

W. S. HAZELTON.  
WIRE FENCE BUILDER.  
APPLICATION FILED AUG. 28, 1908.

925,905.

Patented June 22, 1909.

2 SHEETS—SHEET 1.

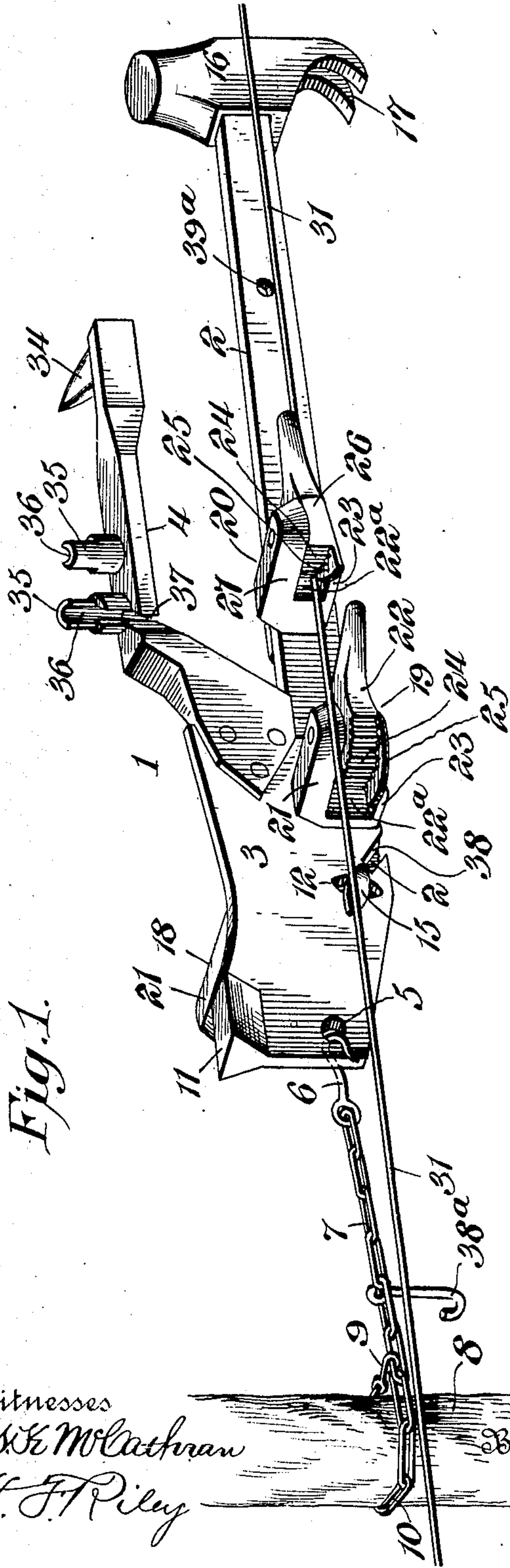


Fig. 1.

