

(No Model.)

W. B. WEST.
WIRE STRETCHER.

No. 364,152.

Patented May 31, 1887.

Fig. 1.

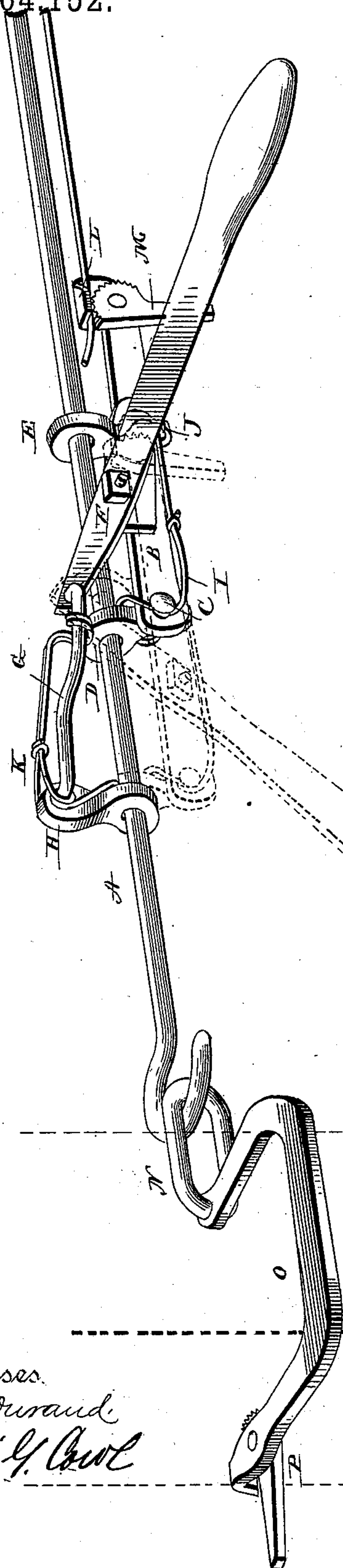
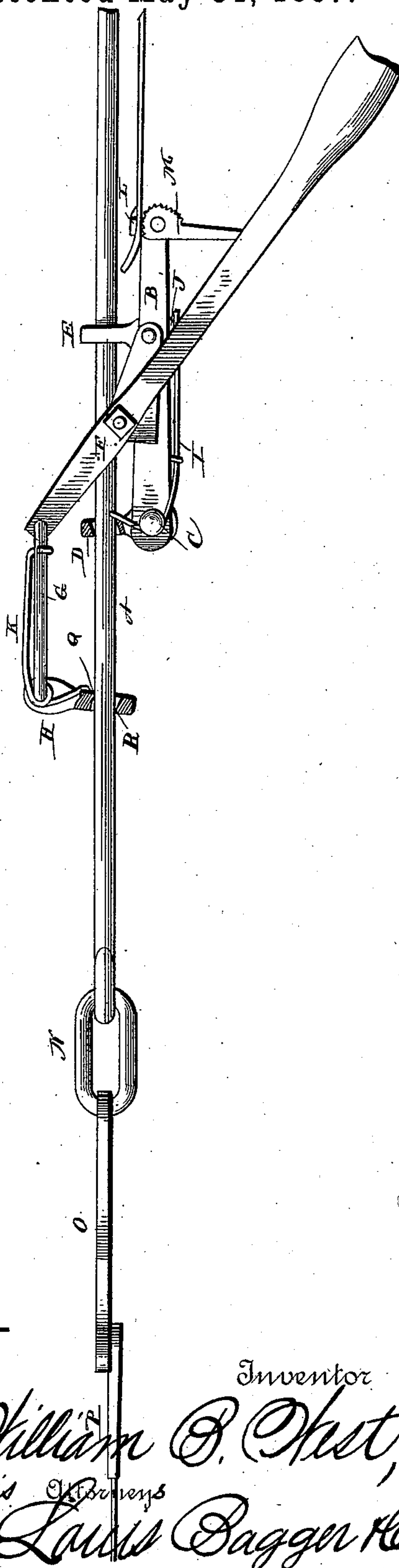


Fig. 2.



Witnesses
F. L. Ouraud
Benj. G. Cool

Inventor
William B. West,
By his Attorneys
Lans Bagger Co.

UNITED STATES PATENT OFFICE.

WILLIAM BOLIVAR WEST, OF NEW HARTFORD, MISSOURI.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 364,152, dated May 31, 1887.

