

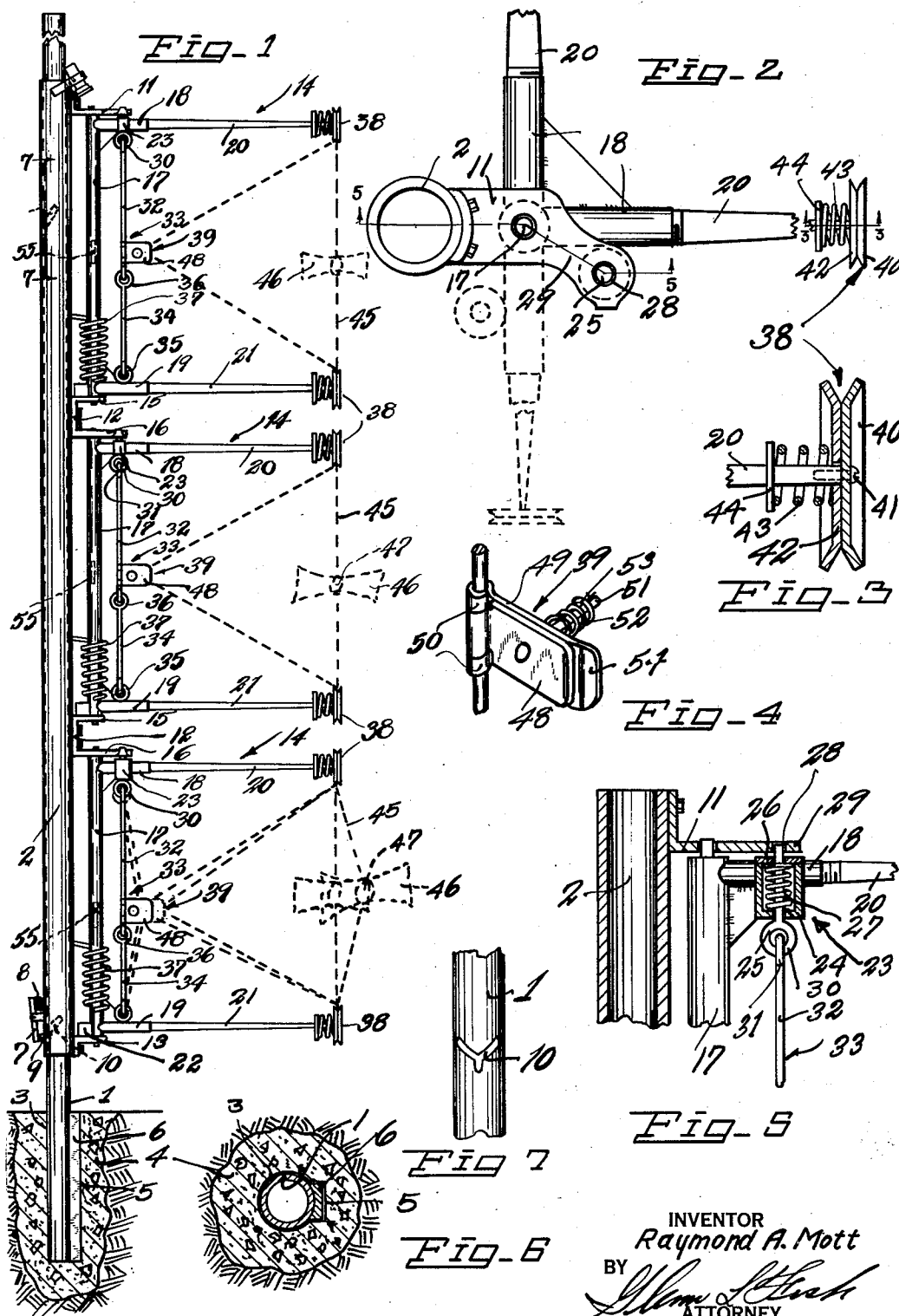
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TRAIN ORDER DELIVERY DEVICE

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TRAIN ORDER DELIVERY DEVICE

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This invention relates to a train order delivery device and it is one object of the invention to provide a device which may be erected at a railroad station in such position that as a train passes an engineer, conductor, or other member of a train crew may remove orders held by the device and thus obtain the orders without stopping the train. Therefore it will not be necessary for a station agent to stand near the track and hold a hoop, having the orders attached to it, in position to be grasped by a member of the train crew as the train passes the station and likelihood of a station agent being killed or injured by standing too close to a train passing the station will be avoided.

