

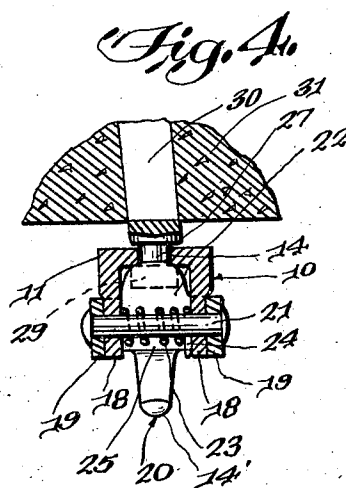
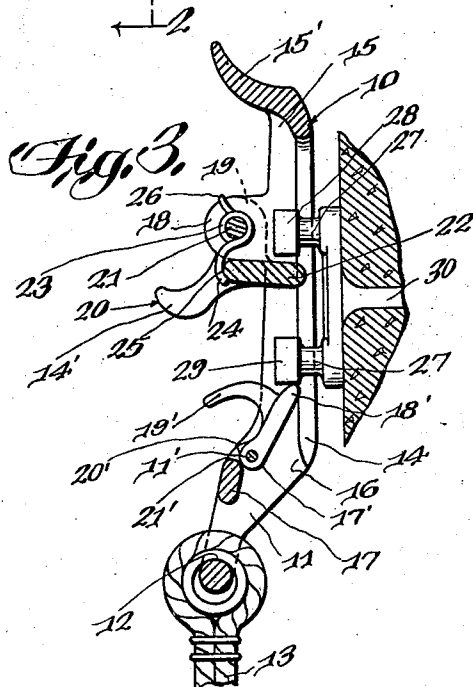
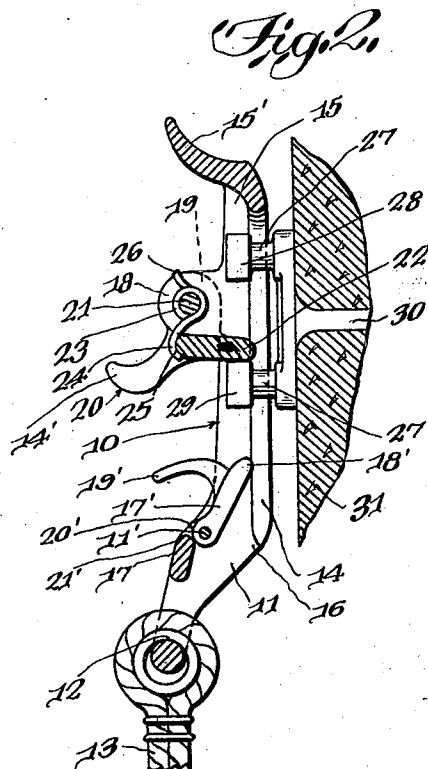
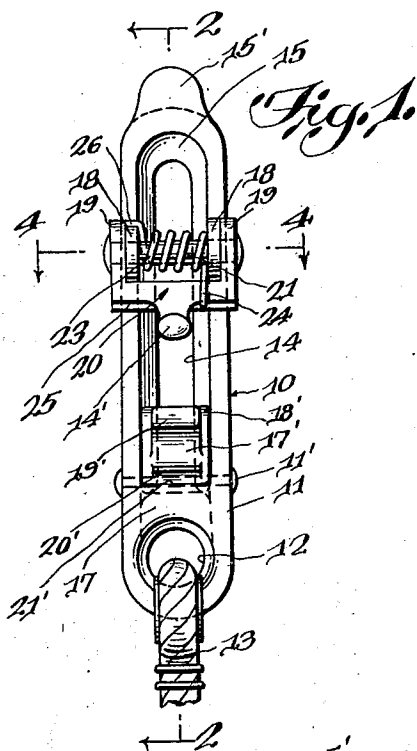
March 12, 1929.

J. HAGEN

1,705,447

WINDOW WASHER'S SAFETY BELT TERMINAL

Filed July 28, 1926



Joseph Hagen
INVENTOR
BY Victor J. Evans
ATTORNEY

UNITED STATES PATENT OFFICE.

JOSEPH HAGEN, OF CHICAGO, ILLINOIS.

