor in the different sections and binding against the sections which slide within the sections to which the respective screws are applied. The sections composing this center post are prevented from being disengaged from each other by slightly flaring that extremity of each section which slides within another, which flared extremity comes in contact with a shoulder formed by a ring or band 3, suitably secured to the upper end of the section within which it slides.

Formed upon or secured to the upper extremity of the top section of the center post 1, is a bracket 4, to which is secured the camera-supporting arm or bar 5, by means of a thumb-screw 6, engaging screw threaded holes formed therefor in the said bracket 4 and a similar bracket formed on the arm or bar 5, whereby said arm may be adjusted to different angular positions with respect to the center post 1. A screw hole is formed in the bracket 4, to receive a set screw 7 which binds against the bracket formed on the arm 5, to bind the latter in its adjusted position. The open bottom end of the lower extremity of the center post receives a covering cap 8, having pins or projections extending therefrom to enter the ground to render the position of the said post steady. Fitted loosely upon one of the telescopic sections, preferably the middle one, and so that it may be free to slide thereupon, is a collar 9, having secured thereto a plurality of small brackets 10.

The numerals 11, represent telescopic radiating legs composed of a plurality of sections one of which sections is preferably made solid and fitted to slide within another of the sections, and adjustable at the desired degree of extension by means of thumb screws passing through a hole in the section in which it slides and binding against the solid sliding section. Secured to or formed with the upper extremity of each of these radiating legs is a bracket composed of two parts 12, 12, having a space between them into which fits the bracket 10 on the collar 9. These brackets are formed with coincident holes to receive a split, spring pin 13, which is shown in enlarged detail in Fig. 4, and, which, when inserted in the holes formed in the brackets expands and is retained in position by a slight head formed on the said pin. By means of this connection the radiating legs are securely attached to the center post and their lower ends free to be moved to and from the said center post.

By fitting the collar 9, loosely on one of the telescopic sections, should the operator accidentally come in contact with one of the ra-

diating legs 11, or should one of said legs be otherwise distributed the jar or vibration caused by such disturbance would be transmitted to and taken up by and lost in the loose collar 9, so that the center post 1 and the other radiating legs 11 would remain firm and undisturbed. Also, by reason of said collar being free to slide upon one of the telescopic sections, whenever it is necessary for the center post 1 to rest at a higher or lower elevation than the radiating legs 11, said radiating legs will automatically seek their proper position. In the drawings we have shown a thumb screw tapping the collar 9, but this is intended for use only, when circumstances require that said collar be fitted over the smaller or top section of the center post, in which case the said thumb screw will be adjusted to confine the collar so that it cannot slip over the top of the center post, but this thumb screw is not essential and may be dispensed with.

It will be seen that every part of the tripod is conveniently adjustable, and that the center post may be supported in a vertical position notwithstanding irregularities in the ground, the radiating legs automatically adjusting themselves to meet the existing necessities.

It will be seen that we provide a tripod which will be firm and steady under all circumstances, the center post sustaining the weight of the camera, and the radiating legs bracing and steadying said center post, and any jar or vibration of which radiating legs is taken up by the loose collar 9. Finally by our invention we provide a tripod which, when out of use or in transportation, may be packed into an extremely small space, and to accomplish this each of the sections composing the center post is provided with an open bottom and the inner or top section is tubular so that the sections may be telescoped and the radiating legs detached and inserted into the tubular inner or top section.

Having thus described our invention, what we claim is—

1. In a tripod the combination of a center sectional telescopic post, a camera-supporting arm carried thereby, and radiating telescopic legs secured to the center post, each section of said center post having an open bottom and the inner or top section being tubular to receive the radiating telescopic legs, substantially as described.

2. In a tripod, the combination of a center telescopic post, a camera-supporting arm carried thereby, a collar loosely fitted on said center post, and radiating telescopic legs secured to said sliding collar, substantially as described.

3. In a tripod, the combination of a tubular center post composed of tubular telescopic sections, a camera supporting arm, a sliding collar arranged on the center post and provided with brackets, and the radiating telescopic legs detachably connected with the brackets of the sliding collar so that said legs can be removed and inserted bodily into the innermost telescopic section, substantially as described.

In testimony whereof we have hereunto set our hands and affixed our seals in presence of two subscribing witnesses.

WILLIAM BUNKER. [L. S.]
LOUIS W. BUTLER. [L. S.]

Witnesses:
HENRY P. FRANSIOLI,
AUGUSTUS J. FRANSIOLI.