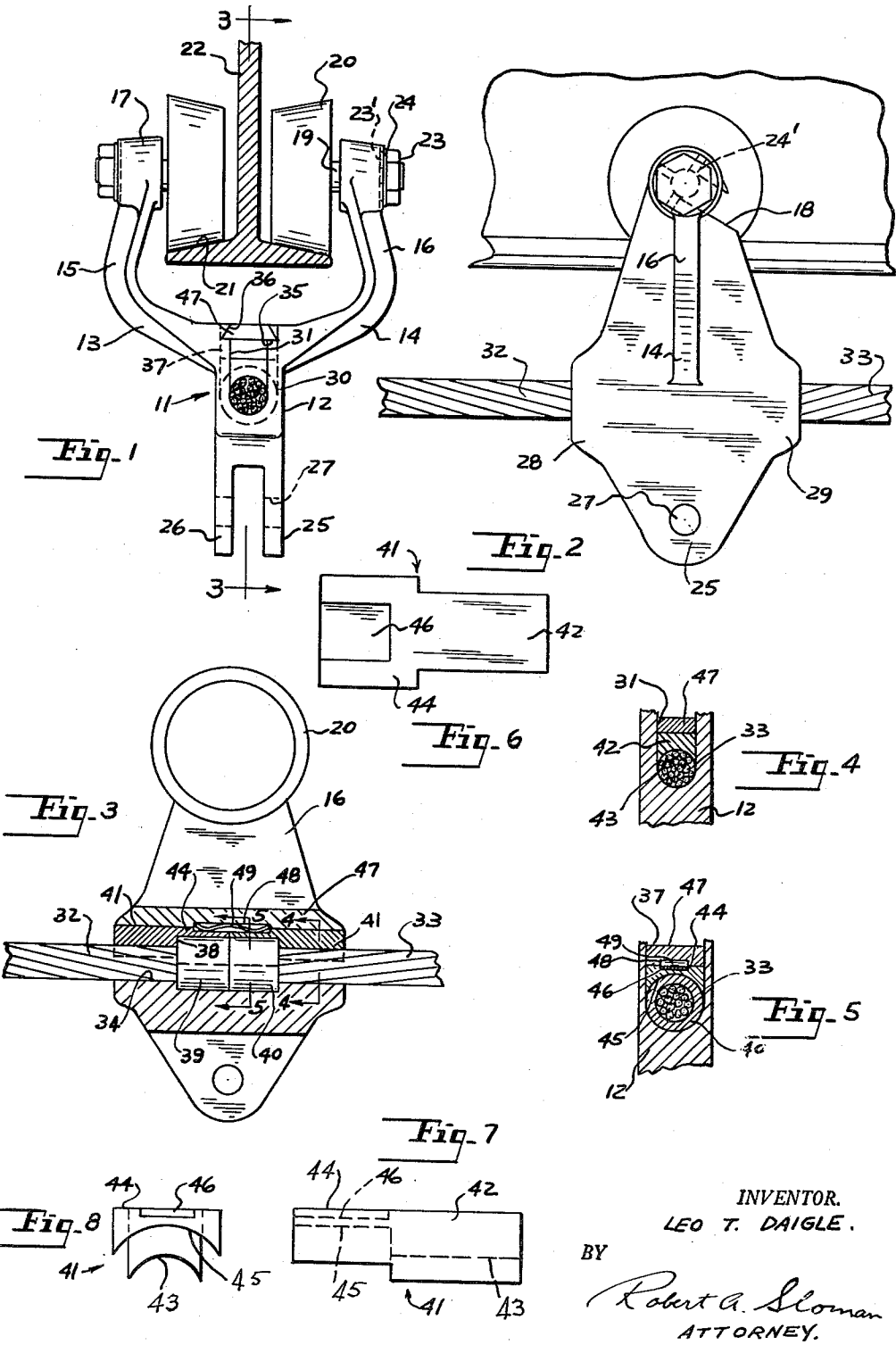


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L. T. DAIGLE
TROLLEY CONVEYOR

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TROLLEY CONVEYOR

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4 Claims. (Cl. 198—177)

This invention relates to a conveyor for transporting a load along a flanged beam, and more particularly to a novel conveyor construction whereby the adjacent ends of a pair of longitudinally aligned cable elements may be spliced together and at the same time secured to the conveyor bracket for transporting a load along a flanged beam.

