

A. B. DOERING.
FENCE WIRE CLAMP.
APPLICATION FILED SEPT. 2, 1908.

925,310.

Patented June 15, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

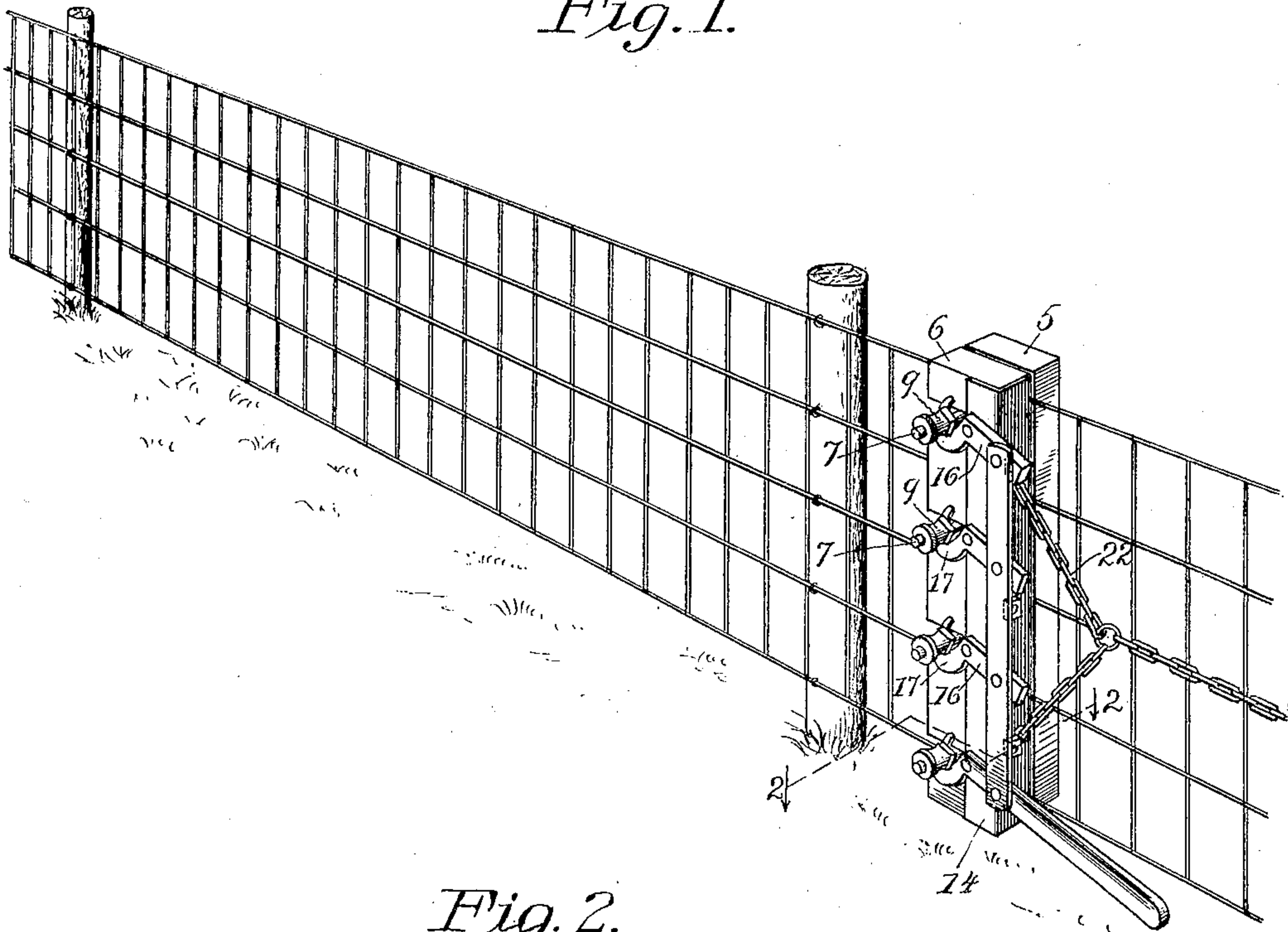
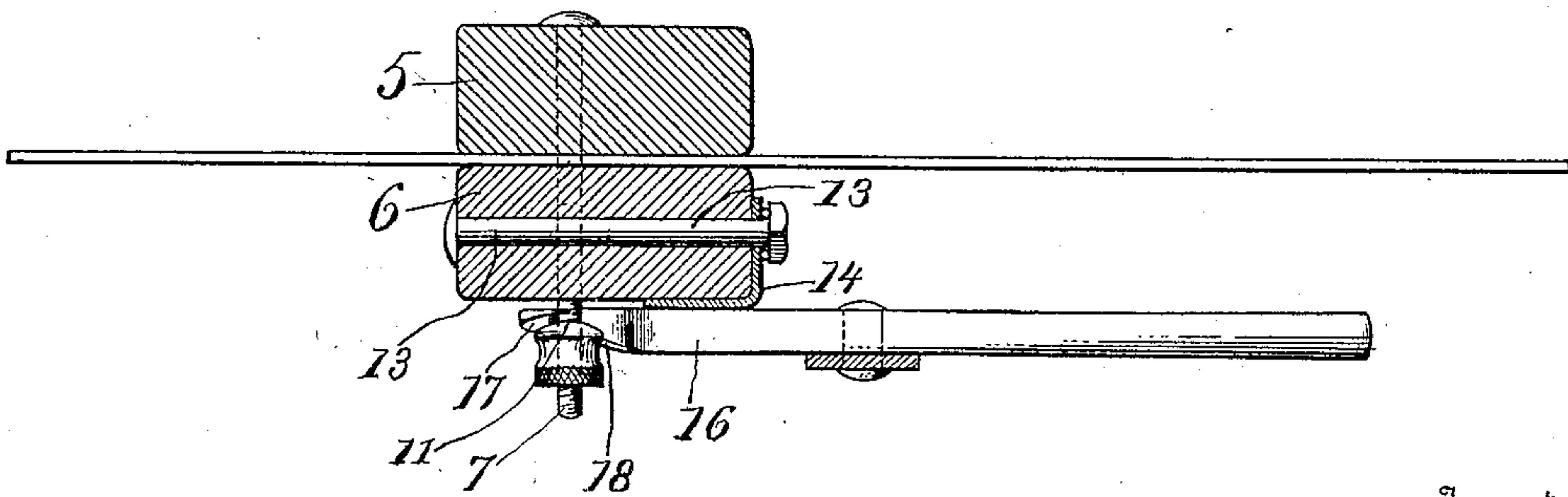


