

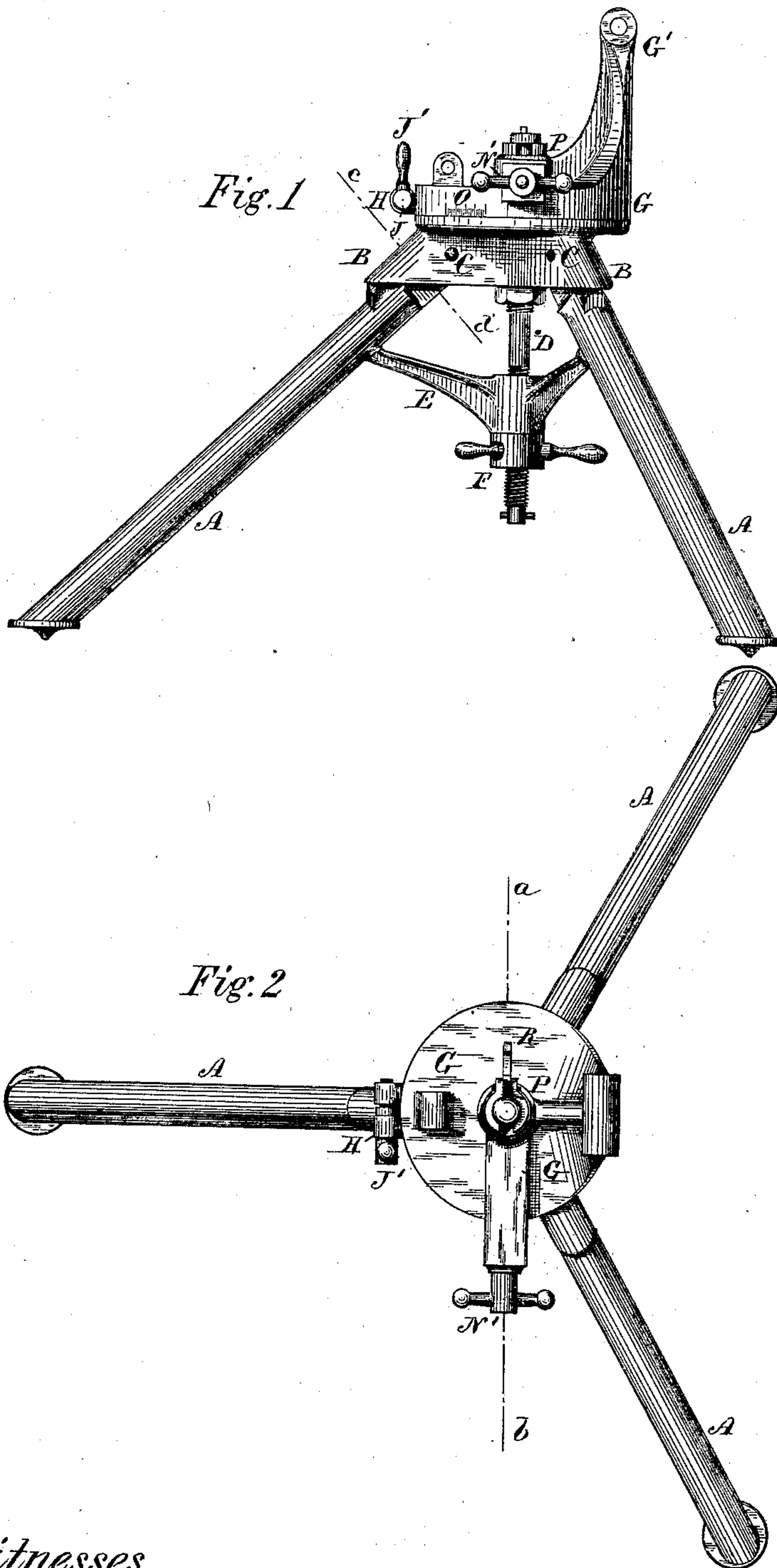
(No Model.)

2 Sheets—Sheet 1.

E. G. PARKHURST.  
Tripod-Support for Machine-Guns.

No. 227,648.

Patented May 18, 1880.



