No. 754,016. PATENTED MAR. 8, 1904.

F. X. SCHMUCKER.

POLE CLIMBER.

APPLICATION FILED JUNE 11, 1903.

NO MODEL.

Fig. 1.

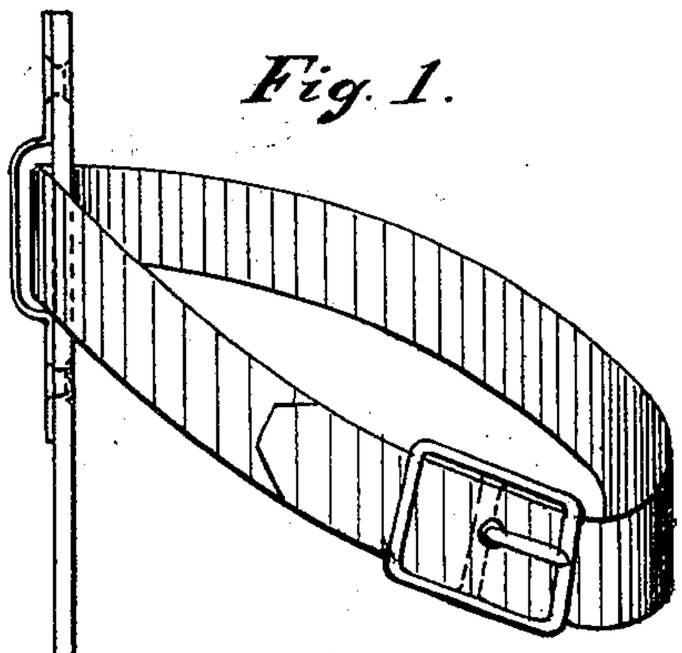


Fig. 2.

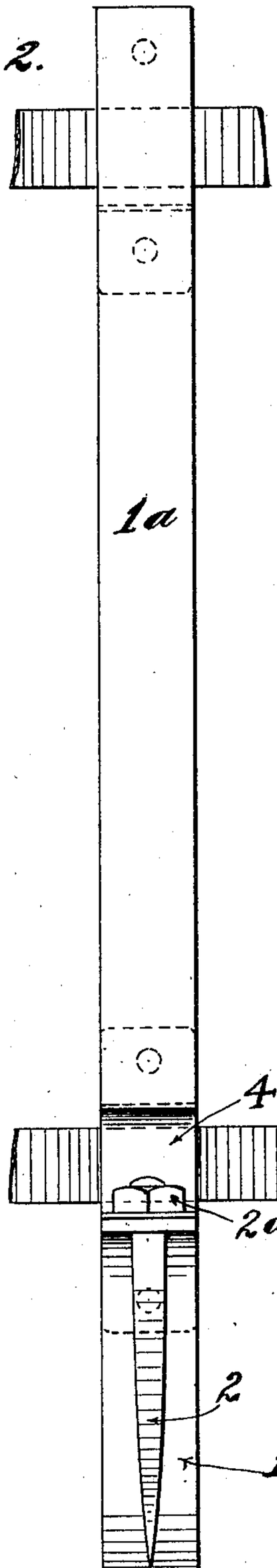


Fig. 3.

