Oct. 11, 1932. F. R. DAVIS 1,882,381

SAFETY BELT

Filed June 2, 1931

Fig. 1.

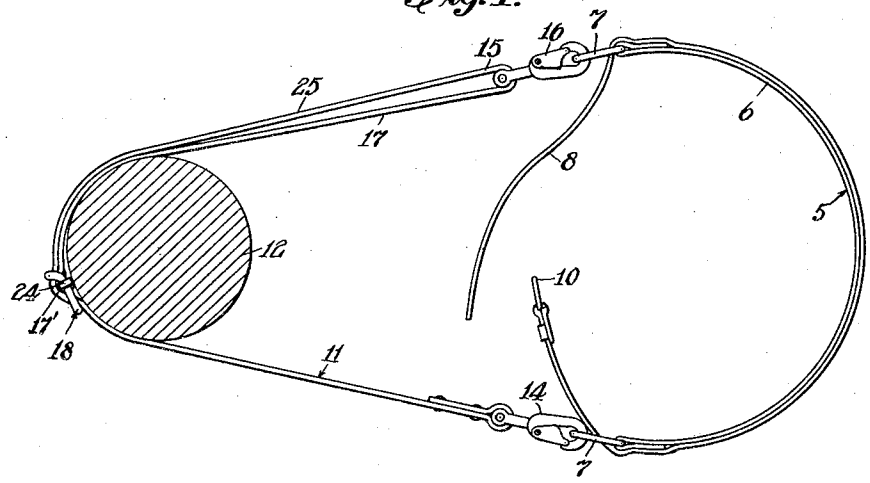


Fig. 2.

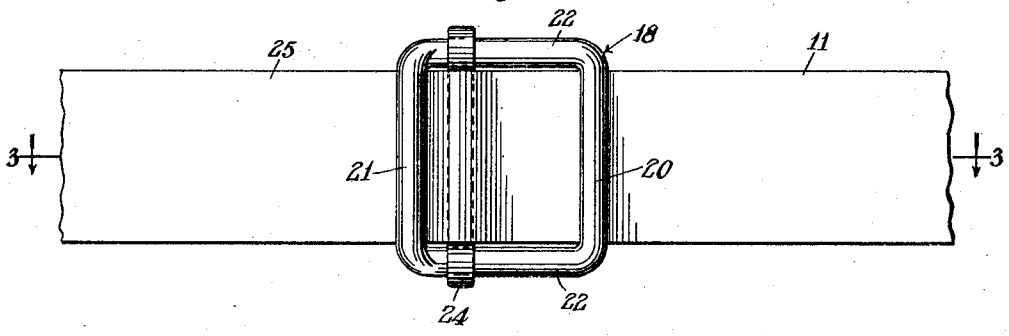
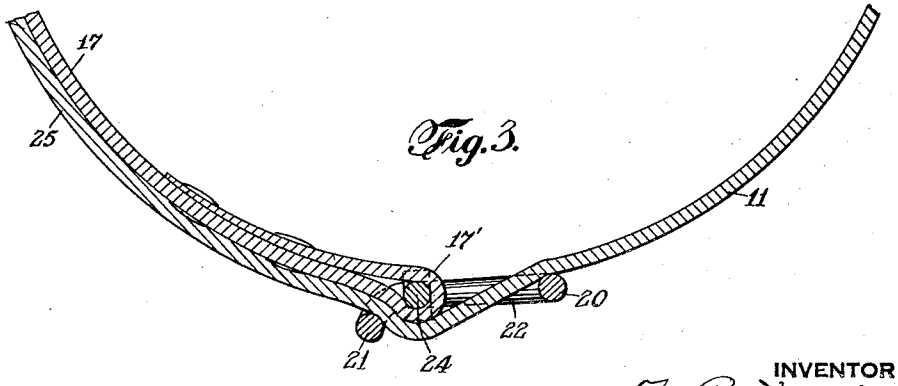


Fig. 3.



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SAFETY BELT

Application filed June 2, 1931. Serial No. 541,724.

This invention relates to safety belts such as are worn by linesmen and other similarly employed workmen.

Belts of the above type are ordinarily characterized by a body strap or girdle to which is suitably connected a supporting strap, which is adapted to partially encircle a telegraph or other pole and is provided with adjusting means, whereby its effective length may be varied to meet different requirements.

The above-mentioned adjusting means has heretofore consisted of a buckle, having a tongue necessitating the use of a plurality of openings in the supporting strap. Such adjusting means has been found objectionable for the reason that the tongue holes or openings, due to the strains incident to use and wear, become dangerously enlarged long before the supporting strap otherwise fails.