Witnesses

Wendell B. Curtis  
Wilmot Horton

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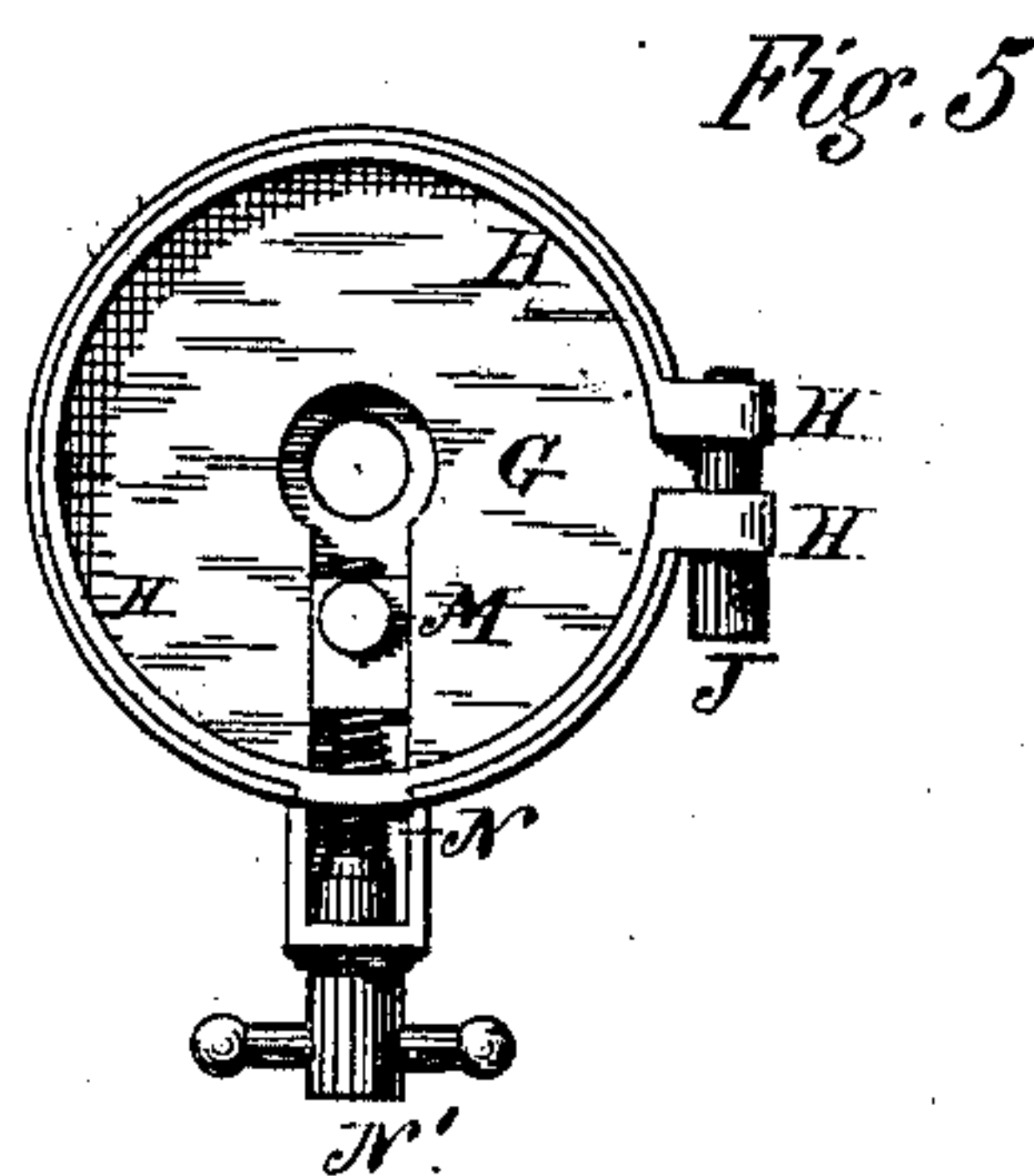
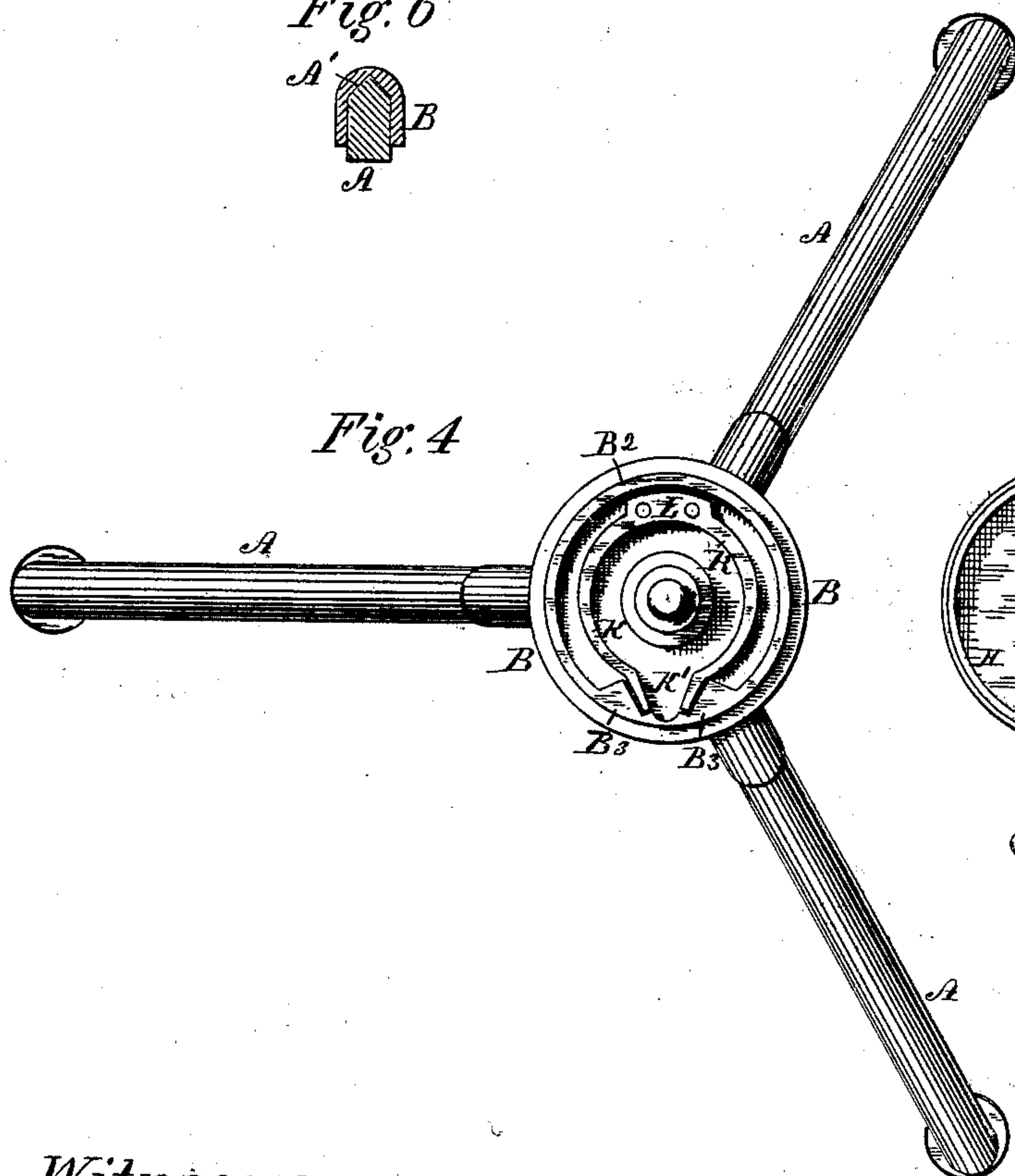
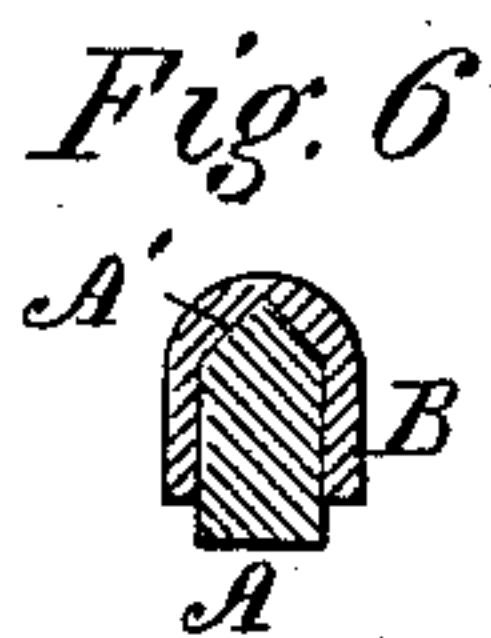
