

J. A. COCKER.

FENCE CLAMP.

APPLICATION FILED SEPT. 11, 1909.

995,525.

Patented June 20, 1911.

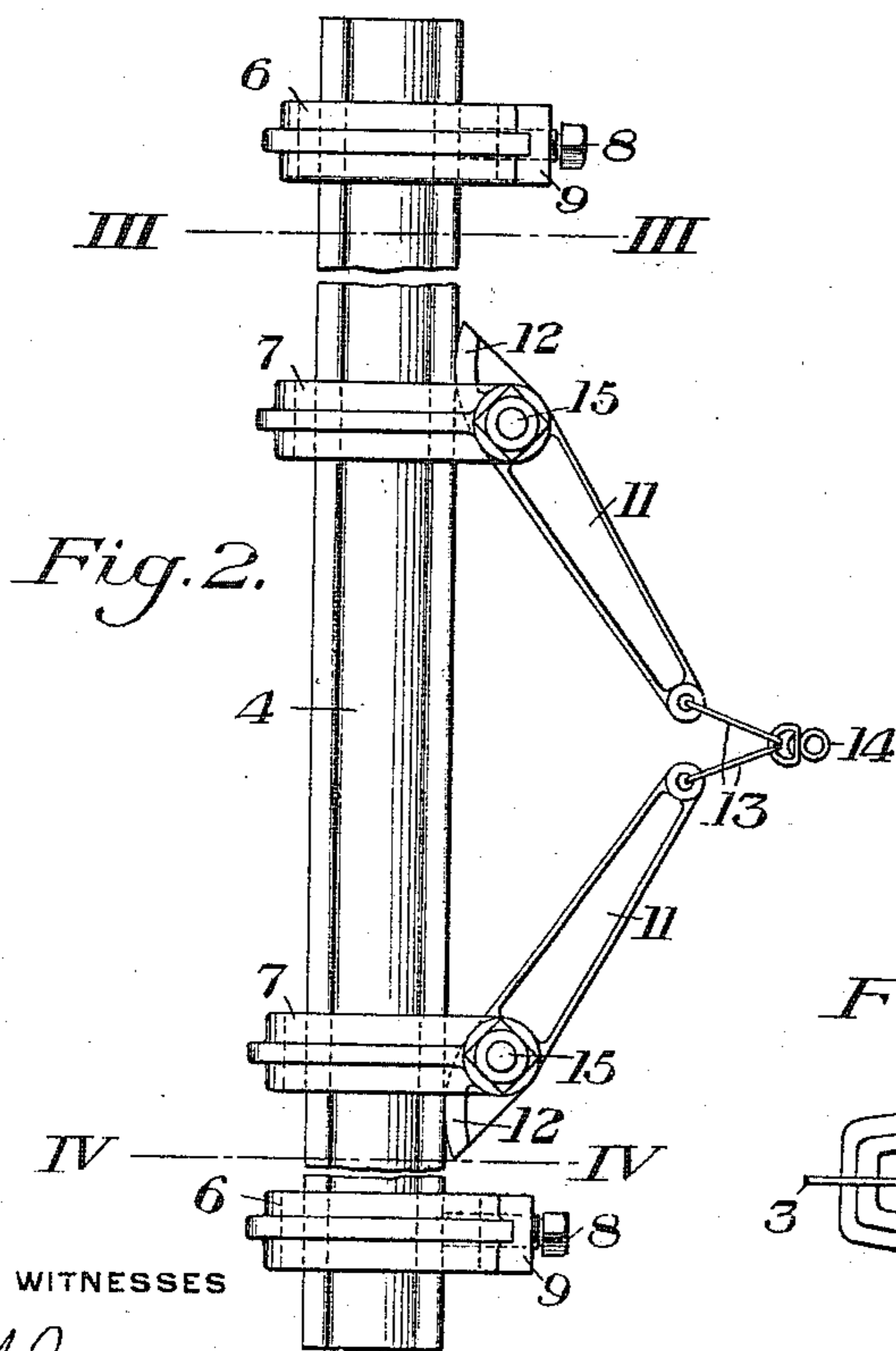
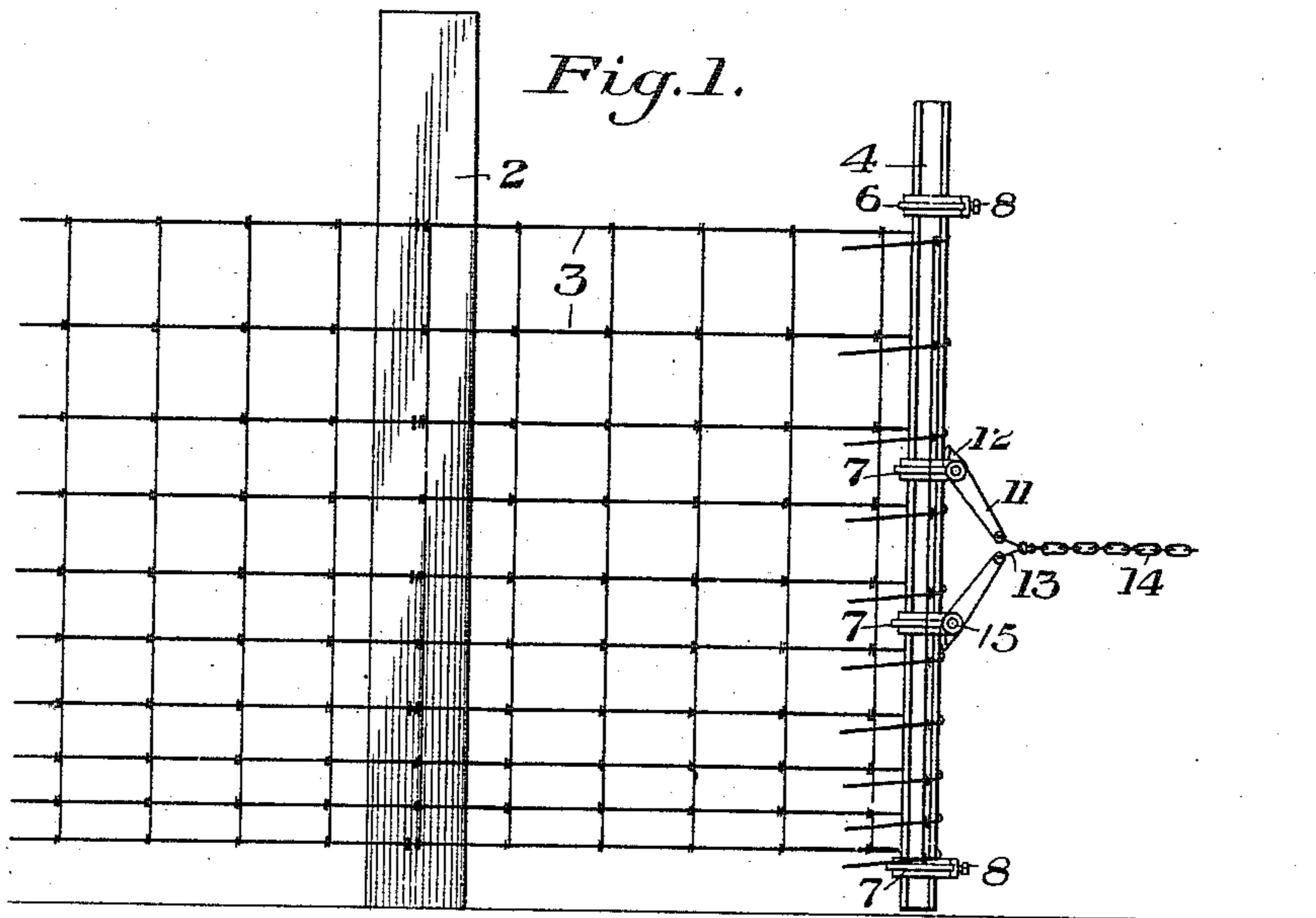


Fig. 3.

