

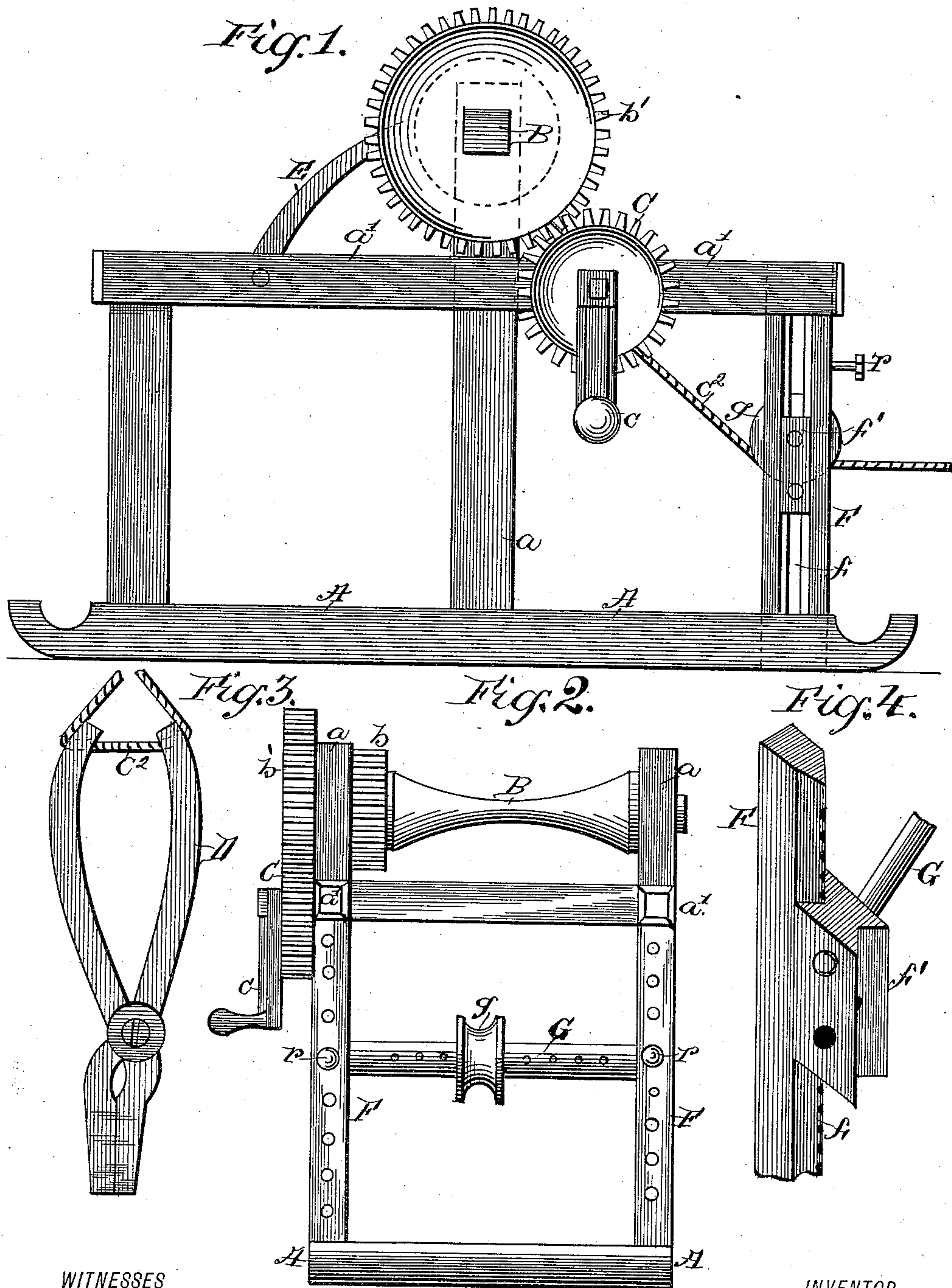
(No Model.)

S. W. HARMAN.

WIRE STRETCHER.

No. 349,041.

Patented Sept. 14, 1886.



WITNESSES
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UNITED STATES PATENT OFFICE.

SAMUEL W. HARMAN, OF ALICEVILLE, KANSAS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 349,041, dated September 14, 1886.

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To all whom it may concern:

Be it known that I, SAMUEL W. HARMAN, a citizen of the United States, residing at Aliceville, in the county of Coffey and State of Kansas, have invented certain new and useful Improvements in Wire-Stretchers; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has for its object to provide a novel construction in wire-stretching machines, by means of which the wire is stretched at any required height along a line of posts; and it consists in the novel combination of parts, as will be hereinafter fully described.

In the accompanying drawings, in which corresponding parts are designated by similar letters, Figure 1 represents a side elevation of my improved wire-stretching machine. Fig. 2 is an end view, and Figs. 3 and 4 detail views, thereof.

Referring to the drawings, A A represent bed-pieces made in the form of runners, upon which the entire machine rests, to be provided with holes or recesses for inserting pins, staples, and the like for securing them to the ground. *a a* are uprights or standards secured to the said runners and extending somewhat above the cross-frame *a'*, the same being provided with holes for the bearings of the axle B. This axle carries the ratchet-wheel *b* at one side of the bearing, and upon the opposite side a cog-wheel, *b'*, which meshes with the cog-wheel C, attached to the frame-work by an axle that runs entirely across the same, and provided with a crank, *c*, by means of which the axle B is rotated, carrying and winding upon it the rope *c'*. To the rope is attached an automatic instrument in the form of pinchers or tongs, for gripping and securely holding the wire to be stretched.

Upon the inner side of the frame *a'* is secured a pawl, E, which is adapted to come in contact with the ratchet-wheel *b'* and prevent the said axle B from turning backward until released.

At one end of the machine are secured two uprights, F, provided with slots *f*, that extend

their entire length, and having Λ -shaped projections upon their inner surfaces for receiving the slides *f'*, in which the axle G is secured, said slides having V-shaped grooves, and said axle carrying upon it the loose pulley *g*, under which the rope *c'* is adjusted to any height desired, thereby rendering it easy in spacing the wire in a line upon the posts, and at the same time holding it in place until fastened thereto. The uprights *f* are provided with holes, and a corresponding hole is formed in the slide *f'*, through which the pin or bolt *r* is inserted for retaining the slide firmly in position at any height desired.

In carrying out my invention it will be observed that the wire to be stretched is grasped by the pinchers or tongs D, provided with holes in the handles, through which the rope *c'* is secured and carried under the adjustable roller *g*; and from thence to the axle B, where it is wound and tightened by the crank *c*, attached to the cog-wheel C, meshing with wheel *b'*, secured to the axle B, which is held against the tension of the wire by the pawl E pressing against the ratchet-wheel *b*.

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

1. In a wire-stretching machine, the combination of the runners A A, uprights *a a*, cross-pieces *a'*, axle B, cog-wheels *b'* and C, crank *c*, ratchet-wheel *b*, pawl E, rope *c'*, pinchers or tongs D, uprights F, provided with slots *f*, having Λ -shaped projections, the slide *f'*, having V-shaped grooves, the axle G, carrying the loose pulley *g*, and the pin or bolt *r*, as and for the purpose described.

2. In a wire-stretching machine, the combination of the runners A A, uprights *a a*, cross-pieces *a'*, pawl E, rope *c'*, pinchers or tongs D, uprights F, provided with slots *f*, having Λ -shaped projections, the slides *f'*, having V-shaped grooves, and the axle G, carrying the loose pulley *g*, as and for the purpose described.

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

SAMUEL W. HARMAN.

Witnesses:

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