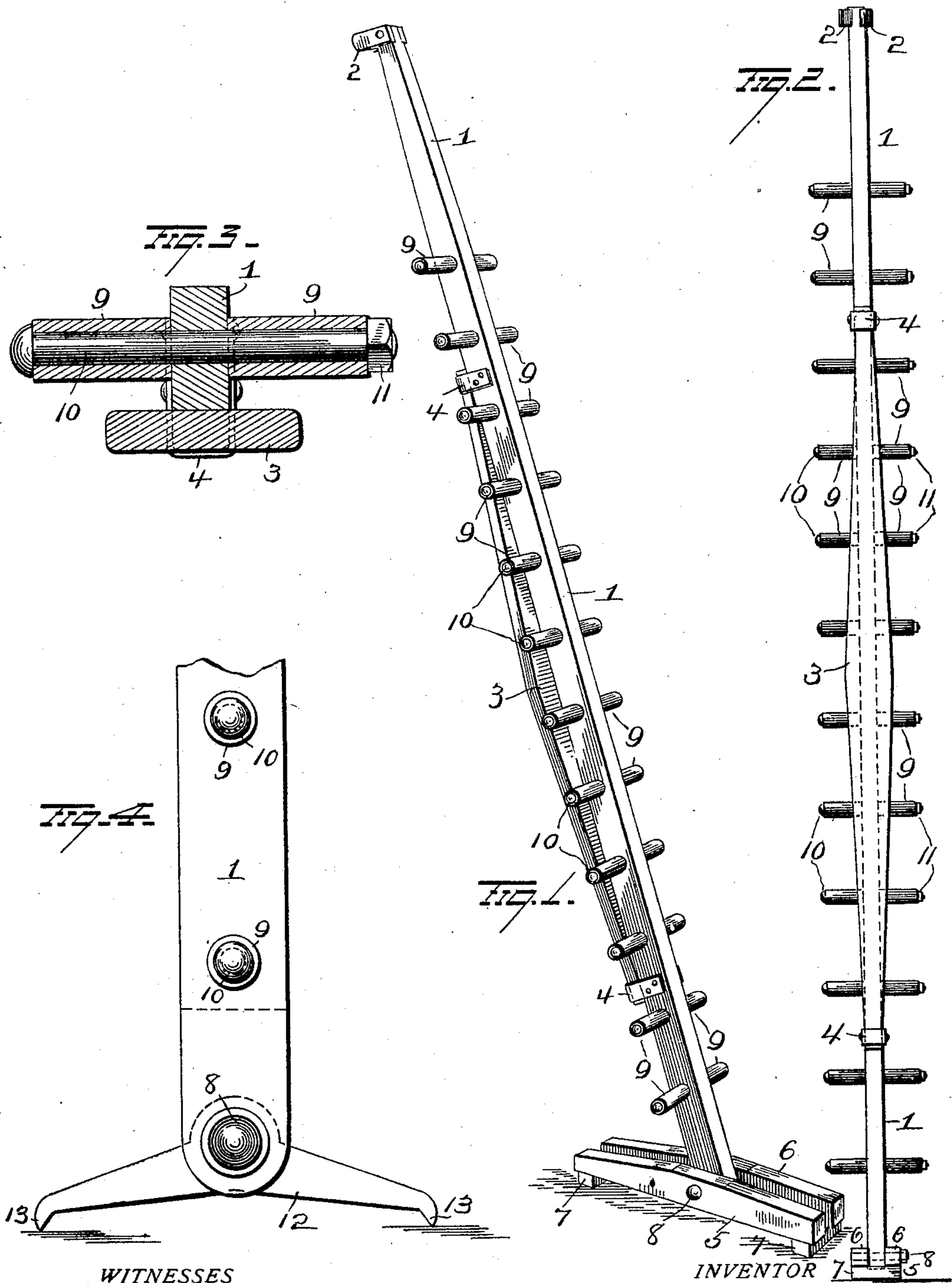


No. 799,360.

PATENTED SEPT. 12, 1905.

A. A. SMITH.
LADDER.

APPLICATION FILED MAY 13, 1904.



WITNESSES
E. Nottingham
G. F. Downing

INVENTOR *A. A. Smith*
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

ANDREW A. SMITH, OF PAONIA, COLORADO.

LADDER.

No. 799,360.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed May 13, 1904. Serial No. 207,795.

To all whom it may concern:

Be it known that I, ANDREW A. SMITH, a resident of Paonia, in the county of Delta and State of Colorado, have invented certain new and useful Improvements in Ladders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved ladder, the object of the invention being to provide improvements of this character of simple and inexpensive construction, strong and durable in use, and which will be maintained in any position it may be placed, obviating all danger of tilting to one side or the base of the ladder slipping.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view illustrating my improvements. Fig. 2 is a rear view of the ladder. Fig. 3 is a view in cross-section, and Fig. 4 is a view of a modification.

1 represents a pole or bar, preferably angular in cross-section and made tapering to its upper end, where it is provided with a spur or spurs 2 to prevent slipping of this upper end. This pole or bar 1 is strengthened against lateral bending by a reinforcing-strip 3, secured against the rear face of the intermediate portion of the bar by any approved means. I have illustrated as securing means metal bands 4, bent around and inclosing the tapered ends of said strip 3 and having their ends secured to opposite sides of bar 1.

5 represents the base of my improved ladder, which comprises parallel bars 6, connected by cross-blocks 7 at their ends and provided at their center with aligned openings for a pivot bolt or pin 8, also passed through an opening in bar 1 to pivotally secure the latter to the base.

The rungs 9 of the ladder comprise tubular sections located on opposite sides of bar 1 and secured in place by bolts 10, passed through

the rung-sections and through openings in bar 1 and secured in place by nuts 11, as clearly shown in Fig. 3.

The base 5 is especially designed to be used on the ground, and where the ladder is to be used as a fire-ladder I preferably employ the base 12. (Shown in Fig. 4.) This base 12 comprises a metal bar having sharp prongs 13 at its ends and pivoted between its ends in the bifurcated lower end of the bar 1. The prongs serve to engage any portion of a building and prevent slipping and are especially designed for climbing from one roof to another where the roof is at an incline.

It will be seen that with my improved ladder the base is located at right angles to the rungs, and while it permits of free backward and forward tilting of bar 1 without disturbing the position of the base the bar cannot pivot laterally or to one side, and danger of falling is thereby greatly obviated.

A great many changes might be made in the general form and arrangement of the parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

A ladder comprising a single pole, series of bolts passing transversely through the pole and projecting laterally in both directions therefrom, rungs mounted on said bolts, bars pivotally attached intermediate of their ends to the lower end of said pole at respective sides thereof, blocks secured to the bottoms of said bars and connecting them, and spurs secured to the upper end of said pole.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ANDREW A. SMITH.

Witnesses:

A. R. CHAPMAN,
GEORGE GRAHAM.