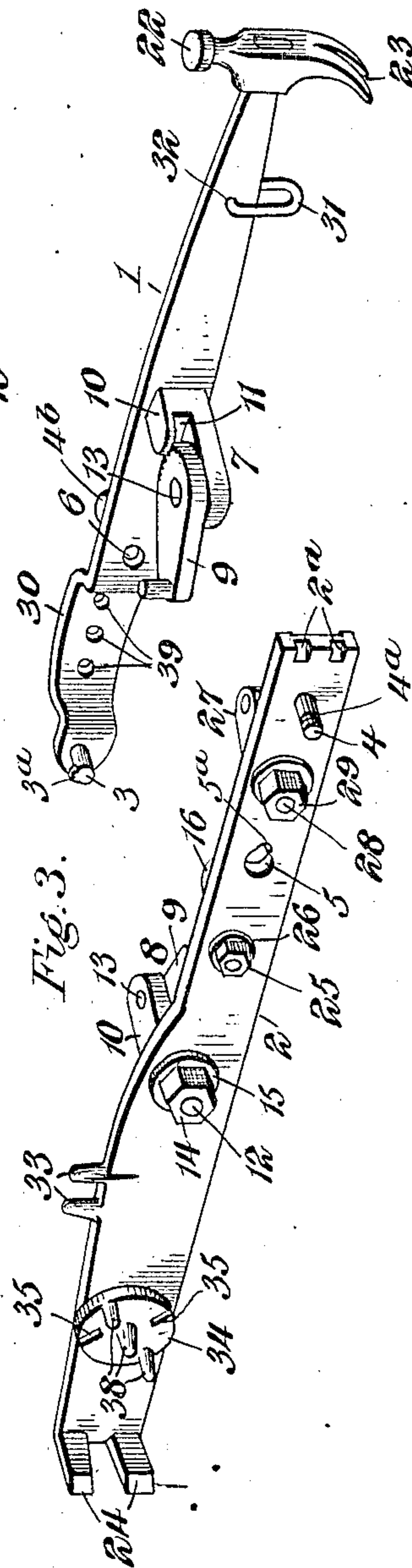
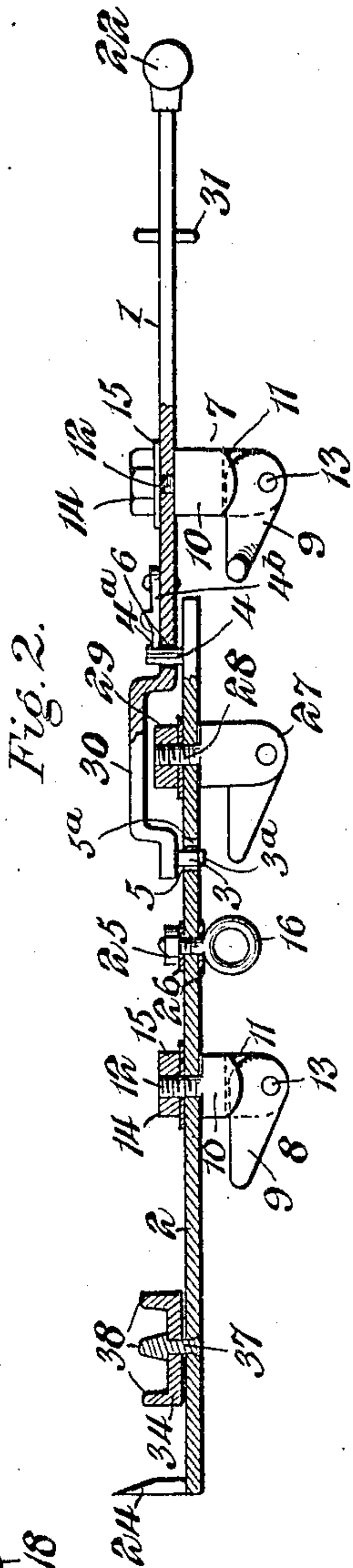
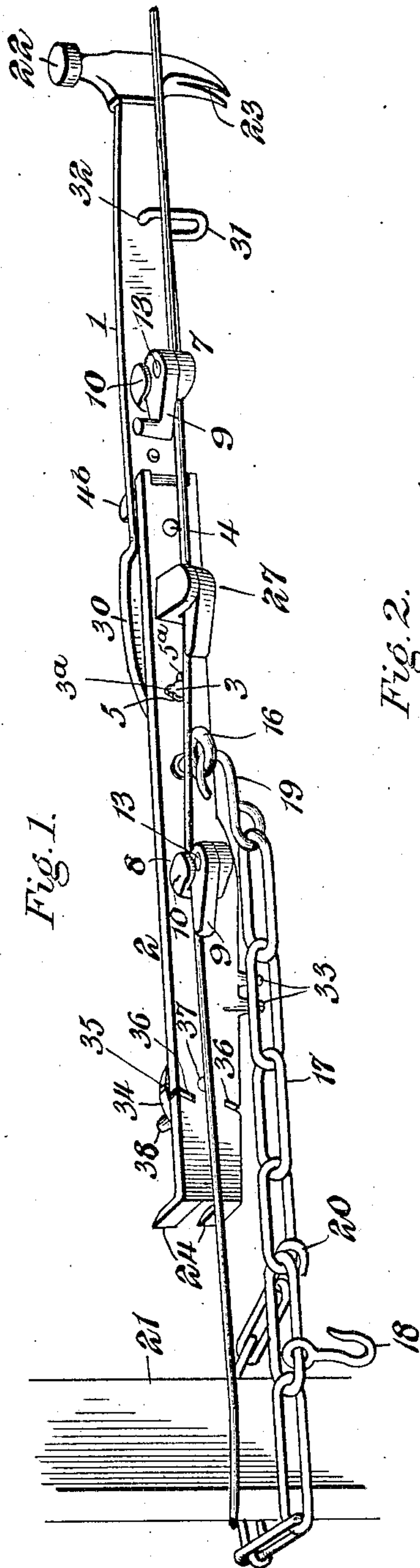