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

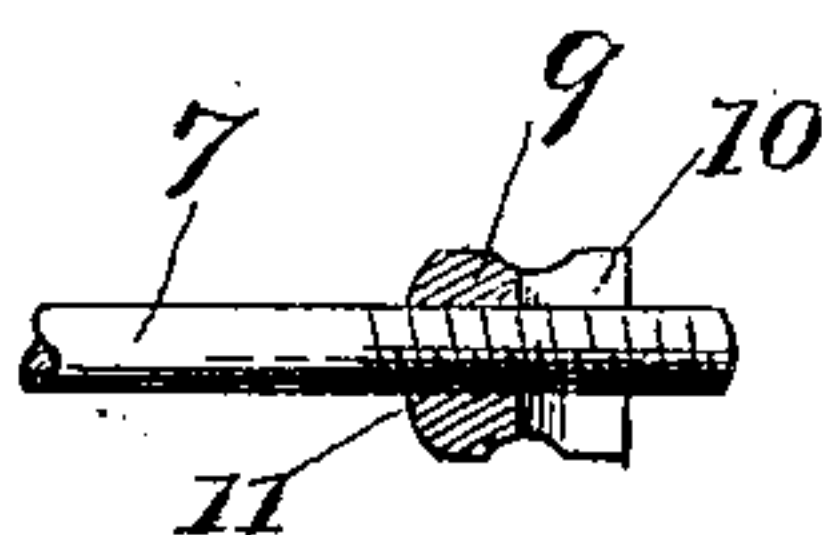
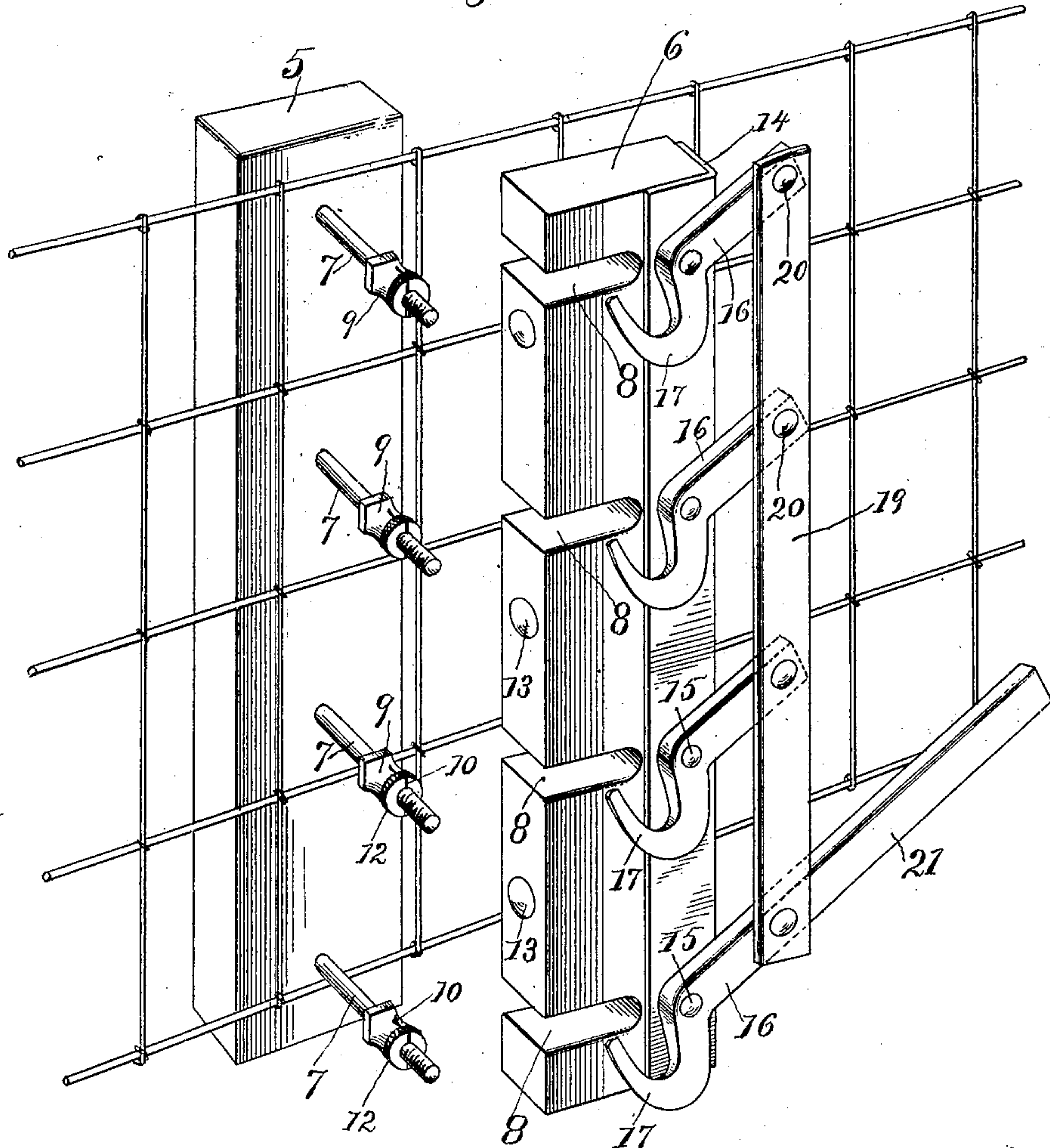


Fig. 4.

