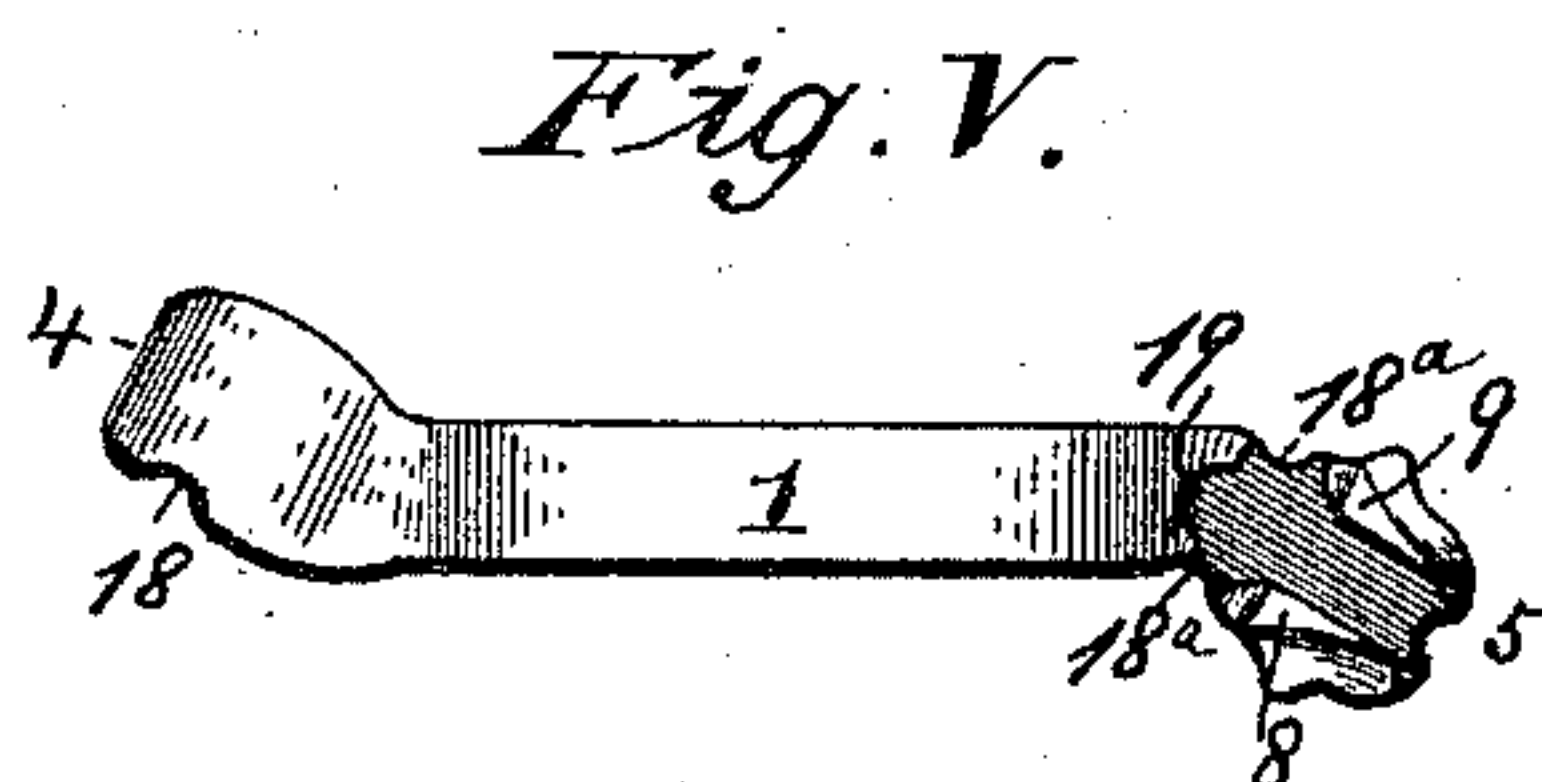
