

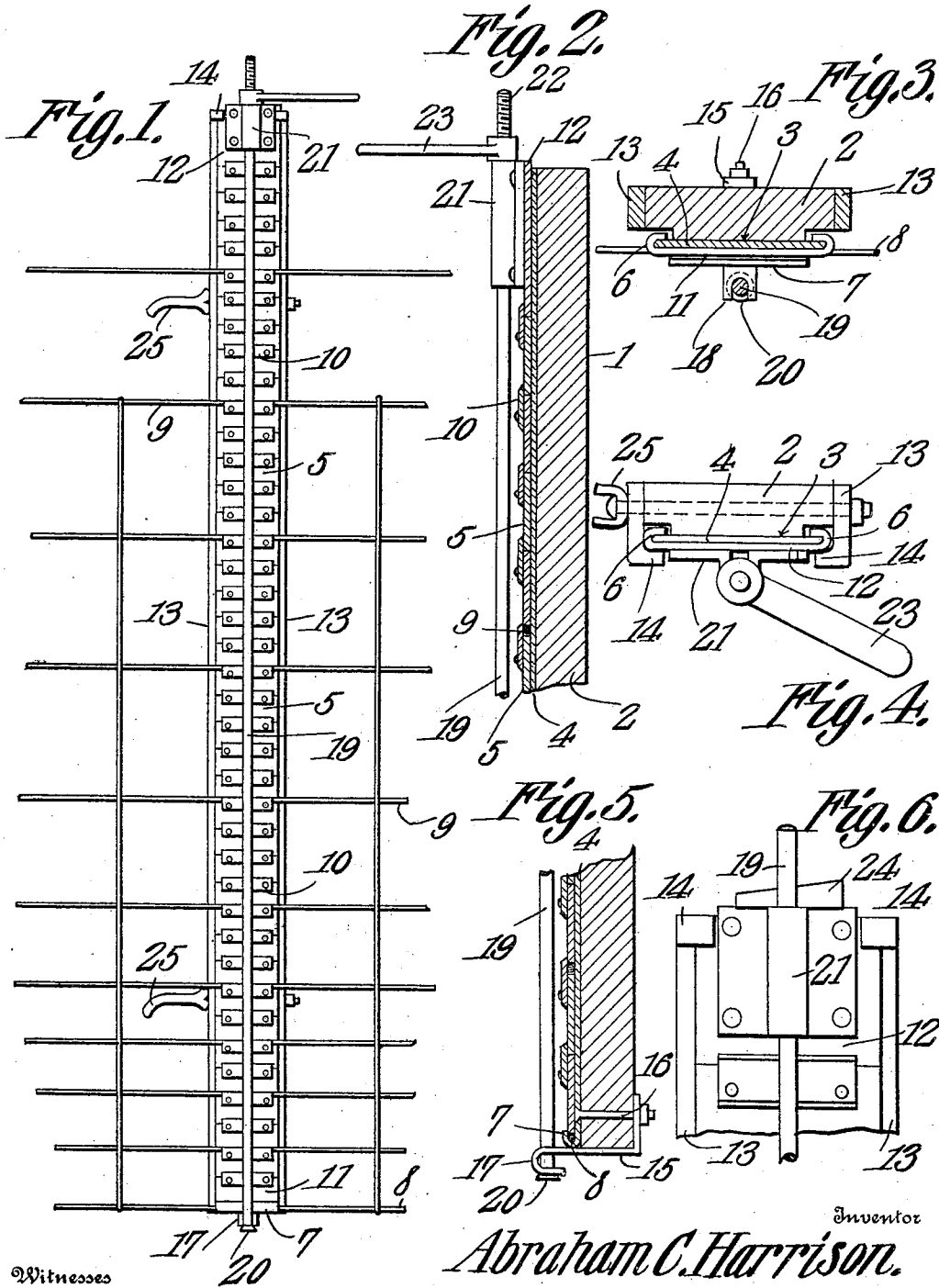
A. C. HARRISON.

FENCE CLAMP.

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939,835.

Patented Nov. 9, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

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FENCE-CLAMP.

939,835.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed January 18, 1909. Serial No. 472,849.

To all whom it may concern:

Be it known that I, ABRAHAM C. HARRISON, a citizen of the United States, residing at Grand Rapids, in the county of Wood and State of Ohio, have invented a new and useful Fence-Clamp, of which the following is a specification.

It is the object of this invention to provide a fence clamp comprising a series of jaws of novel construction arranged to seize and firmly hold fence wires of different spacing, and further to provide novel means for operating the said jaws.

With these and other objects in view, as will hereinafter more fully appear, the invention consists in the novel construction and arrangement of parts, hereinafter described, delineated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that divers changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings:—Figure 1 shows my invention in front elevation; Fig. 2 is a vertical longitudinal section thereof; Fig. 3 is a transverse section, the cutting plane being passed through the lower terminal jaw 11 of Fig. 1; Fig. 4 shows the invention in top plan; Fig. 5 is a vertical longitudinal section designed to show in detail the specific means in which the lower terminal of the clamping rod is mounted; and Fig. 6 is a front elevation of a modified form of my device, portions being broken away in Figs. 2, 5, and 6.