Another object of the invention is to provide a device of this character wherein the train orders are supported from a pole mounted vertically at the station in such proximity to the track that a member of the train crew may remove the orders without leaning from the train to such an extent that he is liable to lose his balance and fall from the moving train.

Another object of the invention is to provide a train order delivery device wherein the orders are carried by a loop formed of string which is detachably engaged with clips carried by a frame pivoted to arms projecting from a post, the string being also engaged with a clip carried by a trigger-operating bar so that when the train orders are grasped and pull exerted to remove them, pull exerted will cause triggers holding the frame in an extended position will be moved to a releasing position and the frame allowed swing from an extended position toward the track to a position parallel to the track where another set of orders may be readily applied for delivery to another train.

Another object of the invention is to provide a train order delivery device having a pole to which a number of order-carrying frames may be mounted, one above another, and thus allow more than one set of orders to be delivered and also allow a set of orders to be applied to a retracted frame while orders are being removed from an extended frame. It will thus be seen that when orders are to be delivered to trains closely following each other this may be done and without danger to a station agent or likelihood of the second set of orders not being positioned for removal before the second train reaches the station.

Another object of the invention is to provide a train order delivering device which is simple

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in construction, easy to operate, and not liable to become broken or inoperable when needed.

The invention is illustrated in the accompanying drawings wherein:

5 Fig. 1 is a view in elevation showing the train order delivering device in position for use.

Fig. 2 is a top plan view of the train order delivering device.

10 Fig. 3 is a fragmentary sectional view upon an enlarged scale taken along the line 3—3 of Figure 2.

Fig. 4 is a perspective view of a cord-holding clip carried by a trigger bar of the device.

15 Fig. 5 is a sectional view taken along the line 5—5 of Figure 2.

Fig. 6 is a transverse sectional view taken along the line 6—6 of Figure 1.

20 Fig. 7 is a fragmentary view showing a portion of the pole or standard in elevation.

This improved train order delivery device has a standard 1 which is formed of a metal tube or pipe and about which fits a sleeve 2 which is also formed of a metal tube or pipe of such diameter that it may be readily slid vertically along the standard from a lowered position to a raised position. The standard is of sufficient height to permit the sleeve to be moved from a lowered position for application of train orders to a raised position in which the train orders will be held at such height that they may be easily grasped and removed by an engineer or other member of the crew of a train. The lower end portion of the standard or pole fits into a socket 3 mounted in concrete 4, which may be a portion of a station platform or a block embedded in ground at a station, and at one side the socket is formed with an extension 5 to receive a bar or key 6 welded to the standard and serving to prevent the standard from turning in the socket. When the delivery device is not in use the standard may be withdrawn from the socket. A latch 7 is pivoted to the sleeve and is yieldably held in an operative position by a spring 8 which urges the bill or pin 9 of the latch through an opening formed in the sleeve. A Y-shaped slot 10 is formed in the standard or post and when the sleeve is shifted upwardly the bill of the latch will engage in an arm of the slot and will then be guided into the lower portion of the slot where it will serve to hold the sleeve in its raised position. By applying pressure to the shank of the latch the bill thereof will be withdrawn and the sleeve may then slide downwardly along the post to a lowered position where order holders carried

by the sleeve will be in such position that train orders may be easily applied to them.

Brackets 11, 12, and 13 are secured to the sleeve and project radially therefrom and these brackets pivotally support frames 14 by means of which train orders are supported in position for removal by a member of a train crew. In the present illustration there have been provided three frames or train order holders but it will be understood that any number desired may be provided. The upper frame is carried by the upper bracket 11 and one of the intermediate brackets 12 between which the intermediate frames are pivotally mounted and the lower frame is pivotally mounted between the lower intermediate bracket and the bracket 13 at the lower end of the sleeve. If a single frame is used the intermediate brackets 12 will be omitted and the frame supported between the brackets 11 and 13. Each intermediate bracket has an upper arm 15 corresponding to the lower bracket 13 and a lower arm 16 corresponding to the upper bracket 11. Therefore each frame or holder is pivotally mounted between an upper elongated bracket member or arm and a short lower bracket member, and the mounting for the upper end of a frame may be referred to as an elongated bracket member and the mounting for the lower end of the frame may be referred to as a short bracket member.

