

No. 819,162.

PATENTED MAY 1, 1906.

J. J. NOHR.  
MAIL DELIVERY APPARATUS.  
APPLICATION FILED AUG. 29, 1905.

2 SHEETS—SHEET 1.

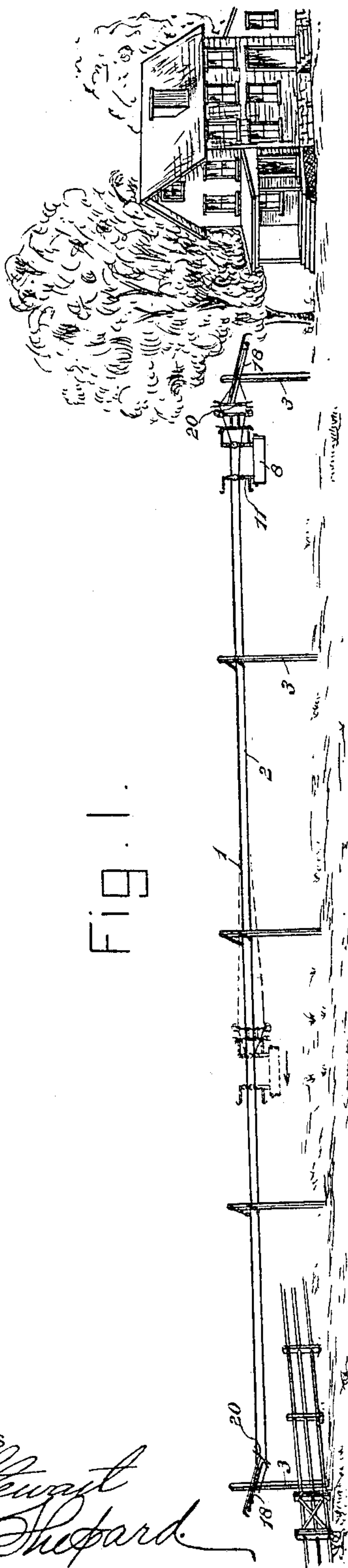


Fig. 1.