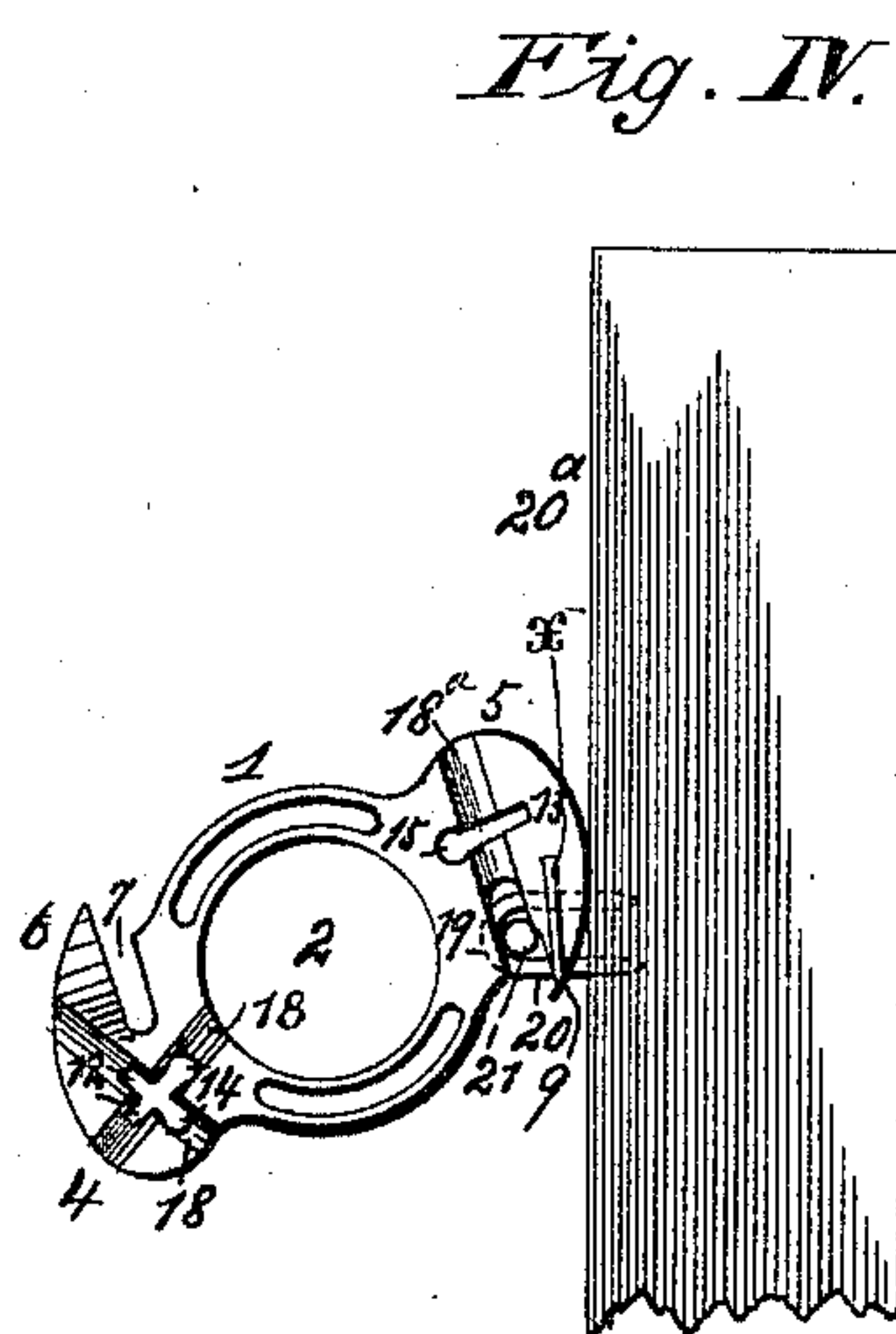
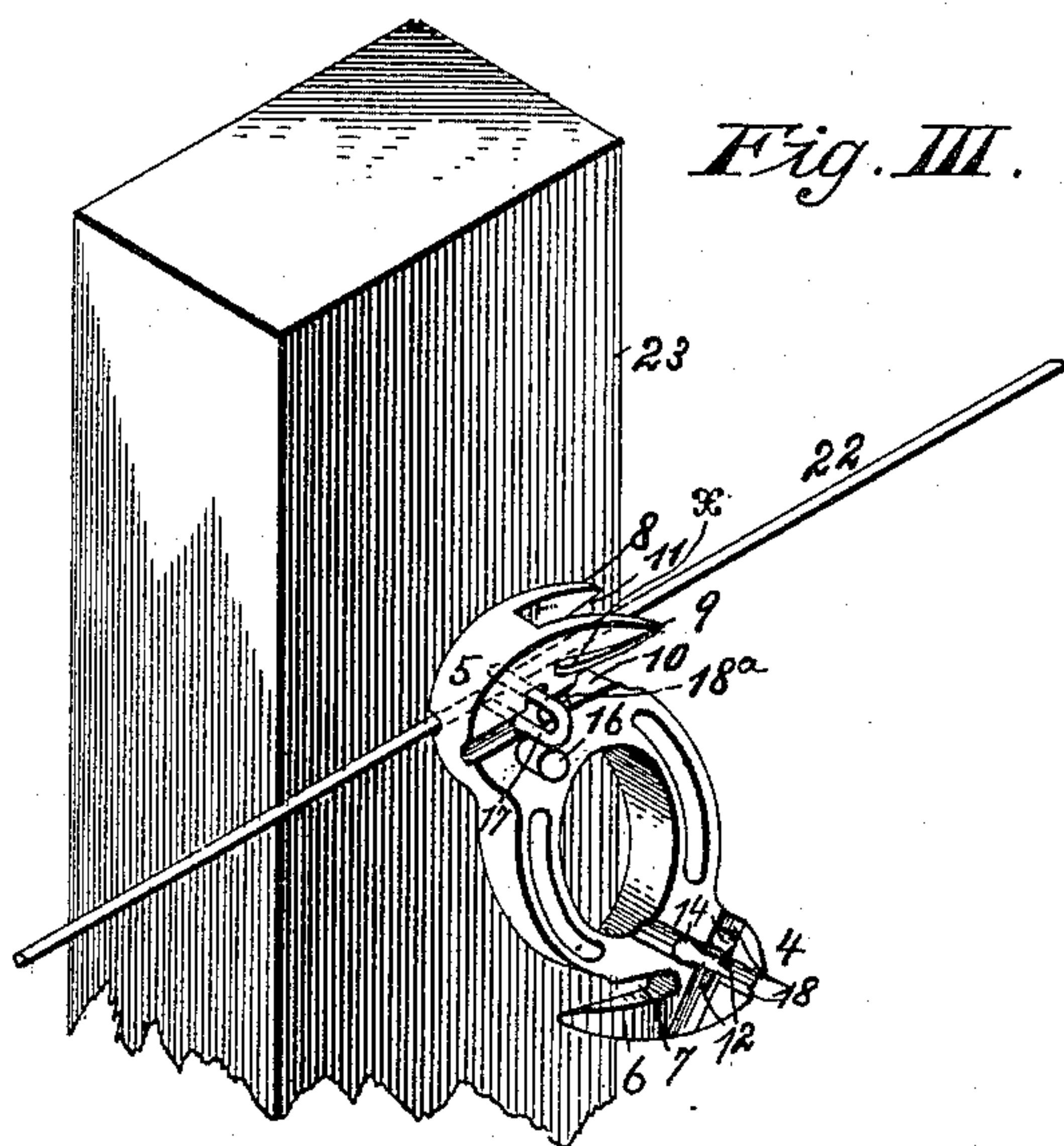