Each frame or order holder 14 has a vertical post or bar 17 formed at its ends with pinions which are rotatably engaged in openings formed through the brackets. Stub-arms or sleeves 18 and 19 project from upper and lower ends of the posts or shafts and carry arms 20 and 21, and referring to Figure 2 it will be seen that the stub arms or sleeves are arranged in pairs, the stub arms or each pair extending at right angles to each other. Therefore when one set of arms 20 and 21 are projecting from the sleeve 2 toward a railroad track the other pair of arms will extend parallel to the track and when the first pair of arms are allowed to move to a retracted position parallel to the track the second pair will at the same time move to an extended position. Swinging movement of the arms when the first pair move toward a retracted position is limited by engagement of the lower stub-arms with abutment blocks 22 carried by the short bracket members. The upper stub-arm which normally projects to an extended position carries at latch 23 having a casing 24 which is mounted in vertical position against the outer side of the stub-arm. A pin 25 extends vertically through the casing and within the casing carries a disc 26 against which bears the upper end of a spring 27 which urges the pin upwardly so that the upper end of the pin will engage through an opening 28 formed through the ear 29 of the elongated bracket member. An eye 30 is formed at the lower end of the pin 25 and through this eye is engaged the eye 31 at the upper end of the upper link 32 of an actuating member 33 for the latch. This actuating member has a lower link 34 which has its lower end loosely engaged through an eye 35 rising from the normally extending stub-arm 19 at the lower end of the post 17 and meeting ends of the links are loosely connected with each other by the eyes 36. When pull is exerted upon the upper link the pin 25 will be drawn downwardly out of the opening 28 and a helical spring 37 coiled about the post 17 and anchored to the post and the lower stub-arm will turn the post and swing the

extended arms 20 and 21 to a retracted position while the retracted arms are simultaneously swung to an extended position.

Each of the upper arms 20 and each of the lower arms 21 carries a clip 38 at its outer end, and the upper link of each of the latch-actuating members 33 carries a clip 39. The clips 38 are of duplicate construction and each has an outer disc 40 secured to the end of the arm by a screw 41 and an inner disk 42 which fits loosely about the arm and is urged toward the companion disc 40 by a helical spring 43 bearing against an abutment washer or disk 44 mounted about the arm. By so forming the clips a looped string or cord 45 may be trained about the clips 38 and gripped between their disks 40 and 42 and a train order 46 passed through a knotted portion 47 of the looped cord will be supported between the upper and lower arms. After the looped cord has been engaged with the clips 38 it is extended toward and engaged with the clip 39. This clip is formed as shown in Figure 4, and referring to this figure it will be seen that it has jaws or leaves 48 and 49, the inside leaf 48 being welded to the link 32 and the outside leaf or jaw being pivoted to the link by hinge ears 50. A stem 51 carried by the leaf 48 passes through an opening formed through the leaf 49 and carries a helical spring 52 which bears against a washer 53 carried by the stem and urges the leaf or jaw 49 toward the leaf or jaw 48. A lip 54 is formed at the free end of the jaw 49 so that the cord may be easily passed inwardly between and then gripped by the jaws and the spring 53 is of such strength that the cord will not be pulled out from between the jaws until the latch pin 25 has been drawn downwardly to release the upper stub-arm and allow the spring 37 to swing the frame or order holder from one position to another.

