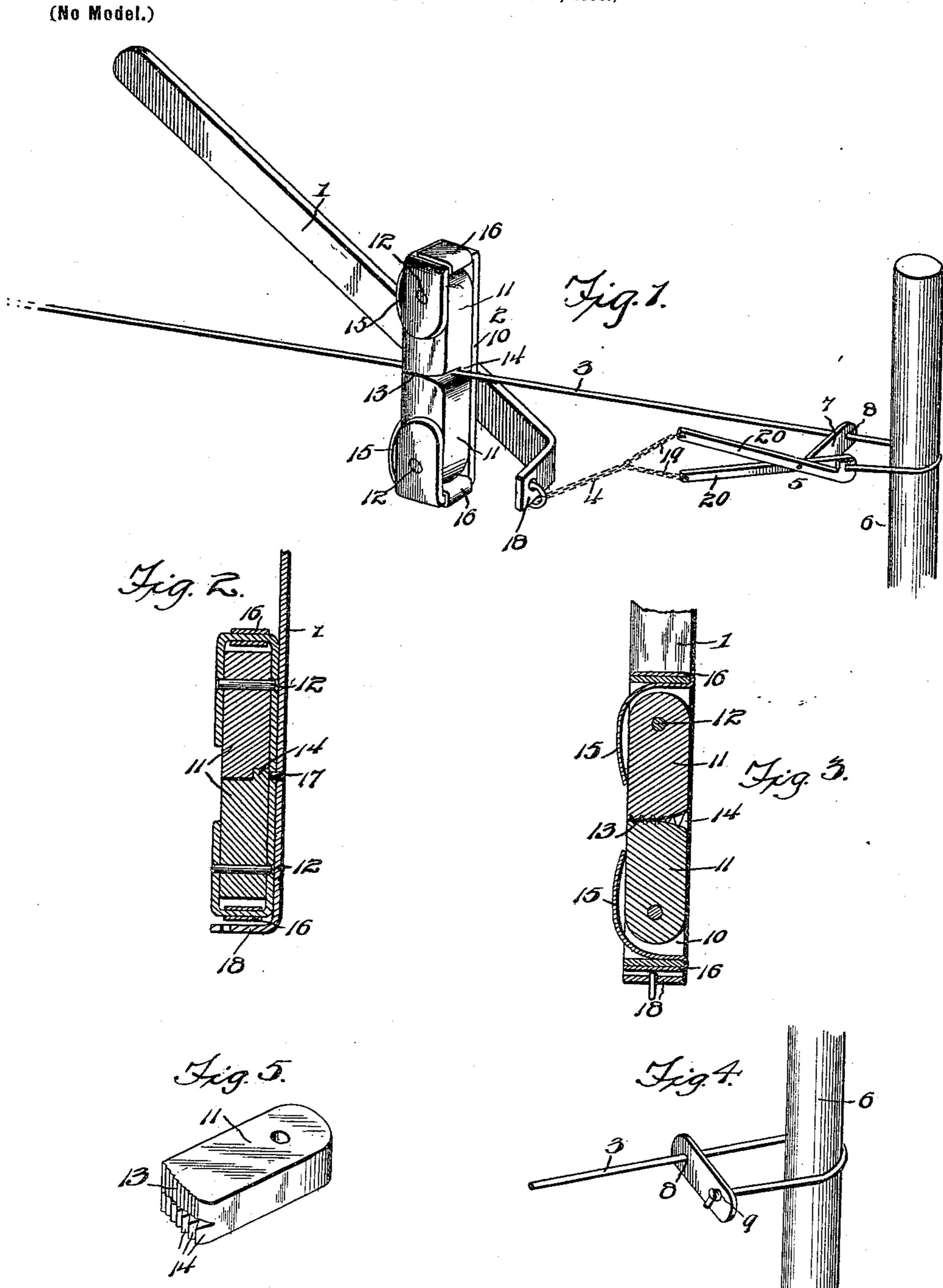
## O. ANDREW. WIRE STRETCHER.

(Application filed Mar. 11, 1899.)



Witnesses

Oren Andrew Inventor

By Kiel Attorneys,

## UNITED STATES PATENT OFFICE.

OREN ANDREW, OF TOWNSEND, NEW YORK.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 640,074, dated December 26, 1899.

Application filed March 11, 1899. Serial No. 708,695. (No model.)

To all whom it may concern:

Beitknown that I, ÖREN ANDREW, a citizen of the United States, residing at Townsend, in the county of Schuyler and State of New York, 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 improve the construction of wire-stretchers and to provide a simple, inexpensive, and efficient one capable of enabling a fence-wire to be readily stretched to the desired tension and to be secured to a fence-post without lessening such tension and adapted to enable the ends of a broken wire to be readily drawn together to repair the same.

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 claims hereto appended.

In the drawings, Figure I is a perspective view of a wire-stretcher constructed in accordance with this invention. Fig. 2 is a sectional view taken longitudinally of the operating-lever, the clamping device thereof being arranged in alinement with the same.