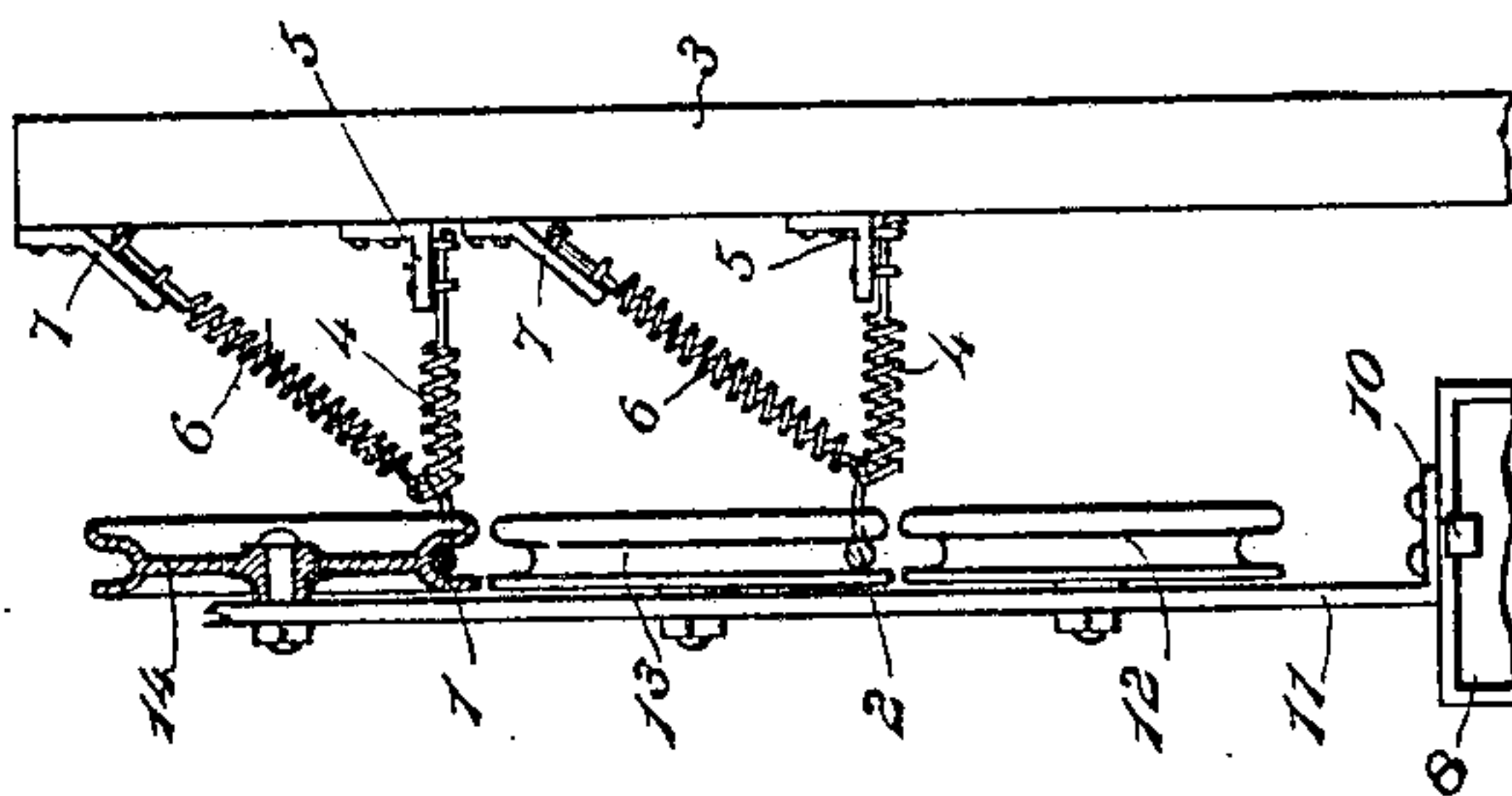


Fig. 3.

