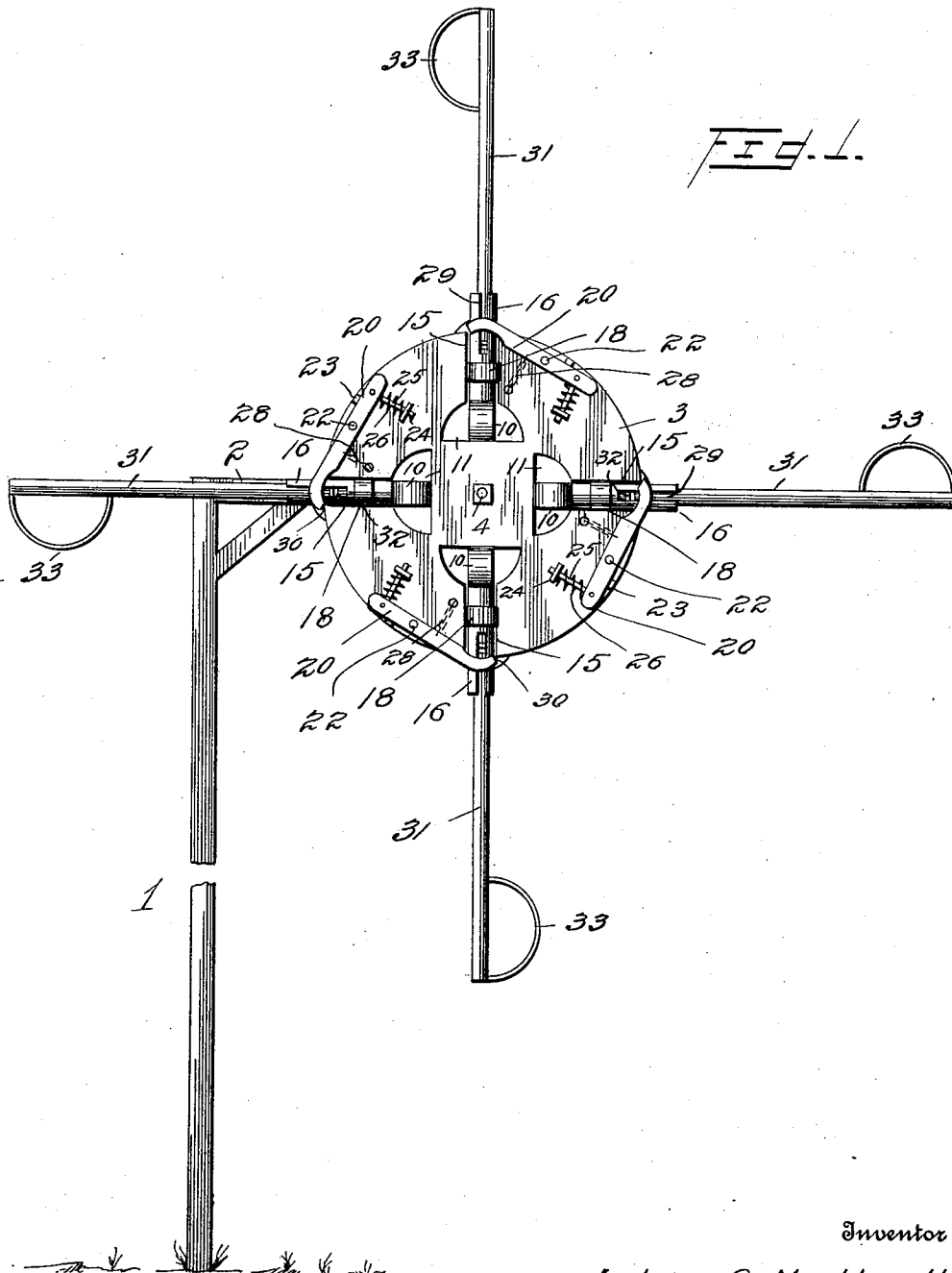


J. G. NORTHCUTT.
 TRAIN ORDER DELIVERER.
 APPLICATION FILED NOV. 11, 1911.

1,032,932.

