K. NURIAN.

WIRE CLAMP OR ANALOGOUS DEVICE.

APPLICATION FILED AUG. 17, 1912.

1,087,973.

Patented Feb. 24, 1914.

Fig. 1.

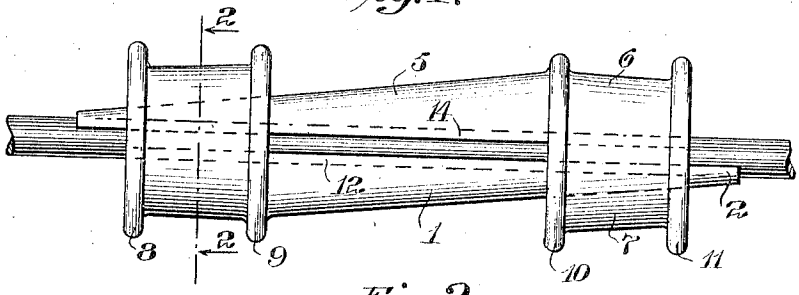


Fig. 2.

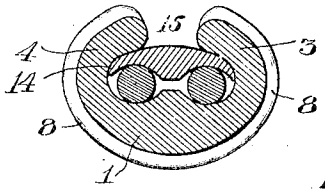


Fig. 3.

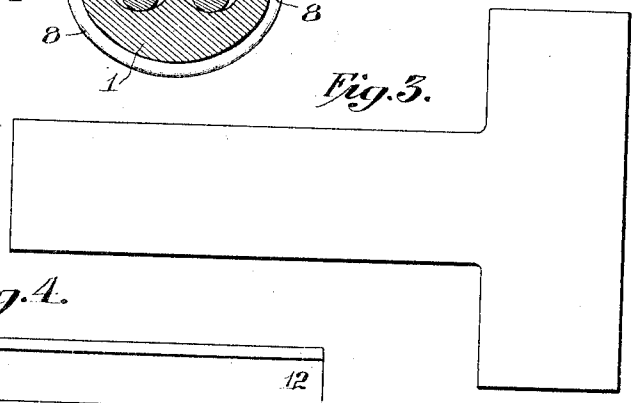


Fig. 4.

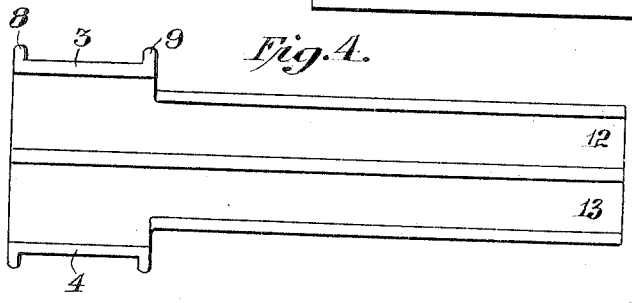
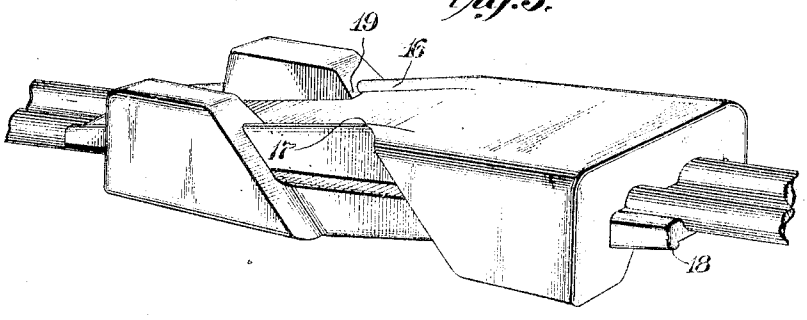


Fig. 5.



Attest:

C. D. Mitchell

M. Press

Inventor:

by Kirkpatrick & Nurian

Arthur Phelps Marr

Atty

UNITED STATES PATENT OFFICE.

KERSON NURIAN, OF NEW YORK, N. Y.

WIRE-CLAMP OR ANALOGOUS DEVICE.

1,087,973. Specification of Letters Patent. Patented Feb. 24, 1914.

Application filed August 17, 1912. Serial No. 715,543.

To all whom it may concern:

Be it known that I, KERSON NURIAN, a citizen of the United States, and resident of the borough of Brooklyn, city of New York, county of Kings, and State of New York, have invented certain new and useful Improvements in Wire-Clamps or Analogous Devices, of which the following is a specification.

Although I have designed and employed my device principally in the securing of guy wires in pole line construction I have found that the device will operate with equal satisfaction and efficiency wherever it is desirable to dead-end a rope or wire or where it is desirable to reave an eye about a pole or stanchion for any purpose whatsover.

My device is constructed of two parts similar in every respect and adapted to be engaged one into the other by a longitudinal slide and consequent wedging of the parts together and it will be seen from the construction as set forth in the drawings that either part of the device serves in the capacity of wedge or tenant.

I have devised more than one method for constructing my clamp and I show it in the drawings as formed from a drop forging in the first figures or from a sand casting in the later view.

The advantages and the details of the construction together with a description of certain alternate features will be set forth as the specification progresses, but I particularly desire to call attention to the following features.

This clamp being formed from similar parts secured in exactly opposite directions to each other and wedging one within the other, there will be no tendency for the strains encountered in its operation to loosen the clamp or to make it less effective. If made of wrought or malleable metal a close engagement of the parts one within another will cause the small end of each wedge to bend inward gripping the wire with greater force. This is particularly true as I have made the inner diameter of each tenant somewhat less than the outer diameter of the small end of each wedge, though I have found that it may be necessary to flare the tenant so that it will receive the wedge.