Fig. 3 is a sectional view on line 3 3 of Fig. 2. Fig. 4 is a detail perspective view illustrating the manner of fastening the fence-wire. Fig. 5 is a detail perspective view of one of the cams or jaws.

Like numerals of reference designate corresponding parts in all the figures of the

drawings.

1 designates an operating-lever carrying a wire-engaging clamp 2 and adapted to be ful40 crumed thereby on the body portion of the fence-wire 3, and connected at its inner end by a chain 4 with a wire-engaging device 5, adapted to be connected with the adjacent end of a wire to enable the lever to draw the same around the post 6, whereby the wire is stretched to the desired tension. The fence-wire 3 extends around the post 6, and its end is connected to one end of a plate 7, which is provided with a perforation 8 to receive the body portion of the fence-wire, and the tension of the plate on the body portion of the wire is adapted to secure the latter at the de-

sired adjustment. The end of the fence-wire is preferably secured to the locking-plate 7 by being passed through a perforation 9 there- 55 of and knotted or otherwise fastened.

The clamping device 2 consists of a substantially rectangular frame 10 and a pair of cams or eccentrics 11, pivoted near their outer ends by rivets 12 or other suitable fastening 60 devices to the frame and provided at their inner edges with wire-engaging faces 13, and having meshing teeth 14, adapted to prevent their inner ends from slipping on each other. The inner ends of the cams are rounded, as 65 shown, and the frame 10 is preferably constructed of a single piece of metal, having its ends bent inward over the body portion and separated at the center to provide a space or entrance to enable the wire to be readily en- 70 gaged with the cams. The cams are maintained in operative position by substantially L-shaped springs 15, arranged at the ends of the frame, and provided at their outer ends with hooks 16 for engaging the frame; but they 75 may be mounted on the latter in any other suitable manner. The frame of the clamping device 2 is centrally pivoted by a rivet 17 or other suitable fastening device to the operating-lever, near one end thereof, to enable it 80 to maintain a position substantially at right angles to the wire while the lever is being operated to stretch the latter.

The inner end 18 of the lever is bent upward to form an arm, which is provided with 85 an eye into which the adjacent end of the chain is linked. The other end of the chain is provided with two branches 19, which are linked into perforations or eyes of the adjacent ends of a pair of bars or levers 20, which 90 are pivoted together between their ends and which constitute the wire-engaging device 5. The outer ends of the pivoted levers are provided with jaws adapted to grip a fence-wire or engage the locking-plate 7 when the inner 95 end of the lever is drawn backward to tighten the chain. By this construction the wire may be stretched around the fence-post when a locking-plate is employed and also when it is not desired to use the same, and the wire-en- 100 gaging devices can also be attached to the ends of a broken wire to enable such broken parts to be drawn together and connected. By stretching a wire around a fence-post in

this manner the short kinks or bends are avoided, and the life of the wire is not shortened thereby.

Instead of employing a pair of levers for clamping the free end of a fence-wire a claw, hook, or any other suitable device may be

used to effect the same result.

The invention has the following advantages: The wire-stretcher, which is simple and comparatively inexpensive in construction, is adapted to be quickly arranged for engaging a fence-wire to stretch the same on a fence-post, and it is also capable of drawing the ends of a broken wire together for repairing the same. The clamping device 2 is adapted to have a fence-wire readily placed in it and removed from it, and the engaging ends of the cams or jaws mesh with each other, so that there is no liability of them accidentally slipping.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. A device of the class described comprising a lever, a clamping device mounted on the lever and provided with a pair of pivoted cams or jaws having inner engaging ends and provided thereat with teeth meshing with each other to prevent the cams or jaws from slipping, and a device connected with the lever for enabling the same to be attached to an end of a wire, substantially as and for the purpose described.

2. A device of the class described comprising a lever, a device connected with the lever for enabling the same to be attached to the

end of a wire, and a clamping device mounted 40 on the lever and composed of a pivoted frame, a pair of jaws or cams having inner engaging ends and provided thereat with teeth meshing with each other to prevent the cams or jaws from slipping, and springs arranged at 45 the ends of the frame and engaging the jaws or cams, substantially as described.

3. A device of the class described comprising a lever, a device connected with the lever for enabling the same to be attached to the send of a wire, and a clamp mounted on the lever and composed of a substantially rectangular frame pivoted between its ends and having an opening forming an entrance for a wire, a pair of camsor jaws pivotally mounted within the frame and having inner engaging ends and provided thereat with teeth meshing with each other to prevent the cams or jaws from slipping, and a spring provided with a hook engaging the frame, said spring 60 having its other end engaging the adjacent jaw, substantially as described.

4. A device of the class described provided with a clamp comprising a frame, a pair of jaws pivoted to the frame and provided at 65 their adjacent ends with engaging faces and having teeth located adjacent to the said faces and meshing with each other, and a spring mounted on the frame and engaging the adjacent jaw, substantially as described. 70

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

OREN ANDREW.

Witnesses:
GEO. C. WAIT,
G. M. STILWELL.