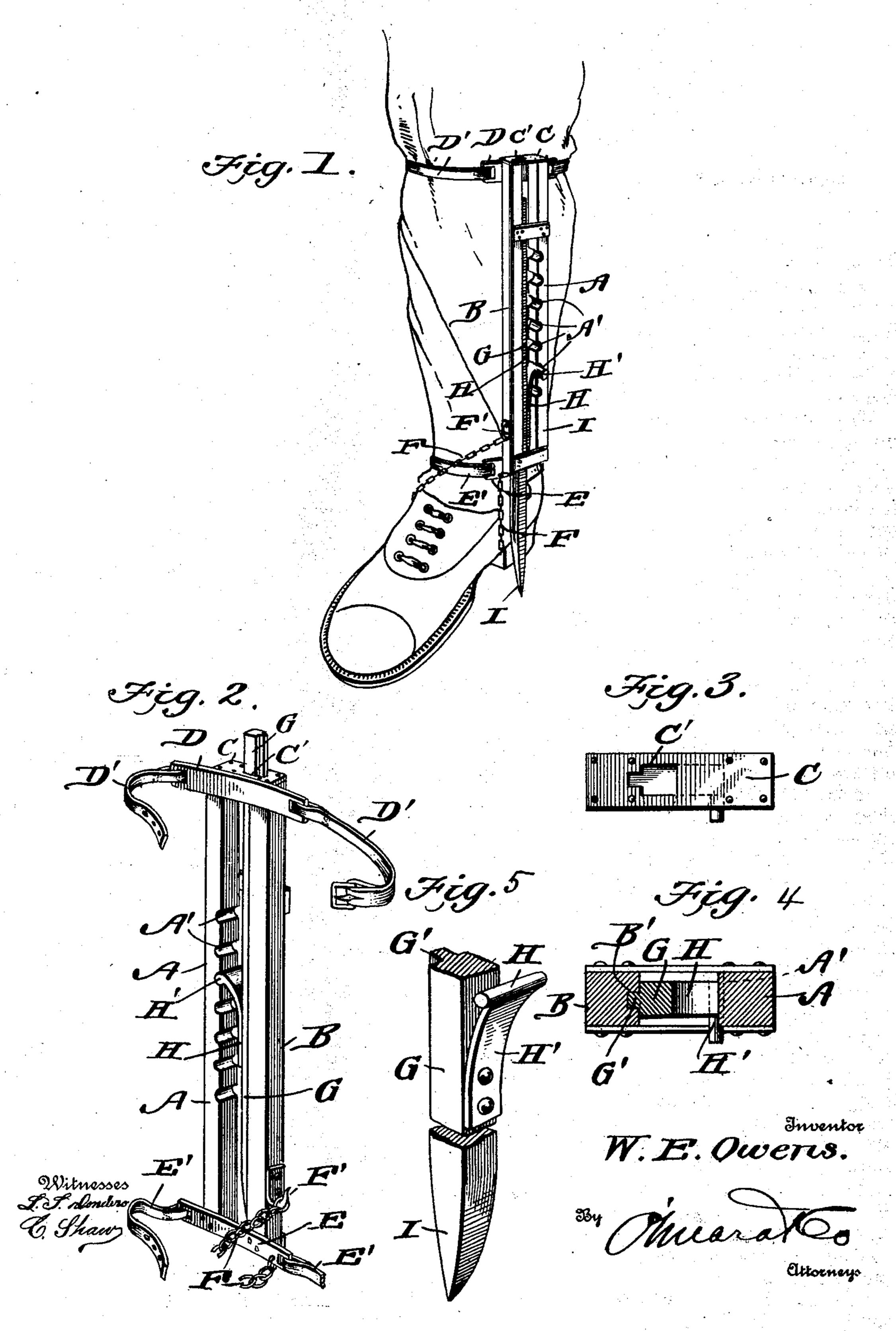
## W. E. OWENS. POLE CLIMBER.

'Application filed July 27, 1901.)

(No Model.)



## United States Patent Office.

WILL EDWARD OWENS, OF BILLINGS, MONTANA.