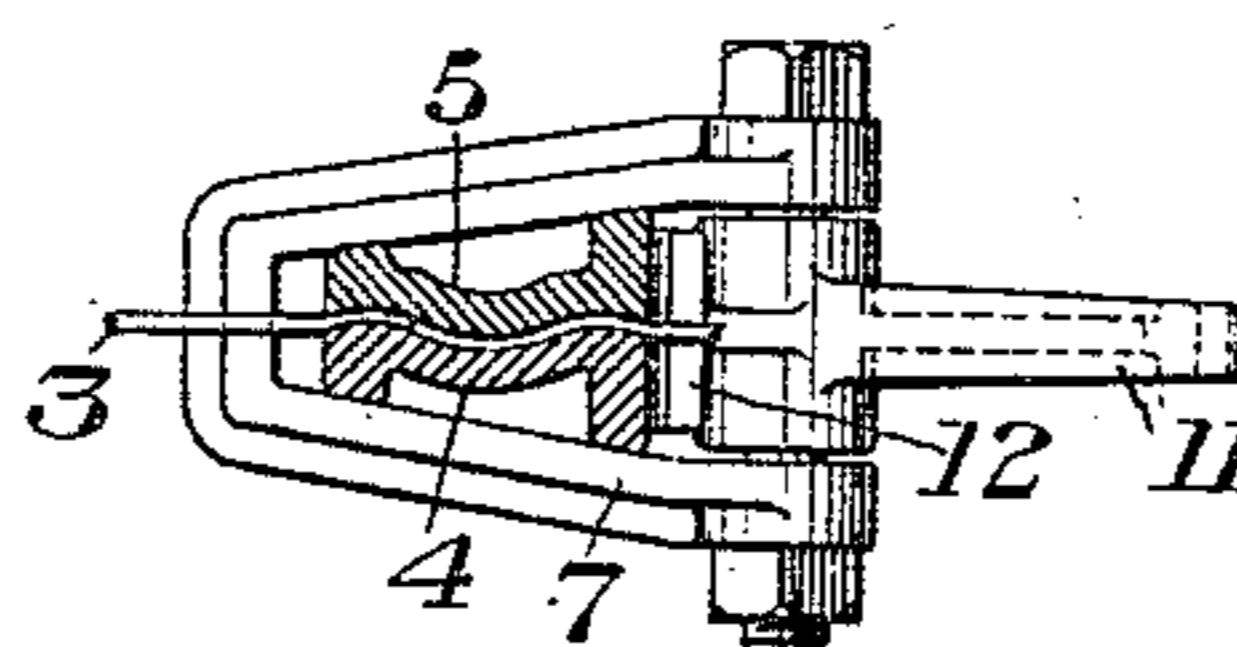
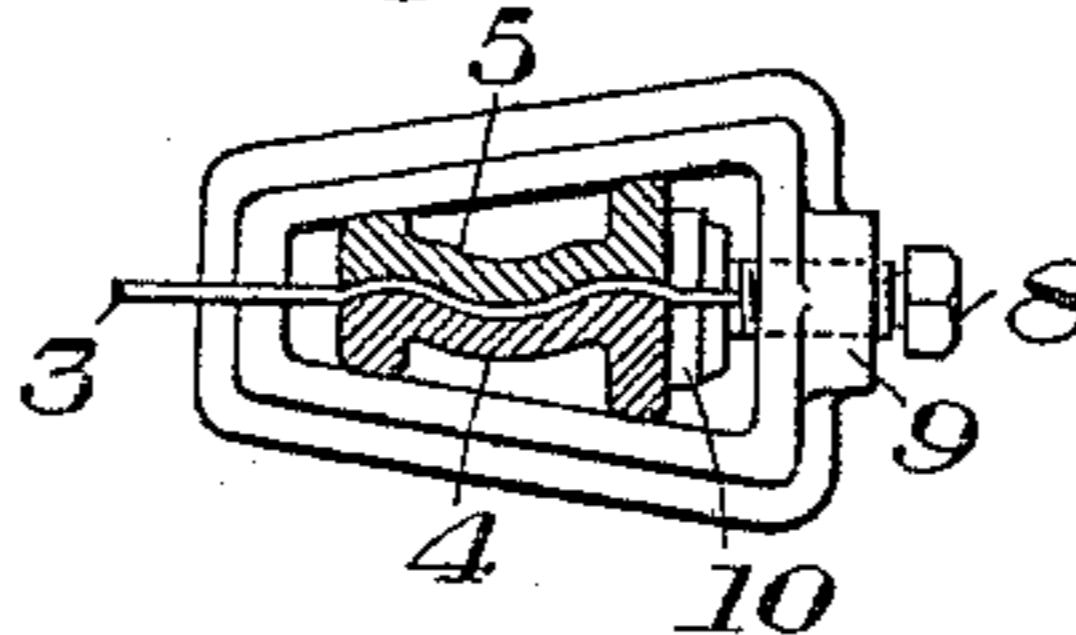


