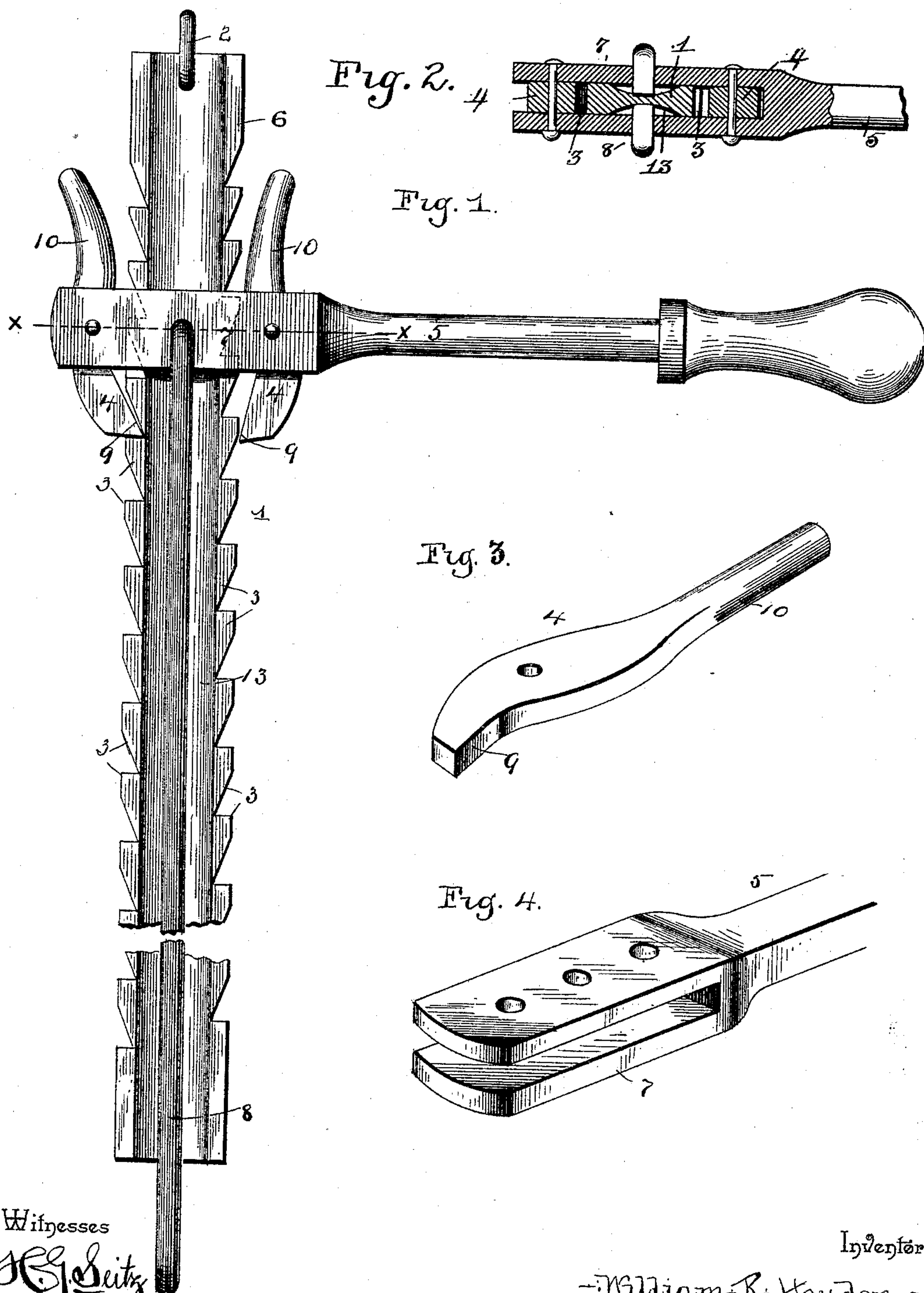


(No Model.)

W. R. HAYDEN.  
WIRE STRETCHER.

No. 462,128.

Patented Oct. 27, 1891.



Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM RAPIER HAYDEN, OF NEW HARTFORD, MISSOURI.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 462,128, dated October 27, 1891.

Application filed May 1, 1890. Serial No. 350,244. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM RAPIER HAYDEN, a citizen of the United States, residing at New Hartford, in the county of Pike and State of Missouri, have invented a new and useful Wire-Stretcher, of which the following is a specification.

The invention relates to improvements in wire-stretchers.

The object of the present invention is to provide a simple and inexpensive wire-stretcher which will equalize the strain and distribute it to all parts of a wire, and which will allow a slackening after a wire has been drawn up to a high tension.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a side view of a wire-stretcher. Fig. 2 is a transverse sectional view on the line *xx* of Fig. 1. Figs. 3 and 4 are detail views.

Referring to the accompanying drawings, 1 designates a ratchet-bar provided at one end with a ring or link 2 and having its longitudinal edges provided with a series of teeth 3, which are alternately arranged—that is, the teeth of one side are arranged opposite the intervals of the teeth of the other side, and which are arranged at varying intervals and are adapted to be engaged by pawls 4 of a handle bar or lever 5. The teeth 3 get closer together as they approach the end 6 of the bar, so that the tension may be gradually increased to prevent sudden strains, which are liable to break a wire. The handle-bar or

lever has its outer end shaped into a handle and its inner end 7 is bifurcated, and the pawls are pivoted in the bifurcation and engage the opposite edges of the ratchet-bar and enable the handle-bar or lever 5 and a slide 8 to be advanced thereon. The pawls 4 have curved portions 9, which engage the teeth 3, and straight portions or extensions 10, which are arranged at an angle to the curved portion and form handles by which the pawls can be readily disengaged from the teeth. The pawls 4 allow a return of the guide and a slackening of a wire. The slide is U-shaped and is pivoted to the handle-bar or lever 5, and the ends 12 are bent inward to form a pivot, which is arranged in oppositely-concaved faces 13, which form ribs at the longitudinal edges of the ratchet-bar 1.

The wire-stretcher may be attached to a post by a chain 14, connected to the link or ring 2, and a wire to be stretched is secured to the slide 8.

It will be seen that the wire-stretcher is simple, inexpensive, easily operated, and is adapted to allow the slackening of a wire.

What I claim is—

In a wire-stretcher, the combination of the ratchet-bar having opposite concave faces forming ribs at the edges of the bar and provided with teeth, the handle-bar, the pawls, and the slide pivoted to the handle-bar and having its pivot engaging the concave portions thereof, substantially as described.

WILLIAM RAPIER HAYDEN.

Witnesses:

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