Oct. 30, 1951 W. J. AULTZ 2,573,298

DEVICE FOR PICKING UP MESSAGES FROM MOVING TRAINS AND THE LIKE

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Fig. 1.

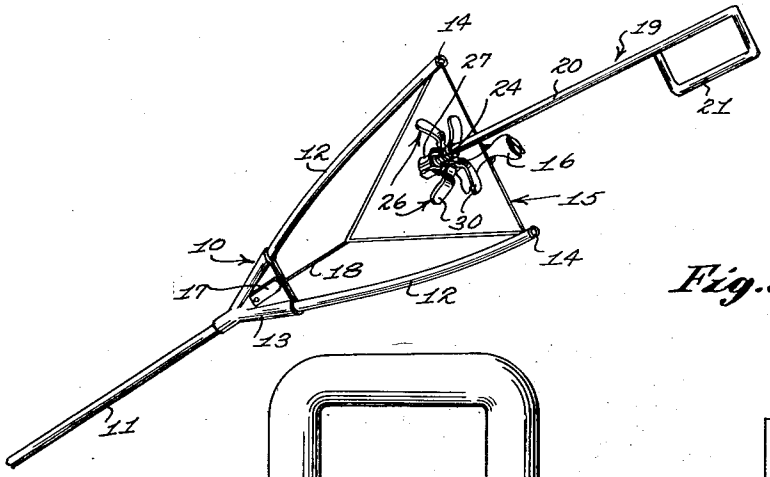


Fig. 3.

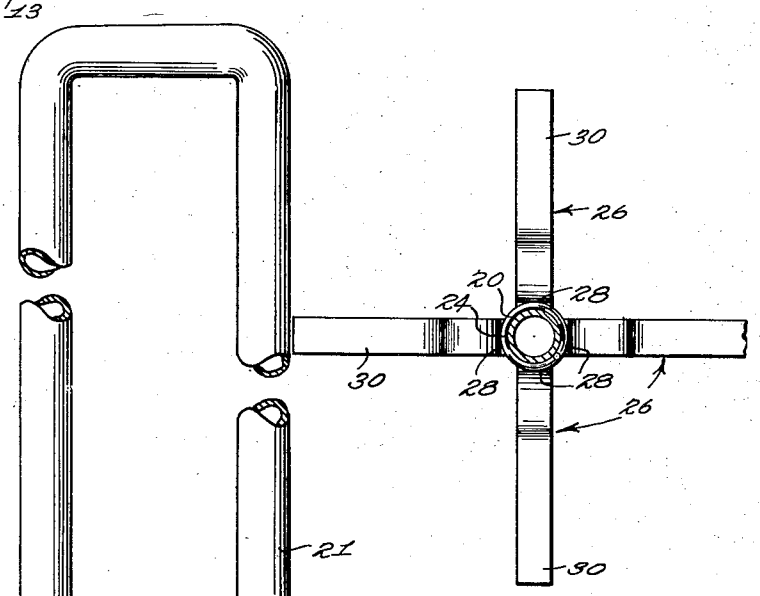
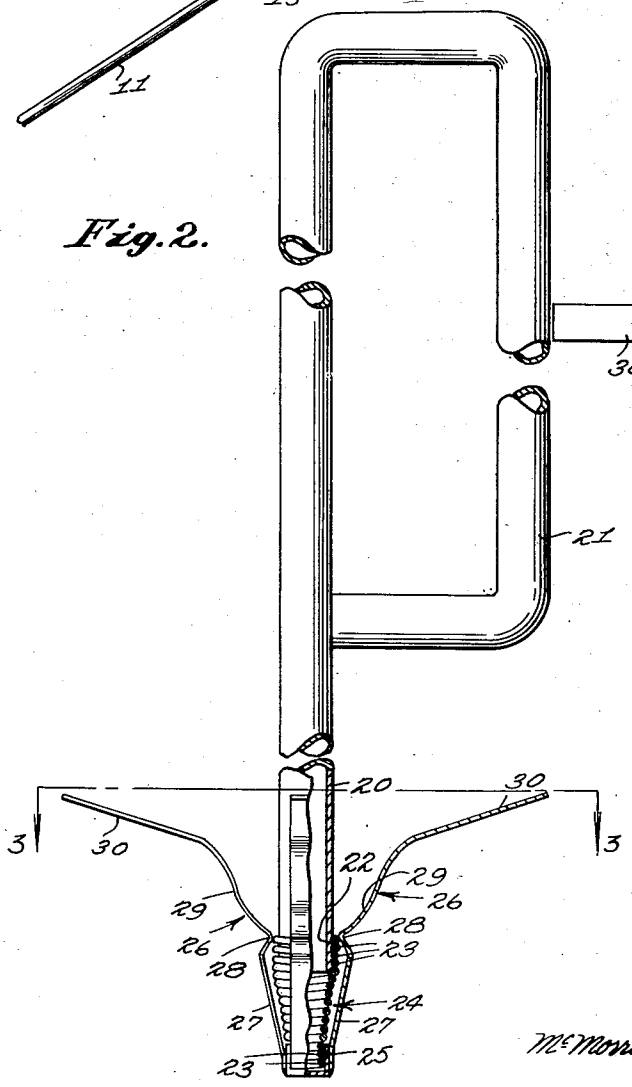