Patented July 16, 1912.

3 SHEETS-SHEET 1.



Witnesses
E. G. Duffy
Wm. North

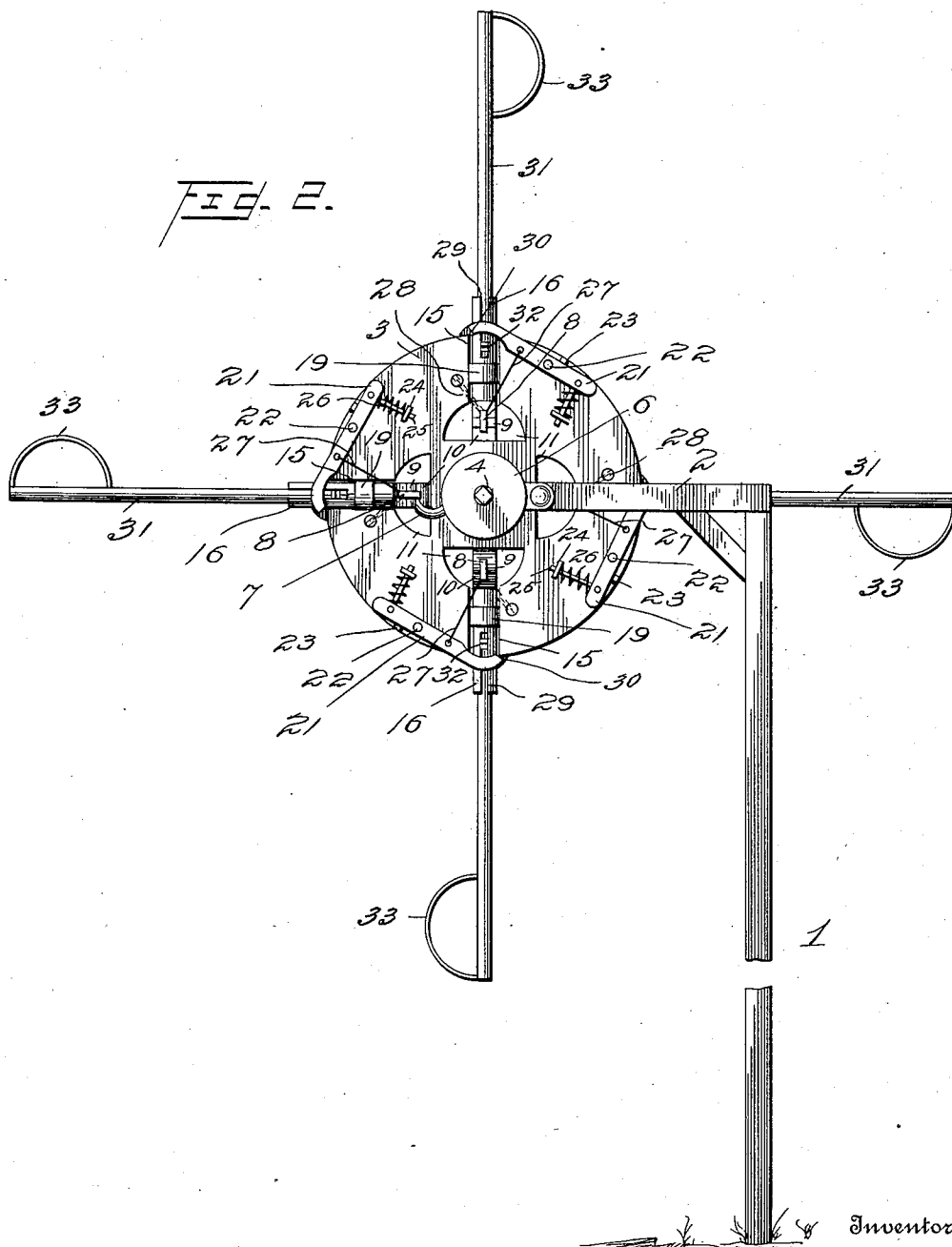
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3 SHEETS-SHEET 3.

