

[54] **WEDGE CLAMPING DEVICE FOR CABLE**

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Attorney—Roger M. Hibbits

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[58] Field of Search.....24/126, 126 K, 136 K, 136;
287/81

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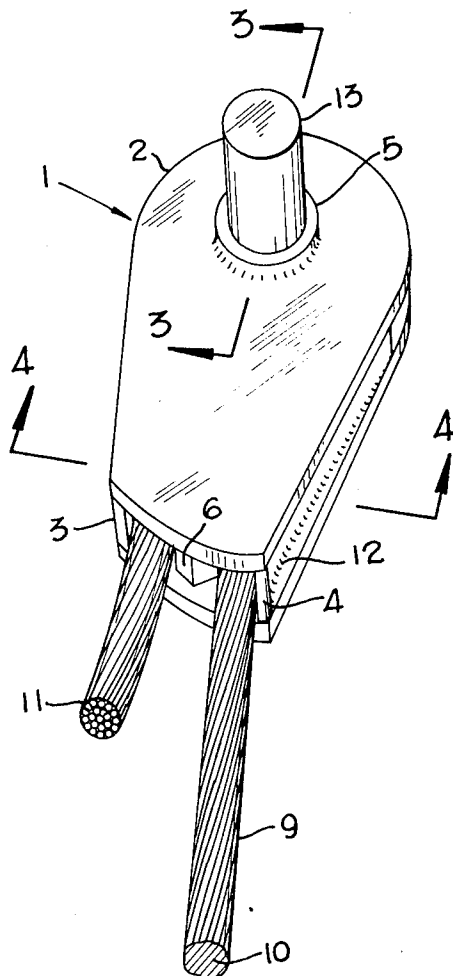
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[57] **ABSTRACT**

Cable clamping means comprising first and second face plates disposed essentially parallel to each other and provided with apertures therein, elongated spacers operably mounted between said face plates providing a wedge shaped space therebetween, a clamping block operably disposed within said wedge shaped space, and a hollow cylindrical eyelet operably disposed through said apertures in said face plates and clamping block.

2 Claims, 6 Drawing Figures



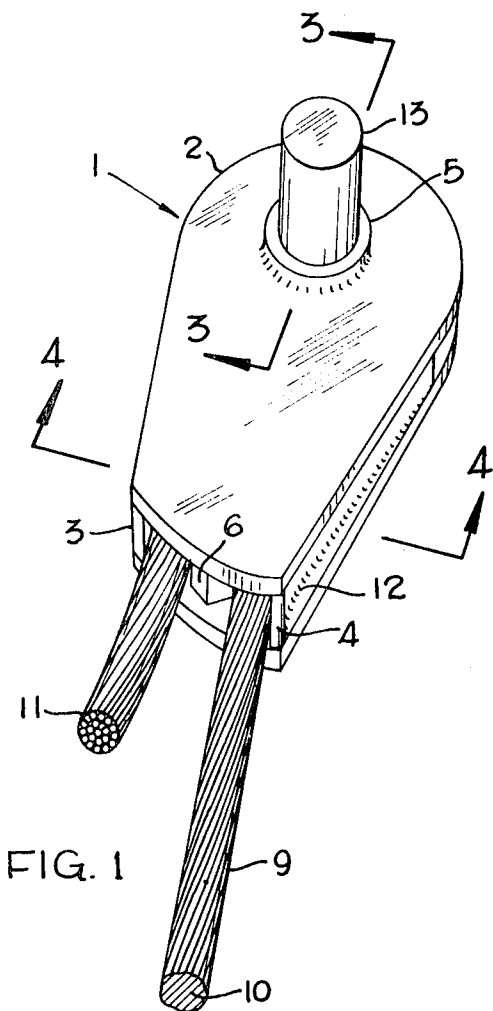


FIG. 1

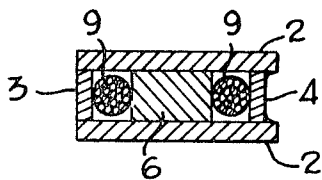


FIG. 4

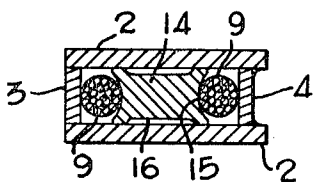


FIG. 6

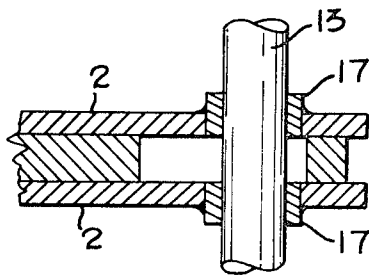


FIG. 5

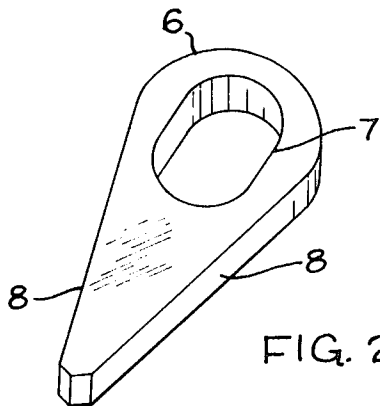


FIG. 2

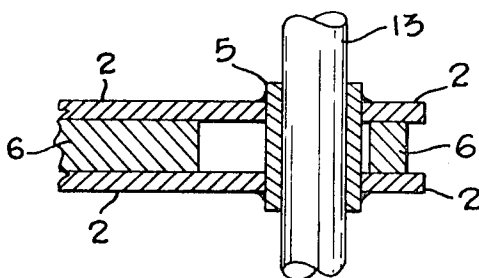


FIG. 3

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WEDGE CLAMPING DEVICE FOR CABLE

BACKGROUND OF THE INVENTION

This invention relates to new and useful improvements in cable clamping devices, applying particularly to cables which are used in conjunction with excavating machinery hoists, tuggers, winches, draglines and guy wires.