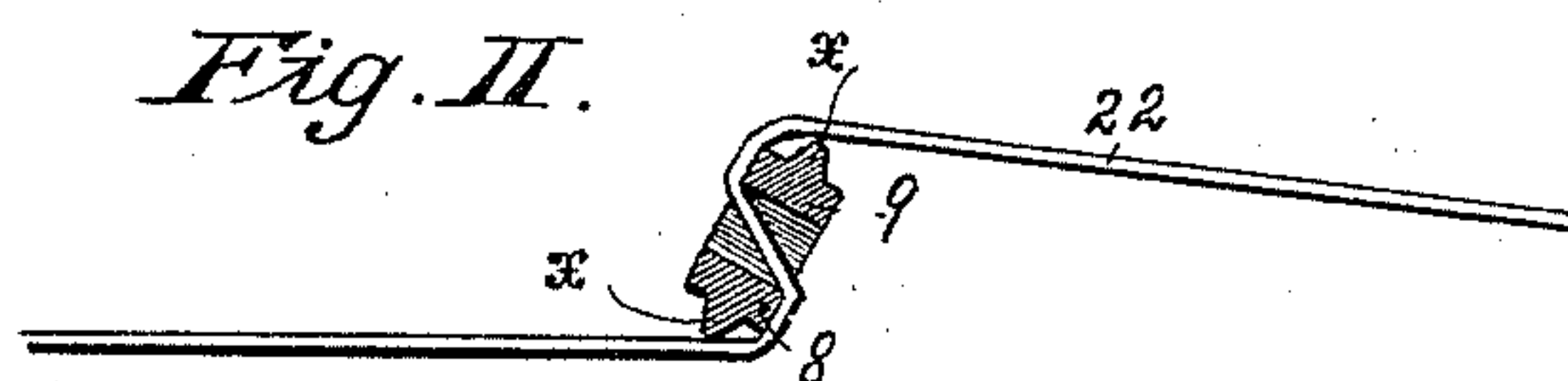