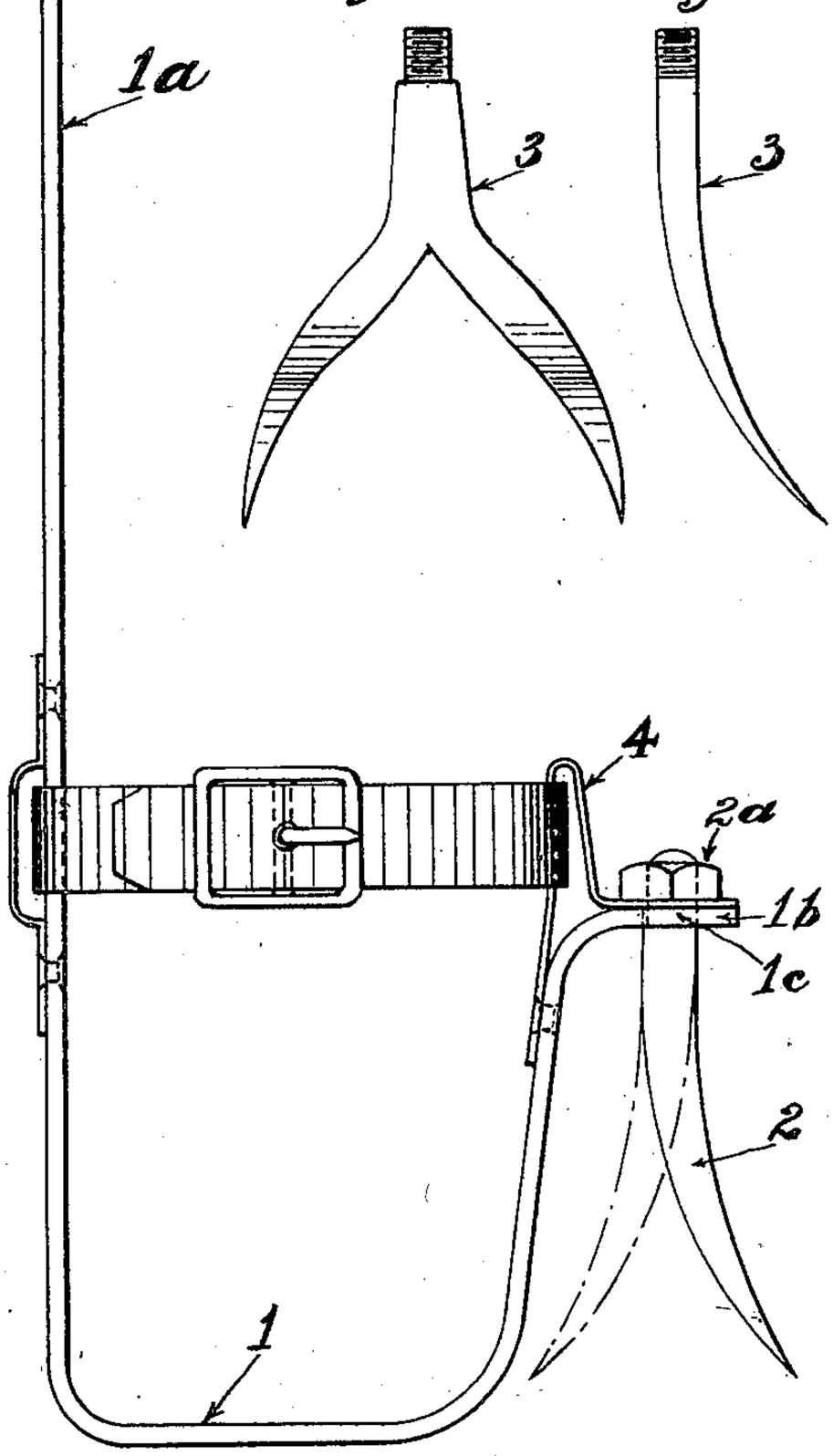
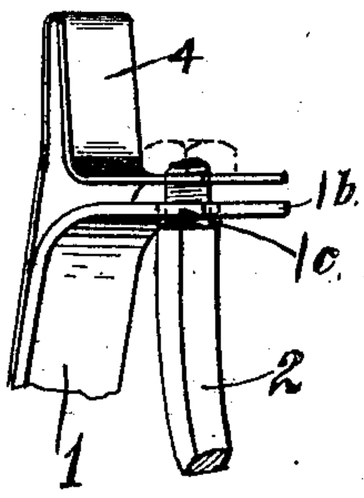


Fig. 3a.

Fig. 4.



Witnesses

Wm. Boyd.

E. T. McKeown.

Inventor

Frank X. Schmucker.

By

Freer and Partlow.

Attorneys

No. 754,016. Patented March 8, 1904.

UNITED STATES PATENT OFFICE.

FRANK X. SCHMUCKER, OF MORRIS, ILLINOIS.

POLE-CLIMBER.

SPECIFICATION forming part of Letters Patent No. 754,016, dated March 8, 1904.

Application filed June 11, 1903. Serial No. 161,031. (No model.)

To all whom it may concern:

Be it known that I, FRANK X. SCHMUCKER, a citizen of the United States, residing at Morris, in the county of Grundy and State of Illinois, have invented new and useful Improvements in Pole-Climbers, of which the following is a specification.

My invention relates to certain improvements, more especially in what may be termed "pole-climbers" generally, such as are applied to the legs of the user or wearer—as, for instance, as used by linemen in climbing telegraph, telephone, &c., poles—said invention being capable of use for climbing trees, &c.

Among numerous advantages of my invention it is noted that its application to the leg of the wearer or user is such as to render more fully effective the weight of the body in aiding the climbing operation, as in thrusting the spur or "hook" into the pole or other body. Also the appliance can be comfortably or conveniently worn when the user or wearer may be walking along the ground any distance, while its spurs or hooks are removable, reversible, and interchangeable, permitting the use of different forms of the latter, as may be required.

Other advantages of my invention will appear in the detailed description which will follow.

