

S. R. AUSTIN.
FENCE TIGHTENER.
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977,995.

Patented Dec. 6, 1910.

Fig. 1.

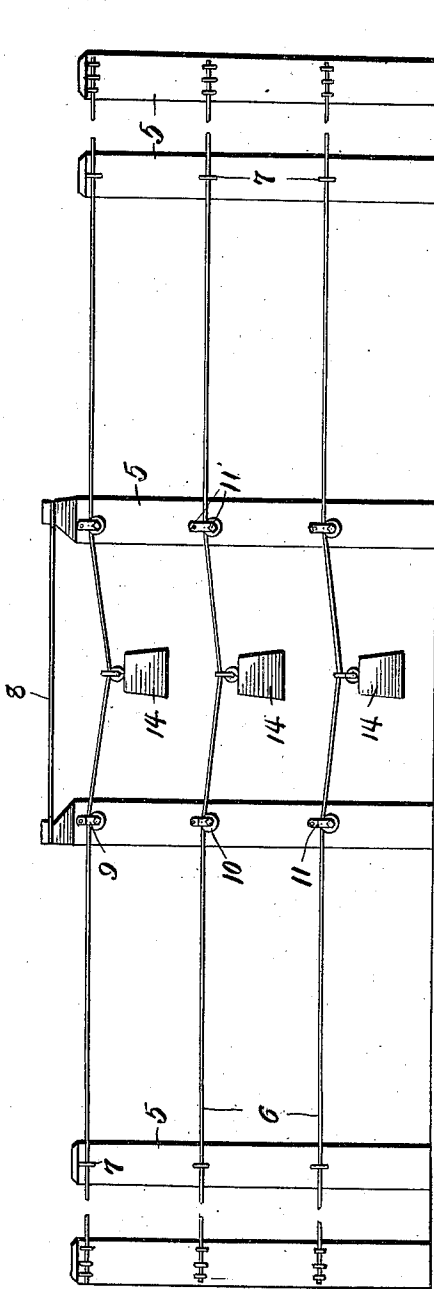


Fig. 2.

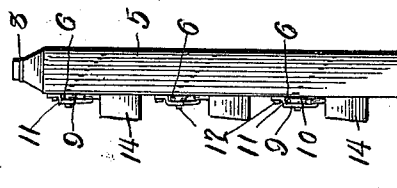
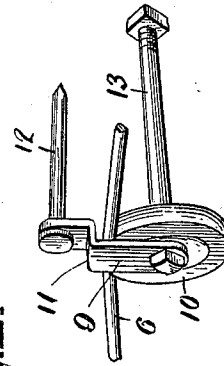


Fig. 3.



Witnesses
Gerald H. H. H.

John A. Donegan.

By

Samuel R. Austin

Attorneys

UNITED STATES PATENT OFFICE.

SAMUEL R. AUSTIN, OF ARNETT, OKLAHOMA.

FENCE-TIGHTENER.

977,995.

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To all whom it may concern:

Be it known that I, SAMUEL R. AUSTIN, a citizen of the United States, residing at Arnett, in the county of Ellis, State of Oklahoma, have invented certain new and useful Improvements in Fence-Tighteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in attachments for wire fences and has for its object the provision of a device of that kind consisting of a plurality of pulleys over which the fence wires are trained and a plurality of weights to be attached to the wires, so that after the fence wires have been stretched over the supporting posts and pulleys the weights will operate to maintain the said wires in taut position.

With the above and other objects in view, as will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the appended claim, it being understood that various changes, in the form, proportion, size, and minor details of the device may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of the specification:—Figure 1 is a section of wire fence showing my improved device applied thereto. Fig. 2 is a vertical sectional view taken between the supporting posts. Fig. 3 is a detail perspective of the pulley and strap for securing the same to the post.

Similar numerals of reference are employed to designate corresponding parts throughout.

The posts for supporting the wires in the section shown in Fig. 1 are designated by the numeral 5 and may be of any well known construction and preferably of wood.

The wires are designated by the numeral 6 and are fixedly secured to one of the end posts of the section after which they are stretched over the intervening posts and secured to the opposite end post.

The staples or eyes for supporting the wires on the intervening posts are designed

by the numeral 7 and it is designed that these staples or eyes will not bear on the wires sufficiently hard to prevent endwise movement of the wires therein. The central posts of the section are arranged somewhat closer together than the remaining posts of the section and at their upper ends are connected by a tie-rod or wire 8.

By referring now to Fig. 1 it will be seen that the faces of the central posts in alignment with the faces of the remaining posts over which the wires 6 are stretched are provided with a plurality of spaced supporting sheaves or pulleys. Each of these members is attached to the post by means of a strap or guide 9, preferably formed of a single piece of sheet metal oblong in contour and substantially rectangular in cross section.

The pulleys are designated by the numeral 10 and their diameters correspond approximately to one-half the length of the guides or straps 9. Each guide or strap 9 is, at its intermediate portion, provided with a lateral offset 11 and adjacent either end is provided with transverse openings.

In securing the straps to the posts the upper end portions are brought to bear on the face of the post and by virtue of the offset 10 the lower portions will be spaced from the post. The upper end portions are secured to the post by means of bolts or screws 12 passing through the transverse openings adjacent the upper ends of the straps or guides while a bolt or shaft 13 is inserted through the openings adjacent the lower ends of the straps and through the central openings in the pulleys or sheaves, the inner ends of said shafts being secured in the post and the diameters of said shafts being sufficient to permit the pulleys to freely rotate thereon. When the parts are so positioned suitable weights 14 are attached to the cross wires 6 between the intermediate posts so that the downward force exerted by these weights on the cross wires 6 will at all times maintain the latter in a taut position. If desired the entire number of posts in the fence section with the exception of the end posts may be provided with the pulleys similar to the intermediate posts.

I am aware that tension springs have hitherto been used to take up the slack in the fence wire. In winter these springs exert a greater tension upon the fence wire than would weights, due to the fact that the

contracting fence wire causes the spring to expand, and this expansion of the spring exerts a greater tension upon the fence wire than ordinary. It is evident that metal is
5 more brittle in winter time than in summer and therefore as a greater tension is exerted upon the metal the tendency is for the metal to break. From this it follows that the life of a fence wire is lessened to a greater de-
10 gree by using a spring to take up the slack than by using a weight, since a weight exerts an unvarying tension upon the wire regardless of any contraction in the wire. Further, auxiliary wires must be used in
15 conjunction with the springs above mentioned to close the opening formed at the bottom of the fence. My device does not require the use of such auxiliary wires as no opening is formed at the bottom of the fence
20 by the use of the above described weights.

From the foregoing it can be seen that I have provided a device which is comparatively simple in structure, inexpensive to manufacture, embodying few parts, and these so arranged that the danger of de- 25 rangement will be reduced to a minimum.

What I claim as new is:—

The combination with a fence wire, of a pair of substantially parallel posts, sheaves on the post engaging the fence wire, and a 30 weight mounted on the fence wire between the posts, and causing the slack in the wire to assume a V shape between the posts.

In testimony whereof, I affix my signature, in presence of two witnesses.

SAMUEL R. AUSTIN.

Witnesses:

HENRY C. EDELBLUTE,
JIM WOODS.