(No Model.)

H. P. CURTIS.

TRIPOD.

No. 340,195. Patented Apr. 20, 1886.

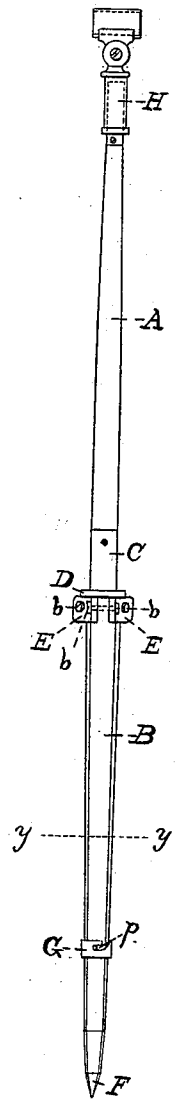


FIG. 2.

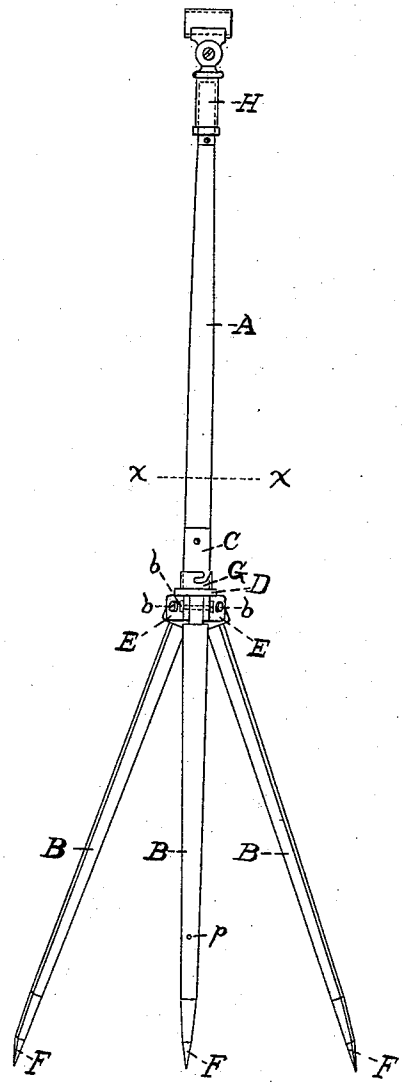


FIG. 1.

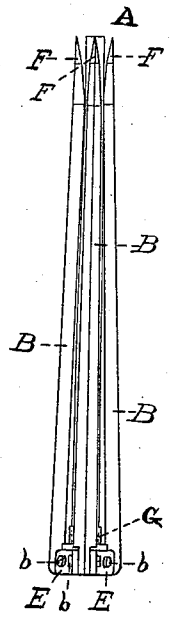


FIG. 3.

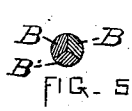


FIG. 5.

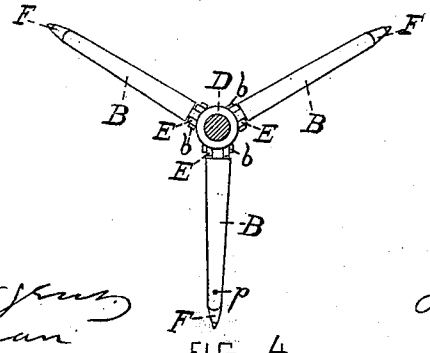


FIG. 4.

WITNESSES:

Francis W. Sargent

Alfred Rodman

INVENTOR:

Henry P. Curtis.

N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY P. CURTIS, OF BOSTON, MASSACHUSETTS.

TRIPOD.

SPECIFICATION forming part of Letters Patent No. 340,195, dated April 20, 1886.

Application filed February 4, 1886. Serial No. 190,761. (No model.)

To all whom it may concern:

Be it known that I, HENRY P. CURTIS, of Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Tripods for Use in the Support of Surveying-Instruments, Photographic Cameras, and Similar Purposes, as set forth in the following specification.

This invention relates to the construction of a tripod capable of more universal use than those heretofore made, and of being readily adapted to conveniently meet the requirements of all the varying conditions of different parts of the surface of the country where it is desirable or needful to employ tripods, and also of being easily reduced in length for convenience of carrying.

