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- (56) Prior Art Documents
 AU 234995 42396/58 81.8
 AU 66157/74 81.8
 AU 71857/88 E04H 17/10
- (57) Claim
- 1. A holder of the type formed from a strip of resilient material connectible to a post and forming a throat through which fencing wire or the like may pass, characterised in that:-

one end portion of said strip is adapted to pass through an aperture in the post;

the opposite end portion of said strip is engageable with the post remote from the engaged aperture whereby said one end portion is resiliently maintained in the engaged aperture, and

an intermediate portion of said strip extending beyond the post to form sai $\check{\alpha}$ throat.

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COMMONWEALTH OF AUSTRALIA Patents Act 1952

This document contains the amendments made under Section 49 and is correct for reliating.

TERRENCE DREDGE and CAROLYN ANN DREDGE

(Patent Application No. PH 08203)

COMPLETE ST FICATION FOR THE INVENTION ENTITLED:-

"WIRE HOLDERS"

The following statement is a full description of this invention, including the best method of performing it known to us:-

This invention relates to holders for elongate articles such as wires, cables and ropes.

This invention has particular reference to holders for supporting fencing wires but of course it can be adapted for supporting various types of wires and the like, such as electrical cable.

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Rural boundary fencing mostly comprises a plurality of spaced wires, which may be plain or barbed wire, stretched tightly between straining posts and supported in spaced relationship between the straining posts by relatively lightweight intermediate fencing posts of various forms. The intermediate posts are often in the form of Y-sectioned metal posts which are commonly referred to as "star pickets".

During erection of a fence, the wires are strained between the spaced straining posts to the desired tension and then secured to the respective intermediate fencing posts. If the latter are star pickets, the respective fencing wires are tied to the star pickets by tie wires which wrap around the fencing wire and pass through the adjacent one of the locating holes provided in one flange of the star picket whereby the fencing wires are maintained in their desired vertically spaced apart relationship.

Accordingly, it will be appreciated that the erection of such fencing is a very time consuming operation as each fencing wire has to be individually tied to each intermediate

post. Furthermore, the fencing wires of such fences require re-straining from time to time. At present this is a difficult task since the fencing wires have to be untied from the intermediate posts before they can be re-strained. After 5 re-straining the wires have to be retied to the intermediate posts. Because this task is very tedious and time consuming it is often neglected with the result that many rural fences become inefficient after a period of use.

This invention aims to alleviate the abovementioned 10 disadvantages and to provide fencing wire holders which will be reliable and efficient in use. Other objects and advantages of this invention will hereinafter become apparent.

with the foregoing and other objects in view, this invention in one aspect resides broadly in a holder of the type formed from 15 a strip of resilient material connectible to a post and forming a throat through which fencing wire or the like may pass, characterised in that:-

one end portion of said strip is adapted to pass through an aperture in the post;

the opposite end portion of said strip is engageable with the post remote from the engaged aperture whereby said one end portion is resiliently maintained in the engaged aperture, and

an intermediate portion of said strip extending beyond the post to form said threat. Of course the holder could be formed 25 from a length of plastics material or moulded from plastics material as desired.

The throat portion may be formed to substantially



encircle a supported article whereby the article may be inserted axially through said throat portion or the throat portion may be formed to partly encircle a supported article whereby the throat portion may move transversely of an elongate article between a remote position and a partly encircling position about the article. The throat portion may co-operate with a mounting to form an enclosure about the fencing wire.

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In a preferred embodiment of the invention the holder is in the form of a clip which is formed from spring steel whereby the end portions may be resiliently urged apart for placement about connection means on a mounting, such as a fence post, and released for captive engagement with the connection means. Alternatively the resilient wire may be formed with end portions which are spaced apart but which may be resiliently deformed to connect the ends together whereby the connection is retained on said mounting by the resilience. The holder may be adapted for mechanical attachment to a mounting such as by nailing, screwing or bolting or the like if desired.

In one preferred embodiment, the invention is in the form of a fence wire holder formed from spring steel wire of between two and four millimetres in diameter and the intermediate portion of the wire which constitutes the throat portion is formed into a substantially circular loop of

between twenty and thirty millimetres inside diameter.

Suitably the attachment means are so formed as to support the loop substantially at right angles to the axis of the fencing wire supported thereby.

In order that this invention may be more readily understood and put into practical effect, reference will now be made to the accompanying drawings which illustrate typical embodiments of the present invention and wherein:-

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FIG 1 is a perspective view of one form of fence wire holder made according to this invention;

FIG 2 is a perspective view illustrating a star picket fence post having alternate forms of wire holders connected thereto, and

FIGS 3 and 4 are perspective views of alternate forms of holders made according to the invention.

The wire holder 10 illustrated in FIG 1 is adapted for use with a star picket 13 as shown in FIG 2. For this purpose the holder 10 is formed from a length of spring steel having its intermediate portion 11 formed into a substantially circular throat portion 12, the axis of which in use, is adapted to lie horizontally and in the direction of the wire to be secured to the fence post 13.

The end portions 14 of the wire are kinked, as illustrated, so that they may resiliently hook, about one another. The end portions 14 extend to the part circular

throat portion 12 through respective arm and shoulder portions 16 and 17. The arm portions 16 are formed so as to extend between the spaced front edges 18 of the star picket 13 and a locating aperture 19 provided in the back flange 20. The shoulder portions 17 span the front face of the star picket between the edges 18 so that the throat portion 12 is positioned substantially therebetween.