FIG. 3.

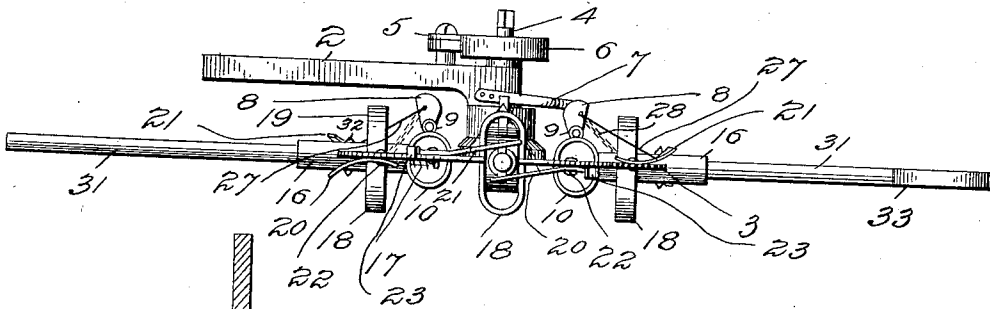


FIG. 4.

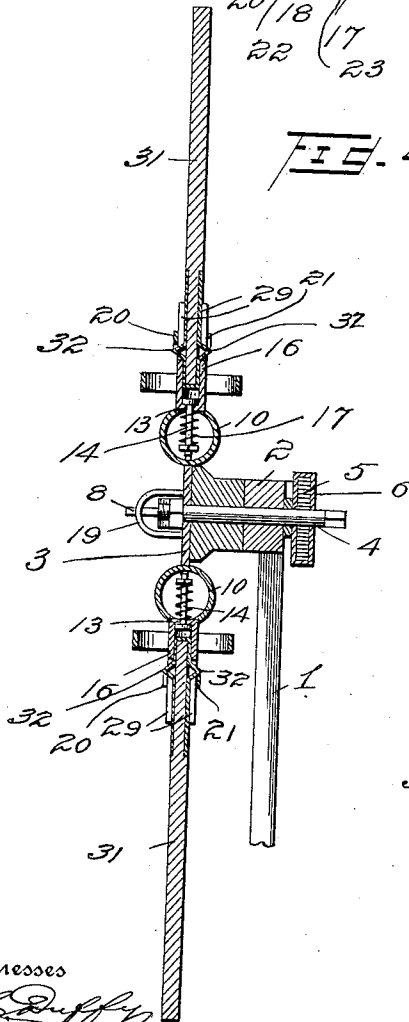
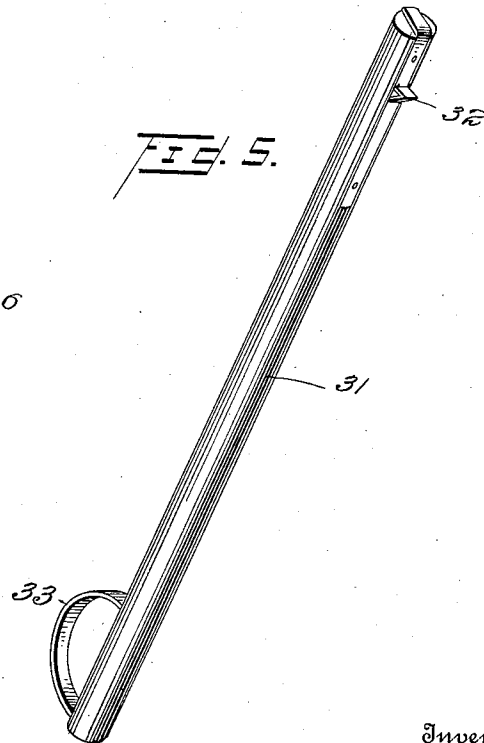


FIG. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN G. NORTHCUTT, OF KENNA, NEW MEXICO.

TRAIN-ORDER DELIVERER.