No. 849,390.

PATENTED APR. 9, 1907.

W. S. HAZELTON.
WIRE FENCE BUILDER.
APPLICATION FILED MAY 31, 1906.

2 SHEETS—SHEET 1.



Witnesses
Chas H. Ourand
J. J. R.

By

Inventor
W. S. Hazelton
W. S. Hazelton

Attorney

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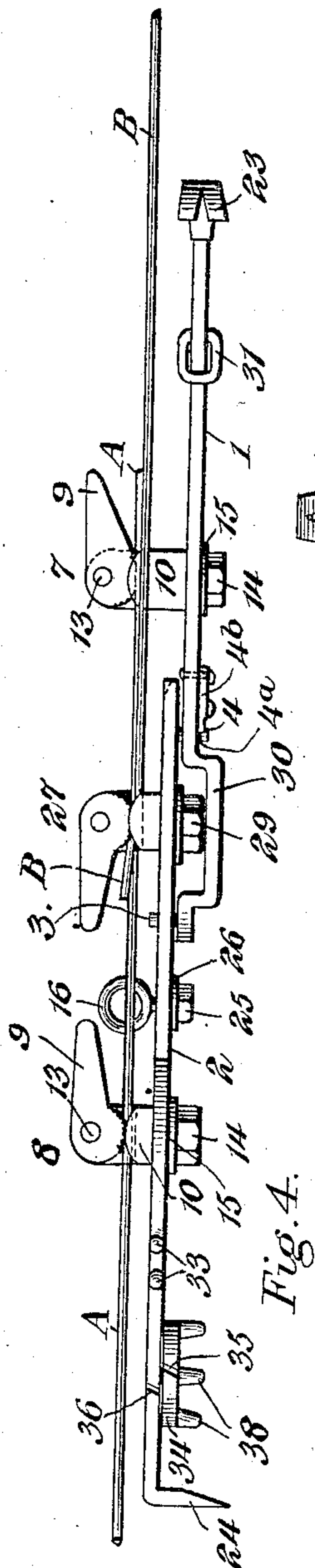


Fig. 4.