Witnesses  
Jas. K. McLaughlin  
H. J. Riley

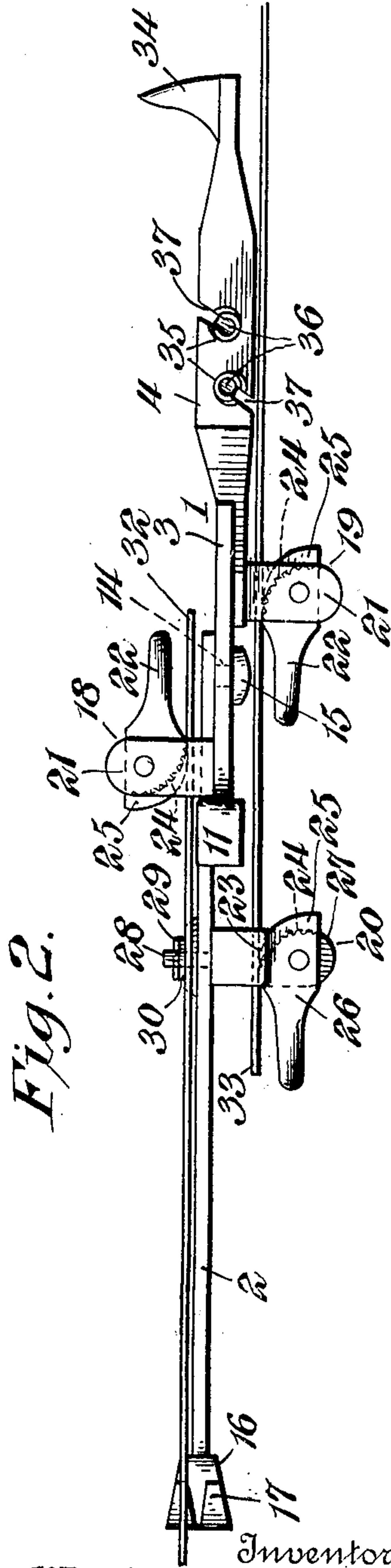


Fig. 2.