WINDOW-WASHER'S SAFETY-BELT TERMINAL.

Application filed July 28, 1926. Serial No. 125,514.

This invention relates to certain novel improvements in window washer's safety belt terminals and has for its principal object the provision of an improved construction of this character which will be highly efficient in use and economical in manufacture.

The present invention constitutes an improvement over that disclosed in my application for U. S. Letters Patent on certain novel and useful improvements in window washer's safety belt terminals filed in the U. S. Patent Office on or about November 16, 1925, Serial No. 69,536.

The present invention contemplates the provision for preventing accidental disconnection between the terminal and the anchor by reason of upward movement of the terminal relative to the anchor studs.

A still further object of the invention is the provision of a stop latch operable automatically to dispose itself in the path of withdrawal of the anchor studs from the terminal.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter more fully described and claimed.

The invention will be best understood by reference to the accompanying drawing showing the preferred form of construction and in which:

Fig. 1 is an elevational view of the invention in its preferred form of construction,

Fig. 2 is a sectional detail view taken substantially on line 2—2 of Fig. 1,

Fig. 3 is a sectional detail view similar to that illustrated in Fig. 2 showing one of the studs of the anchor, with which the invention is associated, in abutment with a safety stop embodied in the invention,

Fig. 4 is a sectional detail view taken substantially on line 4—4 of Fig. 1.

Referring to the drawing, showing the preferred form of construction, a window washer's safety belt terminal is indicated at 10 and comprises a body 11 having an eye 12 formed in one end thereof to which a supporting cable 13 is attached in any suitable manner which will assure the greatest safety. A slot 14 is formed in the body 11 and extends longitudinally with respect thereto and terminates a suitable distance from the end 15 thereof and has an entrance 16 opposite and forwardly of the eye 12 beneath a bridge portion 17 of the body.

The body 11 at its end 15 defines a thumb engaging lip 15'.

The body 11, on opposite sides of the slot 14, is provided with oppositely disposed lateral ears 18 which are adapted for connection with oppositely disposed ears 19 formed on a pivotal stop member 20 by means of a pin 21. The stop member 20 is normally held in a position relative to the body 11 with a portion 22 thereof projecting into the slot 14 by means of a spring member 23 embracing the pin 21 with one end 24 in abutment with the bight portion 25 of the stop member and with the opposite end 26 in abutment with the body member.

The slot 14 is adapted to accommodate the shank portions 27 of anchor studs 28 and 29 which are formed integral with the anchor bolt 30 of any approved construction, securely and permanently embedded in a wall 31 or the like.

In operation the terminal is positioned so as to permit the entrance of the anchor stud 28 into the slot 14 and this is accomplished by pivotally engaging the forefinger against the lip 14' and the thumb against the lip 15' whereby to pivot the stop member 20 in a direction about its pivot so as to raise the abutment 22 to permit the anchor stud 28 to pass within the slot to a predetermined distance from the termination of the slot. Upon passage of the anchor stud 28 to this position the stop member, which is manually manipulated by the thumb and forefinger of the user, is released and permitted to return to its initial position in the above mentioned manner with the anchor stud 29 of the anchor bolt 30 below and in abutment with the stop portion 22 as shown in Fig. 2.

As herein stated the device serves also as an auxiliary safety device to be used in an emergency, and this is brought into operation by the breaking off of the anchor stud 29 by reason of a flaw in the metal or for any other cause and when this happens the body 10 will move downwardly, by reason of gravity, with its end 15 in abutment with the anchor stud 28. Should the anchor stud 28 instead of the anchor stud 29 break off from the anchor bolt proper the device will still be held in operative position by the stop portion 22 which is in abutment with the anchor stud 29.

The above description concludes the construction of my improved window washer's

safety belt terminal as illustrated and described in my prior application herein mentioned.

Associated with the body 11 contiguous the lower end portion thereof and above the bridge portion 17 is a pivotally mounted stop latch 17', this stop latch 17' being pivotally connected to the body 11 through the medium of a pintle 11'. The stop latch 17' includes a bill portion 18' which is adapted to be disposed in the path of withdrawal of the anchor studs 28 and 29, as best shown in Fig. 3 of the drawing.