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN ARTHUR COCKER, OF JOLIET, ILLINOIS, ASSIGNOR TO AMERICAN STEEL & WIRE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

FENCE-CLAMP.

995,525.

Specification of Letters Patent. Patented June 20, 1911.

Application filed September 11, 1909. Serial No. 517,298.

To all whom it may concern:

Be it known that I, JOHN ARTHUR COCKER, of Joliet, Will county, Illinois, have invented a new and useful Fence-Clamp, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation showing my improved apparatus as applied for use in stretching and holding a wire fence while it is being secured to a fence post; Fig. 2 is a side elevation on a larger scale showing a detail of the fence clamp forming my invention; Fig. 3 is a transverse section taken on the line III—III of Fig. 2; Fig. 4 is a similar transverse section on the line IV—IV of Fig. 2.

My invention relates to apparatus employed for stretching and holding woven wire fence in erecting the fence in place, and the object of the invention is to provide a fence clamp having means by which the clamp is easily and quickly attached to the strand wires of the fence, and having improved means by which the force applied in stretching the fence acts to increase the gripping power of the clamp on the fence.

A further object of the invention is to provide a fence clamp having novel means by which it is attached to the fence, and means by which the engaging faces of the bars forming the clamp are tightened on the wires of the fence, and slipping between the wires of the fence and the gripping faces of the clamp is prevented.

In the drawings, 2 represents a fence post, and 3, 3, represent the strand wires of a woven wire fence, being stretched and secured in place on the post 2. The strand wires 3 are passed between the adjacent faces of the clamping bars 4 and 5. Placed on the clamping bars 4 and 5, adjacent to the opposite ends of these bars, are the clamping bands 6 and at points between bands 6 are the clamping bands 7. As shown in Figs. 3 and 4, the clamping bands 6 and 7 have openings provided with tapering inner sides, and the opposite edges of each of the bars 4 and 5 have correspondingly tapered side portions which engage with the tapering sides of the clamping bands. The adjacent faces of the longitudinal clamping bars 4 and 5 are curved or corrugated transversely of their length pref-

erably a reverse curve formed as shown being used, and the adjoining inner surfaces of the clamping bars 4 and 5 are preferably of the same curved contour throughout their length.

The clamping bands 6 are each provided with a set screw 8, which is inserted in the screw-threaded openings in the boss 9 on one end of these bands, the inner end of the set screw engaging preferably with a washer 10, which rests upon the edge of the clamping bars 4 and 5. It will be seen by reference to Fig. 4 that when the set screw is turned so as to move the clamping bars 4 and 5 inwardly toward the smaller end of the tapered opening in the clamping bands 6, the adjacent faces of the clamping bars 4 and 5 will be caused to approach each other and will tightly grip the wires of a fence placed between them.

The clamping bands 7 are provided with levers or arms 11, which are pivotally mounted on the pins or bolts 15 provided on the ends of the clamping bands, one end of the arms having a curved or cam face 12, which engages with the edges of the clamping bars 4 and 5. The outer ends of the levers or arms 11 are connected together by the links 13. The device by which the fence is stretched is secured through the chain 14 to the links 13 on the ends of the levers 11. The sides of the openings in the clamping band 7 taper in a similar manner to those of the clamping bands 6, and the inner tapering surfaces engage with the correspondingly tapered sides of the clamping bars 4 and 5.