The nature of my invention consists of the combination and arrangement of parts substantially as hereinafter more fully disclosed, and specifically pointed out by the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a side view thereof with the spur or hook in position and shown reversed in dotted lines. Fig. 2 is a lateral elevation of the same. Figs. 3 and 3ª are views of another form of spur or hook in front and edge elevation, respectively. Fig. 4 is a broken detailed perspective view disclosing more especially the spring-nut-lock construction or feature of said invention.

Latitude is allowed herein as to details, as they may be changed as circumstances suggest without departing from the spirit of my invention and said invention yet remain protected.

In carrying out my invention I employ a stirrup or member 1, produced, preferably, as shown, the same having an upwardly-extended arm or brace 1ª, adapted to be applied to the outer side of the leg, equipped or furnished with means for connecting it to the leg—as, for instance, by straps passed through staples or keepers on said arm or brace and having buckles or other fastenings. Said stirrup or member is adapted or looped to receive the foot of the user and is preferably of solid steel, possessing it of the requisite strength and more or less spring, and has its shorter arm preferably bent or extended at about right angles, as at 1ᵇ, through which is produced an angular opening or hole 1ᶜ to receive the correspondingly-shaped shank of the spur or hook 2, held therein by a nut 2ª, applied to the screw-threaded upper end portion of said shank. Said spur or hook is thus adapted after unscrewing the nut 2ª sufficiently to permit the bringing of the screw-threaded portion of its shank into hole 1ᶜ to be reversed or turned, so as to dispose or present its point toward the shorter arm of said stirrup, said parts thereafter being again tightened in place. Thus the wearer or user when walking from point to point or any distance would not be subject to discomfiture or inconveniences, as would otherwise be the case. Also by this arrangement the form of spur or hook in use may be substituted by one of another form—as, for example, a double hook or spur 3, as in Figs. 3 and 3ª—if desired, as is apparent.

The shorter arm of the stirrup 1 has suitably fastened or riveted thereto at its upper end upon the inner side a looped strap or plate spring 4, the lower or outturned or horizontal end of which has an aperture or hole therethrough to receive the upper screw-threaded end of the spur or hook after the passage of said end of hook through the outstanding end of said stirrup. Upon the screwing or turning of the nut 2ª into engagement or contact with the outturned portion or end of the spring 4, thus forcing the latter upon

the outstanding end of the shorter arm of the stirrup, the nut will be locked in place, as against accidental turning or unscrewing from the use of the appliance by the recoil action or stress of said spring.

It is further noted that by having the long arm of each stirrup applied to the outer side of the leg the full weight of the body of the wearer is rendered effective in aiding the climbing operation, as in the operator thrusting the spurs or hooks into the pole or tree being climbed.

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

1. A device of the character described, comprising a stirrup having an outstanding portion and a spur axially movable in said portion and having applied thereto a fastening for its retention in position.

2. A device of the character described, comprising a stirrup having an outstanding portion, a spur having a shank formed with an angular, and a screw-threaded, portion, axially movable in said outstanding portion, and a nut applied to said screw-threaded portion, above said outstanding portion.

3. A device of the character described, embracing a stirrup having a long arm applied to the outside of the leg of the user, and its short arm having an outstanding portion and a spur axially movable in said outstanding portion, and having applied thereto a fastening for its retention in position.

4. A device of the character described, comprising a stirrup and a spur, said stirrup having an arm provided with an outstanding end portion provided with an aperture, receiving a shank portion of said spur, and means effecting the retention of said shank portion in said aperture.

5. A device of the character described, comprising a stirrup, and a spur having an angular shank portion and an upper end screw-threaded portion, said stirrup having an outstanding portion provided with an aperture receiving said angular shank portion, and a nut engaging said screw-threaded portion.

6. A device of the character described, comprising a stirrup, a spur, said stirrup having an apertured outstanding portion adapted to receive the shank of said spur, a spring connected to said stirrup and having one end adapted to also receive the shank portion of said spur, and a nut applied to the upper end of said spur, and engaging and forcing said spring, at its spur-shank-receiving portion, into contact with said stirrup outstanding portion.

7. A device of the character described, comprising a stirrup, a spur, said stirrup having an apertured outstanding portion adapted to receive the shank of said spur, a spring connected to said stirrup and formed or produced into a loop, with one end extending laterally therefrom and adapted to also receive the shank portion of said spur, and a nut applied to the upper end of said spur and engaging and forcing the laterally-extending portion of said spring into contact with said stirrup outstanding portion.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK X. SCHMUCKER.

Witnesses:
A. H. HILLIKER,
PETER CAMPBELL.