As shown in Fig. 3 of the drawing the stop latch 17' is pivotally supported by the body 11 through the medium of the pintle 11' in such a manner that it will dispose its bill portion in the path of withdrawal of the anchor stud 29 by gravity.

The stop latch 17' defines as an integral part thereof a finger piece 19' which facilitates pivoting the stop latch in a direction to dispose the bill portion 18' from the path of withdrawal of the anchor studs.

As shown in Fig. 3 the stop latch 17' includes a lateral extension 20' at its lower end portion. This lateral extension 20' is adapted to engage the adjacent portion 21' of the bridge portion 17 limiting pivotal movement of the stop latch 17' from position with its bill portion 18' out of the path of withdrawal of the anchor studs. The lateral extension 20' is located in such position that outward pivotal movement of the stop latch 17' is not disposed beyond the vertical plane whereby the stop latch 17' will by gravity pivot in a direction to dispose the bill portion 18' in the path of withdrawal of the anchor studs when the finger of the operator is disengaged from the finger piece 19'.

The terminal as herein described is associated with the anchor in substantially the same manner as that disclosed in my prior application herein mentioned. As shown in Fig. 3 when the terminal is drawn in an upward direction the anchor stud 29 will be disposed in engagement with the bill portion 18'. The bill portion in such engagement with the anchor stud 29 will prevent further withdrawal of the anchor studs from the slot 14 until the operator pivots the stop latch, through the medium of the finger piece 19', in a direction to remove the bill portion 18' from the path of withdrawal of the anchor studs.

My invention will be of great value in the window washing art and especially where anchor studs are disposed at a low point with respect to the side jambs of a window sill and when the window washer or user of the terminal reaches in an upward direction in an attempt to reach a high surface. In this reaching action of the window washer it is manifest that the terminal will be acted upon

to move in an upward direction and unless a stop latch is provided the terminal will become disengaged from the anchor studs. This cannot take place by the use of a terminal as above described for it is manifest that at all times the stop latch 17' is disposed in a position to obstruct withdrawal of the anchor studs.

While I have shown and described the preferred form of construction for carrying my 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 of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

The invention having been set forth, what I claim as new and useful is:

1. In a window washer's safety belt terminal, the combination with a body having an open slot formed therein for the reception of a pair of anchor studs disposed one above the other, a portion defining a bridge between the portions of the body defining the slot, of means pivotally associated with the body and having a portion normally disposed in a position with respect to the slot to limit positioning of the anchor studs within the slot, a stop latch pivotally supported by the body at the mouth of the slot and having a bill normally disposed by gravity in the path of withdrawal of the anchor studs from the slot, said stop latch defining an extended portion adapted for engagement with the bridge portion for limiting pivotal movement of the stop latch in a direction to dispose the bill from the path of withdrawal of the anchor studs.

2. In a window washer's safety belt terminal, the combination with a body having an open slot formed therein for the reception of a pair of spaced anchor studs disposed one above the other, said body having means thereon affording attachment with a cable, of means mounted on said body including a portion adapted to be movably disposed to extend into said slot whereby said portion will be disposed between said anchor studs when said body is associated therewith, and a stop latch pivotally supported by the body contiguous the lower end portion thereof and having a bill portion normally disposed by the gravity in the path of withdrawal of said anchor studs whereby longitudinal movement of said studs in said slot is limited.

3. In a window washer's safety belt terminal, the combination with a body having an open slot formed therein for the reception of a pair of spaced anchor studs disposed one above the other, said body having means thereon affording attachment with a cable, of means pivotally mounted on said body

including a portion disposed to extend into said slot whereby said portion will be disposed between said anchor studs when said body is associated therewith such that said
5 anchor studs extend through said slot and a stop latch pivotally supported by the body contiguous the lower end portion thereof and having a bill portion normally disposed by the gravity in the path of withdrawal of
said anchor studs whereby longitudinal movement of said studs in said slot is limited, and a finger piece formed on said stop latch adapted to facilitate pivoting said stop latch in a position to dispose the bill from the path of withdrawal of the finger piece.
15 In testimony whereof I affix my signature.

JOSEPH HAGEN.