July 20, 1943. E. D. SAWYER 2,324,726

YIELDING BARRIER NET

Filed Aug. 26, 1940

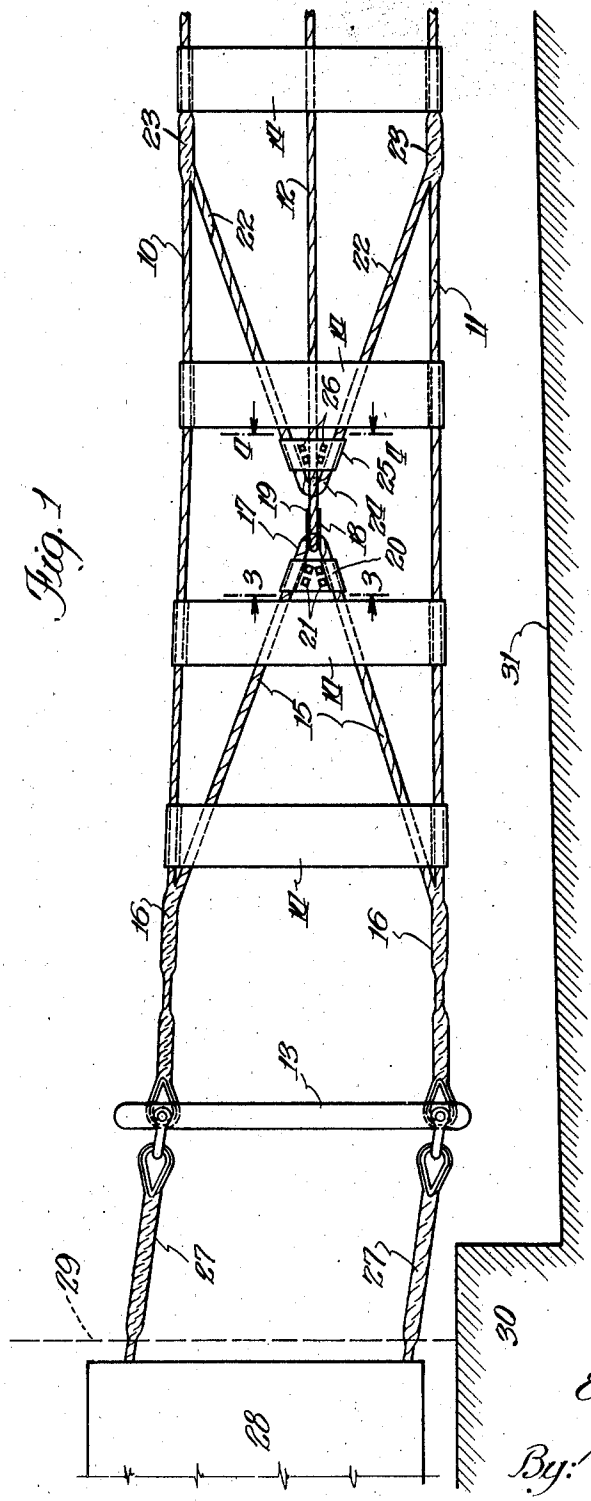


Fig. 1

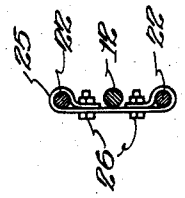


Fig. 4

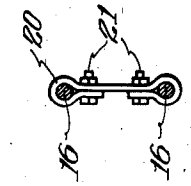


Fig. 3

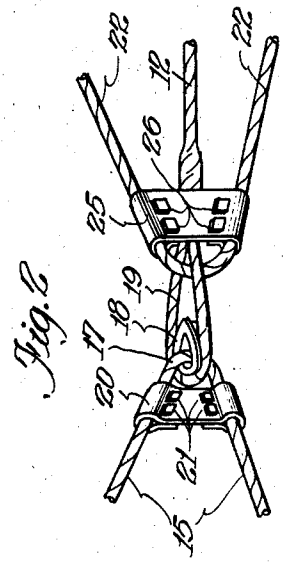


Fig. 2

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YIELDING BARRIER NET

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8 Claims. (Cl. 39—1)

The invention relates to improvements in yielding barrier nets and has for its primary object the provision of an improved yielding barrier net or construction arranged so as to be well adapted to resist the strains and blows to which it may be subjected in use.

Another object of the invention is the provision of such an arrangement which is so constructed as to permit of ready readjustments in case of distortion in use.

Other objects will appear hereinafter.

The invention consists of the combination and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing forming a part of this specification and in which:

Fig. 1 is a face view of one end of a flexible barrier net embodying the invention and shown in position of use;

Fig. 2, an enlarged perspective view of the connection between the apices of bridles employed in the net construction;

Fig. 3, an enlarged section taken substantially on line 3—3 of Fig. 1, and

Fig. 4, an enlarged section taken substantially on line 4—4 of Fig. 1.