Fig. 2.



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DEVICE FOR PICKING UP MESSAGES FROM MOVING TRAINS AND THE LIKE

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2 Claims. (Cl. 258—3)

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My invention relates to a device for use in picking up messages and the like while traveling at high speed upon a train or the like.

A primary object of my invention is to provide a device for picking up messages from telegraph operators or station agents by the engineer or trainman of a moving train.

A further object is to provide a device of the above-mentioned character which will eliminate the liability of injury to the arms and hands of trainmen during the picking up of messages.

A further object is to provide a device for use in picking up messages while traveling at high speed upon a train, the use of the device making it highly improbable that the message will be missed, as frequently occurs when the trainman attempts to pick up the message by hand.

A further object is to provide a message pick-up device which is very safe for both the trainman or engineer and telegraph operator or agent involved in the transferring of the message.

A further object is to provide a message pick-up device for use by trainmen, said device being designed particularly for use with standard message delivery forks already in wide use.

A still further object of my invention is to provide a pick-up device of the above-mentioned character which is highly simplified, light, strong and durable, and cheap to manufacture.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application, and in which like numerals are employed to designate like parts throughout the same:

Figure 1 is a perspective view of a message pick-up device embodying my invention and showing the use of the same in conjunction with a standard type message delivery fork;

Figure 2 is a central, vertical, longitudinal section through the pick-up device, parts broken away, and part in elevation; and

Figure 3 is a horizontal, transverse section taken on line 3—3 of Figure 2.

In the drawings, where, for the purpose of illustration, is shown a preferred embodiment of my invention, the numeral 10 designates generally a standard type message delivery fork, such as disclosed by United States Patent No. 1,902,669. The delivery fork 10 comprises a handle 11 and two diverging fork arms 12 connected with the handle by means of a sheet metal coupling member 13. The fork arms 12 are provided in their free ends with narrow slots 14 for receiving there-

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in sections of a closed loop of string 15 having a telegram or message 16 secured thereto. Secured to the coupling member 13 is a leaf spring 17 for clampingly engaging a tail or extension 18 of the string loop 15. The loop 15 is thus detachably held by the delivery fork 10 in such a manner that it may be grasped and pulled bodily from the delivery fork, together with the message 16. In present day practice, it is customary for the engineer or trainman, traveling at high speed, to insert his hand and arm through the loop 15, while the same is held by the fork 10. The trainman's arm thus engaged through the loop 15 pulls the loop from the fork 10 together with the message 16. Frequently, the trainman strikes his hand or knuckles against the arms 12 or some other part of the fork 10, injuring them. In order to overcome this difficulty, and also to make it highly improbable that a message held by the fork 10 will be missed, I provide a pick-up device for use by the trainman or engineer, and designated generally by the numeral 19.

The pick-up device 19 comprises a straight rod or shank 20, preferably formed of aluminum tubing, and bent at its outer end to form a large, rectangular, open loop 21 adapted to serve as a handle. The opposite or forward end of the rod 20 is externally screw-threaded, as shown at 22, for receiving some of the coils 23 of an axially extending, retractile coil spring 24. The spring 24 projects beyond the screw-threaded end of the shank or rod 20, as shown in Figure 2. The coils of the spring 24 which engage upon the screw-threaded end 22 are under tension, and serve to securely fasten the spring 24 to the rod 20, so that it will not become accidentally disconnected from the rod.