Witnesses  
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*H. D. Shepard*

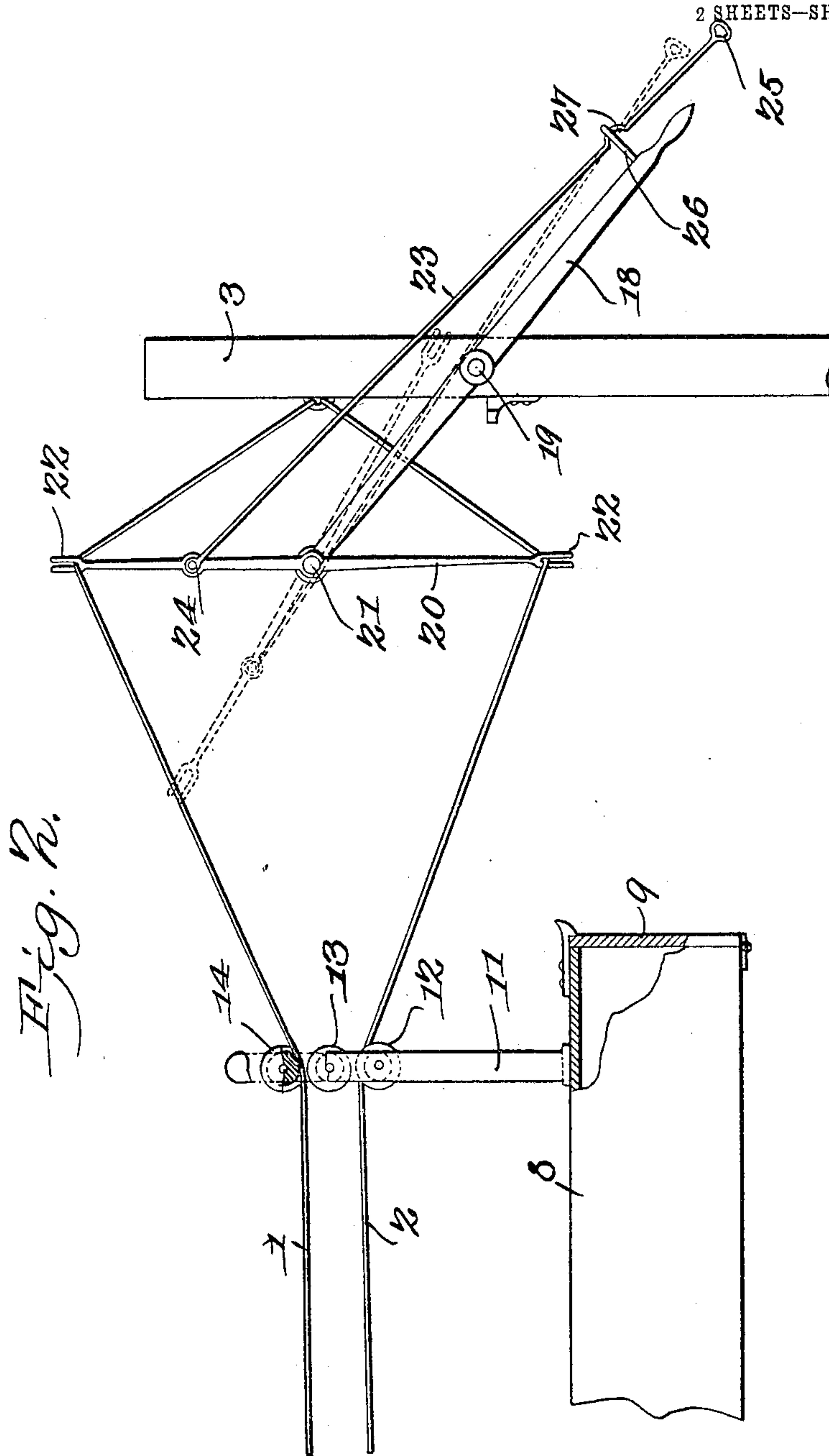
*Julius J. Nohr*  
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WITNESSES:

*E. J. Stewart*  
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# UNITED STATES PATENT OFFICE.

JULIUS J. NOHR, OF YANKTON, SOUTH DAKOTA.

## MAIL-DELIVERY APPARATUS.

No. 819,162.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed August 29, 1905. Serial No. 276,279.

*To all whom it may concern:*

Be it known that I, JULIUS J. NOHR, a citizen of the United States, residing at Yankton, in the county of Yankton and State of South Dakota, have invented a new and useful Mail-Delivery Apparatus, of which the following is a specification.

This invention relates to mail-delivery apparatus, and is particularly designed for use in connection with rural free-delivery systems to carry the mail from the main road to the house, and vice versa, although it may be employed for carrying mail from one post-office to another.

A further object of the invention is to provide for propelling the mail-carrying receptacle in a novel and effective manner, so as to dispense with expensive motors, and thereby bring the device into the reach of the general public.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a perspective view of the present apparatus erected for use. Fig. 2 is an enlarged elevation of one end of the track, showing the means for starting the mail-carrying receptacle. Fig. 3 is an enlarged cross-sectional view taken through the track with one of the traction-wheels in section.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

The present apparatus is in the nature of an overhead-trolley system and includes a track made up of vertically-spaced wires 1 and 2, supported upon the series of posts 3, one terminal of the track being at or adjacent the house and the other terminal at the main road. As best indicated in Fig. 3 of the drawings, it will be seen that each wire or track member is supported by a substantially horizontal helical spring 4, connected to the post by means of a suitable bracket 5, there being another spring 6 inclined to the vertical and connected at its lower end to the spring 4 and its upper end to a bracket 7,

carried by the post, whereby each wire is maintained at a desired distance from the post and is capable of yielding vertically.