It is the object of the present invention to provide a novel cast conveyor bracket together with means for retaining and securing therein the registering ends of a pair of cable elements for not only splicing said elements into a continuous cable but for securing the same to the conveyor apparatus.

This and other objects will be seen from the following specification and claims in conjunction with the appended drawing, in which:

Fig. 1 is an end elevational view of the present conveyor mechanism as mounted upon an I beam, fragmentarily shown.

Fig. 2 is a side elevational view thereof.

Fig. 3 is a section taken on line 3—3 of Fig. 1.

Fig. 4 is a fragmentary section taken on line 4—4 of Fig. 3.

Fig. 5 is a section taken on line 5—5 of Fig. 3.

Fig. 6 is a plan view of one of the cable hold-down elements.

Fig. 7 is a side elevational view thereof; and

Fig. 8 is an end elevational view thereof.

It will be understood that the above drawing illustrates merely a preferred embodiment of the invention, and that other embodiments are contemplated within the scope of the claims hereafter set forth.

Referring to the drawing, Figs. 1, 2 and 3 illustrate a cast unitary bracket 11, which has a central body portion 12 and a pair of outwardly and upwardly extending arms 13 and 14 in opposed relation with said arms terminating in the substantially upwardly extending inwardly inclined arm extensions 15 and 16, having the formed wheel mounting heads 17 at their upper ends.

Said heads are transversely apertured to receive through the entry slot 18 formed in said heads the mounting stud 19 for the tapered wheel 20 journaled thereon. The wheels 20 are adapted for movably mounting upon the opposed flanges 21 upon opposite sides of I beam 22.

Nuts 23 are threaded upon the outer ends of studs 19 and cooperable with the intermediate washer 24 for immovably securing the wheel mounting in position.

As shown in Fig. 2, there are a plurality of indentations or slots 24' formed within the outer surfaces of the heads 17 adapted to receive correspondingly shaped projections 23' upon said washer whereby with the nut 23 tightened, the washer is immovably secured in position for anchoring the wheel mounting studs 19 within said heads.

A pair of load supporting plates 25 and 26 depend from body 12 in spaced relation and have aligned transverse apertures 27 for receiving a load carrying device to be transported by the present conveyor mechanism.

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Body 12 intermediate its ends has the oppositely arranged lateral projections or formations 28 and 29 adapted to cooperate with body 12 in the manner now described for cooperatively receiving a pair of registering cable elements 32 and 33.

As shown in Fig. 1, the end face 30 of said body portion 12 has a transverse slot 31 formed therethrough, which slot extends through said body and is identified at 34 in Fig. 3 for receiving portions of the cable elements 32 and 33.

The bounding walls of the slots 31 terminate in the ledges 35; and the inner edges of said ledges merge with the inwardly inclined transverse slot 36 of wedge-shape.

Intermediate the ends of the slots 31—34, there is formed an enlarged upright slot 37 of increased width thereby defining the retaining shoulders 38 shown in Fig. 3.

The cable elements 32 and 33 have formed upon their inner registering ends the heads 39 and 40 of increased diameter, which are cooperatively and retainingly received within the enlarged slotted portion 37 in said bracket and whose outer portions cooperate with the respective shoulders 38 formed within the said bracket.

The assembled cable elements with their registering heads 39 and 40 are held down within the slotted interior of said bracket by means of a pair of longitudinally aligned oppositely arranged hold-down plates 41 illustrated in Figs. 3, 4, 5, 6, 7 and 8.

It is contemplated that the heads 39 and 40 may be upset and formed as an integral part of the cable elements 32 and 33, or on the other hand may be formed as sleeves immovably swedged or otherwise secured upon the registering ends of said cable elements.

The hold-down plates 41 have elongated bodies 42 adapted for cooperative positioning within slots 31 with the undersurfaces of said bodies having an arcuate slot 43 for cooperative gripping engagement with a portion of a cable element. The bodies 42 terminate at their inner ends in the laterally enlarged cable head retaining plates 44, their undersurfaces having arcuate longitudinal slots 45 to cooperatively receive the heads 39 and 40 respectively.