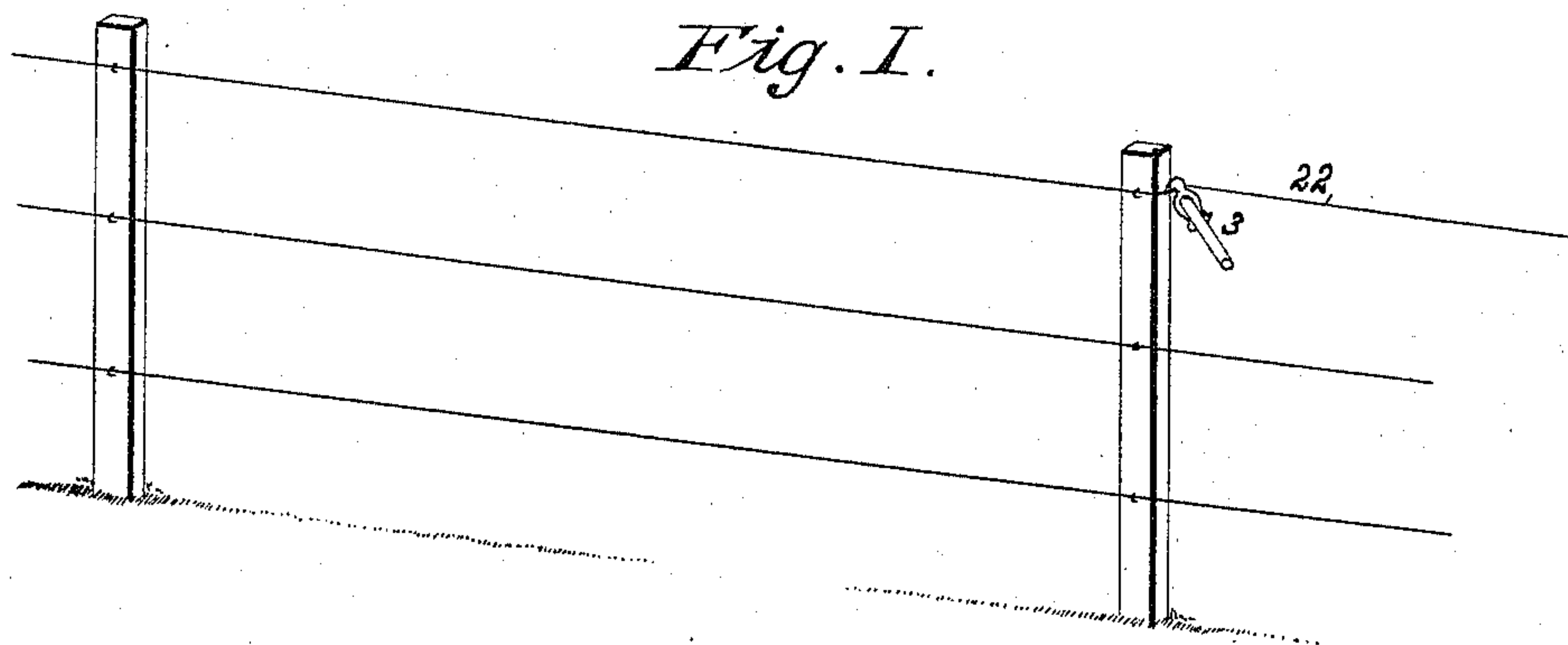