In the particular form in which I have embodied my invention in the accompanying drawings, the numeral 1 denotes generally a supporting element comprising a body member 2 having a longitudinally disposed rib 3 upon which is mounted a plate 4, the said plate 4 being arranged to project laterally beyond the rib. I further provide a series of jaws 5 arranged to be slidably mounted upon the plate 4, each of said jaws having its ends intumed to engage the edges of the plate 4, as denoted by the numeral 6. The bottom of the plate 4 is upturned as shown at 7 to engage the bottom wire 8 of a fence

and to provide an abutment for the lower terminal jaw 11 of the series. Each of the jaws 5 is provided with a shoulder 10 positioned to overlap the jaw adjacent to that upon which the shoulder is mounted and arranged to retain between the jaws the line wires 9 of a fence.

The side plates 13 are mounted upon the edges of the body member 2, and are provided, at their upper extremities, with forwardly projecting lateral lugs upon their edges, the said lugs being inbent to engage the uppermost jaw, as denoted by the numeral 14.

Mounted upon the bottom of the body member 2 is the member 15 having its rear terminal upbent into contact with the rear face of the body member 2 and there secured by a bolt 16 passing through the body member 2 into engagement with the plate 4, as shown in Fig. 5. The forward terminal of this member 15 is bent to form a hook 17 arranged to project beyond the jaws 5 and vertically slotted, as shown at 18 in Fig. 3. I further provide a clamping rod denoted in the several figures by the numeral 19. This clamping rod 19 is of such a diameter that it may readily be introduced into the slotted hook 17, an enlarged terminal 20 upon said rod preventing its rotation when under stress, as hereinafter described.

The upper terminal jaw 11 of the series carries a bearing 21, in which the upper terminal of the rod 19 is mounted. The upper terminal of the rod 19 is threaded as denoted by the numeral 22 and a clamping member 23 is mounted thereon, the said clamping member 23 being threaded internally to engage the threaded terminal of the rod.

In order that a winch or like device adapted to stretch the fence may be connected operatively with my clamp, I provide the eyes 25 mounted upon the edges of the supporting element and having their terminals extended to engage the side plates upon the opposite side of the supporting element from that upon which the eye itself is located.

My examination of the prior art and my experience in manufacturing and operating fence clamps has brought to my attention the fact that a device of the class described, in order to present a satisfactory and durable structure, must be possessed of the following characteristics. Primarily, as the name of the device indicates, its clamping func-

tion must be well developed; and secondly, the structure must be rigid, for if the supporting element upon which the jaws are mounted bends in the clamping operation, the hold of the said jaws upon the wires will be lessened and the said jaws will become bent and their usefulness impaired. Primarily, of course, the clamping rod which I have shown is designed to draw the jaws together and to maintain their grip upon the wires. However, this clamping rod at the same time serves to truss the entire structure and to prevent it from bulging or bending when the jaws are brought into clamping relation upon the wires.

In practical operation, the supporting element is placed in contact with the line wires of a fence and these line wires are introduced between the adjacent jaws 5. The enlarged terminal 20 of the clamping rod 19 is made to engage the slot in the hooked member 17 and the rod then brought into an upright position in close relation to the jaws 5. The upper terminal jaw 11 is then slid to its place within the members 14, the bearing 21 engaging the upper terminal of the rod. The clamping member 23 is then rotated upon the rod and brought into bearing with the top of the upper terminal jaw 12, pressing all of the jaws in the series closely together, the downward movement of the entire series being prevented by the upturned portion 7 of the plate 4.

It is obvious that, as shown in Fig. 6, the rod 19 may be longitudinally slotted, a wedge 24 being passed through the slot in the rod into engagement with the top of the upper terminal jaw 12. When this wedge 24 is driven firmly into the slot, the several jaws of the series will be clamped together in the same manner as when the member 23 is employed.

The number of jaws 5 may be varied to fit the proposed use to which the clamp is to be put. I have mounted forty of them upon the supporting element and obtained good results. By making the jaws of small dimensions and multiplying their number, it is possible to apply the device to a fence hav-

ing a large number of wires, the several wires being spaced from each other at unequal distances.

I claim:—

1. A fence clamp comprising a supporting element; a series of alined jaws slidably mounted upon the supporting element; and a clamping rod having its lower terminal removably mounted in the supporting element, its upper terminal being mounted in the upper jaw of the series, the said rod being arranged to draw all of the jaws together.

2. A fence clamp comprising a supporting element; a series of alined coacting jaws slidably mounted upon the supporting element and having their ends intumed to engage the supporting element; and means for operating the jaws.

3. A fence clamp comprising a body member; a plate longitudinally mounted upon the body member and spaced therefrom; a plurality of coacting jaws slidably mounted upon the plate and having their ends intumed to engage the edges of the plate; and means for operating the jaws.

4. A fence clamp comprising a supporting element; alined coacting jaws slidably mounted upon the supporting element, each of said jaws having a shoulder to overlap the adjacent jaw; and means for operating the jaws.

5. A fence clamp comprising a body member; a series of alined jaws slidably mounted upon the body member; a jaw-clamping means having its lower terminal removably assembled with the body member, its upper terminal being mounted in the upper jaw of the series; side plates carried by the body member and being provided at their upper extremities with inbent lugs to engage said upper jaw.

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

ABRAHAM C. HARRISON.

Witnesses:

C. L. LASKEY,
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