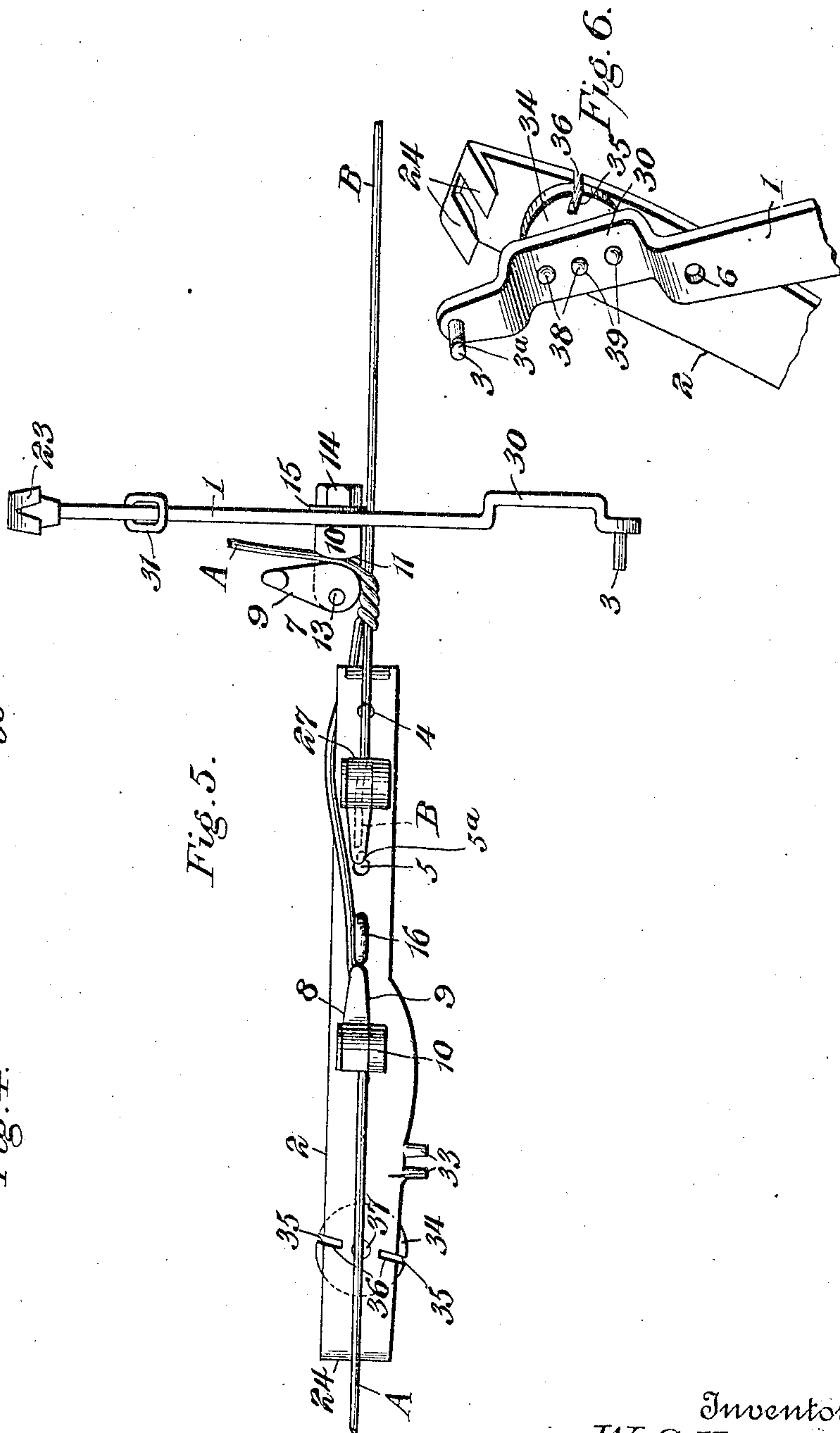


Fig. 5.