After the device is clamped and wedged in position, I may turn back or outward the small end of each wedge thus insuring that the device will remain in a desirable position permanently, though I have found in my experiments that this will seldom be necessary.

The following is what I consider the best means of carrying out this invention and the accompanying drawing forms a part of this specification, in which—

Figure 1 shows in side elevation a device formed from a drop forging. Fig. 2 is a sectional view on the line 2—2 in Fig. 1, and viewed in the direction of the arrow. Fig. 3 shows a blank from which the device will be formed. Fig. 4 shows the device after the first die has done its work. Fig. 5 shows a modification of the construction, and the shape the device will probably assume if made as a sand casting.

Similar reference numerals indicate like parts in all the figures where they appear.

At 1, I have shown the wedging or tapered body of one of the parts of my device. This portion is tapered on one side only, the outer side, and at one end terminates in a thin portion that is not however reduced in width. The inner side of this as well as the other wedging member is straight, and in operation these two straight faces will be parallel.

I have before stated that one end, that indicated by 2, is thin. The end opposite is provided with an extension the upper and lower sides of which are parallel. This extension forms the tenant and is provided with a plurality of upwardly extending and inwardly turned projecting sides 3 and 4, for a purpose that shall appear later. The wedge shaped body of the other member is indicated at 5 and the straight extension at 6. One of the upwardly extending and inturned sides is shown at 7.

I have found that to form my device from a drop forging it may become necessary to stiffen the upwardly extending and inturned sides and for that purpose I have added the ribs 10 and 11 to the extensions or lips of both members. These ribs are of the length equal to the extensions, and act to stiffen the structure to add strength to the whole device.

In the parallel faces of the members 1 and 5, I produce a plurality of grooves as shown at 12 and 13 in Fig. 4 and as indicated by the dotted lines 12 and 14 in Fig. 1. I have provided each of the members with two parallel and longitudinal grooves, and I have so proportioned my parts that the grooves

in the members 1 and 5 beside being parallel to each other will be in perfect alinement. This is necessary to obtain the most complete and satisfactory working of the device.

I have before mentioned that each tenant is provided with upwardly extending sides. These sides are each turned inwardly and toward each other but it is my intention that they do not extend so far as to overlap or even touch each other, for I have found that it is desirable to allow a certain definite space 15 between the ends of the inwardly extending lips, and I have found that this space will greatly assist in the ready application of my device. The guy wire is looped about the dead-man and the strain being retained on the free or draw end, both sides of the wire are drawn together and are caused to pass into the space 15 and lie in the grooves 12 and 13. Another part of my device which as I have already described is similar in all respects to the part already in position is now placed upon the wire by having both sides of the wire pass through a similar space 15, care being taken that the separate parts be applied so that their points approach each other. The wires now being caused to enter the longitudinal grooves the parts may be forced together and the wires secured by causing the small end of the wedge 1, to enter the tenant formed integral with the wedge 5 and the small end of the wedge 5 to enter the tenon formed integral with the wedge 1. A few sharp blows with a mallet or other instrument will force the parts so closely together that the guy-wire will be secured firmly and reliably in its operative position. The loose end of the wire may now be cut free and the strain removed.

At Fig. 3 I have shown a blank from which one of the members 1 or 5 may be formed and at Fig. 4 I show this blank as it will appear after the first shaping die has done its work. Here the grooves 12 and 13 are partly formed and the sides 3 and 4 have been bent upward and outward, the ribs 8 and 9 are also shown though incomplete, and it remains but for the second forming die to act upon the partially completed device to produce a finished product as shown in Fig. 1.

In the Fig. 5 I have shown a shape that will probably be given my device when it is made as a sand casting. The body is somewhat heavier to compensate for the difference in the strength of the material used and the outer side of each wedge portion is provided with a plurality of longitudinal ribs as shown at 16, 17 and 18. The overhanging lips of the tenant are provided with additional downward projections 19 that coact with the ribs 16 and 17 to form a lock well adapted to resist the breaking strain occasioned by the insertion of the wedging members into their receiving tenons.

It is obvious from the construction that certain modifications may be made in my device and that the number of grooves 12 and 13 may be lessened or increased at will, and that other changes not here enumerated may be made by a good mechanic without departing from the principle or sacrificing the advantages of this invention.

Having carefully and fully described my invention what I claim and desire to secure by Letters Patent is:

1. A device having one straight and grooved face, and an inclined and smooth face formed integral and producing between them a wedge member, an enlarged portion formed integral at the larger end of said wedge and provided with a plurality of reinforcing ribs and inturned lips, said lips being adapted to receive and firmly retain the smaller end of another similar wedged member, as herein specified and for the purpose set forth.

2. A device of the character described having in combination two members of similar outline, each having a smooth and grooved surface, and a smooth and inclined surface formed in pairs, and an enlarged portion at one end of each said pair, said enlarged portion being provided with a plurality of upwardly extending and inturned lips said lips being arranged to serve as a tenant for the opposite said member, as herein specified and for the purpose set forth.

3. A device of the character described having one straight and grooved face, and an inclined and smooth face formed integral and producing between them a wedged member an enlarged portion formed integral at the larger end of said wedge and provided with an entrance slot producing a plurality of inturned lips, said lips being adapted to receive and firmly retain the smaller end of another wedge member of similar outline as herein specified.

Signed at the city of New York, county and State of New York this 8th day of Aug. 1912.

KERSON NURIAN.

Witnesses:
ARTHUR PHELPS MARR,
M. KRESS.