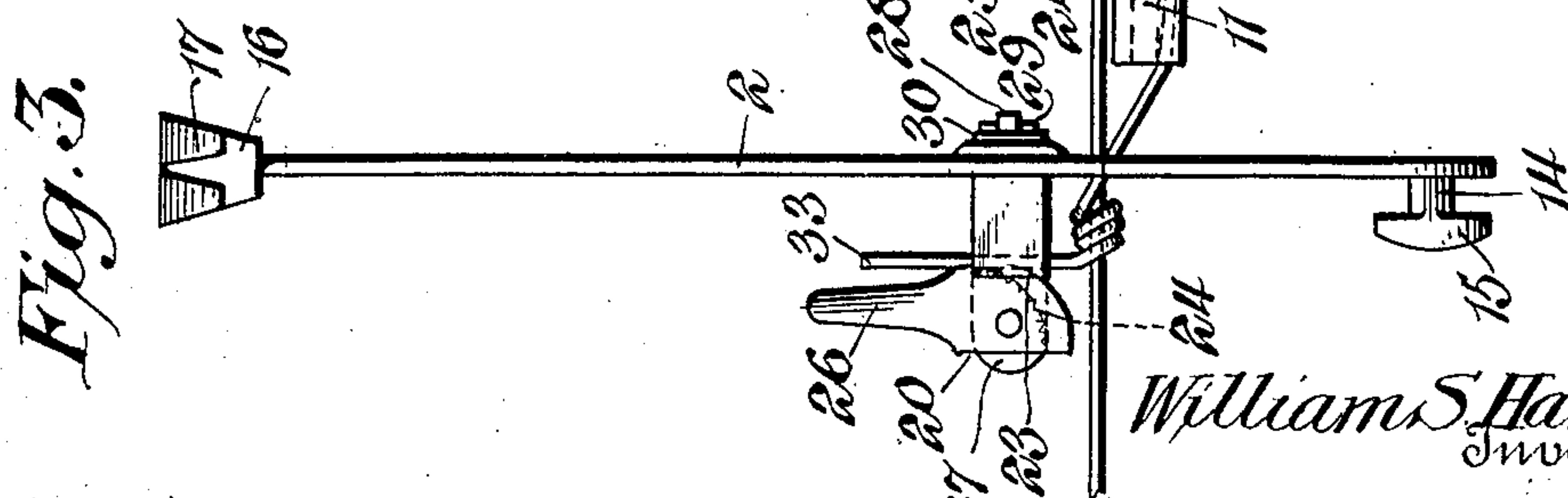
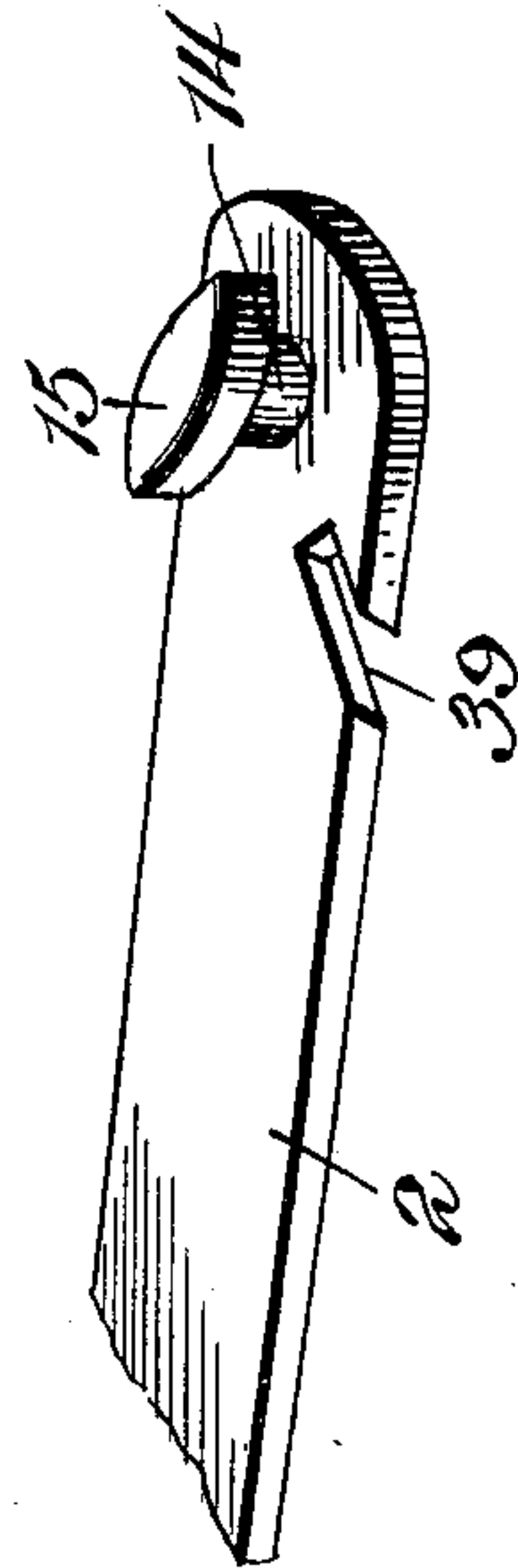
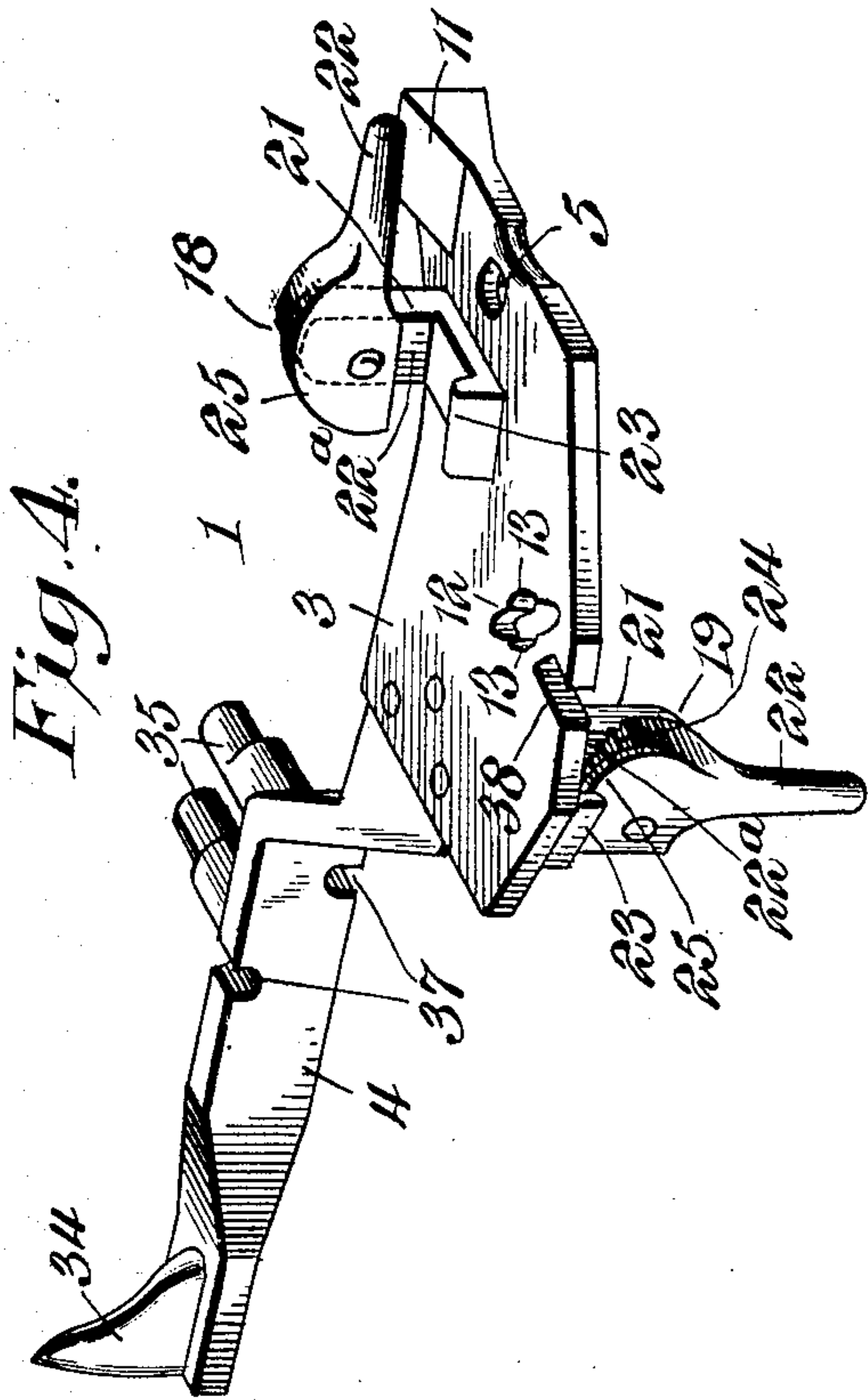
Inventor  
William S. Hazeltone  
E. G. Siggers  
Attorney