Application filed March 16, 1887. Serial No. 231,112. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BOLIVAR WEST, a citizen of the United States, and a resident of New Hartford, in the county of Pike and State of Missouri, have invented certain new and useful Improvements in Wire-Stretchers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view representing my improved wire-stretcher as used in drawing a wire up to a post, full and dotted lines showing, respectively, the two extreme positions of the operating-lever; and Fig. 2 is a side view of the stretcher as used in drawing two ends of a wire together, parts of the device being shown in section.

Like letters of reference indicate corresponding parts in the figures.

My invention has relation to wire stretchers; and it consists in the improved construction and combination of parts constituting my machine, as will be hereinafter fully set forth.

Referring to the accompanying drawings by letters, A represents the main rod upon which the stretching mechanism operates. Said mechanism consists of a sliding bar, B, to the forward end of which, upon the bolt C, is pivoted the shank of the rear biting-ring, D, and to said bar, near its back end, is rigidly secured the simple ring E by its shank. Upon the side of said bar, between the two said rings, is fulcrumed the operating-lever F, to the upper end of which is pivotally connected one end of the link G, whose other end is similarly connected to the shank of the advanced biting-ring H.

About the pivot of the biting-ring D is coiled a spring, I, one end of which bears against said ring and the other is free to be supported or not in the hook J, formed at the lower end of the shank of the simple rigid ring. A similar spring, K, is coiled about the pivot of the advanced biting-ring, and has one end bearing against said ring, while the other is formed into a hook, by which said end can be confined or not to the link G.

Upon the back end of the sliding bar is

formed a lip, L, which coacts with an ordinary handle-lever, M, with a serrated cam-head to form a wire-clamp. The forward end of the main rod is formed into a hook for connecting to said rod by means of the link N the post-hook O. Upon the free end of said post-hook is formed a wire-clamp, P, which is the same in construction as the one upon the sliding bar.

The advanced biting-ring is constructed with sharp edges on its interior at Q and R, so that as the shank is pulled to the rear these edges tend to bite into the bar and prevent said ring from sliding back; but they do not hinder it from being pushed forward. The rear biting-ring is constructed in the same manner as the advanced one and operates the same against an oblique backward pull upon its shank, and also in readily moving forward.

In operating the stretcher the free ends of the springs I and K are loosened from their fastenings, and the stretching mechanism placed near the back end of the rod. Then the free ends of the springs are secured, thereby causing their other ends to bear forcibly against the rings, and thus place said rings in an oblique position upon the rod, ready for biting. Then, when the post-hoop has been put around the post, or the end of a wire fastened into the clamp thereon, and the end of the other wire secured in the clamp upon the back end of the sliding bar, the lower end of the operating-lever is pulled back, which forces the advanced biting-ring forward while the sliding bar stands still. (See full lines, Fig. 1.) The next step is to pull said lever forward, in which operation the advanced biting-ring remains stationary and the sliding bar moves forward with the attached wire. (See dotted lines, Fig. 1.) By repeating these movements of the lever the sliding bar approaches the post or the wire secured to the post-hook, and when the wire is sufficiently stretched or tightened it may be secured to the post, or the free ends of the wires twisted together.

When the stretcher is used to bring two wires together, or to take up the slack in the middle of the wire, the post-hook affords a convenient handle for holding it steady during the operation.

Having thus fully described my invention, I claim—

1. The combination of the main rod, the

sliding bar, a simple ring rigidly connected thereto near its back end and adapted to slide upon said rod, a biting-ring pivoted by its shank to the forward end of the sliding bar, a
5 lever fulcrumed to said bar, a biting-ring linked to said lever, a wire-clamp upon the sliding bar, and a post-hook secured to the main rod, as shown and described.

2. In a wire-stretcher, the combination of
10 the main rod provided with means for securing it to a post or other object, a sliding bar provided with means for connecting it to a wire, a ring rigidly connected by its shank to said bar, a biting-ring pivotally connected to
15 the same bar, a spring coiled about the rivet of said ring and bearing by one end against the ring, and the other adapted to rest in a

hook on the shank of the rigid ring, a lever fulcrumed to the sliding bar intermediate between said rings, a biting-ring upon the rod in
20 advance of the other biting-ring and pivoted by its shank to a link connected to said lever, and a spring coiled about the pivot of said ring and bearing by one end against said ring, and the other adapted to hook under said
25 link, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLIAM BOLIVAR WEST.

Witnesses:

CHAMP CLARK,
W. C. THOMPSON.