

S. A. FISHER.
Wire-Stretcher.

No. 218,951.

Patented Aug. 26, 1879.

Fig. 1

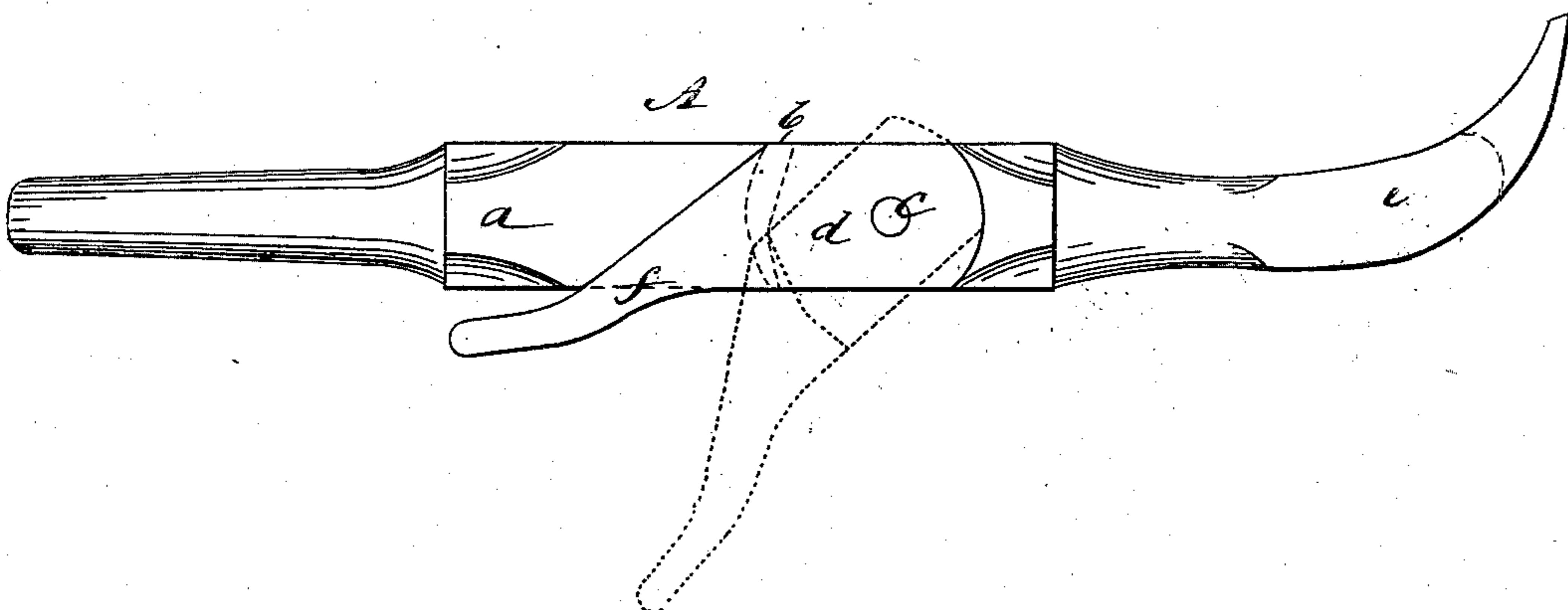
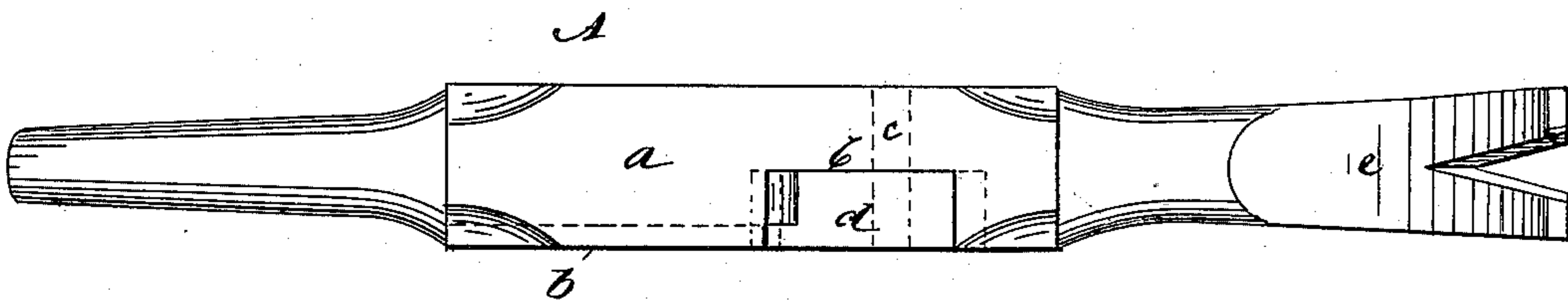