The mail-carrying receptacle 8 is preferably oblong in form and is provided at each end with a hinged door 9, having a suitable lock or latch 10, which may be merely a spring-latch or a key-controlled lock, as may be desired. From the top of this receptacle there rises a post or hanger 11, upon which is rotatably mounted a vertical series of three rollers or wheels 12, 13, and 14, which are preferably grooved, so as to receive the respective wires 1 and 2. The upper wheel 14 runs upon the wire 1 and the intermediate wheel 13 runs upon the lower wire 2, said intermediate wheel also serving as a guard to engage the under side of the upper wire 1 should the wheel 14 jump from the wire and also when the wheel 14 passes the successive springs 4, which support the wire. The lower wheel 12 also serves as a guard-wheel to receive the wire 2 should the wheel jump upwardly, and thereby prevent the receptacle 8 from swinging laterally and disengaging the wheels from the wires.

For the purpose of propelling the receptacle it is proposed to maintain the wires or track members in rear of the receptacle, as indicated in Fig. 2 of the drawings, so as to maintain a forward pressure against the rear sides of the upper and lower track-wheels 14 and 12 with a tendency to move the receptacle forwardly so long as the wires remain spread. The means for spreading the wires or track members at each end of the track consists of a vertically-swinging lever 18, fulcrumed intermediate of its ends, as at 19, upon the adjacent terminal post 3 and having a cross-head or bar 20, pivoted at its middle upon what will be termed the "inner" end of the lever, as indicated at 21. The ends of the cross head or bar 20 terminates in seats or forks 22 to receive the wires 1 and 2. A controlling-rod 23 is pivotally connected to the cross-head 20, as at 24, and extends rearwardly alongside of the lever and terminates in a handle 25 at the outer free end of the lever. Upon the lever is a looped guide 26, through which the rod 23 passes, said rod being provided with a kink 27 to engage one side of the guide and hold the cross-head 20 disposed at substantially right angles across the lever 18.

When the apparatus is inactive, the cross-head 21 occupies a position in substantial



parallelism with the lever 18, the latter being in a horizontal position or at least tilted to the vertical to such an extent that the wires 1 and 2 will not be materially spread. By 5 drawing rearwardly upon the rod 23 the cross-head will be swung upon its pivot 21, so as to spread the wires, the rod 23 being engaged with the guide 26, so as to hold the cross-head in this position. If necessary, the 10 lever 18 may be tilted to elevate the adjacent end portions of the wires. With the wires thus spread in rear of the mail-carrying receptacle there is a forward pressure against the rear sides of the traction-wheels 14 and 15 12, whereby the receptacle will travel away from the spread portion of the wires.

In order that the car or receptacle may travel in both directions of the track, there is spreading means at each end of the track.

20 From the foregoing description it will be noted that I dispense with motors and the care incident thereto, while at the same time the apparatus is always in condition for action.

25 Having thus described the invention, what I claim is—

1. In apparatus of the class described, the combination of a pair of spaced yieldably-supported track members, a carrier having 30 traction-wheels engaging the track members, a lever fulcrumed independently of the track, a cross-head fulcrumed intermediate of its ends upon the lever and provided with oppo-

site seats loosely receiving the track members, and a controller connected to the cross-head for swinging the same upon its fulcrum-support to spread the wires. 35

2. In apparatus of the class described, the combination with vertically-spaced yieldably-supported wires, a carrier provided at 40 opposite ends with upstanding hangers, each hanger having a traction-wheel running upon the top of the upper wire, a lower traction-wheel running against the under side of the lower wire and an intermediate wheel run- 45 ning between the wires, and means at each end of the track for successive operation to spread the wires.

3. In apparatus of the class described, the combination with a support, of upper and 50 lower track-wires, a substantially horizontal helical supporting-spring connected to each wire and to the support, a helical brace-spring connected to the first-mentioned spring and to the support above said spring, a carrier 55 having traction-wheels running in engagement with the wires, and means to spread the wires in rear of the carrier to advance the same upon the track.

In testimony that I claim the foregoing as 60 my own I have hereto affixed my signature in the presence of two witnesses.

JULIUS J. NOHR.

Witnesses:

TITUS E. PRICE,  
E. L. KURTZ.