In the operation of my improved fence clamp, the strand wires (3) of the fence are placed between the curved faces of the clamping bars 4 and 5. The clamping bands 6 are then placed in position adjacent to the opposite ends of the clamp bars 4 and 5. The set screws 8 are then turned so as to wedge the clamping bars into engagement with the wires held between their transversely curved surfaces. The clamping bands 7 are then placed in position on the bars and the levers 11 are secured in place on the pins 15. The fence-tightening apparatus is then caused to operate so as to stretch the fence through the lever arms 11 and clamping bars 4 and 5. It will be understood that one end of the fence to which the clamping arms are attached has

been secured to a fence post at the beginning of the erecting operation. The fence is then stretched to the desired tension and is held stretched until it has been secured in the proper manner to the fence post 2. The tightening device is then released and the set screws 8 are retracted so as to release the grip of the clamping bars 4 and 5 upon the fence. When the power is applied to the lever arms 11 by the tightening apparatus, the cam faces 12 of the lever arms will engage with the contacting surfaces of the clamping bars 4 and 5 and will force them downwardly into the tapering openings in the clamping bands 7. As the tension is increased on the stretching device, the wedging effect of the tapering surfaces on the bars 4 and 5 and engaging surfaces of the opening in the clamping bands 7, will cause the opposing surfaces in contact with the strand wires 3 of the fence to more tightly grip these wires.

The advantages of my invention will be apparent to those skilled in the art. The apparatus is simple and can be easily and quickly applied for use while the strand wires of the fence are tightly held in place, and the clamping device is readily detached or disengaged when desired. The greater the tension applied on the tightening device, the tighter the wires will be gripped by the clamping bars.

Modifications in the construction and arrangement of the parts may be made without departing from my invention.

I claim:

1. A fence clamp comprising clamping bars having co-acting fence clamping faces, clamping bands embracing said bars, said bars and bands having engaging beveled wedging faces for causing a relative approach of the adjacent faces of the clamping bars and means by which the bars are attached to a fence stretcher, said means being arranged to wedge the bars within the clamping bands and thereby increase the clamping force of the bars on the fence wires held between the clamping bars when tension is applied by the stretcher.

2. A fence clamp comprising a pair of clamping bars having co-acting fence clamping faces, said bars having beveled wedging faces thereon, clamping bands embracing said bars having beveled wedging faces and

means by which the bars are attached to a fence stretcher, said means being arranged to move the beveled wedging faces on the bars relative to those on the clamping bands to increase the clamping force of the bars on the fence wire held between the clamping bars when tension is applied by said stretcher.

3. In a fence clamp, a pair of clamping bars, clamping bands embracing said bars, the engaging surfaces of said bands and bars being tapered, and means by which the bars are forced inwardly within said bands when tension is applied through the clamping bars to stretch the fence.

4. In a fence clamp, a pair of clamping bars, the adjacent faces of said bars having transversely curved surfaces, clamping bands having wedging faces embracing said bars, and means for moving the bars within said clamping bands to cause a relative approach of the curved faces of the clamping bars when the fence is stretched through said bars and clamping bands.

5. In a fence clamp, a pair of clamping bars, clamping bands embracing said bars, the contacting surfaces of the bars and clamping bands being tapered, and a lever arm pivotally mounted on the clamping bands, one end of said lever arm engaging with and moving the clamping bars inwardly in said clamping bands when the fence is stretched through the clamping bars and lever arms.

6. In a fence clamp, a pair of clamping bars having co-acting fence clamping faces, a plurality of sets of wedging faces on each of said bars, clamping bands embracing said bars having wedging faces engaging with one set of the wedging faces on said bars for causing a relative approach of said clamping bars and means by which the bars are attached to a fence stretcher, said means having wedging faces engaging with a second set of wedging faces on the bars arranged to increase the clamping force on the fence wires when tension is applied by said stretcher.

In testimony whereof, I have hereunto set my hand.

JOHN ARTHUR COCKER.

Witnesses:

GEO. M. HOGMIRE,
T. INGRAHAM.