W. S. HAZELTON.  
WIRE FENCE BUILDER.  
APPLICATION FILED AUG. 28, 1908.

925,905.

Patented June 22, 1909.

2 SHEETS—SHEET 2.



Witnesses  
Jas. E. McLaughlin  
J. F. Riley

William S. Hazelton  
Inventor

E. G. Siggers  
Attorney



# UNITED STATES PATENT OFFICE.

WILLIAM S. HAZELTON, OF PROSSER, WASHINGTON.

## WIRE-FENCE BUILDER.

No. 925,905.

Specification of Letters Patent.

Patented June 22, 1909.

Application filed August 28, 1908. Serial No. 450,680.

*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 improve the construction of wire fence builders, and to provide a simple, inexpensive and efficient wire fence builder, adapted when employed in constructing wire fences to enable a fence wire to be easily and quickly stretched to the desired tension, and capable of holding the stretched wire while the same is being stapled or otherwise secured to a fence post.

Another object of the invention is to provide a device of this character adapted, when repairing broken fence wires, to enable the ends to be readily drawn together, overlapped and twisted at each end of the joint or splice to construct either a loop or telegraph splice.

A further object of the invention is to provide a wire fence builder, equipped with means for removing staples from the fence post to unfasten the fence wire, and having means for twisting or looping the wire to tighten the same, and adapted to enable fastening devices to be driven through the twisted or looped portions of the wire, while the same is held by the device.