As shown in FIG 1 the wire holder 10 is formed with the end portions 14 spaced apart so that they may be sprung about a star picket and secured thereto by inserting one end portion 14 through an aperture 19, then hooking the other end portion about the inserted end portion, as shown in FIG 3.

In use the wire holder 10 may be placed about a fence wire 21 after it has been strained and then pushed into engagement about the front face of a star picket. The holder 10 is then located vertically in any one of the selected apertures 19 to secure the captive fence wire at a desired height.

Alternatively the wire holder 10 may be installed onto a star picket and the wire 21 may be pulled therethrough to form the desired strained fence wire. The wire 21 may be a barbed wire and accordingly the diameter of the throat 12 is such as to permit the barbs to pass freely therethrough. For this purpose the resilient nature of the holder will prevent jamming of the barbs therein.

The wire holder 30 illustrated in FIG 3 is similar to the



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previously described wire holder 10. However it is adapted for connection to a suitable eye or other mounting provided on a post, such as an aperture of a star picket. The mounting eye may be an eye screwed into a timber post or provided on a concrete post or otherwise as desired.

Alternatively the eye may be constituted by one of the apertures 19 in a star picket 13. For this purpose the ends 31 of the wire holder 30 are inturned in overlapping relationship so that they may be resiliently spread apart to pass about the flange 33 for secure engagement in an aperture therein. This wire holder 30 has a circular throat portion 32 which is adapted to lie in a plane substantially at right angles to the inturned ends 31 of the holder 30.

A further holder 40 which is adapted to engage with a star picket is illustrated in FIG 2. One end 41 of the holder 40 is adapted to pass through an aperture 19 for location therein. The wire body of the holder extends from the end 41 forwardly about one front edge 18 of the star picket and then across to the throat portion 32 which, as can be seen is non-circular shaped and utilizes the picket 13 as an enclosure for the back portion of the throat 42. The other end 43 of the holder 40 returns from the throat portion 42 about the back face of the other front edge 18 to retain the holder on the picket 13.

FIG 4 illustrates a further holder 50 which is



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particularly adapted for connection to a circular post. As illustrated, the throat loop 51 is formed at one end of the holder 50. The latter is formed from a length of wire and includes an inwardly projecting end portion 52 adjacent the loop 51 and an opposed end portion 53 which extends inwardly from an arcuate tail portion 54 extending from the opposite end of the loop 51. This holder 50 is sprung for attachment to a post as illustrated and in use the loop 51 is maintained substantially parallel to the post axis.

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When the wires of a fence supported by holders of the present invention become slack, they may be easily re-strained without removal of the wires from the holders or removal of the holders from the intermediate posts. Thus re-straining is a relatively easy operation to perform. Also according to this invention, fences can be erected by arranging the wires loosely between strainer posts, then securing the wires to the intermediate posts by passing holders of this invention about the wires and connecting them to the intermediate posts so as to hold the wires in their spaced apart attitude and then straining the wires as a last operation.

It will of course be realised that the above has been given only by way of illustrative example of the present invention and that all such modifications and variations thereto as would be apparent to persons skilled in the art

are deemed to fall within the broad scope and ambit of this invention as is defined in the appended claims.

THE CLAIMS DEFINING THIS INVENTION ARE AS FOLLOWS:-

1. A holder of the type formed from a strip of resilient material connectible to a post and forming a throat through which fencing wire or the like may pass, characterised in that:-

one end portion of said strip is adapted to pass through an aperture in the post;

the opposite end portion of said strip is engageable with the post remote from the engaged aperture whereby said one end portion is resiliently maintained in the engaged aperture, and

an intermediate portion of said strip extending beyond the post to form said throat.

- 2. A holder as claimed in claim 1, wherein said one end portion includes an abutment part which abuts said post and an end part displaced therefrom which is adapted to extend through said aperture.
- 3. A holder as claimed in claim 2, wherein said opposite end portion includes an engaging part which engages with a portion of said end part which protrudes through said aperture.
- 4. A holder as claimed in any one of the preceding claims, wherein said post is an open sectioned picket.
- 5. A holder as claimed in any one of the preceding claims, wherein said intermediate portion is in the form of a



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substantially closed loop.

- 6. A holder as claimed in any one of the preceding claims wherein the inner dimension of said throat is such as to permit the passage of barbed wire therethrough.
- 7. A holder as claimed in any one of the preceding claims, wherein each end portion includes a mounting part adjacent said throat and wherein said mounting parts extend substantially parallel to the axis of said loop.
- 8. A holder as claimed in any one of the preceding claims, wherein said holder is formed from spring steel whereby said end portions may be resiliently urged apart for placement about said post.
- 9. A holder as claimed in any one of the preceding claims, wherein the axis of the throat formed by said intermediate portion is substantially parallel to the axis of the fence wire supported thereby.
- 10. A holder as claimed in any one of claims 2 to 9, wherein said opposite end portion includes an end part which is adapted to pass through an aperture in the post.



11. A holder substantially as hereinbefore described with reference to the accompanying figures 1, 2 and 3.

DATED THIS twenty-seventh DAY OF November, 1990

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by

PIZZEY AND COMPANY PATENT ATTORNEYS



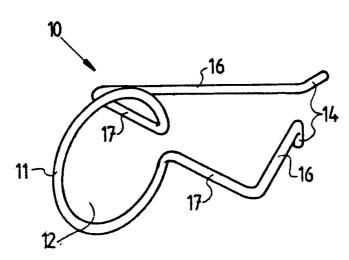


FIG. 1