It will be noted from Figs. 3, 5, 6, 7 and 8, that there is formed in each of the hold-down plate elements 44 a recess 46 arranged in alignment with the corresponding recess of the second longitudinally aligned hold-down plate 41. These recesses cooperate with an opposed corresponding rectangular recess 48 formed in the undersurface of the elongated wedge-shaped locking plate 47.

As shown in Fig. 1, the wedge-shaped slot 36 at the upper end of the transverse slot 31, in cooperation with the shoulders 35, slidably receive the locking plate 47, which is in sliding contact with the top surfaces of the hold-down plates 41; there being a suitable leaf-spring 49 interposed between locking plate 47 and hold-down plates 41 within the above described recess to exert a slight downward pressure upon said hold-down plates, as illustrated in Fig. 3.

Having described my invention, reference should now be had to the claims which follow for determining the scope thereof.

I claim:

1. A conveyor mechanism for transporting a load along a flanged beam comprising an upright bracket including a body having a transverse slot therethrough adapted to receive portions of a pair of registering longitudinally aligned cable elements, opposed upwardly projecting arms on said body upon opposite sides of said beam, rollers journaled at the upper ends of said arms movably mounted upon the beam flanges, said body slot having a central upright enlarged recess, cylindrical heads of in-

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creased diameter upon the registering ends of said cable elements retainingly positioned within said enlarged recess, aligned cable and head hold-down plates positioned within said transverse slot and slot enlarged recess cooperatively engaging portions of said cable elements and said heads, said body having therein at the upper end of said transverse slot under-cut portions defining a wedge-shaped slot, and a wedge-shaped locking plate slidably positioned within said slot operatively retaining said hold-down plates within said body.

2. A conveyor mechanism for transporting a load along a flanged beam comprising an upright bracket including a body having a transverse slot therethrough adapted to receive portions of a pair of registering longitudinally aligned cable elements, opposed upwardly projecting arms on said body upon opposite sides of said beam, rollers journaled at the upper ends of said arms movably mounted upon the beam flanges, said body slot having a central upright enlarged recess, cylindrical heads of increased diameter upon the registering ends of said cable elements retainingly positioned within said enlarged recess, aligned cable and head hold-down plates positioned within said transverse slot and slot enlarged recess cooperatively engaging portions of said cable elements and said heads, said body having therein at the upper end of said transverse slot undercut portions defining a wedge-shaped slot, a wedge-shaped locking plate slidably positioned within said slot operatively retaining said hold-down plates within said body, the upper surfaces of said hold-down plates at their inner ends having aligned slots therein, and a spring within said slots bearing against the undersurface of said locking plate.

3. A conveyor mechanism for transporting a load along a flanged beam comprising an upright bracket including a body having a transverse slot therethrough adapted to receive portions of a pair of registering longitudinally aligned cable elements, opposed upwardly projecting arms on said body upon opposite sides of said beam, rollers journaled at the upper ends of said arms movably mounted upon the beam flanges, said body slot having a central upright enlarged recess, cylindrical heads of increased diameter upon the registering ends of said cable elements retainingly positioned within said

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enlarged recess, aligned cable and head hold-down plates positioned within said transverse slot and enlarged recess cooperatively engaging portions of said cable elements and said heads, said body having therein at the upper end of said transverse slot under-cut portions defining a wedge-shaped slot, a wedge-shaped locking plate slidably positioned within said slot operatively retaining said hold-down plates within said body, the upper surfaces of said hold-down plates at their inner ends having aligned slots therein, the corresponding undersurface of said locking plate having an opposed slot, and a leaf-spring within said slots expansively engaging said hold-down plates and locking plate.

4. A conveyor mechanism for transporting a load along a flanged beam comprising an upright bracket including a unitary body having a transverse slot therethrough opening at its upper end in the top wall of the body adapted to receive portions of a pair of registering longitudinally aligned cable elements, opposed upwardly projecting arms on said body upon opposite sides of said beam, rollers journaled at the upper ends of said arms movably mounted upon the beam flanges, said body slot having a central upright enlarged recess, cylindrical heads of increased diameter upon the registering ends of said cable elements retainingly positioned within said enlarged recess, a cable head hold-down plate projected into and through said transverse slot and enlarged recess in the direction of said cable elements cooperatively engaging portions of said cable elements and said heads, and locking means within said body operatively retaining said hold-down plate within said body.

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