A small sheet metal cup 25 receives some of the end coils 23 of the spring within it, and may be brazed or otherwise permanently secured to the outer end of the spring. Permanently secured to the side of the cup 25 by brazing, welding or the like are four angularly equidistantly spaced spring arms 26. The arms 26 are preferably formed of spring steel, or the like, and comprise generally longitudinally extending, somewhat diverging, substantially straight portions 27 which lie adjacent to and spaced radially from the spring 24, Figure 2. The spring arms 26 are arranged 90° apart, Figure 3, and extend generally longitudinally inwardly about the rod 20. Adjacent to the inner end of the spring 24, the spring arms are bent to form radially inwardly projecting extensions or ribs 28 which are resiliently biased into contact with the periphery

of the spring. Longitudinally inwardly of the ribs 28, the spring arms 26 further include somewhat curved, diverging, intermediate portions 29 bent at their inner ends to form somewhat inclined, generally radial, substantially straight extensions 30. The tips of the radial extensions 30 are disposed a substantial distance outwardly of the rod 20 and all of the spring arms are of the same length. The radial extensions 30 are spaced inwardly longitudinally of the spring 24, as shown. The arms 26 are highly resilient, and when the extensions 30 are engaged, the inwardly biased ribs 28 will readily move out of contact with the periphery of the spring 24.

In use, the engineer or trainman grasps the handle 21 of the message pick-up device and extends the elongated rod or shank 20 longitudinally beyond his hand. At this time, the train may be traveling at high speed. The telegraph operator or station agent stands beside the track with the message delivery fork 10 in his hand, the handle 11 of the message delivery fork being held. The end of the rod 20 having the spring arms 26 attached thereto is inserted by the trainman or engineer into the string loop 15. The rod 20 may either be inserted longitudinally or axially through the loop 15, or the forward side of the loop extended between the fork arms 12 may be snagged at any angle by the pick-up device.

When the string loop 15, which is under some tension, is engaged by the rod or shank 20, the side or strand of the string loop moves longitudinally along the rod 20 toward the spring arms 26. When the string loop engages any one of the spring arms 26 by contact with either the extension 30 or the diverging portion 29, the rib 28 of that spring arm will be shifted radially outwardly of the spring 24 and the side of the string loop will enter the longitudinal space between the extension 27 and the side of the spring 24. As the train travels forwardly, the string loop 15 so held will be pulled bodily from the delivery fork 10 and held by the spring arm 26. Once any one of the spring arms 26 has thus engaged the string loop 15 and pulled the same from the delivery fork 10, it is substantially impossible for the string loop to be disengaged from the message pick-up device 19 until the engineer or trainman removes it. The device is very light, highly simplified and positive in its action. Its use reduces to a minimum the number of "misses" encountered in the picking up of messages. As previously explained, the device constitutes an important safety feature and eliminates injury to the hands and arms of trainmen and engineers in the picking up of messages.

The pick-up device 19 obviously may be used to pick up messages held by any stationary support beside the railroad track, such as a crane or the like, instead of messages held by the station agent or telegraph operator, using the delivery fork 10. Likewise, the device 19 may be secured to the side of the engine, caboose or any part of the train, in the proper location to pick up the message held by the side of the track.

It is to be understood that the form of the invention herewith shown and described is to be taken as a preferred example of the same, and that various changes in shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A message pick-up device, comprising an elongated substantially straight rod, a loop secured to the rod near one end thereof and adapted to serve as a handle, a longitudinally extending coil spring secured to the opposite end of the rod and projecting axially beyond such end of the rod, and a plurality of angularly spaced longitudinally inwardly extending spring arms secured to the coil spring and including generally radially outwardly projecting extensions adapted to snag the message for securing the message to the rod.

2. A message pick-up device, comprising a substantially straight elongated rod, a loop secured to the rod near one end thereof and adapted to serve as a handle, a coil spring secured to the opposite end of the rod and extending axially beyond such end of the rod, and a plurality of angularly spaced longitudinally inwardly extending spring arms secured to the coil spring, the spring arms being bent between their ends to form radially inwardly projecting gripping ribs resiliently biased into contact with the side of the coil spring, the spring arms being further bent longitudinally inwardly of the gripping ribs to form generally radially extending portions adapted to snag the message and causing said gripping ribs to shift away from contact with the spring when engaged by the message.

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