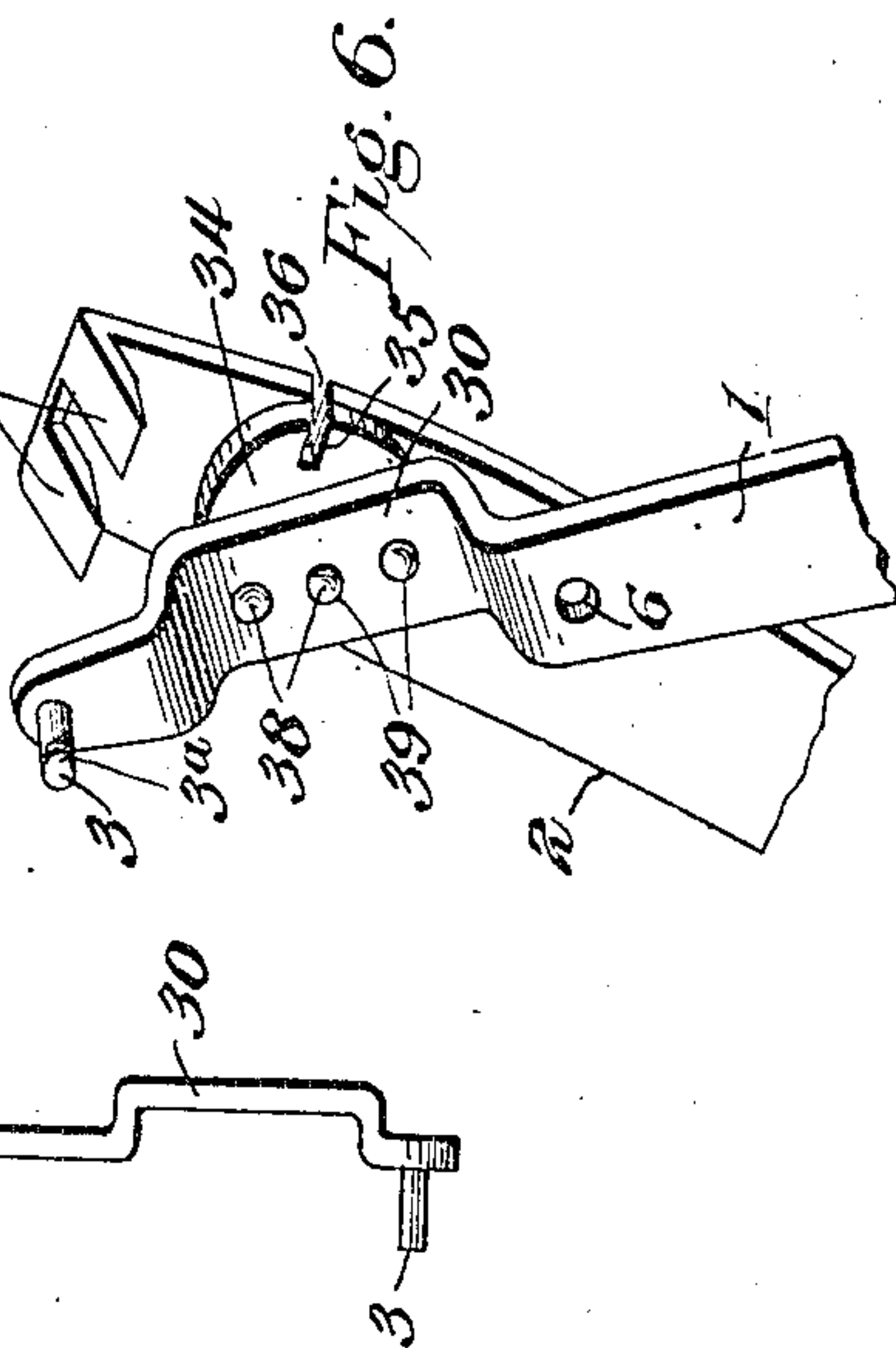


Fig. 6.

Witnesses
Chas. H. Ourand
J. F. Rely

Inventor
W. S. Hazelton
E. J. Siggers
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM S. HAZELTON, OF PROSSER, WASHINGTON.

WIRE-FENCE BUILDER.

No. 849,390.

Specification of Letters Patent.

Patented April 9, 1907.

Application filed May 31, 1906. Serial No. 319,596.

To all whom it may concern:

Be it known that I, WILLIAM S. HAZELTON, a citizen of the United States, residing at Prosser, in the county of Benton and State of Washington, have invented a new and useful Wire-Fence Builder, of which the following is a specification.

The invention relates to a wire-fence builder.

The object of the present invention is to provide a simple, inexpensive, and efficient wire-fence builder designed for constructing and repairing fences and adapted to enable a fence-wire to be readily stretched and held while it is being stapled or otherwise secured to a fence-post.

Another object of the invention is to provide a device of this character adapted for drawing the ends of a broken wire together at a point between the fence-posts and capable of enabling the terminals of the wire, after being overlapped, to be twisted at opposite points to form what is commonly known as a "telegraph-splice."

It is also the object of the invention to provide a device adapted to be conveniently employed for stretching fence-wires in a variety of ways at a fence-post and capable of enabling staples to be readily extracted without injuring the wire and of also enabling heavy fence-wire to be easily cut.