Furthermore the invention has for its object to provide a wire fence builder composed of separable parts, capable, when connected, of being readily operated to cut heavy fence wires, and when separated, to hold a fence wire while one of the said parts is being employed for fastening the wire.

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 ar-

anged for stretching a fence wire. Fig. 2 is a plan view, the wire fence builder being arranged for splicing a fence wire, and the lever being swung over from the position shown in Fig. 1 to the opposite end of the relatively fixed member for overlapping the ends of the wire. Fig. 3 is a plan view, the lever being disconnected from the relatively fixed member and shown arranged for twisting one of the ends of the wire around the other to make a telegraph splice. Fig. 4 is a detail perspective view of a relatively fixed member, the same being inverted to show the underside thereof. Fig. 5 is a detail perspective view of the pivoted end of the lever.

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

The wire fence builder comprises in its construction a relatively fixed member 1 and a lever 2, detachably pivoted to the relatively fixed member and adapted to be oscillated to either stretch a fence wire, or to draw together and overlap the two ends of a broken wire for splicing the same.

The relatively fixed member 1 consists of a plate 3 and an arm 4, extending longitudinally from one end of the plate and located substantially in alinement with one of the side edges of the plate 3. The plate is provided at its front end with an opening 5 for the reception of a hook 6 of a chain 7, which is adapted to be looped around a post 8, as clearly illustrated in Fig. 1 of the drawings, when building a wire fence. The hook 6 is located at one end of the chain, and the latter is also provided at its other end with a hook 9, adapted to engage the various lengths of the chain to form the loop 10, which encircles the post 8. The front end of the plate 3 is also provided with an enlargement 11, extending along one of the side edges of the plate and adapted to form a hammer head. The enlargement is substantially triangular in cross section, and it presents a flat outer striking face. The plate is provided at an intermediate point with an oppositely tapered bearing opening 12, enlarged and rounded at opposite sides of the center at 13 to provide a bearing for a pivot 14, extending laterally from the inner pivoted end of the lever 2 and having an oppositely tapered head 15, adapted when arranged longitudinally of the opening 12 to be passed through the same and capable, when moved out of such position by the oscillation



of the lever, to retain the pivot 14 in the bearing opening 12. By this construction the lever 2 is detachably connected with the relatively fixed member, and is adapted to be readily separated from the same to enable it to be operated independently of the relatively fixed member for twisting one of the broken ends of a wire around the other end in making a splice and also to permit the lever to be used as a hammer for driving staples and the like. The lever is equipped at its outer end with a hammer head 16, having a claw 17 at one end and provided at its other end with a striking face.

The relatively fixed member is equipped with rigidly mounted clamps 18 and 19, located at the opposite side faces of the plate 3, and the lever is provided with a pivotally mounted clamp 20, located at the same side of the device as the clamp 19, which is adapted to engage and fold a wire, after the same has been stretched by the oscillation of the lever 2. Each of the rigidly mounted clamps consists of a fixed substantially L-shaped member 21, and a pivoted cam lever 22. The fixed L-shaped member 21, which may be formed integral or otherwise mounted on the plate 3, forms a projecting arm and provides a wire-receiving seat 22<sup>a</sup>. The arm extends from one side of the seat, which has a retaining flange 23 at the opposite side to prevent the wire from slipping laterally out of the clamp. The lever 22, which is eccentrically pivoted to the arm or projecting portion of the member 21, is provided with a roughened or serrated wire-engaging face 24, and it has a lip or flange 25 located at one side of the wire-engaging face to cooperate with the flange 23 and retaining the wire within the clamp.

The clamp 20 is composed of a cam lever 26 and a substantially L-shaped lever 27, provided with a stem or pivot 28, piercing the lever 2 and secured to the same by means of a key or pin 29, a washer 30 being interposed between the same and the lever. The L-shaped member 27 forms a seat for the wire and is provided with a projecting flange at one side of the seat, while the lever 26, which is eccentrically pivoted to the arm or projecting portion of the L-shaped member, is constructed similar to the wire-engaging lever 22 heretofore described.