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UNITED STATES PATENT OFFICE.

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FENCE-WIRE CLAMP.

No. 925,310.

Specification of Letters Patent.

Patented June 15, 1909.

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To all whom it may concern:

Be it known that I, ALBERT B. DOERING, a citizen of the United States, residing at Le Mars, in the county of Plymouth and State of Iowa, have invented certain new and useful Improvements in Fence-Wire Clamps, of which the following is a specification.

This invention relates to clamping devices utilized in the construction and erection of wire fences for the purpose of engaging the wire fabric or the wire strands used in the construction of the fence and to enable such fabric or strands to be stretched evenly and simultaneously throughout.

The invention has for its object to simplify and improve the construction and operation of this class of clamping devices; to facilitate the adjustment and detachment of the bars that constitute the clamping members; to provide simple and improved means for so connecting the clamping members that the wire strands or fabric will be held very securely therebetween; to provide a simple and improved construction whereby minute adjustment may be had to adapt the clamping device to wire fabrics of different thicknesses; and to provide an improved and simplified construction whereby a plurality of cams operating in conjunction with the clamping device will be simultaneously operated.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention; it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawings—Figure 1 is a perspective view showing the improved clamping device in position for operation upon a section of fence. Fig. 2 is a horizontal sectional view of a clamping device upon a somewhat larger scale. Fig. 3 is a perspective view showing the bars or members of the clamping device, separated and ready for placing upon a section of fence fabric, which is shown between the clamping members. Fig. 4 is a sectional

detail view of one of the bolts and nuts used in connection with the clamping members.

Corresponding parts in the several figures are denoted by like characters of reference.

The improved clamping device is composed of two bars or members which for convenience will be described respectively as the rear bar 5, and the front bar 6. These bars may be of any desired length, it being obvious that the length should slightly exceed the height of the fence that is to be constructed. The rear bar 5, is provided with a plurality of bolts 7, 7, extending transversely therethrough and projecting forwardly through the front bar 6, the latter being provided with a plurality of lateral notches 8, 8, for the passage of said bolts; said notches being of such dimensions as to enable the bar 6 to be very readily mounted upon or detached from the rear member 5, by a lateral sliding movement; the bolts 7 are equipped with nuts 9, which are, in practice, to be slightly spaced from the front side or face of the front bar 6; it being obvious that said front bar may be mounted upon the bolts without removing or even disturbing the position of the nuts 9. The nuts 9 may be ordinary square or polygonal nuts; but it is preferred that said nuts be of the elongated shape illustrated in the drawings, and provided with slits 10, whereby they will be enabled to firmly bite upon the bolts so that they will not readily be displaced from any position to which they may be adjusted; the nuts are also preferably provided with convexed rear faces 11 and with milled portions forming handles 12 whereby they may be readily manipulated.