(No Model.)

F. W. SIMMONS.
COMBINED WIRE STRETCHER, STAPLE HOLDER, AND STAPLE PULLER.
No. 540,115. Patented May 28, 1895.



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UNITED STATES PATENT OFFICE.

FRANK W. SIMMONS, OF HANNIBAL, MISSOURI.

COMBINED WIRE-STRETCHER, STAPLE-HOLDER, AND STAPLE-PULLER.

SPECIFICATION forming part of Letters Patent No. 540,115, dated May 28, 1895.

Application filed July 9, 1894. Serial No. 516,993. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. SIMMONS, of Hannibal, in the county of Marion and State of Missouri, have invented a certain new and useful Combined Wire - Stretcher, Staple-Holder, and Staple-Puller, of which the following specification is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part thereof.

My invention has for its object to provide a simple and effective combination tool for use in putting up and taking down wire fences and to this end my invention comprises a wire stretching device, a staple puller, and a staple holder formed in a single tool which is simple and economical to manufacture and very convenient to manipulate.

The wire stretcher, staple puller and staple holder are of peculiar construction and their novel features will first be described in connection with the accompanying drawings and afterward particularly pointed out in the claims.

In said drawings, Figure I is a view of wire fence representing the manner in which my improved tool is used as a wire-stretcher. Fig. II is an enlarged detail view showing the wire-gripping head in section and representing the manner of engaging the wire for stretching it. Fig. III is a front perspective view illustrating the use of the tool for holding staples in position to be driven into a post. Fig. IV is a similar side elevation representing the use of the tool for pulling staples. Fig. V is an edge elevation of the tool.

Similar numerals and letters refer to similar parts throughout the several views.

1 represents the body of the tool having the opening 2 for the insertion of a handle or lever 3.

4 and 5 represent heads formed at opposite ends of the body. The head 4 is provided with the tapering hook extension 6 formed integral therewith which forms with the body 2 opening 7 and has a rounded or oval shaped fulcrum surface upon which the tool is rocked for extracting a staple after the hook is placed in engagement with it. The head 5 is also formed with the rounded or oval-shaped fulcrum surface and is provided with the integral double hook extensions, 8 and 9, each of which is tapered and formed with a side

strengthening rib *x*. The hook extensions 8 and 9 are separated by the opening 11 and form with the body 2 the opening 10.

12 represents elongated openings through the head 4 at right angles to each other, and 13 represents a like elongated opening through the head 5 said opening being adapted to hold the staples in position to be driven into a post. These openings are formed at one end with the enlargements 14 and 15 in which may be inserted a plug 16 to reduce the size of the opening to the size of the staple.

17 is a staple in the opening.

18 represents grooves in the side of the head 4 extending across the head in the same directions as the staple openings 12, and 18^a represents a groove in the head 5 extending across the head at right angles to the staple opening 13, said grooves being adapted to embrace the wire as it lies against the post when the device is used as a staple holder.

19 represents a notch or groove in the edge of the body 1, to the rear of the opening 11 between the hooks, into which the rounded end of the staple projects for holding the extracted staple and preventing its being lost when the double hooked head of the tool is used as a staple puller as shown in Fig. IV.