An object of this invention is to provide a safety belt characterized by an adjusting means which is so constructed as to overcome the above objection, and at the same time enable the necessary adjustments to be readily made with security and safety.

Other objects and advantages of the invention will become apparent from the following description, taken in connection with the accompanying drawing in which—

Fig. 1 is a plan view of a belt embodying this invention;

Fig. 2 is an enlarged fragmental view of the supporting-strap, shown in association with the adjusting means therefor, and

Fig. 3 is a horizontal sectional view taken on line 3—3 of Fig. 2.

Referring particularly to Fig. 1, the body strap or girdle 5 may be of any suitable design, and is herein shown as including a back strap 6, suitably secured at opposite ends to a pair of connector rings 7. Secured to the back strap 6, is an embracing strap 8, opposite ends of which project through the connector rings 7 and are adapted to be connected together by suitable means, such as a buckle 10, whereby the strap or girdle 5 may be readily secured about the user's body.

Associated with the body strap or girdle 5, is a supporting strap 11, which is adapted to partially encircle a telegraph or other pole 12. The supporting strap 11 is connected at one end to a suitable snap hook 14, and is folded back upon itself at its other end, thus providing a loop 15, adapted for the reception of a similar hook 16, the snap hooks 14 and 16 serving as means whereby the supporting strap may be quickly attached to and easily detached from the body strap 5.

Considering the loop 15, it will be noted that the inner reach 17 thereof is connected at its end to an adjustable clamp or fastening device 18. This fastening device comprises a rectangularly shaped frame member, having a pair of parallel side bars 20 and 21 connected together in a spaced relation by a pair of end bars 22, to which is slidingly connected a cross-bar or locking element 24, disposed intermediate the side bars and adapted to receive the looped end 17′ of the inner reach of the loop 15. As to the end bars 22, it will be noted that they are curved or bent forwardly relatively near their points of connection with the side bar 21 so that such side bar is forwardly offset with respect to the central vertical plane of the side bar 20, the locking element 24 and the major portion of the respective end bars 22 on which the locking element is slidably mounted.

Referring particularly to Figs. 1 and 3, it will be noted that the supporting strap 11 passes under the side bar 20, over the locking element 24, under the side bar 21 and thence to the snap hook 16, the portion of the strap intermediate such hook and the fastening device 18 constituting the outer reach 25 of the loop 15.

From the construction of the fastening device 18 and its relation to the supporting strap 11, it will be understood that such fastening device may be readily moved longitudinally of the strap to vary the effective length thereof. Also it will be understood that when the supporting strap 11 is placed under tension, the locking element 24 will move on the end bars 22, with the result that the supporting strap will be impinged between the side bar 21 of the fastening device and the looped end 17′ of the inner reach of

the loop 15. The impinging action, to which the supporting strap is subjected, is especially pronounced, due to the offset relation of the cross bar 21 to the cross bar 20 and the end bars 22, inasmuch as the angle at which the looped end 17′ of the inner reach of the loop 15 moves into engagement with the supporting strap at that point is such, as will be appreciated from Fig. 3, as to enable the contacting portion of said looped end to gradually move nearer and nearer to the cooperatively associated cross bar 21, whereby the fastening device 18 and, consequently, the tensioned supporting strap 11, is held in a given condition of adjustment.

Although only one form of the invention is herein shown and described, it will be understood that certain changes may be made without departing from the spirit of the invention or the scope of the following claims.

What is claimed is:

1. In a safety belt, a rectangularly shaped member, a cross-bar slidingly connected to said member, and a strap having an end portion secured permanently around said cross-bar and extending in a loop and then under one side of said member and over said strap-surrounded cross-bar and under the other side of said member, whereby the effective length of said strap may be adjusted and whereby such strap may be maintained in a given condition of adjustment by the jamming force on the strap at the point where it passes between the sliding strap-covered cross-bar and the first mentioned side of said member.

2. In a safety belt, a rectangularly shaped member including a pair of side bars and a pair of end bars, to the ends of which end bars said side bars are connected, said end bars being bent outwardly adjacent their respective points of connection with one of said side bars; a cross-bar slidingly connected to said end bars; and a strap having an end portion secured permanently around said cross-bar and extending in a loop and then under said one side bar and over said strap-surrounded cross-bar and under the other side bar, whereby the effective length of said strap may be adjusted and whereby such strap is maintained in a given condition of adjustment by the jamming force on the strap at the point where it passes between said sliding strap-covered cross-bar and said one of said side bars.

In testimony whereof, I have signed this specification.

FRANK RUTLEDGE DAVIS.