SUMMARY OF THE INVENTION

It is accordingly a primary object of the present invention to provide an improved cable clamping device.

It is another object of the present invention to provide an improved cable clamping device which is simply and economically manufactured.

It is a further object of the present invention to provide a cable clamping device which is more efficient.

It is a further object of the present invention to provide a cable clamping device which is simpler to use.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of cable clamping means constructed in accordance with and embodying the present invention.

FIG. 2 is a perspective view of a sliding block for use in the cable clamping means shown in FIG. 1.

FIG. 3 is a fragmentary sectional view of the cable clamping means shown in FIG. 1.

FIG. 4 is another fragmentary sectional view of the cable clamping means shown in FIG. 1.

FIG. 5 is a fragmentary sectional view showing another arrangement of the cable clamping means as shown in FIG. 3.

FIG. 6 is a fragmentary sectional view of another arrangement of the cable clamping means as shown in FIG. 4.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the accompanying drawings in detail, the cable clamping device, 1, in its preferred embodiment comprises face plates, 2, disposed essentially parallel to each other. Elongated members, 3, which is a flat bar, and, 4, which is a flat bar curved at, 12, are interposed between face plates, 2, a wedge-shaped space being thereby provided between elongated members, 3, and, 4. Eyelet, 5, extends through apertures provided in face plates, 2, and the wedge-shaped space between elongated members, 3, and, 4. Eyelet, 5, may be secured to face-plates, 2, by welding as shown in FIG. 1. Sliding block, 6, shown in FIGS., 1, and, 2, is in the form of a wedge having non-parallel sides which arcuately meet at the large end of sliding block, 6. Sliding block, 6, is provided with elongated aperture, 7, which allows movement of sliding block, 6, relative to eyelet, 5. Elongated members, 3, and, 4, are installed between plates, 2, essentially parallel to the corresponding sides, 8, of sliding block, 6. In operation, cable 9, is passed between elongated member, 4, sliding block, 6, and face plates, 2, about sliding block, 6, and returns through the space between elongated member, 3, sliding block, 6, and face plates, 2, and terminates in cable end, 11. Cable, 9, is shown in FIG. 1, fragmented at cable section, 10, which would be the end of cable, 9, which would go to a load. In operation the line of force or tension on cable, 9, would be nonparallel to elongated member, 4, and an arcuate bend, 12, is provided in elongated member, 4, to minimize strain on cable, 9, at the point where bend, 12, is provided. For purposes of illustration, a pin, 13, is shown passing through eyelet, 5. In operation pin, 13, would be connected to an external source of power such as a tractor.

Tension on cable, 9, in the direction of section, 10, forces sliding block, 6, towards the narrow end of the wedge-shaped space provided by elongated members, 3, and, 4, and thus cable, 9, becomes clamped between sliding block, 6, and elongated members, 3, and, 4.

FIG. 3 shows in greater detail the relationship of face plates, 2, sliding block, 6, eyelet, 5, and cable, 13.

FIG. 4 shows in greater detail the relationship of face plates, 2, elongated members, 3, and, 4, sliding block, 6, and cable, 9.

FIG. 5 shows another embodiment of the present invention, wherein the eyelet, 5, of FIG. 3, is replaced by eyelets, 17. Eyelets, 17, may be eliminated by using bosses on the exterior surfaces of face plates, 2.

While I have, illustrated and described preferred embodiments of my invention, it is to be understood that changes and modifications in the form, construction, arrangement and combination of the parts and steps of the cable terminating means and methods of making and using the same may be substituted for those herein shown and described without departing from the nature and principle of my invention.

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

1. A cable eye comprising

a first face plate, said faceplate provided with an aperture therein

a hollow cylindrical eye mounted on said first face plate such that the longitudinal axis of said eye is essentially perpendicular to said first face plate and aligned with the aperture in said first plate,

first and second elongated spacers mounted on said first face plate and disposed so that a wedge shaped space is provided there between, said second elongated spacer arcuately bent outwardly and away from the apex of said wedge shaped space,

a clamping block provided with an aperture therein movably mounted on said first face plate in proximity of said spacers disposed so that said eye extends through the aperture in said clamping block, said aperture in said clamping block adapted to allow said clamping block to move toward and away from said first and second spacers, a second face plate mounted on said eye and first and second spacers, said second plate disposed essentially parallel to said first face plate.

2. A cable eye comprising

a first face plate, said faceplate provided with an aperture therein

a hollow cylindrical eye mounted on said first face plate such that the longitudinal axis of said eye is essentially perpendicular to said first face plate and aligned with the aperture in said first plate,

first and second elongated spacers mounted on said first face plate and disposed so that the wedge shaped space is provided there between, said second elongated spacer arcuately bent outwardly and away from the apex of said wedge shaped space,

a clamping block provided with an aperture therein movably mounted on said first face plate in proximity of said spacers disposed so that said eye extends through the aperture in said clamping block, said aperture in said clamping block adapted to allow said clamping block to move toward and away from said first and second spacers, said clamping block provided with recesses in the surfaces thereof in contact with said face plates,

a second face plate mounted on said eye and first and second spacers, said second face plate disposed essentially parallel to said first face plate.

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