1,032,932.

Specification of Letters Patent.

Patented July 16, 1912.

Application filed November 11, 1911. Serial No. 659,698.

To all whom it may concern:

Be it known that I, JOHN G. NORTHCUTT, a citizen of the United States, residing at Kenna, in the county of Chaves and State of New Mexico, have invented new and useful Improvements in Train-Order Deliverers, of which the following is a specification.

This invention relates to mechanism for delivering orders from a station to the engineer or conductor of a train passing the said station, and the object of the invention is to provide a device of this character which is of a comparatively simple construction, which may be easily erected, and which is adapted to sustain a plurality of messages which are delivered successively to a number of passing trains.

With the above primary object in view, and many others which will appear as the nature of the invention progresses, the improvement resides in the novel construction, combination and arrangement of parts hereinafter fully described and claimed.

In the drawings, accompanying this specification, there has been illustrated a simple and preferred embodiment of the improvement, it being understood, however, that the showing therein is merely illustrative, and that such changes in the minor details of construction, which fall within the scope of the appended claims may be resorted to if desired, without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings,—Figure 1 is a side elevation of a device constructed in accordance with the present invention. Fig. 2 is an elevation of the same, opposite to that shown in Fig. 1. Fig. 3 is a plan view of the same. Fig. 4 is a vertical transverse sectional view taken central of the disk and looking toward the station post. Fig. 5 is a detail perspective view of the order receiving rod.

Like reference characters designate corresponding parts throughout the several figures of the drawings.

The improved apparatus contemplates automatic means whereby train orders are arranged within the path of the train and

may be removed from the apparatus by the engineer, fireman, or conductor, or the train may be provided with a suitable apparatus for removing the said orders. The apparatus contemplates means whereby orders for a number of trains will be brought consecutively and automatically within the path of each of the trains and delivered to the train for which the order is intended without manual operation of the apparatus.

In the drawings, the numeral 1 designates a station post. Secured in any desired manner to this post 1 is a bracket or arm 2 upon which is pivoted a disk 3. The disk 3 preferably comprises a single sheet of suitable metal, and the shaft 4 therefor, which extends through bearings provided in the arm or bracket 2, has positioned thereon adjacent the angular end of the said shaft, one end of a flattened spiral spring 5. The arm or bracket 2 is provided with a suitable casing 6 for the reception of the said spring and the opposite end of the spring is connected with the arm or bracket 2 or with the casing if desired in any desired manner. The tension of the spring 5 is adapted to rotate the disk 3 and in order to limit the rotation of the said disk the arm or bracket 2 is provided with an off-set stop member 7, the latter adapted to engage successively with one of a plurality of flattened pivoted fingers 8. In the device, illustrated in the drawings, four of these fingers are shown but it is obvious that any number may be employed as desired. The fingers 8 have their trunnions mounted in bearings 9 provided upon U-shaped members 10, the said U-shaped members straddling openings 11 provided in the disk 3. These U-shaped members each form one of the walls of a housing for the said openings 11, the opposite wall being formed by a second substantially U-shaped member, as clearly shown in the several figures of the drawing. The U-shaped members are preferably connected together at one of their ends, while the free arms of the said members are secured to the disk in any desired manner, or if preferable the said members may comprise a single element as illustrated in the drawings.

The connecting portion of each pair of the U-shaped members is provided with a suitable opening 13, the said opening adapted to receive a double headed rod 14. Each of these rods may have their heads detachable if desired, the showing in the drawings illustrating only one of the said heads detachable. The disk is provided with longitudinally extending slits 15 arranged adjacent the openings 10, and positioned within the space formed by the said slits are the sleeves or barrels 16. The sleeves or barrels have their inner faces closed, but are provided with an opening which is adapted to receive one of the headed extremities of the rod 14, while surrounding the said rod and contacting with both the housing and the opposite head of the rod are helical springs 17. The side walls provided by the slits 15 prevent the lateral movement of the slits or barrels, but the openings provided by the said barrels for the reception of the headed rod 14 are sufficient to permit of a lateral or swinging movement of the said barrels. This movement is limited through the medium of oppositely arranged substantially U-shaped bail members 18 and 19, the said members being secured to the disk adjacent the walls formed by the slitted portions thereof.