With these and other objects in view the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a wire-fence builder constructed in accordance with this invention and shown in position for stretching a wire at a fence-post. Fig. 2 is a longitudinal sectional view of the device, the chain being removed. Fig. 3 is a perspective view showing the two members of the device separated. Fig. 4 is a plan view of the device, showing the same arranged for splicing the broken ends of a fence-wire. Fig. 5 is an elevation of the

same, showing one end of the wire partially twisted by one of the members of the device. Fig. 6 is a detail perspective view showing the parts arranged for operating the wire-cutter.

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

1 and 2 designate two sections or members which are adapted to be fitted together to form a lever for stretching a fence-wire or the broken ends of a wire, as hereinafter more fully explained.

The inner contiguous ends of the sections 1 and 2 of the lever are overlapped and are interlocked by means of pins 3 and 4 and corresponding perforations 5 and 6. The pin 3 extends from one of the side faces of the section or member 1, and it fits in the perforation 5 of the other section or member 2, and the pin 4 of the latter section fits in the perforation 6 of the section or member 1. The pins or studs 3 and 4 are in practice of sufficient length to securely interlock the parts, as clearly shown in Fig. 2 of the drawings.

In order to positively retain the sections or members 1 and 2 in their overlapped interlocked relation, the pin 3 is provided at its outer end with a projection 3^a, extending laterally from the said pin 3 and forming a partial head, which is adapted to be passed through the perforation 5 of the member 2, when the member 1 is arranged at right angles to the same. The projection 3^a extends upward from the pin 3 when the member 1 is arranged as shown in Fig. 3, and the perforation 5 is provided with an extension or enlargement 5^a to conform to the configuration of the head or projecting portion 3^a. When the members 1 and 2 are arranged in alinement, the projecting head 3^a is carried away from the extension 5^a of the perforation 5 and the pin 3 is securely retained or held in the perforation 5. The other pin 4 is provided at its outer end with a notch 4^a, which is adapted to receive a pivot-catch 4^b, mounted on the member 1 and having a beveled portion to engage the pin 4. The members 1 and 2 have sufficient play on the pin 3 to enable the pin 4 to be readily inserted and removed from the perforation or opening 6 of the member 1; but when the parts are interlocked and the catches engage with the

stud the members 1 and 2 are rigidly secured together.

The section or member 1 is provided at an intermediate point with a wire-engaging clamp or grip 7, and the other section or member 2 has a similar clamp 8, located at an intermediate point between its ends. Each of the wire-engaging clamps or grips 7 and 8 is swiveled to the device, and consists of a clamping-jaw 9 and a body portion 10, having a fixed cooperating jaw 11 and provided with a shank 12. The fixed jaw of the body portion is provided with a projecting lip, which extends over a movable jaw or lever 9, as clearly shown in Fig. 2 of the drawings, to prevent the wire from becoming accidentally disconnected from the clamp or grip through any lateral strain incident to the swinging or rotary movement of the device, as hereinafter explained. The movable jaw 9, which is preferably corrugated or otherwise roughened to prevent the wire from slipping, is mounted on a pivot 13, which may be of any desired construction. The shank 12 extends through a perforation of the contiguous section or member and is threaded to receive a nut 14, a washer 15 being preferably interposed between the nut and the section or member, as shown.

The section or member 2 is provided at its inner portion, at a point between the clamp or grip 8 and the inner end of the section or member, with a swiveled eye 16, which is adapted to receive one end of a chain 17. The chain is provided with an intermediate hook 18, and it has terminal hooks 19 and 20.

When it is desired to stretch a fence-wire for stapling the same to a fence-post, the hook 19 of one end of the chain is placed in the swiveled eye 16, and the other end of the chain is looped around the post 21, as shown in Fig. 1, by engaging the hook 20 with one of the intermediate links of the chain. The wire is then drawn by hand and is placed in one of the grips or clamps 7 and 8, and the lever, formed by the sections or members 1 and 2, is then partially rotated on the pivot formed by the swiveled eye to stretch the wire. A one-half turn of the lever moves the other one of the said clamps or grips 7 and 8 to the outer portion of the device in position for engaging the fence-wire, as shown in Fig. 1. This will retain the device in engagement with the wire, while the same is being stapled or otherwise secured to the fence-post, should the wire be tight enough. If not, the stretching operation must be repeated until the wire is placed under the desired tension. The device should be operated so that before the stretching operation is completed the section or member 1 may be removed without loosening the wire. The section or member is provided at its outer end with a hammer-head 22 and may be used as a hammer for stapling the wire to

the fence-post. Instead of employing the swiveled eye 16 the member 2 may be provided with an opening to receive the chain.