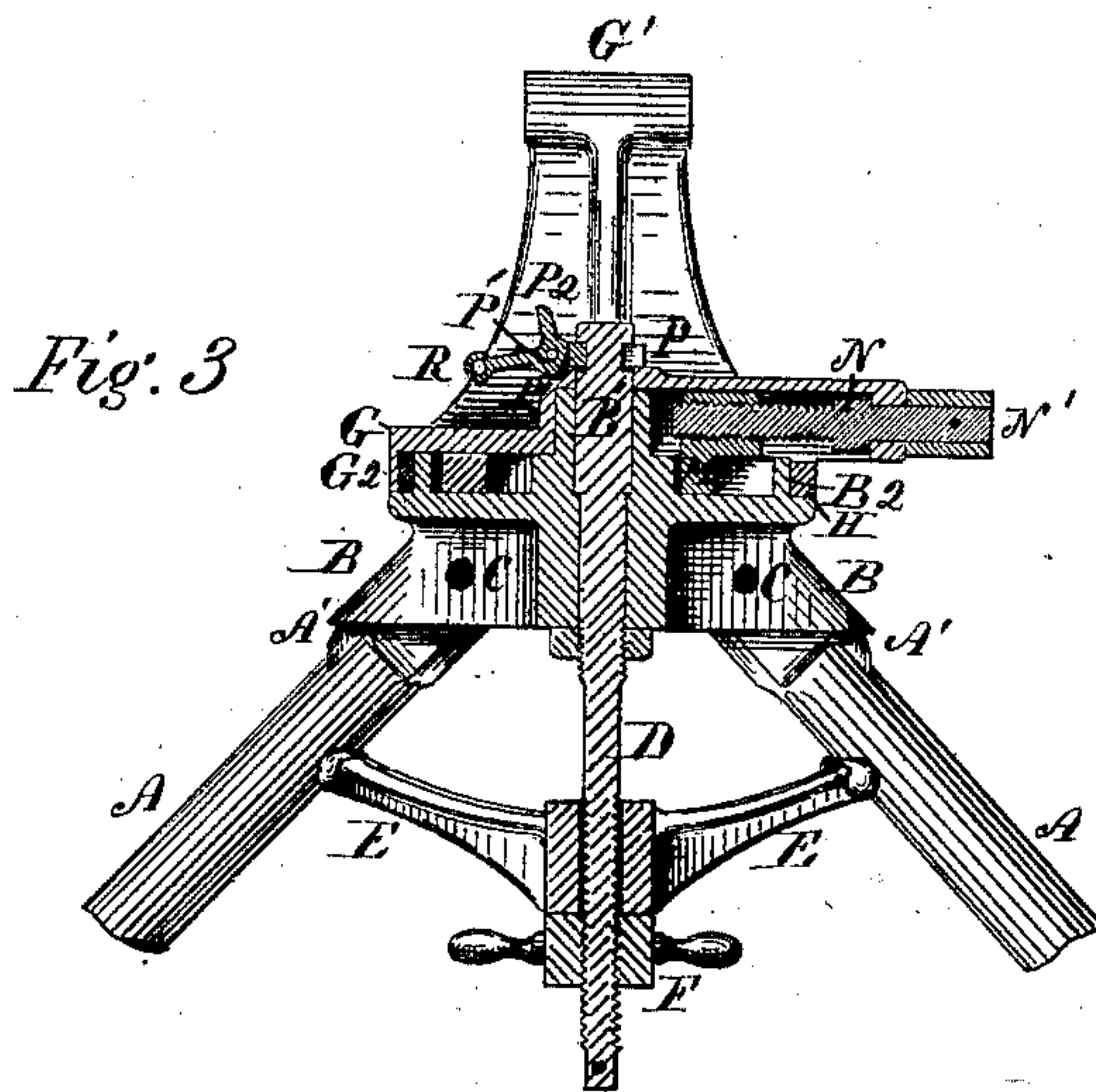
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Arndell R. Curtis  
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# UNITED STATES PATENT OFFICE.