20 represents a staple being drawn from the post 20^a by my device, 21 representing the wire which is held by the staple, and which is engaged by the hooks 8 and 9 on each side of the staple for extracting the latter.

22 represents a wire upon the post 23, see Fig. III, upon which the staple 17 is about to be driven to secure the same. The single hook 6 and pair of hooks 8 and 9 extend oppositely from the body in order that the rounded portions of the heads may be presented to the hand in withdrawing staples with either head.

When using the tool as a wire stretcher, the hooks 8 and 9 are placed astride the wire and given a half turn, when the wire becomes engaged between the hooks as shown in Fig. II so that it will not slip. The handle 3 is then passed through the opening 2 in the body, and one end engaged against the post so as to form a fulcrum, while the other end is pressed to one side in the desired direction until the wire is drawn taut. The lever can then be held in this position by the

body of the operator, while both hands are left free to drive the staple on to the wire. When long lines of fence are being built it is desirable to secure the handle to the tool
 5 by passing a screw or nail through the enlarged end of one of the openings in the head into the handle. In repairing or when only short lines are being put up, the tool may very conveniently be used without thus se-
 10 curing the handle.

When using the tool as a staple puller, the hooks 8 and 9 are inserted between the wire and the post, astride the staple, and the rounded fulcrum surface is fulcrumed against the
 15 post, and the tool rocked thereon, thus affording ample leverage for easily withdrawing the staple. Should the wire break, or if it is desired to withdraw a staple not holding a wire, the point of the tapered hook 6 on the
 20 head 4 is inserted under the staple and the tool rocked on the fulcrum face of the head 4, or the head struck a blow with the hammer. The hooks being formed rounded or oval the danger of breaking the wire or sta-
 25 ple in the use of the implement is greatly reduced if not entirely removed.

When using the tool as a staple holder, the staple is inserted in one of the openings through the heads, and the head laid against
 30 the post as shown in Fig. III of the drawings, with one of the grooves embracing the wire and securely holding it between the points of the staple while the staple is driven in. The wooden plug in the opening regulates the
 35 size of the opening to suit the staple.

It will be observed from Fig. V. that the heads 4 and 5 extend at an angle from the opposite sides of the body 1. This is to keep
 40 the hand from coming in contact with the post and being injured, as would be the case were the heads in line with the body.

The tool is quite small and compact and can be conveniently carried in the pocket if desired.

45 In stretching barb-wire, the single pointed hook may be used by simply engaging it with the wire behind one of the barbs and giving it a partial twist and then inserting the lever and stretching in the same manner as above

described; or if it is desired to take up only 50 a small amount of slack the wire can be easily kinked by engaging the single hook with it and giving it a partial twist.

Having thus fully described my invention, the following is what I claim as new therein 55 and desire to secure by Letters Patent:

1. An improved tool comprising a body portion, the rounded heads formed at the opposite ends of the body, the single pointed hook formed integral with one of the heads, and 60 the double pointed hook formed integral with the other head, substantially as set forth.

2. An improved tool comprising the body portion, the heads formed at the opposite ends of the body and formed with the rounded or 65 oval-shaped fulcrum faces, the tapered single hook formed integral with one head, the double taper-pointed hook formed integral with the other head and strengthening side ribs for the double hook, substantially as set 70 forth.

3. An improved tool comprising the body portion, the rounded heads formed at the opposite ends of the body, the double hook formed integral with one of the rounded 75 heads, and the notch or groove in the body portion in the rear of the opening between the two hook portions adapted to receive the end of the staple, substantially as set forth.

4. An improved tool comprising a body por- 80 tion formed with an annular opening for the reception of a lever, heads formed on the body, a double hook formed integral with one head, a single hook formed on the other head, a suitable lever for the tool, and means for securing 85 it in place, substantially as and for the purpose set forth.

5. An improved tool comprising the body portion, the heads formed at the opposite ends of the body, the hooks and the elongated sta- 90 ple-holding openings formed with enlarged ends adapted to receive plugs to reduce their width, substantially as and for the purpose set forth.

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