The numerals 20 and 21 designate flattened resilient plates which are pivotally connected as at 22 to the opposite faces of the disk 3. These plates are arranged in pairs, one contacting with the upper face, and the second contacting with the lower face of each of the barrels. The periphery of the disk 3 is provided with a plurality of lugs 23, the said lugs being arranged to contact with the portion of the plates 20 and 21 beyond their pivot, and to limit the inward movement of the opposite ends of the plates. Each of the plates, adjacent its end contacted by the lug 23, is provided with a pivoted rod 24, the latter passing through a suitable eye 24' formed upon the opposite faces of the disk 3. Surrounding each of these rods 25 and adapted to exert pressure between the eye and the plate, so as to force the rod into contact with its lug is a helical spring 26. Each of the coacting pairs of plates 20 and 21 is connected with the fingers 8, one of the connections comprising a pivoted bar 27, the second comprising a flexible element 28, and the said flexible element 28 is adapted to pass through a suitable opening formed in the disk so that the same may be connected with the plate upon the outer face of the disk. Each of the barrels 16 is provided at its outer and open face with oppositely arranged longitudinally extending bifurcations 29, and the extremities of the coacting pairs of plates overlie the spaces thus provided. The outer edges of each of the pairs

of coacting plates are bent or flared away from the barrels 16 with which they contact, and the object of the said flared portions, which may be designated by the numeral 30, is to permit of the ready insertion of the order carrying rods 31. These rods 31 have their diametrically opposite faces provided with off-set portions forming studs 32, and it will be noted that when the rods are to be inserted within the barrels the flared ends of the springs will readily give when contacted upon their inner faces by the studs of the rods, and their inner faces will exert an opposite pressure so as to prevent the accidental removal of the order carrying rod. The order may be wound around the rod or may be connected therewith in any desired or preferred manner and the extremity of each of the said rods is formed with a bail or loop 33, the same adapted to be grasped by one of the trainmen or by a suitable mechanism connected with the train so as to withdraw the rod and to deliver the order to the train. When one of the rods is withdrawn from its barrel, it will be noted that the studs thereof will contact with the oppositely arranged plates 20 and 21, and in so doing will swing the plates upon their pivots against the pressure of their springs so as to spread the plates to permit the studs 32 to pass between the said plates. It will be noted that when the rod 31 is being withdrawn from its barrel, the rigid connection between the finger 8 and one of the plates will swing the said plate out of contact with the stop member 7, thus permitting the disk to rotate under the exertion of the spring 5 until the next finger 8 contacts with the stop member. This operation is continuous it being noted that the station master being acquainted with the message to be delivered to the first passing train, places the order upon the rod 31 which is arranged within the path of the grasping device carried by the train. When this message has been delivered, the message been arranged upon the next rod 31 is brought to a position to be grasped by the said second train and so on until all of the orders are delivered to the successive passing trains.

Having thus fully described the said invention, what I claim is:—

1. An apparatus of the class described including a disk provided with spaced openings arranged adjacent its periphery, slotted sleeves resiliently supported within the openings, resilient plates upon the disk and overlying the slots of the sleeves and rod members having one of their ends provided with studs adapted to be inserted within the sleeves, and the said studs adapted to extend through the slots of the sleeves and to be contacted by the resilient plates.

2. In a device for the purpose set forth, the combination with a stationary delivery apparatus and a removable securing apparatus, the delivery apparatus embodying a rotatable disk, spring actuated means for rotating the disk, stop elements for limiting the rotation of the disk, removable elements connected with the disk, resilient elements for normally forcing the removable elements away from the disk, spring stops for sustaining the removable elements upon the disk, and means provided upon the receiving apparatus for detaching the removable elements from the disk and permitting the spring to rotate the disk to bring the successive receiving apparatus within the path of the next removable element which, through the medium of the stop, has been retained within the path of the said successive receiving apparatus.