Fig. 2



WITNESSES:

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UNITED STATES PATENT OFFICE.

SYLVANUS A. FISHER, OF GENESEO, ILLINOIS.

IMPROVEMENT IN WIRE-STRETCHERS.

Specification forming part of Letters Patent No. **218,951**, dated August 26, 1879; application filed June 10, 1879.

To all whom it may concern:

Be it known that I, SYLVANUS A. FISHER, of Geneseo, in the county of Henry and State of Illinois, have invented a new and Improved Wire-Stretcher, of which the following is a specification.

The object of my invention is to furnish a portable device which shall be light, strong, and inexpensive, and adapted for the purpose of stretching or tightening fence-wire.

The invention consists in a lever fitted with a cam-acting holding-jaw, whereby the wire is securely held and may be readily released; also, in the combination, with the stretcher, of a claw adapted for drawing staples from the fence-post.

In the accompanying drawings, to which reference is made for a full understanding of the invention, Figure 1 is a side elevation of wire-stretcher constructed in accordance with my invention. Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

A is my improved wire-stretcher and tightener. *a* is the lever portion, which is made of suitable size and strength, and with its ends rounded to form handles, whereby the stretcher can be conveniently manipulated. At one side of lever *a*, about midway between the ends, there is formed a recess, *b*, in which is fitted the clamp *d* on a pivot, *c*. The ends of the recess *b* are shaped in the arcs of circles, centered at the pivot *c*, and the clamp *d* is shaped to fit closely in the recess, except at the moving end, which is formed slightly eccentric. The moving end of the clamp *d* is also formed with a handle portion, *f*, and the lever *a* is formed with a rabbet to receive the handle when the clamp is closed, so that the clamp can open only in one direction, and when closed lies flush with the surface of the lever.

In stretching wire with the said device the

clamp is to be opened to permit insertion of the wire between the cam-surfaces, and then closed upon the wire. The wire is stretched or tightened by placing one end of the lever against the fence-post as a fulcrum, and exerting the requisite pressure upon the moving end. The wire will tighten itself in the clamp, as required by the pressure, so that it cannot slip. The wire is released by moving back the clamp, which can be readily done.

I form one end of lever *a* as a hammer-claw, *l*, for use in drawing staples from the fence-posts when required. This renders the tool more convenient and saves the use of a separate tool. This claw end is intended to be placed against the post in stretching wire, and forms a rolling fulcrum, that facilitates the operation of stretching.

The cam action of the clamp may be obtained by making the side of the recess *b* eccentric, or both impinging-surfaces slightly so. I do not limit myself in that particular.

By setting the clamp within a recess, as described, there are no projections to catch and interfere with the work, and the stretcher can be made light, and yet strong enough to withstand great strain.

I am aware that it is not new to provide the lever with an adjustable fulcrum-block and eccentric clamp, or with a hook and pivoted eccentric jaw, or to use a claw, or to combine cam-levers with block, hooks, and cord; but

What I do claim is—

In a wire-stretcher, the combination, with a pivoted clamp, of the lever *a*, having an arc-shaped clamping-face arranged on the inner side of the long arm, whereby said arm may serve as a guard to keep the wire in place and prevent it from springing out of the jaw.

SYLVANUS AYRES FISHER.

Witnesses:

HENDRICK V. FISHER,
J. H. MITCHELL.