In stretching fence wires in wire fence building, the parts are arranged, as illustrated in Fig. 1 of the drawings, the chain 7 being looped around the post and linked into the opening 5 of the front end of the relatively fixed member. The lever is connected by means of its pivot to the relatively fixed member, and is extended longitudinally of the wire fence builder from the rear portion of the relatively fixed member. While in this position, its clamp 20 is engaged with the wire 31 and the lever is then swung for-

ward in the direction of the post to carry the clamp 20 from its position in rear of the clamp 19 to a point in advance of the same. The wire 31 is then placed in the clamp 19 and released from the clamp 20, the clamp 19 serving to hold the wire while the lever 2 is being swung backward and arranged for a second stretching operation. This operation is repeated until the wire is stretched to the desired tension. When the wire is stretched to the desired tension, it is secured and held by the clamp 19, while the lever 2 is detached and used as a hammer for stapling or otherwise securing the wire to the post. The pivotal mounting of the clamp enables the wire to be stretched without twisting the same. The head 15 of the pivot is arranged so as to register with the elliptical opening 12, when the lever is at a point intermediate of the ends of its oscillatory movement, and the lever is brought to such intermediate position to detach it from the relatively fixed member. The opening 13 is located adjacent to one of the side edges, and the arm 4 is located at the other side edge in order to offset the arm from the lever so as not to interfere with the operation of the latter. The wires of a fence are successively stretched and secured to a post, and the device is then advanced to the next post where the stretching operation is repeated.

In operating the wire fence builder for splicing the ends of a broken wire, one end 32 of the wire is placed in the clamp 18 of the relatively fixed member, and the other end 33 of the wire is secured in the clamp 20 of the lever 2, which at the beginning of the operation, extends from the rear end of the relatively fixed member. The lever 2 is then swung forward from this position to carry the clamp 20 to a point in advance of the clamp 19 in which the wire 33 is then secured, as illustrated in Fig. 2 of the drawings. The lever 2 is then swung backward a sufficient distance to disengage its pivot from its relatively fixed member, the wire 33 being still held by the clamp 19. The detached lever 2 is then operated to twist the end 33 of the wire around the end 32, as clearly illustrated in Fig. 3 of the drawings to form one of the coils of a telegraph splice. After the first coil of the telegraph splice is completed, the wire 33 is removed from the clamp 19, and the relatively fixed member is then operated to twist the wire 32 around the wire 33, which forms a second coil and completes the telegraph splice.

The arm 4 of the relatively fixed member is provided with a tapered laterally extending projection or spur 34, adapted to be introduced into a staple, which is readily extracted from a post by using the relatively fixed member as a lever. After the staple has been extracted, the slackened wire may be taken up by means of a pair of laterally



extending lugs 35, spaced apart and reduced at their outer portions, the outer and inner portions being of different diameters to form loops of different sizes. The wire to be  
 5 tightened is placed between the lugs 35, and the relatively fixed member is then used as a lever for twisting or looping the wire around the lugs. The lugs 35 are provided with longitudinal grooves 36, and the arm 4 has cor-  
 10 responding notches 37, which register with the inner ends of the grooves 36. These provide passages for enabling nails, or other suitable fastening devices to be driven into the looped or twisted portion of the wire,  
 15 while the same is being held by the lugs and before withdrawing the latter from the loops. After the looped or twisted portion of the wire has been fastened, the lugs may be withdrawn from engagement with the wire.  
 20 The relatively fixed member 1 and the lever 2 are provided with cooperating notches or recesses 38 and 39, located adjacent to the pivot 14 and forming a wire cutter, adapted to enable heavy fence wire to be easily and  
 25 quickly cut.