EDWARD G. PARKHURST, OF HARTFORD, CONN, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO THE PRATT & WHITNEY COMPANY, OF SAME PLACE.

## TRIPOD-SUPPORT FOR MACHINE-GUNS.

SPECIFICATION forming part of Letters Patent No. 227,648, dated May 18, 1880.

Application filed March 15, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD G. PARKHURST, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Tripod-Supports for Machine-Guns; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvements relate to tripod-supports adapted to machine-guns, upon which the gun is placed when in use, but which can be detached and carried separately and folded up for ease of transportation.

The object of my invention is to provide a stand for a machine-gun which will be more firm and rigid than those now used, also one upon which the gun can be oscillated from side to side without the shock experienced in those heretofore in use, and at the same time have an adjustment for limiting the throw in horizontal arc.

It also has for its object an improved construction and arrangement of the several parts, by which the action is rendered more efficient.

In the accompanying drawings, Figure 1 is a side view of my improved tripod. Fig. 2 is a top view of the same. Fig. 3 is a vertical section upon the line *a b* of Fig. 2, showing the parts beyond. Fig. 4 is a top view of the legs and fixed head of my improved tripod with the rotating head removed. Fig. 5 is a view of the under side of the rotating head, upon which the gun rests, and to which it is attached by the trunnions. Fig. 6 is a cross-section upon the line *c d* of Fig. 1.