The bars or clamping members 5 and 6 are usually and preferably made of wood, and the front bar having the notches 8 is provided intermediate said notches with bolts 13 extending laterally therethrough for the purpose of reinforcing the construction which would otherwise be weakened by the notches 8. The clamping bar 6 is also protected and reinforced by an angle-iron 14, which is held securely in position by the bolts 13 extending through one wing of said angle-iron; the other wing of the angle-iron, which abuts upon the front face of the bar 6, is apertured for the passage of a plurality of pins or bolts 15; one of such pins or bolts being located adjacent to the inner end of each of the notches 8, and said pins or bolts serving to support the levers 16, which are formed with

terminal curved or arcuate hooks 17, said hooks being reduced or tapering in the direction of their points or terminal ends, will be best seen in Fig. 2 of the drawings, thus forming cam faces 18 adapted to engage the rear ends or faces of the nuts 9, which, as herein previously mentioned, are preferably made convexed so as to be effectively engaged by the cam levers. The ends of the levers 16, which extend from the supporting pins in a direction opposite to the hooks 17, are connected in series by means of a link or connecting rod 19, which is pivotally connected, at 20, with each of the levers; and one of said levers is extended beyond the link or connecting rod 19 so as to form a handle 21, by means of which the several levers may be simultaneously operated.

The clamping device is equipped with a draft-member such as a chain 22, which has been shown only in Fig. 1 of the drawings, as being connected with the front bar 6; said chain being utilized for the attachment of draft for the purpose of stretching the fence wires or fabric.

From the foregoing description taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood by those skilled in the art to which it appertains. The nuts 9 are capable of minute adjustment according to the thickness of the fabric or fence material that is operated upon. By manipulating the handle 21, the cam levers may be simultaneously rocked or oscillated to place them into or out of engagement with the nuts 9; when the cam levers are in the position illustrated in Fig. 3 of the drawings, with the hooked-ends out of registry with the notches 8, bar 6 may be readily connected with or detached from the bar 5 by a simple lateral sliding movement, whereby the notches 8 are adjusted upon or removed from the bolts 7; while the clamping bars are separated, they may be placed upon opposite sides of the fence-fabric, or the latter, or the strand wires of a fence may be introduced therebetween without removing the bolts 7 or disturbing the position of the nuts 9, said bolts and nuts being inserted through the meshes when woven fabric is used, as will be readily understood; the bar 6 is now adjusted upon the bolts projecting from the bar 5, behind the nuts which have been previously adjusted to the desired position, and the several cam-levers may now be simultaneously operated by the handle 21, causing the tapering or cam-shaped hooks to engage the rear faces of the nuts, and thus causing the wires or fabric to be very firmly clamped between the bars 5 and 6. Draft

may now be applied for the purpose of stretching the fence and the stretching operation will be performed very evenly and effectively, the several strand-wires, and all portions of the fence-fabric being subjected to an equal strain.

The improved clamping device is simple in construction, durable, easily operated, and thoroughly efficient for the purposes for which it is provided.

Having thus described the invention, what is claimed is—

1. In a wire clamp, a rear member having forwardly extending bolts equipped with nuts, a front member having lateral notches to engage the bolts, levers pivoted upon the front member adjacent to the inner ends of the notches and having terminal hooks tapering in the direction of their extremities to form cam faces engaging the rear faces of the nuts, and a link connecting the levers in series.

2. In a wire clamp, a rear member having forwardly extending bolts equipped with nuts, a front member having lateral notches to engage the bolts, an angle-iron upon the front member, bolts extending laterally through the front member and through one wing of the angle-iron, pins extending transversely through the front member and through the other wing of the angle-iron, and levers pivoted upon the pins and having arcuate terminal hooks to engage the bolts; said hooks being provided with tapering cam-faces to engage the rear end faces of the nuts.

3. In a wire clamp of the character described, a rear member having forwardly extending bolts, nuts upon said bolts provided with convex rear faces, a front member having lateral notches to engage the bolts, and clamping members pivoted upon the front member adjacent to the inner ends of the notches and having curved terminal hooks tapering in the direction of their length and forming cams to engage the convex inner faces of the nuts.

4. In a wire clamp of the character described, a rear member having forwardly extending bolts, split nuts upon said bolts having convex rear faces, a front member having lateral notches to engage the bolts, and a clamping member pivoted upon the front side of the front member and having curved tapering terminal hooks.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT B. DOERING.

Witnesses:

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