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  
 30 to the fence wire at one side of the fence post. The chain 7 is equipped with an intermediate hook 38<sup>a</sup>, which is engaged with a perforation 39<sup>a</sup> of the lever 2. The terminal hooks of the chain are connected with the fence wire  
 35 at opposite sides of the post, and the lever is then fulcrumed on the latter, its hammer head being placed against the post. This will enable the fence wires to be drawn around the opposite sides of the post and  
 40 when the wire is stretched to the desired tension, the other end of the connecting piece is secured to the wire. The short connecting piece passes around the back of the post in the usual manner. The wire fence builder is  
 45 also adapted to enable the two ends of a broken wire to be drawn together and connected by a loop splice. In performing this operation, the ends of the wire are drawn together and overlapped the same as in making  
 50 a telegraph splice, both wires 32 and 33 being held by the clamps 18 and 19 of the member 1, while the wire 33 is looped around the wire 32 at the front end of the member 1, the member 2 having been previously disconnected from the member 1 for this purpose.  
 55 The wire 33 is then removed from the clamp 19, and the member 1 is swung forward to loop the wire 32 with respect to the wire 33, which by being located at and engaged by the front end of the member 1 will be prevented from slipping. After the wires have been looped in this manner, the terminals of the wires are twisted around the latter at the  
 60 outer ends of the loops, thereby completing the operation.

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

1. A wire stretcher including a relatively fixed member provided with wire-engaging  
 70 means, and a stretching lever fulcrumed on the relatively fixed member and provided with separate wire-engaging means, said lever being arranged to carry its wire-engaging means from one side of the wire-engaging  
 75 means of the relatively fixed member to the opposite side thereof to stretch the wire and being also separable from the relatively fixed member for twisting the wire while the same is held by the relatively fixed member. 80

2. A wire stretcher including a relatively fixed member provided at opposite sides with wire-engaging means, and a stretching lever fulcrumed on the relatively fixed member and provided with separate wire-engaging means,  
 85 said lever being detachable from the relatively fixed member for twisting the wire while the same is being held by the said relatively fixed member.

3. A wire stretcher including a relatively fixed member provided at opposite sides with wire-engaging clamps, and a lever fulcrumed on the relatively fixed member and having a wire-engaging clamp, said lever being arranged to carry its clamp from one side of one  
 90 of the clamps of the relatively fixed member to the opposite side of the same and being separable from the relatively fixed member for twisting the wire while the same is being held by the relatively fixed member. 100

4. A wire stretcher including a relatively fixed member provided with a clamp, and a lever detachably pivoted to the relatively fixed member and provided with a pivoted clamp, said lever being arranged to swing  
 105 from one side of the clamp of the relatively fixed member to the opposite side thereof for stretching a wire and being separable from the relatively fixed member for twisting the wire. 110

5. A wire stretcher including a relatively fixed member provided at opposite sides with rigidly mounted clamps, and a lever fulcrumed on the relatively fixed member and provided with a pivoted clamp, said lever  
 115 being arranged to swing up one side of one of the clamps of the relatively fixed member to the opposite side thereof.

6. A wire stretcher including a relatively fixed member provided at opposite sides with rigidly mounted clamps, and a lever fulcrumed on the relatively fixed member and provided with a pivoted clamp, said lever being arranged to swing up one side of one of the clamps of the relatively fixed member to the opposite side thereof and being separable from the relatively fixed member for twisting the wire. 120

7. A wire stretcher including a relatively fixed member provided at one edge with a 130

projecting arm and having a bearing opening  
at its opposite edge, said relatively fixed  
member being also provided with wire-engag-  
ing means mounted directly on the relatively  
5 fixed member, and a lever spaced from the  
said arm and provided with a pivot detach-  
ably arranged in the opening of the rela-  
tively fixed member.

In testimony that I claim the foregoing as  
my own, I have hereto affixed my signature 10  
in the presence of two witnesses.

WILLIAM S. HAZELTON.

Witnesses:

GUY H. PEARL,  
DON PEARL.