A A A are the legs of the tripod. B is the fixed head, in which the upper ends of the legs are hinged in the usual manner between cheeks, through which and the leg passes the pin C. The upper part of the leg is furnished with a V-shaped projection, A', which fits into a similarly-shaped recess in the part B when the legs are spread for use.

D is a central spindle fixed in the head B and extending downward. Upon this slides

the clamp E, which spreads the legs forcibly apart when it is placed against them and pressed upward by the hand-nut F upon a screw-thread on the lower end of the spindle D. The clamp E is provided with an arm reaching to each leg, which, when the tripod is shut up for transportation and the clamp released, passes between the legs by turning a little to one side. When the legs are spread and the clamp forced against them the projections A' are pressed into the V-shaped slots in the head and the legs are firmly held, so as to prevent any possibility of movement.

G is the rotating head, which supports the gun upon a standard, G', in the usual manner. It turns upon a central bearing on the part B. (Shown at B' in Fig. 3.)

H is a band forming a friction-clamp between the parts B and G. It lies between the flange B<sup>2</sup> on the head B and the flange G<sup>2</sup> on the rotating head G. It is attached to the flange G<sup>2</sup>, as shown in Fig. 5, and binds upon the flange B<sup>2</sup> by means of the clamp-screw J, which is operated by the handle J'. The turning down of the handle from the position shown in Fig. 1 clamps the two heads B and G together and holds the gun firmly in position.

K is a horseshoe-shaped spring, secured by rivets or screws at L to the head B. Its ends K' incline outwardly, as shown in Fig. 4, and lie between the blocks B<sup>3</sup> B<sup>3</sup>, there being a small space between the spring and block.

M is a sliding pin in the plate G, moved out and in radially by means of the screw N and cross-head or wheel N'. The diameter of the pin is such as to be just included between the outer ends of the spring K and to have more play as it approaches the center. When it reaches the ends of the parts K' it can then move entirely round the circle inside of the spring. This construction allows the pin to hold the gun firmly when the pin is turned completely out, to admit of more play or oscillation as it approaches the center, and when it is turned completely in as far as it can go the gun can be rotated all around the circle.

O is a graduated scale between the parts B and G, by which the amount of angular oscillation can be measured.



P is a fork passing into a groove in the top of the spindle D for holding on the head G. It is furnished with the lever R for keeping it in place by means of a small projection, P', which enters into a notch in the upper rim of the central portion of G when the outer end of the lever is turned down, as shown in Fig. 3.

P<sup>2</sup> is an arm of the lever R, which acts upon the top of the spindle D when the outer end is turned up, so as to force the fork outward and loosen it, so that it can be easily withdrawn.

The operation of my invention is as follows: The legs of the tripod are folded up for transportation. When it is desired to set up the tripod the legs are extended and the clamp E placed against them. The nut F is then turned until the legs are firmly held by the V-shaped grooves in B, together with the pins C and the clamp. When the gun is mounted and it is desired to turn it all round the pin M is screwed back beyond the part K' of the spring. The upper or rotating head can then turn freely. It can then be clamped in any position by turning down the handle J'.

When it is desired to swing the gun through any small angle back and forth the pin M is screwed out so as to enter between the ends of the spring at K', and the amount of oscillation is determined by the distance out, being less and less until, when entirely out, the pin holds the gun firmly in a fixed position. Any desired angle of swing can be measured on the scale O. While oscillating back and forth the pin M strikes upon the spring and relieves the jar from the blow that would otherwise be struck upon the blocks B<sup>3</sup>. The spring relieves the blow and then rests upon the block.

When the gun is to be dismantled and the rotating head removed the lever R is turned upward, which draws out the fork P, so that it can be readily removed. The head is then taken off.

It will thus be seen that a much more useful and effective tripod is obtained by means of my improvements than has heretofore been known.

What I claim as my invention is—

1. The combination of the head B, having the V-shaped supports A', in which the legs rest when open, with the clamp E, the legs A, and the pins C of the tripod, constructed and arranged so as to hold the legs firmly when spread, substantially as described.

2. The combination of the spring K, to receive the shock, and the movable pin M, sliding in the head G, to adjust the throw, with the fixed head B and the rotating head G, substantially as described.

3. The spring K, furnished with the inclined ends K', in combination with a movable pin, M, sliding in the head G, and the fixed and movable heads B and G, whereby the horizontal throw of the gun is adjusted, substantially as described.

4. The lever R, with its projection P' fitting into a recess in the head G, and arm P<sup>2</sup>, in combination with the spindle D and the fork P, whereby said fork is fastened and released, substantially as described.

EDWARD G. PARKHURST.

Witnesses:

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