## POLE-CLIMBER.

SPECIFICATION forming part of Letters Patent No. 693,433, dated February 18, 1902.

Application filed July 27, 1901. Serial No. 69,956. (No model.)

To all whom it may concern:

Beitknown that I, WILL EDWARD OWENS, a citizen of the United States, residing at Billings, in the county of Yellowstone and State 5 of Montana, have invented a new and useful Pole-Climber, of which the following is a specification.

This invention is an improved pole-climbing appliance adapted to be secured to the 10 leg of a person, by means of which he is enabled to climb the pole; and the object of the invention is to provide a device in which the spur or spike can be quickly and easily adjusted for operation and can also be quickly 15 and easily moved out of the way when not desired for use, thereby not interfering with the free and easy movement of the feet of the wearer.

With these objects in view the invention 20 consists in the peculiar construction of the various parts and in their novel combination and arrangement, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view showing the practical application of my invention. Fig. 2 is a perspective view of the device detached from the leg of the wearer. Fig. 3 is 30 a top plan view. Fig. 4 is a horizontal sectional view, and Fig. 5 is a detail perspective illustrating a portion of the rod carrying the

spike or spur.

In carrying out my invention I employ two 35 bars A and B, which are connected at their upper and lower ends by means of plates C, and, furthermore, the upper and lower strips D and E, respectively, are attached to their upper and lower ends, said cross-strips hav-40 ing the straps D' and E' connected thereto and by means of which the bars A and B are strapped to the side of the leg of the wearer. A chain F is also attached to the cross-strip E, said chain being adapted to be passed 45 around, under, and across the instep of the foot and connected to a hook F', arranged at one side of the bar B.

The bar B has a longitudinal groove B' produced in its inner face, and the bar A has 50 a series of horizontal notches A' produced in its inner face.

A bar G, having a tongue G', slides between the bars A and B, the tongue G'entering the groove B' of the bar B, and the plate C has an opening C' of a shape to permit the 55 passage of the tongued bar G. This bar G has a stiff leaf-spring H rigidly attached thereto, the free end of said spring being enlarged and rounded, as shown at H', said enlarged and rounded end being adapted to engage 60 one of the series of horizontal notches A' produced in the face of the bar A, thus serving to hold the bar G in any adjusted position. This bar G carries a spike or spur I at its lower end, which projects downwardly and is 65 adapted to engage the pole during the climbing operation.

Inasmuch as the bar G is adjustable, it will of course be understood that the spike or spur can be adjusted to any convenient position 70 for operation, and, furthermore, in case the operator wishes to walk about and at the same time does not wish to remove the climber all interference from the spur or spike can be avoided by raising the bar G to a consider- 75 able height, thereby elevating the spur or spike to such a point that it will not interfere

in the least while walking.

Having thus fully described my invention, what I claim as new, and desire to secure by 80 Letters Patent, is—

1. In a pole-climber the combination with the guide-bars, of an adjustable spur or spike bar arranged between the guide-bars, the upper and lower cross-strips attached to the 85 said guide-bars, the straps connected to said cross-strips, and a chain connected to one of the guide-bars for the purpose of connecting the guide-bars to the foot, substantially as described.

2. In a pole-climber the combination with the guide-bars, one of which is grooved, said guide-bars being provided with means for attachment to the leg, and a bar carrying a spike or spur, said bar having a tongue adapt- 95 ed to engage the grooved guide-bar and provided with means for engaging the opposite guide-bar for the purpose of holding the spur and bar in its adjusted position, substantially as described.

3. In a pole-climber the combination with the guide-bars connected at their upper and

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lower ends and provided with means for attachment to the leg, one of said bars being grooved longitudinally, the other bar having a series of horizontal notches, and the spurbar having a spur or spike at its lower end, and a leaf-spring rigidly attached to the spurbar, the end of said spring being adapted to

engage one of a series of notches produced in the side bar, substantially as and for the purpose described.

WILL EDWARD OWENS.

Witnesses:

F. L. MANN, JAMES CHAPPLE.