No. 688,164. Patented Dec. 3, 1901.

F. FRANKE.

WIRE STRETCHER.

(Application filed Feb. 14, 1901.)

(No Model.)

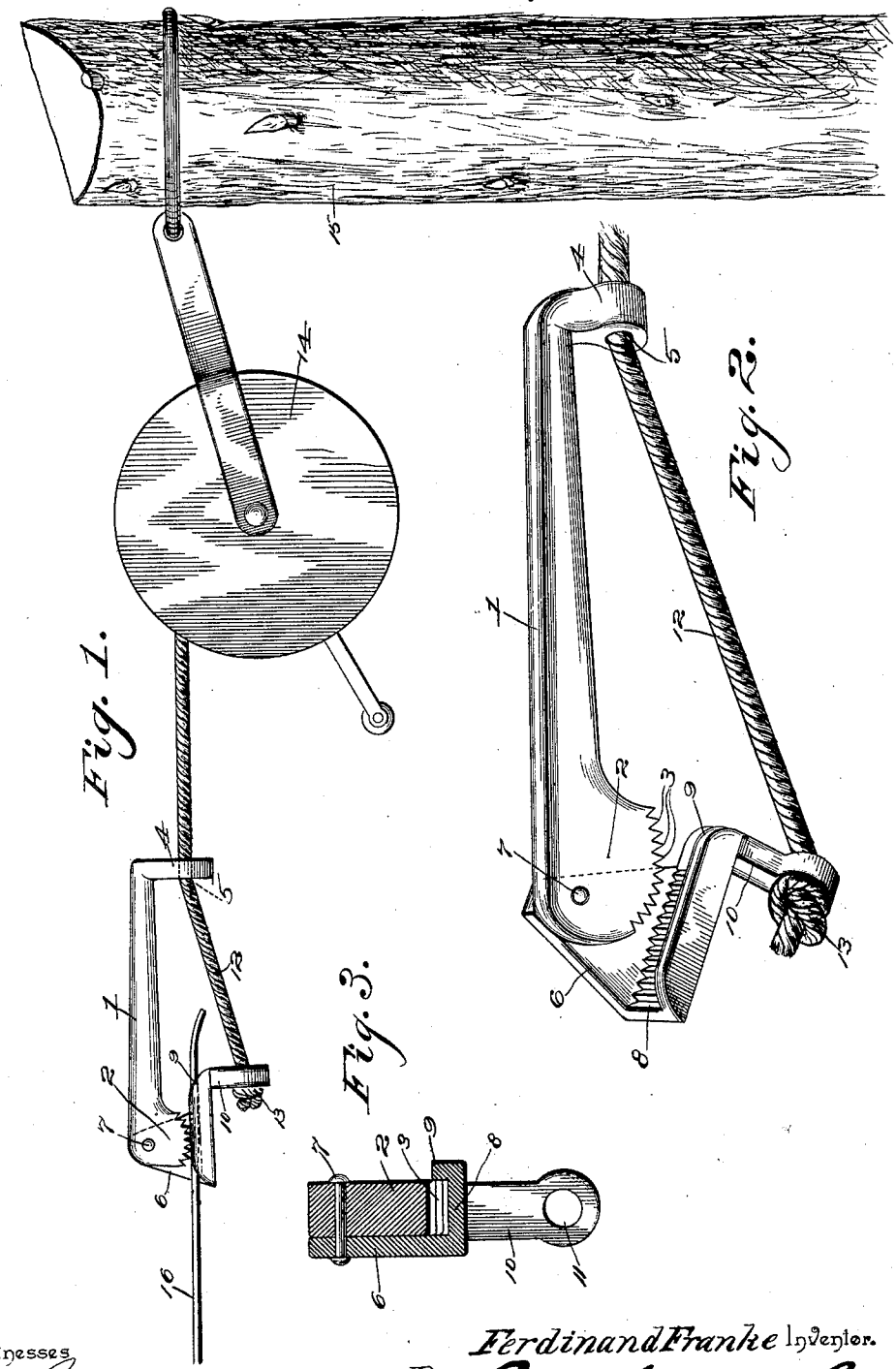


Fig. 1.

Fig. 2.

Fig. 3.