The hammer-head is provided with a claw 23, and the outer end of the other section or member 2 is provided with a pair of spaced projecting chisel-blades 24, extending outward at right angles from one of the side faces of the said section or member 2 and adapted to be used for cutting out the wood back of a fence-wire at opposite sides of a staple, so that the staple may be engaged by the claw of the hammer for extracting the same. The spaced blades 24 are adapted to straddle a staple, and when the wood is cut away back of the wire the staple may be extracted from the post without injuring the fence-wire. The swiveled eye is provided with a shank which pierces the section or member 2 and which is secured to the same by means of a nut 25, washers 26 being employed and arranged at opposite sides of the section or member between the same and the eye and the nut.

When it is desired to splice the ends of a broken wire, the lever formed by the members 1 and 2 is used in a manner similar to that heretofore described. The chain, however, is not employed, and an intermediate grip or clamp 27 is used. The intermediate grip or clamp 27 is constructed the same as those heretofore described. It extends outward from the same face of the section or member 2 as the clamp or grip 8, and its shank 28 pierces the said member 2 at a point between the pin or stud 4 and the perforation 5. The nut 29 of the intermediate grip or clamp is arranged within a lateral bend or offset portion 30 of the section or member 1. The offset or bent portion 30, which is located at the inner end of the member 1, clears the nut 29 and does not interfere with any rotary or pivotal movement of the intermediate grip or clamp. The ends A and B of the broken wire are placed in the outer grip or clamp 7 and in the intermediate clamp 27, respectively, and the lever is then partially rotated to overlap the terminals of the wire. The wire A is then placed in the clamp or grip 8, and it will be seen that both of the wires will be firmly held by the member 2. The interlocking portions of the members are then disconnected, and the member 1 is thereby left hanging loose, being engaged with the terminal of the wire A. The said member 1 is then operated to twist the wire A around the wire B to form the first coil of a telegraph-splice. Previous to twisting the wire A around the wire B the said wire A is placed back of the adjacent end of the member 2, as indicated in Fig. 5 of the drawings. The member 2 is provided with notches 2^a, either one of which is adapted to receive the wire. The outer grip 8 is then disengaged from the wire, and the mem-

ber 2 is then operated to wrap its end of the wire around the other portion of the wire. This forms the second coil of the telegraph-splice, and the broken ends of the wire are in this manner securely spliced. If necessary, a short piece of wire may be attached to one of the ends of a broken wire when the latter cannot otherwise be stretched sufficiently to form a splice. Also if the wire is not stretched sufficiently tight through the first stretching operation the operation may be repeated, as the overlapped ends of the wire will be held by the intermediate grip at the end of each stretching operation.

The device may be employed for stretching a wire around a fixed post without unstapling the wire. This operation is performed by first attaching a short piece of wire to the fence-wire at one side of the fence-post. The intermediate hook 18 of the chain is then linked into a loop 31 of the member 1, and the terminals of the chain are connected with the fence-wire at opposite sides of the post. The member 1 is then used as a lever by fulcruming its hammer end on the post. This will enable the fence-wire to be drawn around the opposite sides of the post, and when the wire is stretched to the desired tension the other end of the short connecting-piece is secured to the wire. The short connecting-piece passes around the back of the post in the usual manner. The loop 31 is linked into a perforation 32 of the member 1, but the intermediate hook 18 may be placed in the perforation 32, and the loop 31 may be dispensed with without affecting the result. The device may also be employed for stretching the fence-wire at a post without employing the separate piece of wire as before described, and the member 2 is provided at one of its edges with a pair of spaced projecting studs 33, which are adapted to engage the fence-wire after the staple has been extracted. The studs 33 are placed at opposite sides of the wire, and the member 2 is then rotated to twist the wire to a greater or less extent for stretching the wire to the desired tension. The wire is then secured to the post by staples or other suitable fastening devices.