My improvements consist of a single rod or staff of a length about equal to one-half the height desired for a tripod, fitted at one end into a socket having three legs so jointed thereto at equal distances one from another around its circumference that they can be folded together and form a continuous staff with the upper single staff, and also can be folded upward against the single staff, thereby shortening the length of the instrument, and making it more compact for convenience of transportation.

In order that the legs of the tripod may form a compact firm stake or staff when pressed closely together, I construct them of a form which in cross-section is a component segment of the staff desired, and I find it more convenient and easy to make the staff cylindrical and the several legs all of the same size and in the form of sectors of a cylinder terminating in a conical or pyramidal point. A staff of octagonal, hexagonal, or even rectangular form will serve the same purpose; but in order to produce a firm stake which can be readily driven into the ground I make the inner surfaces of the legs, or the portions of each which bear against portions of another when the legs are pressed together, plane surfaces, which I prefer should be radial to the center of the staff produced by the contact of the several legs. Beneath the plate of the socket or head in which the staff or upper portion is fixed I pivot the several legs to ears made either integral with or securely fastened to the socket, arranging these ears so as to allow the several legs to be turned upward against the staff without interfering with the plate or socket.

Heretofore the points or feet of the legs of tripods have each been made conical or pyramidal, so that when the legs are pressed together the three points never come into contact, but are always separated one from another by a greater or less distance.

One of the essential requisites of my improved construction is to have the points of the several feet in close contact, so as to form practically a single point when the legs are pressed together; and in order to hold them securely in that position I place a ring over the end of the compound stake and crowd it upward until the friction holds it; or it may be further prevented from dropping off by a pin projecting from one of the legs, and a slot in the ring to hook over the pin.

In the accompanying drawings, Figure 1 is a side elevation of my improved tripod with the legs spread for ordinary use. Fig. 2 is a side elevation with the legs pressed closely together to form a pointed staff or stake with a slotted ring slipped upon it to hold the legs securely in contact; Fig. 3, a side elevation showing the legs turned upward and folded against the staff, ready for convenient transportation. Fig. 4 is a view of the legs in the position shown at Fig. 1, looking directly down upon them, and having the upper staff cut off on line *x x*. Fig. 5 is a cross-section of the lower or compound stake on line *y y*, Fig. 2.

Corresponding parts in the several figures are indicated by the same letters.

A is the upper single staff; B, the legs; C, the socket in which the staff A is held; D, a plate to which the socket, as also the ears E, are attached. *b* are bolts or pivots upon which the legs B turn; F, the feet or points of the legs; G, the ring to hold them in close contact when pressed together, as shown in Fig. 2; *p*, the pin for preventing the ring G from slipping off the stake.

The instrument or apparatus to be used upon the tripod can be held upon the staff A by a sleeve or socket, H.

In the drawings I have shown a cylindrical staff or stake as being one of the most convenient forms to make, and the form of the legs are sectors of a cylinder terminating at one end in a cone. The cross-section of legs made from a cylindrical staff is plainly shown at Fig. 5.

I prefer to make the staff and legs of my tripod of wood, and the other parts, including the feet, of metal.

I claim—

1. A tripod having pivoted to its head or socket legs which are component longitudinal segments of a pointed staff or stake, and which, when pressed closely together, form a single complete staff or stake, pointed at its lower end, substantially as described.

2. A tripod consisting of a single staff supported in a head or socket and of legs having substantially the form of sectors of a cylinder terminating in a point and pivoted to the head with the vertex of each sector turned inward, whereby when the legs are pressed closely together they form a complete staff continuous with the upper portion, and terminating in a point, substantially as described.

3. A tripod consisting of a single staff in its upper portion, a socket for said staff, and of three legs jointed or hinged to said socket, so that they may be turned upward and folded against said staff, in the manner and for the purpose substantially as described.

4. A tripod having the feet or points of its three legs constructed substantially in the form of segments of an inverted cone or pyramid produced by longitudinal sections through the vertex thereof, whereby when the feet are pressed closely together they will form a single conical or pyramidal point, substantially as described.

HENRY P. CURTIS.

Witnesses:
FRANCIS W. SARGENT,
ALFRED RODMAN.