Witnesses
Fred Bennyard
H. J. Shepard

Ferdinand Franke Inventor.
By C. A. Snow & Co.
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

FERDINAND FRANKE, OF LOUISVILLE, KENTUCKY.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 688,164, dated December 3, 1901.

Application filed February 14, 1901. Serial No. 47,318. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND FRANKE, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Wire-Stretcher, of which the following is a specification.

This invention relates to wire-stretchers, and has for its object to provide an improved wire-clamp which is arranged to facilitate the application and removal thereof with respect to a wire to be stretched and also to insure a positive grip upon the wire, so as to preclude the possibility of the device accidentally slipping upon the wire.

It is furthermore designed to provide a comparatively small, light, and durable device of this character for convenience in carrying the same along a line of fencing, and also to adapt the clamp for connection with any preferred or accessible stretching means.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a wire-stretching apparatus equipped with the present form of wire-clamp. Fig. 2 is a detail perspective view of a wire-clamp constructed in accordance with the present invention. Fig. 3 is a transverse sectional view taken through the coöperative wire-gripping parts of the clamp.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

Referring to the drawings, it will be seen that the present clamp comprises a comparatively short straight shank 1, which has one end provided with an integral segmental head 2, that lies wholly upon one side of the shank and is provided upon its convex edge with teeth 3. At the opposite end of the shank and projected laterally at the same side thereof with the segmental head is a lateral projection or ear 4, which is provided with a perforation 5, disposed longitudinally of the shank. A swinging clamp member or jaw 6 is mounted at the head end of the shank and is formed by an angular plate the body portion of which has one end pivotally connected to one side of the head, as at 7, so that the opposite angularly-related portion 8 may project laterally across the toothed convex edge of the head to coöperate therewith. The inner face of the portion 8 is provided with teeth, as plainly illustrated in Fig. 2 of the drawings, and also has an outer longitudinal flange 9, that overlaps the opposite outer side of the segmental head, so as to form a brace against lateral strain upon the swinging clamp member. At the inner or rear end of the portion 8, which projects beyond the adjacent rear edge of the body 6, there is provided an outwardly-directed arm 10, projected in a direction opposite to that of the flange and provided with a terminal perforation or opening 11 for the reception of a clamp-operating device preferably in the form of a cable 12, which also passes rearwardly and loosely through the perforation in the projection or ear 4 at the rear end of the shank, the forward end of the cable being fixedly connected to the arm ordinarily by means of a stop 13, formed by a knot in the cable, bearing against the front side of the arm, so that by drawing rearwardly upon the cable the swinging clamp member will also be swung rearwardly to coöperate with the segmental head.

In using the device as shown in Fig. 1 of the drawings the free rear end portion of the cable is connected to any suitable stretching device—as, for instance, a windlass 14—that is in turn connected to a post 15 or other fixed support, and then the swinging clamp member 6 is swung forwardly, so as to clear the segmental head, as shown in Fig. 2, after which the wire 16 to be stretched is applied laterally between the swinging clamp member and the head, and then the windlass is operated to draw upon the cable, thereby swinging the clamp member 6 rearwardly to grip the wire between the toothed portions of the segmental head and the other clamp member. Thus the greater the strain upon the cable the tighter the grip of the clamp upon

the wire, so that accidental slipping of either part is precluded. The clamp can be readily released immediately upon the reduction of the strain upon the cable by swinging the clamp member 6 forwardly by means of the arm 10 as a finger-piece, whereby the removal of the clamp is facilitated.

What is claimed is—

A wire-clamp, comprising a shank, having an integral lateral perforate guide at one end, a segmental integral clamp-head at the opposite end thereof and upon the same side with the guide, the convex edge of the head being toothed, a swinging clamp member pivoted to one side of the head, and having a lateral flange at its free edge and projected across the toothed edge of the head, the inner side of the flange being toothed to coöperate with the head, a longitudinal flange at the outer edge of the former flange and overlapping the opposite side of the head, a lateral arm at the inner end of the toothed flange, projected in the same direction as the guide, and a cable connected to the arm, and passed loosely outward through the perforate guide.

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

FERDINAND FRANKE.

Witnesses:

ALVA J. WELKER,

J. D. HAYNES.