The device is provided with a wire-cutter, which consists of a rotary disk 34, provided with opposite wire-receiving notches 35 and cooperating with similar notches 36 of the member 2. The disk is provided with a pivot 37, which pierces the member 2 and which is preferably headed to retain it in engagement with the said member 2. The disk may be pivoted in any other desired manner, and it is also provided with central and side projections or studs 38, which are adapted to engage corresponding perforations 39 of the lateral offset projecting portion 30 of the member 1. The member 1 is interlocked with the disk 34, as shown in Fig. 6 of the drawings, and the two members

are then used in the manner of a pair of pliers to partially rotate the disk on the member 2. The wire to be cut is placed in a recess of the member 2 and in a recess of the disk, and it is readily severed by partially rotating the disk to carry its recess away from that of the member 2. The offset or bend 30 of the member 1 offsets the members from each other to enable them to clear each other in the pivotal movement incident to the operation of the wire-cutter.

When the device is used as a lever for stretching a fence-wire, the two members are connected together, if it is desired to exert considerable power in such stretching operation; but when this is not necessary the stretching may be effected by the member 2, and the other member 1, which is provided with a hammer, may be conveniently used for driving a staple or other fastening device for securing the wire.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A wire-stretcher comprising a lever composed of two members detachably interlocked and provided with separate wire-engaging devices, and a flexible connection provided with means for engaging the lever.

2. A wire-stretcher comprising a lever composed of two members having overlapped portions and provided with means for detachably interlocking the same, and separate wire-engaging means carried by the members of the lever.

3. A wire-stretcher comprising a lever composed of separable members provided with wire-engaging means, and a flexible connection adapted to engage the lever and having intermediate and terminal engaging devices.

4. A wire-stretcher comprising a lever composed of separable members having overlapped portions, each provided with a projecting stud and a perforation, the stud of each member being detachably fitted into the perforation of the other member, and wire-engaging means carried by the members.

5. A wire-stretcher comprising a lever composed of two separable members having overlapped portions, the overlapped portion of one of the members being bent outwardly or offset and the said members being provided with interlocking means located at the ends of the outwardly-bent or offset portion, an intermediate wire-clamp mounted on the other member and having its attaching means located within the said outwardly-bent portion or offset, and outer wire-clamps mounted on the members and spaced from the intermediate clamp.

6. A wire-stretcher comprising a lever consisting of two separable members, an intermediate wire-clamp mounted on the lever,

and outer wire-clamps carried by the members and spaced from the intermediate clamp.

7. A wire-stretcher comprising a lever consisting of two separable members having spaced wire-engaging means.

8. A wire-stretcher comprising a lever consisting of two separable members carrying spaced wire-engaging means, one of the members being also provided with a laterally-bent portion and the other member having a notch, and a rotary wire-cutting device mounted on the member having the notch and provided with a corresponding notch, said wire-cutting device and laterally-bent portion having interlocking means.

9. A wire-stretcher comprising a lever consisting of two separable members having overlapped portions detachably interlocked, one of the interlocked portions being laterally bent and provided with perforations, and a rotary wire-cutting device mounted on the other member and having projections for engaging the perforations of the laterally-bent portion of the first-mentioned member.

10. A wire-stretcher comprising a lever provided with a pair of spaced wire-engaging lugs extending from one side of the lever and adapted to straddle a wire for twisting the same.

11. A wire-stretcher comprising a lever composed of two separable members having overlapped portions, one of the members being provided with a stud having a projection

forming a partial head, and the other member being provided with an opening adapted to permit the stud to be inserted in and removed from it when the members are arranged at an angle to each other, means for locking the members in alinement, and wire-engaging means carried by the lever.

12. A wire-stretcher comprising a lever composed of separable members having overlapped portions, each provided with a projecting stud and a perforation, the stud of one of the levers having a partial head and the corresponding perforation of the other member being arranged to permit the head to be passed through it when the members are arranged at an angle to each other, and a catch arranged to engage the other stud for locking the levers in alinement.

13. A wire-stretcher comprising a lever composed of separable members having overlapped portions, each provided with a projecting stud and a perforation, and a catch mounted on one of the members and engaging the stud of the other member, whereby the two members are retained in their interlocked relation.

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

WILLIAM S. HAZELTON.

Witnesses:

DON PEARL,
E. O. WILSON.

It is hereby certified that in Letters Patent No. 849,390, granted April 9, 1907, upon the application of William S. Hazelton, of Prosser, Washington, for an improvement in "Wire-Fence Builders," an error appears in the printed specification requiring correction, as follows: In line 125, page 3, the word "beat" should read *bent*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 23d day of April, A. D., 1907.

[SEAL.]

E. B. MOORE,
Acting Commissioner of Patents.