When this device is in use it is set up at a station adjacent the railroad track and after the cord has been applied to a train order the cord is engaged with the clips 38 and 39 and the frame turned to a set position in which the arms carrying the cord project toward the track. If two orders are to be delivered the cord holding the second order is applied to the clips of the second set of arms and to the clip 55 projecting from the post 17 at right angles to clip 39. The sleeve 2 is then slid upwardly upon the standard 1 and secured in the raised position by the latch 7. As a train passes the station a member of the train crew reaches out from the engine or a car of the train and grasps the portion of the cord extending between the upper and lower arms and pull is exerted to detach the cord from the clips 38. This will also exert pull upon the upper link 32 of the latch operating member 33 and the pin 25 will be pulled downwardly to release the frame and allow the spring 37 to turn the frame as the cord is detached from the clip 39 until turning of the frame is stopped by the block 22. The second set of arms will then project toward the track and the message held by the cord applied to their clips 38 and the clip 55 on the post will be removed. By providing three frames each having two sets of arms six train orders may be applied ready for delivery to train crews. After a message or train order has been removed the latch 7 may be moved to a releasing position and the sleeve allowed to slide downwardly along the standard to a lowered position where other train orders may be applied.

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Having thus described the invention, what is claimed is:

1. In a train order delivering device, a standard, a sleeve slidable vertically along the standard from a lowered position to a raised position, a latch for releasably holding the sleeve raised, upper and lower brackets projecting laterally from said sleeve, a post disposed vertically and rotatably mounted between said brackets, upper and lower arms projecting laterally from said post, clips at outer ends of said arms, a latch carried by the upper arm and having a casing and a pin slidable vertically through the casing and urged upwardly into position to engage through an opening in the upper bracket to releasably hold the arms in position to extend toward a railroad track, a spring about said post for returning the frame to its normal position and retract the arms when the pin of the latch is moved to a releasing position, a latch-releasing member consisting of links loosely connected with each other and extending between and connected with the latch and the lower arm, and a clip carried by a link of the latch-releasing member for engagement by a looped cord carrying a message and applied to the clips of the arms whereby pull upon the cord to detach it from the clips will exert pull upon the link and cause the latch pin to be shifted downwardly and the upper arm released and the frame swung to move the extended arms to a retracted position parallel to the track.

2. In a train order delivering device, a standard, a sleeve about said standard shiftable along the same to raised and lowered positions, upper and lower brackets projecting laterally from said sleeve, a frame having a vertical post rotatably mounted between said brackets, upper and lower arms projecting from said post and having swinging movement from a retracted position to an extended position by turning of the post, a latch carried by one arm and yieldably held in position for engagement with the adjacent bracket for releasably holding the frame in a set position with the arms extended, a spring for returning the frame to its normal position with the arms retracted when the latch is moved to a releasing position, clips at outer ends of said arms, yieldable actuating member extending vertically between the arms and having one end connected with the latch, a clip carried by said actuating member, and a message holder detachably engaged with the clips of the arms and the clip of the actuating member and thereby held in position to be grasped and pull exerted to first detach it from the clips of the arms and then exert pull upon the actuating member to move the latch to a releasing position and

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then detach the message holder from the clip of the actuating member.

3. In a train order delivering device, a standard and, upper and lower brackets projecting laterally from said standard, a frame having a vertical post rotatably mounted between said brackets, upper and lower arms projecting from said post and movable from a retracted position to an extended position by turning of the post, a latch for releasably holding the frame in a set position with the arms extended toward a railroad track, a yieldable actuating member extending between inner ends of the arms and connected with the latch for moving the latch to a releasing position, clips carried by outer end portions of said arms for engaging a message holder and holding a portion thereof in position between outer ends of the arms, and a clip carried by the actuating member for engagement with a portion of the message holder extended towards the post whereby pull upon the message holder will first detach it from the clips of the arms and then exert pull upon the clip of the actuating member to detach the message holder therefrom and simultaneously actuate the actuating member to move the latch to the releasing position for permitting movement of the frame to retract the arms.

4. In a train order delivering device, a vertical support, brackets projecting from the support, a frame having a vertical post rotatably mounted between the brackets and upper and lower arms projecting from the post, clips carried by the arms for supporting a message holder between the arms, a latch for releasably holding the frame in a set position with the arms extending toward a railroad track, a spring for turning the post and swinging the arms to a retracted position when the latch is in a releasing position, an actuator for the latch, and a clip carried by the actuator for engagement with the message holder and consisting of leaves projecting laterally from the actuator, one leaf being fixed to the actuator and the other being pivoted thereto, a stem carried by the stationary leaf and passing through an opening in the pivoted leaf, and a spring about the stem urging the pivoted leaf toward the stationary leaf.

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