3. The combination with a plurality of passing cars, of a station post, a revoluble disk mounted upon said post, spring actuated means for revolving the disk, a stop element for halting the revolution of the disk, the said disk being provided with a plurality of spaced openings, sleeves within the said openings, means provided upon the disks for permitting a limited vertical and longitudinal movement of the said sleeves, order receiving rods within each of the said sleeves, stops upon each of the said rods, spring members arranged at both the top and the bottom faces of the said disk and contacting with the stops of the rods, ears pivotally connected with the disk and adapted to normally contact with the disk therefor, and means provided between the spring retaining elements and the said ears for rotating the ears out of the path of the stop after one of the rods has been removed from its sleeve to bring the successive rod within the path of the car succeeding that which is adapted to remove the first named rod.

4. The combination with a station post arranged adjacent a railway upon which cars pass, of a revoluble member connected with the said post, a spring for revolving the said member, means whereby the spring is wound, a stop for limiting the rotation of the member, a movable member contacting the stop to limit the rearward movement of the said member, sleeves arranged upon the said member, means whereby the said sleeves are permitted a limited vertical and a limited longitudinal movement, order receiving rods within the said sleeves, each of said rods being formed with an oppositely arranged off-set, pivoted flexible elements connected with both the upper and lower faces of the delivery apparatus and adapted to contact with the off-sets upon the removable elements, spring members for sustaining the flexible elements into contact with the off-sets, means for limiting the movement of the

said flexible elements, and means actuated by the first passing car when removing the first removable element from the delivery apparatus for swinging the contacting member out of engagement with the stop to permit of the succeeding contacting member to engage with the stop.

5. In a device for the purpose set forth, the combination with a station post, a bracket upon said post, a disk pivotally connected with said bracket, a spring element for rotating the disk, said disk being provided with a plurality of spaced radial slots, U-shaped members bridging the said slots upon both the top and the bottom of the said disk, a sleeve mounted within both of the said slots, a resilient element for retaining each of the said sleeves within the slot, each of the sleeves being formed with oppositely arranged registering openings, flat resilient members pivotally connected with the disk and having their ends overlying the slots, flexible elements connected with the resilient elements to sustain the same in relation to the slots of the sleeves, stop members for limiting the movement of the resilient elements, a stop provided upon the bracket, a finger connected with the disk adjacent each of its slots and adapted to contact with the said stop, a connection between the resilient elements and each of the said fingers, a delivery rod, said delivery rod being provided with off-sets, each of said off-sets adapted to contact and to be retained within its particular sleeve by the resilient members, and whereby when one of the said rods is removed from its sleeve the said resilient elements will be rotated so as to bring their particular finger out of engagement with the stop to permit of the rotation of the disk and to allow the stop to contact with the succeeding finger.

6. In a device for the purpose set forth, the combination with a station post, of a disk mounted for rotation upon the said post, spring means for rotating the disk, a stop member, pivoted fingers secured to the disk and adapted to contact with the stop member to limit the rotation of the disk, loosely mounted sleeves carried by the disk and arranged in spaced relation thereon, each of said sleeves having its outer portion formed upon its opposite faces with elongated openings, order delivery rods for each of the sleeves, each of the said rods having its top and bottom portions formed with stops adapted to pass through the openings of the sleeves, flattened resilient members pivotally connected upon both the upper and lower faces of the disk and having their ends contacting with the opposite faces of the sleeve and adapted to engage with the stops of the order delivery rods, the ends of the said resilient members being flared outwardly from their point of contact with the said stops,

each of the said resilient members having a
connecting element which is secured to one
of the fingers, spring members for normally
forcing the resilient elements into contact
5 with the stops, and means provided upon the
disk for limiting the movement of the said
resilient elements.

In testimony whereof I affix my signature
in presence of two witnesses.

JOHN G. NORTHCUTT.

Witnesses:

CLAUDE J. MARBUT,
T. W. CAMICHAIR.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."