J. G. HEASLET. ROD CONNECTION. APPLICATION FILED FEB. 4, 1915.

1,166,206.

Patented Dec. 28, 1915.



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ROD CONNECTION.

1,166,206.

Specification of Letters Patent. Patented Dec. 28, 1915.

Application filed February 4, 1915. Serial No. 6,077.

To all whom it may concern:

Be it known that I, JAMES G. HEASLET, a citizen of the United States of America, and resident of the city of Detroit, county of

Wayne, State of Michigan, have invented certain new and useful Improvements in Rod Connections, of which the following is a specification.

This invention is a rod connection, espe-10 cially adapted for pull rods wherein the ends are connected to pivoted elements subjected to strain and wear. Heretofore in devices of this character, it has been considered necessary to drop forge the ends of pull

- 15 rods in vehicle construction to insure necessary strength and durability. Furthermore, it has been customary to make round pull rods with drop forged ends which were usually drop forged solid and finished by 20 milling and drilling. This is an expensive
- operation, owing to the metal used and time and labor necessary. An object of this invention, therefore, is

- to simplify the manufacture of devices of 25 this character and effect a saving in metal, labor and manufacturing cost, by substituting ends made of steel stampings for the drop forged ends.
- Broadly stated, the invention consists in 30 constructing the ends from a flat steel ribbon which is cut to proper lengths and doubled upon itself around the pivotal connection of a lever or rod and then secured to the pull rod. The ribbon end may be slotted
- 35 and formed to pivotally engage a lever head provided with axial pintles, if desired. While an embodiment of the invention is

disclosed in the accompanying drawing, it is to be understood that the disclosure there-40 in made is for the purposes of illustration

only, and not as defining the limits of the invention.

In the accompanying drawings: Figure 1 is a perspective view of a pull rod having at

- 45 one end the rod connection showing a lever in the same plane as a rod, while at the opposite end the rod connection engages a lever positioned at right angles to the plane of the rod. Fig. 2 is a plan view of a plate 50 from which the rod connection may be
- formed.

In the embodiment disclosed, a section of the metallic ribbon is shown in Fig. 2, which has been stamped out of the proper length 55 to form a connection. This ribbon may be

of steel and is shown rectangular in form. When the rod connection lies in the same plane as the axial line of the lever 3 to which the pull rod may be connected, the connection such as illustrated at A in Fig. 1, is 60 employed. The blank from which this connection is made is similar in form to that illustrated in Fig. 2, with the exception of the elongated central slot. In lieu of this slot, a plurality of perforations may be in- 65 serted to receive the pivot pin 4 for the lever The plate C may be bent centrally until 3. its body portion forms parallel walls which are spaced apart as at 5-5 in Fig. 1, to provide an enlarged aperture or loop to permit 70 of the oscillation of the lever 3, and, thereafter, the plate may be again bent at 6 to contract the ends 7 thereof into substantially parallel relation for engagement with the pull rod, which is indicated at 8. Suitable 75 fastening means may be passed through ap-ertures 9 in the ends 7 to secure the rod connection to the rod.

It will be observed that the main or body portion of the ribbon section is shown of 80 greater width than the ends 7, to permit of increased bearing surface for the pivotal connections.

In Fig. 2 the plate section C is shown after it has been stamped from the sheet rib- 85 bon, to be provided with the body portion 10 of greater width than the ends 7, as pre-viously described. This body portion, how-ever, is shown provided with an elongated aperture 11 and with the perforations 9 in 90 the ends 7. This form of the connection is particularly adapted for engaging a lever 12 which may be placed at right angles to the axial line of the rod 8. In this construc-tion, the lever 12 is shown provided with a 95head 13 and pintle bearings 14. The rectangular section shown in Fig. 2 is so bent that its body portion 10 will form a bearing 15 for the pintles 14, as indicated at B in Fig. 1, and thereafter the remaining portion of the body part 10 is bent into parallel 100 planes as indicated at 16, to bring the ends 7 thereof into opposite parallel positions to engage the pull rod 8, after which suitable 105connecting means such as bolts or rivets 17 may be inserted through the apertures 9 of the ends 7 to secure the rod connection to the rod. This form of the connection permits of pivotal movement of the lever 12 with relation to the rod 8 on a plane at right angles ¹¹⁰ to the plane of the lever, and with its head 13 extending through the elongated aperture 11 of Fig. 2.

It is obvious that the plate may be of dif-5 ferent forms or proportions to adapt it to levers of other constructions than that illustrated herein, and the right is reserved to make such changes and alterations as fairly fall within the scope of the appended claim.

.10 Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

A rod connection embodying a rod provided with alined, laterally extending, cylin-

15 drical trunnions, and a movable member associated therewith, in combination with an elongated plate folded upon itself to bring its free ends into engagement with the mov-

able member, and means for securing said plate to said member, said plate being 20 formed around the trunnions of the firstmentioned rod so as to conform to the greater portion of the circumference thereof and provide bearings therefor, and said plate being also bifurcated at the rounded 25 portion thereof to allow of the entrance of said rod, whereby the rod is secured to the movable member for pivotal movement by unitary means.

Signed at the city of Detroit, Michigan, 30 by me this 29th day of January, 1915.

JAMES G. HEASLET.

Witnesses: G. M. Eggleston, R. E. Scratch.

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

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