The embodiment of the invention illustrated in the drawing comprises a flexible barrier net having a top strand 10, a bottom strand 11 and an intermediate strand 12, all in the form of wire cables. Vertical spacing bars 13 and 14 are extended vertically across said strands to hold the same in spaced relation as is usual in barrier nets of this character.

A bridle member 15 consisting of a single integral wire cable or strand has its ends spliced to the cables 10 and 11 at 16 adjacent each end of the net, and converges thence inwardly away from the end of the net to an apex 17 as shown. Apex 17 passes freely through a thimble 18 which is embraced by an eye 19 formed by splicing at the corresponding end of the intermediate cable 12 as best shown in Fig. 2. A clamp 20 is arranged across each apex 17 adjacent the thimble 18 and the clamping engagement with the sides of the bridle 15 is rendered adjustable by means of the bolts 21 as will be readily understood.

A second bridle member 22 is arranged to cooperate with the bridle member 15 as indicated, the ends of the bridle member 22 being spliced at 23 to the cables 10 and 11 at points further away from the end of the net and converge thence outwardly toward the bridle 15 to an apex 24 which is extended, as shown, through the eye 19 of the corresponding end of the cable 12. A clamp 25 is secured across the bridle 23 adjacent its apex 24 and rendered adjustable thereon by clamping bolts 26.

The net thus provided is suspended in the usual way on the ends of the pay-out cables 27 and is carried in the usual way by the usual box or carriage 28 reciprocating vertically in the usual column 29 supported on the usual base 30 at each side of the roadway 31 as will be readily understood by those skilled in this art.

By this arrangement a barrier net is provided which is admirably adapted to resist all blows and strains to which it may be subjected. Where the chief strain is applied to the intermediate cable 12 it will be transmitted equally to the cable ends 27 by the action of the bridle 15. Where the chief strain or blow is applied to either the top or the bottom cable the same will be transmitted to the other cable and thereby substantially uniform pay-out of the cables 27 caused with corresponding substantial uniformity of transmission of strain. Should either side of either bridle member be directly struck or entangled so as to receive the chief strain, sufficient slippage will be permitted by the clamps 20 and 25 to effect an equalization of said strain to prevent rupture of the splice connections with the cables 10 and 11. The intensity of strain at which this slippage will occur may be adjusted as necessary or desired by means of the bolts 21 and 26. After such a distortion it is obvious that the clamps may be readily released to permit of readjustments of the parts and the clamps may then be readjusted to exert the proper resistance on the sides of the bridle. Inasmuch as the strains thus likely to be encountered by the bridles 22 are considerably less than those likely to be encountered by the bridles 15, the clamp members 25 are made correspondingly lighter as shown in Figs. 3 and 4.

While I have illustrated and described the preferred form and construction for carrying the invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I therefore do not wish to be limited to the precise details disclosed but desire to avail myself of such variations and modifications as fall within the scope of the appended claims.

I claim:

1. A flexible substantially rectangular roadway barrier net comprising a top, a bottom and an intermediate strand; a bridle member at one end of the net having its ends secured to said top

and bottom strands adjacent their ends and converging thence inwardly away from the end of the net to an apex having a connection with the corresponding end of said intermediate strand which will slip under extraordinary strain.

2. The construction specified in claim 1 in which the bridle ends are spliced to the top and bottom strands and the connection between the bridle apex and the intermediate strand is a sliding one.

3. The construction specified in claim 1 in which the bridle ends are spliced to the top and bottom strands and the connection between the bridle apex and the intermediate strand is a sliding one and the end of the intermediate strand is provided with an eye embracing a thimble and the apex of the bridle passes through said thimble.

4. The construction specified in claim 1 in which the bridle ends are spliced to the top and bottom strands and the end of the intermediate strand is provided with an eye embracing a thimble and the apex of the bridle passes through said thimble and a clamp is arranged across said apex adjacent said thimble to resist sliding of the bridle through said thimble except under extraordinary strains.

5. A flexible barrier substantially rectangular roadway barrier net comprising a top, a bottom, and an intermediate strand; a first bridle member at one end of the net having its ends secured to said top and bottom strands adjacent their ends and converging thence inwardly away from the end of the net to an apex having a connection with the corresponding end of said intermediate strand which will slip under extraordinary strain; and a second bridle member cooperating with said first mentioned bridle member, having its ends secured to said top and bottom strands at points further away from the net end and converging thence outwardly toward the net end to an apex having a connection with the apex of the first mentioned bridle.

6. The construction specified in claim 5 in which the bridle ends are spliced to the top and bottom strands and the connection between the bridle apices is a slidable one.

7. The construction specified in claim 5 in which the bridle ends are spliced to the top and bottom strands and the connection between the bridle apices is a slidable one, and the end of the intermediate strand is provided with an eye and the apices of the bridles pass through said eye.

8. The construction specified in claim 5 in which the bridle ends are spliced to the top and bottom strands and the connection between the bridle apices is a slidable one, and the end of the intermediate strand is provided with an eye and the apices of the bridles pass through said eye and clamps are arranged across said apices adjacent said eye to resist sliding of the bridles through said eye except under extraordinary strains.

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